Harrow Way Community School
Learning for life, success for all

Year 10 Knowledge Organiser

Summer Term

How do I complete Knowledge Organiser Homework?

Link to self-quiz video: https://youtu.be/cFUuhtPIMPU

Step 1

Check on:
ShowMyHomework for what words / definitions / facts you have been asked to learn.

Step 2

Write today's date and the title from your Knowledge Organiser in your self-quizzing book.

Step 3

Read the section of the Knowledge Organiser that you are studying. Read it slowly, you can read it aloud and with a ruler if this helps.

Step 4

Cover up the section and try to write out the information exactly as it is written on the Knowledge Organiser in your self-quizzing book.

DO NOT PEEK!

Step 5

Uncover the section and compare it to what you have written. If you have made mistakes or missed parts out, add them in using a pencil or a different colour.

Step 6

Repeat steps 3-5 again until you are confident.
You will need to bring your self-quizzing book in every day and your teacher will check your work.
You will be tested in class.

Knowledge Organiser - YEAR 10 - SUMMER TERM

Contents

GCSE Assessment objective 1 Part 1: MIND MAPPING

DEVELOP ideas through investigations, demonstrating critical understanding of sources.

AO1

Showing your ideas

Central idea = Starting point

Must be clear and central

Key words = key idea

One word per branch which will spark a number of associations

Colour coding = clarity

This links the visual with the logical and helps your brain to create mental shortcuts. The code allows you to categorise, highlight and analyse information. Colours also make images more appealing and engaging

Branches = key themes

You can explore each theme or main branch in greater depth by adding smaller branches

What to include

IDEAS exploring the starting point: notes, phrases, drawings, images.

Images = powerful message

Visuals can convey much more info than a word or sentence. They are processed instantly by the brain and act as visual stimuli to recall info

Art - Assessment Objective 1.2

GCSE Assessment objective 1 Part 2: MOOD BOARD
DEVELOP ideas through investigations, demonstrating critical understanding of sources.

AO1

Gathering resources

Consider your theme
Do you want it quite narrow or are you happy to collect a wider range of ideas?

Use a range of sources
Internet images, photographs, magazine cuttings, drawings etc

Don't limit yourself
Even if it doesn't directly link to your starting point it may relate to the theme. Consider colours and words to help you.

What to include
IMAGES of the work of artists, designers, craftspeople, art movements, song lyrics
Quotes from poetry, literature, film etc.

Apply your ideas
Your moodboard will directly link to the development of your project. If there is empty space fill it with sketches or annotations

Pick a style
Pulling it all together with a colour theme or visual style will make your page work together as a whole

Art - Assessment Objective 1.3

GCSE Assessment objective 1 Part 3: Artist Research
DEVELOP ideas through investigations, demonstrating critical understanding of sources.

AO1

Showing your understanding of an artists work or style

Biographical information
Birth, death, style, education, important works

Social, historical and economic influences
What was happening at the time? Were they responding to anything that was happening around them?

Collected images
Select images that are relevant and that appeal to you, make comments about why you like them

Technical information
How was their work produced? What methods and materials did they use?

Artistic influences
Who influenced their work? Did their work influence anyone else?

What to include
IMAGES of the work of one artists, designer or craftsperson that inspires you
ANNOTATION (see separate knowledge organiser)
ARTIST RESPONSE (to demonstrate your understanding of the style

Art - Assessment Objective 1.4

GCSE Assessment objective 1 Part 4: Art analysis

AO1

Analysing artwork

CONTENT 1.
Looking at the subject of the work

- What is it?
- What exactly can you see?
- What is happening?
- What does the work represent?
- What does the artist call the work?
- Does the title change the way we see the work?
- What I the theme of the work?
- Landscape, portrait, journey, moment, memory, event, surreal, fantasy, abstract, message

FORM Looking at the formal elements 2.

- What colours does the artist use and why? How is the colour organised?
- What kind of shapes can you see?
- What kind of lines and marks does the artist use?
- What is the surface like?
- What textures can you see?
- What patterns can you see?
- How big is the work?
- Light, delicate, layered, strong, rough, dark, peaceful, dripped, textured, scale, vivid, bright

PROCESS 3.
How the work has been developed and made

- What materials and tools have been used?
- What is the evidence for how it has been made?
- Painted, drawn, woven, printed, cast, stitched, constructed, collaged

Technical information 4.

- How was their work produced?
- What methods and materials did they use?

Artistic influences 5.

- Who influenced their work?
- Did their work influence anyone else?

Write in note form and discuss with your teacher

Sentence starters

6.

Looking at artwork **OBJECTIVELY**.
What are the facts? Don't guess

Use these sentence starters to direct your research:

I particularly like…(title of the work you have chosen to talk about)
It is a… (painting, sculpture, textile etc)
It has been created by… (what materials and techniques did the artist use?)
The subject of this piece is… (what is in the work? If there are people in it what are they doing? If there are objects in it, what are they and where are they placed?) Describe it in detail.
The composition is inviting because…
This artwork is unique because…

7.

Look at the work **SUBJECTIVELY** (your opinions & thoughts)
Use these sentence starters to direct your research:

This artwork reminds me of…because…
This artwork makes me think of…because…
Through speculation I have come to the conclusion that…
(what do you think is happening in the artwork, how is it different or strange?
I believe the artist has created this kind of work because…
On closer inspection I notice that…
(what have you noticed since you started looking more carefully at the artwork OR by reading about it)
This piece is exciting because
(Why were you drawn to this piece of artwork? Is it the colours? How it makes you feel? How the artist has arranged the objects? Because it draws the eye in a certain direction? Look carefully and explain what is going through your mind.
I appreciate the way the artist has…
This work is similar to … (another work you have looked at) because…
This work is in contrast to … (another work you have looked at) because…
I prefer this work to… (another work you have looked at) because… (mention the differences and similarities of the two artworks)
I am interested in this type of work because at this stage I think I might… (what are you going to make or create?)
To develop my ideas I will be experimenting with… (materials/techniques)

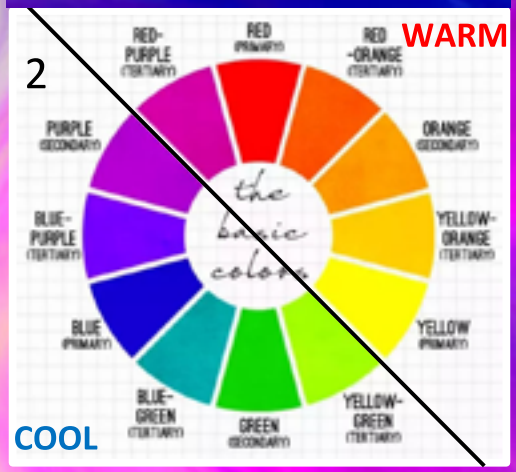
COLOUR

1

Colour plays a vitally **important** role in the world in which we live. **Colour** can sway thinking, change actions, and cause reactions. It can irritate or soothe your eyes, raise your blood pressure or suppress your appetite. As a powerful form of communication, **colour** is irreplaceable.

COLOUR WHEEL

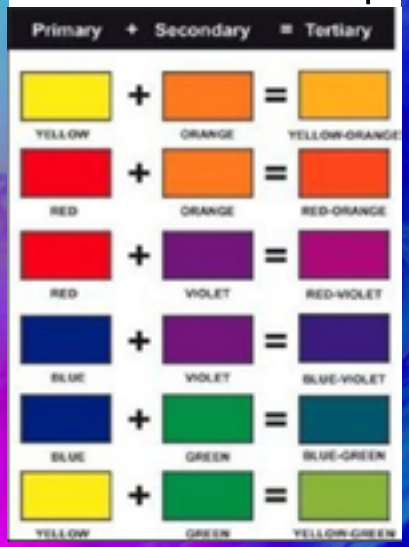
2



Cool colours painting

Warm colours painting

4



5

TINT
is adding white to a colour

TONE
is adding grey to a colour

SHADE
is adding black to a colour

ADJECTIVES TO DESCRIBE COLOURS

3

Light Bright Vivid Glowing Vibrant Brilliant Intense Dazzling Subdued Diluted Gloomy Depressing Pale Dull Murky Muted Monotonous Fluorescent Saturated Opaque Transparent

COLOUR SCHEMES

6

PRIMARY

Uses the primary colours: Red, Yellow & Blue. They can not be made by mixing other colours.

COMPLEMENTARY

Uses a pair of colours that are opposite each other on the colour wheel. The pairs are: Green/Red; Blue/Orange; Yellow/Purple.

SECONDARY

Uses the secondary colours: Orange, Green & Purple. Each secondary colour is made by mixing two primary colours.

HARMONIOUS

Uses three or four colours (primary, secondary and tertiary) that are next to each other on the colour wheel.

TERTIARY

Uses the tertiary colours. They are made by mixing a primary and a secondary colour next to each other on the colour wheel.

MONOCHROMATIC

Uses Tints, Tones & Shades of one colour. The word MONO means ONE and the word CHROMA means INTENSITY OF COLOUR.

DRAWING

The **basic craft of drawing** is about two things: **1. To control your hand** and **2. Learn to see.**

Line drawing

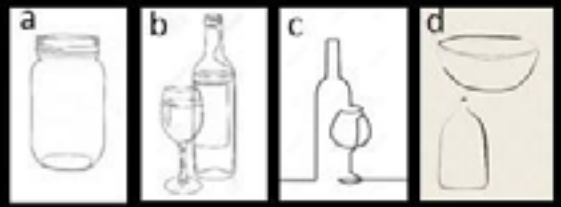
1 ELLIPSES:
The circle found at the top and the base of a cylindrical object; i.e. bottle, cylinder, etc. Ellipse can also occur when the sides of the bottle change direction, i.e. get narrow or wide.

2 CENTRE LINE: Divides the object vertically in two equal parts.
LINE OF SYMMETRY: the line at which the bottle is symmetrical.
Mirror Image symmetry: exactly matching opposite sides

3 POSITIVE SPACE: (*Object in white*)
The space occupied by the object/s.

NEGATIVE SPACE: (*All in black*)
The rest of the space around or in between the object/s.

4 LINEAR DRAWING
A drawing using line only to:
a) outline the shape of the object;
b) to add detail;
c) using continuous line (without lifting your pencil of the paper from start to finish.
d) Minimalist drawing



Tonal drawing

5 FLAT TONE:
A solid block of tone, see Tonal Ladder. It has no outlines. Different flat tones next to each other define shapes.

6 SHADING:
When the tone gradually changes from dark to light. It can appear a) smooth or b) rough by using lines called **Hatching** or **Cross Hatching**.

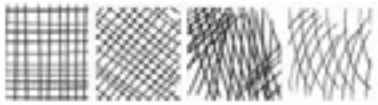
SHADING (light from the side):
On the outside of the object the tone changes gradually from one side to the other. Light and dark areas swap direction on the inside opening of the object like in this cup.

SHADING (light from the centre):
The tone is dark on both sides and smoothly gets light in the middle. It gives a 3D effect and looks very realistic.

7 TEXTURE and MARK-MAKING:
Texture is the **surface quality** of something. Artists use mark-making techniques to represent different textures.

8 Hatching

Cross- Hatching in 2,3 or more directions



Other elements of drawing

9 PERSPECTIVE:

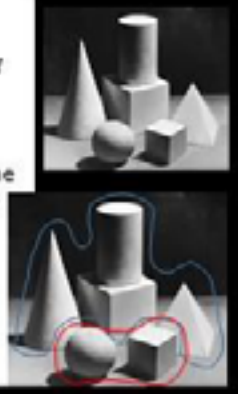
the art of representing three-dimensional objects on a two-dimensional surface so as to give the right impression of their height, width, depth and position in relation to each other.

10 RANGE OF PENCILS:

11 FOREGROUND: An art term that describes the objects in the scene that are closest to the viewer. It is the part in front of everything else and has the most detail.

MIDDLE GROUND: lies between the foreground and background of a painting. The objects in this area appear smaller. They are usually placed behind the objects in the foreground.

BACKGROUND: is the part of a scene or picture that is farthest from the viewer. It usually has the least detail.

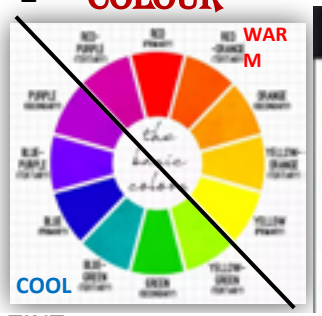


12 COMPOSITION:
Refers to the organisation, arrangement, and combination of objects within the borders of a **drawing** space.
For a great **drawing**, you want to bring the eyes of the viewer toward your centre of interest within an aesthetically pleasing **composition.**

FORMAL ELEMENTS

1 The Formal Elements are: **line, shape, form, tone, texture, pattern and colour**. They are used together to create artwork.

2 COLOUR



TINT
is adding white to a colour

TONE
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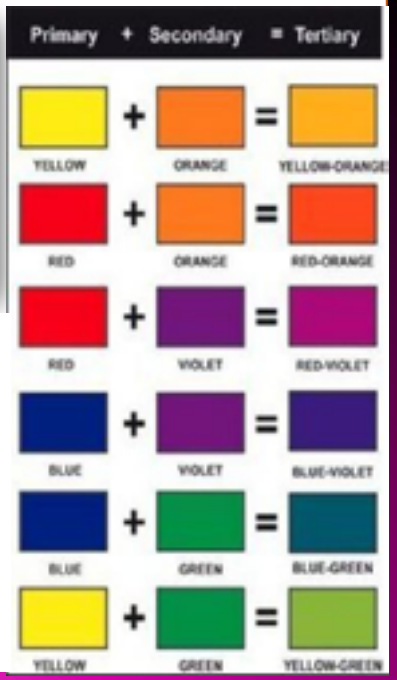
SHADE
is adding black to a colour

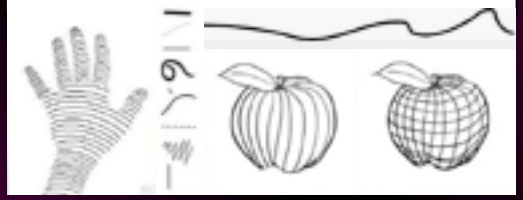


3 PATTERN

is a symbol or shape that is repeated. A design that is created by repeating lines, shapes, tones or colours. The design used to create a pattern is often referred to as a **motif**. Motifs can be simple shapes or complex arrangements. Tessellating any image creates a Repetitive pattern.

4 LINE

is the path left by a moving point, i.e. a pencil or a brush.
A line can take many forms. It can be horizontal, diagonal or curved. Line can be used to show: contours (the shape and form of something); movements, feelings or expressions (a short, hard line gives a different feeling to a more flowing one).

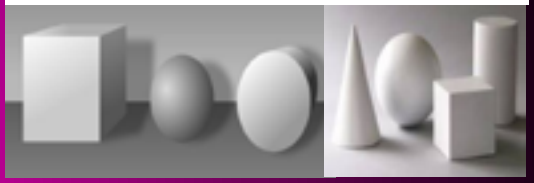


5 SHAPE

is an area enclosed by a line. It could be just an outline or it could be shaded in. When drawing shapes, you must consider the size and position as well as the shape of the area around it. The shapes created in the spaces between shapes are referred to as **negative space**.

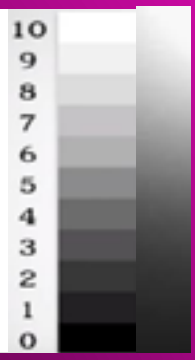
6 FORM

is a three dimensional shape (3D), such as a cube, sphere or cylinder. Sculpture and 3D design are about creating forms. In 2D artworks, lines, tones and perspective can be used to create an illusion of form. The three dimensions of form are width, length and depth.



7 TONE

is the lightness or darkness of an object. This could be a shade or how dark or light a colour appears. Tones are created by the way light falls on a 3D object. In every 3D object there are minimum of 3 tones; light, mid-tone and dark. Tone can be flat or it can vary from dark to light.

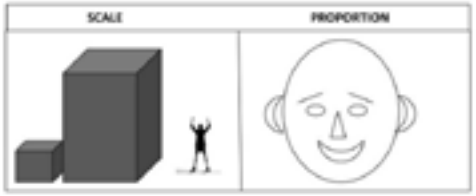


8 TEXTURE

is the **surface quality** of something, the way something feels or looks like it feels. **Actual texture** really exists, so you can feel it or touch it. You can create actual texture in an artwork by changing the surface, such as sticking different fabrics onto a canvas.
Visual texture is created using marks to represent actual texture. It gives the illusion of a texture or surface. You can create visual texture by using different lines, shapes, colours or tones.

9 SCALE

is the size of one object in relation to the other objects in a design or **artwork**.



10 PROPORTION

refers to the relationship of the sizes of two or more subjects or elements.

Art - Painting

PAINTING

1. The act of **painting**, using a brush, palette knife, sponge, or airbrush to apply the paint; 2. The result of the action – the **actual picture**.

1 Watercolour brushes:
Are specially made to allow the artist to control the flow of the colour from the **brush** onto the paper. A watercolour brush should hold a fine point when wet and spring back into shape after each stroke. It should carry the colour allowing the artist to:
a) lay it down on the paper evenly 2) consistency.

2 WATERCOLOUR:
a) Paints that are made of pigments suspended in a water-based solution (binder).

b) The art of painting with watercolours, especially using a technique of producing paler colours by diluting rather than by adding white.

WATERCOLOUR PAPER:
Best watercolour papers are made from **cotton fibres.** There are three types of w/c paper.

HP- Hot Press. Smooth surface for detailed work
CP (NOT) – Cold press. Slightly textured for most types of work
Rough – Heavily textured paper enhances the final piece of work.

3 WATERCOLOUR TECHNIQUES:
a) Wash: When watercolour mixture is gradually diluted with water.

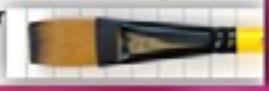
b) Blending: When two colours seamlessly merge into one another.

c) Wet –on – Wet: Water is applied onto the paper and then paint is applied onto it.

d) Masking Fluid
It is a rubber type product that prevents the paint from reaching the paper and is peeled off to expose the whitepaper left untouched.

4 ROUND BRUSHES:
Good for sketching, outlining, detailed work, controlled washes, filling in small areas.

FLAT BRUSHES: Good for bold strokes, washes, filling wide spaces, impasto. Edge can be used for fine lines, straight edges and stripes.



5 ACRYLIC PAINT: Opaque and semi-opaque fast-drying paint made of pigment and acrylic polymer emulsion dilutable with water.

ACRYLIC PAINTING SURFACES:
Canvas, paper, wood, or anything which is neither greasy nor too glossy.

ACRYLIC PAINTING BRUSHES:
A good selection of round and flat stiff synthetic brushes. Palette knives.

6 ACRYLIC PAINTINGS TECHNIQUES:
UNDERPAINTING: A layer of paint applied first to a canvas or board.

a) Tonal Grounds Under Painting
This type of painting has the entire canvas covered in a single transparent colour. This layer will create backlighting shadows that will tone the entire painting and provide contrast.

b) A Tonal Under-Painting
A layer of paint applied first that acts as a foundation for the painting with some **built in contrast** and **tonal values.**

IMPASTO: A technique used in **painting,** where paint is laid on in very thick layers that the brush or **palette**-knife strokes are visible. Paint can also be mixed right on the canvas. When dry, impasto provides texture; the paint appears to be coming out of the canvas.

7 POSTERPAINT:
A semi-opaque paint with a water-soluble binder, used mainly in schools.

8 OIL PAINTS: is a type of slow-drying **paint** that consists of pigment suspended in a drying **oil,** commonly linseed **oil.** Not used in schools.

9 MIXED MEDIA:
A Technique that uses more than one medium or material. Assemblages and collages are two common examples of art using different media that will make use of different materials including cloth, paper, wood and found objects.

ASSEMBLAGE:
The making of 3D art, often involves using found objects.

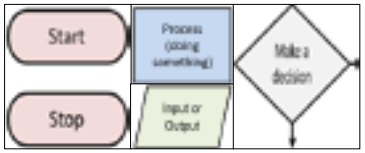
MIXED MEDIA COLLAGE:
This is an art form which involves combining different materials with paint to create a whole New artwork.

10 SGRAFFITO TECHNIQUE:
Used in **painting,** pottery, and glass. Consists of putting down a preliminary surface, covering it with another, and then scratching the top layer. The pattern or shape that emerges is of the colour below.

Year 10 Computer Science 2 . 1

Computational thinking:
The use of computers to solve problems.
Development of algorithms to solve problems.
Uses the 4 steps below to do this.
Decomposition – breaking down a large problem into smaller sub-problems.
Abstraction – representing 'real world' problems in a computer removing unnecessary elements from the problem.
Pattern Recognition – Finds any patterns in the problem/solution.
Algorithmic Thinking - identifying the steps involved in solving a problem.

Flow Diagram



Flow diagrams visually represent the steps that make an algorithm. A standard set of shapes are used to represent different types of step, such as running a sub-process. The arrows in a flow diagram represent the flow of control through the algorithm.

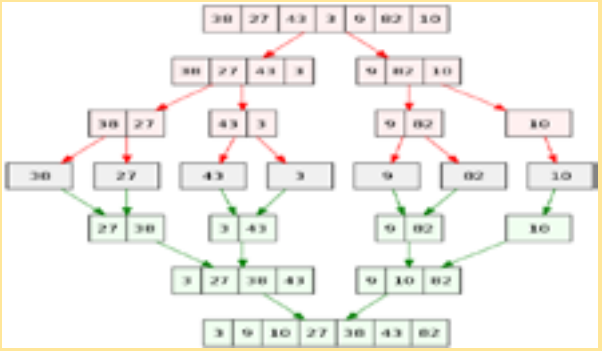
Pseudocode is fake code. Between code and written English

```
x = 0
while x != 100:
    x = int(input("Please type in a number"))
print("Loop has ended")
```

```
for counter in range(3,20,2):
    print(counter)
```

```
name=input("Please type in your name")
print("hello ",name)
Age=int(input("How old are you?"))
```

Merge Sort The list is repeatedly divided into two until the elements are separated individually. Pairs of elements are then compared, placed into order and combined. The process is then repeated until the list is whole again.

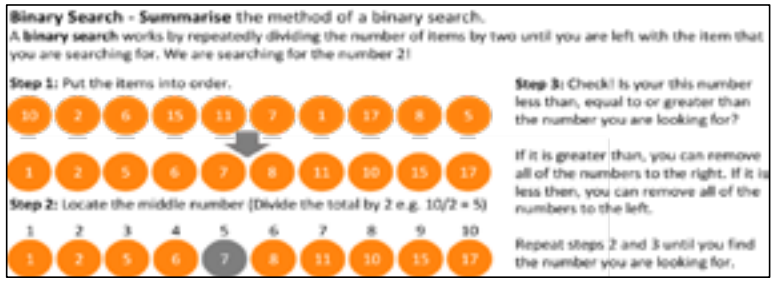


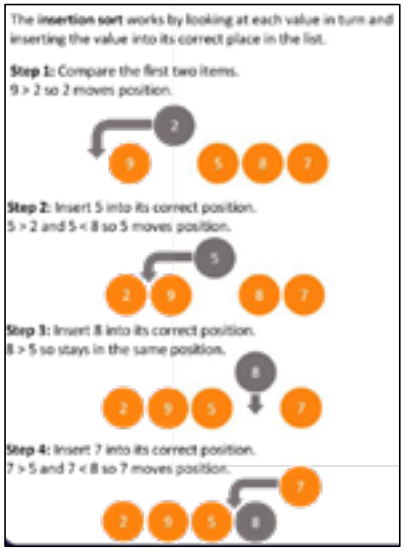
Bubble Sort: Each item is compared with the one on its right, and swapped if it is larger At the end of the first pass the largest item bubbles through to the end of the list (Mauve indicates sorted items)

9	5	4	15	3	8	11	2
5	9	4	15	3	8	11	2
5	4	9	15	3	8	11	2
5	4	9	15	3	8	11	2
5	4	9	3	15	8	11	2
5	4	9	3	8	15	11	2
5	4	9	3	8	11	15	2
5	4	9	3	8	11	2	15

Linear Search: This simply involves searching through a set of data, one item after the other, until the item we are looking for is found. Searching for the number 36.

INDEX	0	1	2	3	4	5	6
Item	23	25	26	34	36	45	47





A high level language uses human words which a CPU does not understand. A computer uses a translator to change the code so it can understand it. There are 2 ways to translate - **Complier** coverts the code into machine code before running it or **Interpreter** which coverts the code one instruction at a time running each instruction before translating the next.

Low Level Language

Machine code - Not understood by humans only by computers. Binary is used to represent the instructions to the computer. The instructions are fetched from RAM, decoded by the CPU and then executed one after the other. The code has 2 parts the **Opcode** which tells the processor what to do and the **Operand** telling the processor what to do it to.
Assembly language – It uses Binary and short acronyms, like commands JMP 1024 (jump to instruction 1024) An assembler translates the code into machine code so the processor can deal with the code

Types of Errors

Syntax errors - Variables not declare correctly Variable names spelt incorrectly
Logic errors - Conditions that can not be met Infinite loops Missing brackets
Run time errors - Division by 0 Programs that do not complete Memory is too full to continue

Year 10 Computer Science 2 . 2

Data types – How the data will be stored

Integer – Whole Number - 23
Real - Any number with a decimal – 2.223
Character - 1 single letter - A
String - A mix of letters numbers and symbols - A546TH
Boolean - Has 2 states - TRUE or FALSE. 1 or 0

Casting This is the process of converting data from one type to another. For example str(age 13) converts the integer to a string. This may be required for a program to process information for a different outcome

Variables - Are used to store values in a program. Variables can be changed. For example a variable might allows a name, age or score to be entered to a program.

Constants - Are used to store values in a program. It is a part of a program that cannot be changed. For example a constant could be the use of Pi.

Identifiers - Are the names given to variables or constants in a program. These cannot have spaces. There are two main formats. **CamelCase** this uses a capital letter for each new word. (e.g. FirstName) or **snake_case** this uses an underscore to separate each word (e.g first_name)

Array – A data structure that can store multiple items. The items are known as **elements** . An array is created by **declaring** all the elements. The elements are stored within square brackets []. E.g scores = [1,2,3,4,5]

```
import array as arr
a = arr.array('i', [2, 4, 6, 8])

print("First:", a[0])
print("Second:", a[1])
print("Third:", a[2])
print("Fourth", a[3])
```

```
import array as arr

List = arr.array('i', [2, 4, 6])
List.append(4)
print(List)
List.extend([8, 10, 12])
print(List)
```

Managing Files - Programs use **open, read, write, close.** In pseudocode these functions are referred in the format **myFile, openRead, openWrite and close().** To manage files in python there are other functions to be aware of: f.**open** (file open), **f.write** (file write), **'a'** (Append – add to a file) **'n'** (New line)

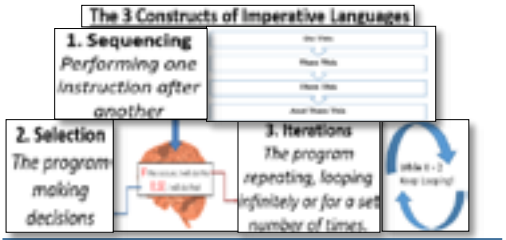
```
name = input ("Enter Your Name")
print ("Hello, " + name, "welcome to the score section")
age = input ("What is your age?")
print ("We need to know your gender")
gender = input ("Please enter male, female, or other")
print ("Now we need to know your high score")
score = input("Please enter your high score")
f = open ('scores.csv','a')
f.write(name + ',' + age + ',' + gender + ',' + score +'\n')
f.close()
f = open ('scores.csv','r')
scores = f.readlines()
print(scores[2])
```

Sub Program – This is a self contained sequence of instructions within a program. These are also known as subroutines and can be called on for a single specific function within a program. **Benefits to the use of subroutines** - Reduce the amount of code - Make programs easier to read and test - Give code better structure

Types of sub Programs
A Function – Returns a value to the main program
A Procedure – Carries out a task, does not return a value to the main program
A Parameter – A value passe to the main program

Maths Operators For Pseudocode

+	Addition	3+3=6
-	Subtraction	3-3=0
*	Multiplication	3*3=9
/	Division	3/3=1
Mod	**Modulus Division** - Returns the remainder after division	17/3=6R2 Remainder No. **Mod 2**
Div	**Quotient Division** - Returns the quotient or the lowest integer	11/4=2 Complete **Div=2**
^	Exponential Powers of	3^3=27



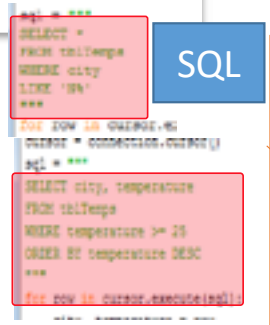
Iteration – For and While Loops

```
x = 0
while x != 100:
    x = int(input("Please type in a number"))
print("Loop has ended")
```

```
for counter in range(3,20,2):
    print(counter)
```

Python -> English	
print('hello!')	Prints a value on screen (in this case, hello!)
input('')	Inputs a value into the computer.
x=input('')	Inputs a value and stores it into the variable x.
x=int(input(''))	Inputs a value into x, whilst also making it into an integer.
print(str(x))	Prints the variable x, but converts it into a string first.
if name == "Fred":	Decides whether the variable 'name' ha a value which is equal to 'Fred'.
else:	The other option if the conditions for an if statement are not met (eg. name = 'Bob' when it should be Fred)
elif name == "Tim"	elif (short for else if) is for when the first if condition is not met, but you want to specify another option.
#	# is used to make comments in code – any line which starts with a # will be ignored when the program runs.

SQL



The **SQL Statement** uses **SELECT *** For a Wildcard **FROM** to chose the info **WHERE** this choses information **LIKE N%** Will select countries that begin with an N

The **SQL Statement** uses **SELECT** sets up the query **FROM** to chose the info **WHERE** this choses information (and excludes other fields)

Maths Operations

For multiple maths operations this is th order that needs to be followed

Brackets 3^2*12/(3*2)+6-6
Brackets (3*2)=6
Indices of Power Index 3^2 =3x3=
Division Divide 12÷ 6 = 2
Multiplication Multiply 9*2 = 18
Addition Add 18+ 6 = 24
Subtraction Subtract 24- 6 = 18

Year 10 Computer Science 2 . 3

Defensive design: - Programs need to be designed to cope with bad entries made by users. This will:
- Minimise bugs or issues
- Program works regardless of user actions
- Errors are identified on entry

Contingencies (all possibilities) need to be considered at the planning stage for programs. This should consider possible user inputs and how to manage these.

Authentication
Identifies a user
Normally requires a combination entry (username/password)
Authentication checks against pre-set entries

- **Validation** is a method of checks an entry to ensure it is valid for the purpose that it is being used. There are some ways that code can be set up to validate inputs
- **Length Check** – Checks the number of characters in an inputs
- **Range Check** – Checks to ensure that an input falls between a set range of values
- **Presence Check** – Ensures that a field cannot be left blank

Naming conventions

CamelCase this uses a capital letter for each new word. (e.g. FirstName)
snake_case this uses an underscore to separate each word (e.g first_name)

Defensive design considerations:

Sub Program – This is a self contained sequence of instructions within a program. These are also known as subroutines and can be called on for a single specific function within a program.

Benefits to the use of subroutines
- Reduce the amount of code
- Make programs easier to read and test
- Give code better structure

Types of sub Programs
A Function – Returns a value to the main program
A Procedure – Carries out a task, does not return a value to the main program
A Parameter – A value passed to the main program

Indentation – used to highlight the blocks of code. If a block has to be more deeply nested, it is simply indented further to the right.

```
database={'name': '1234', 'name2': '5678', 'name3': '9012'}
name = input('Enter username: ')
ask = input('Enter pin: ')
if ask == database[name]:
    print ("Welcome", name)
else:
    print ("Invalid code")
```

TESTING –

ITERATIVE TESTING - Tests carried out during development.
FINAL TESTING – Test once a program has been completed.
ALPHA TESTS - final testing carried out by a programmer
BETA TESTS – Final testing carried out by users

Suitable Test Data - There are three methods to test a program.
NORMAL - uses a check with a program that is expected to work.
BOUNDARY - (or extreme tests) will check the program limits, with the highest and lowest numbers in a range that should work.
ERRONEOUS - uses data that is not expected to work to check if the program rejects this information.

Syntax and Logical Errors
SYNTAX errors - Grammar, spelling and character mistakes in code
LOGIC errors occur when an incorrect operand has been used, like an AND instead of an OR. These errors may allow a code to operate, but work incorrectly

Maintainability - For a program to work it should be written in a manner that is easy to follow with the correct use of line breaks and indentations. Where appropriate comments should be included (//for OCR Pseudocode comments), to show what is happening in a piece of code. Indentations must be used for code that is a subprogram for a previous piece of code. Meaningful identifiers should be used in all programs.

Commenting - Comments are the useful information that developers provide to make the reader understand the source code. It explains the logic or a part of it used in the code. They are usually helpful to someone maintaining or enhancing the code when the programmer is not around to answer questions about it. Python comments start with hashtag symbol with no white spaces (#) and lasts till the end of the line.

```
# This is a comment
# Print "GeeksforGeeks !" to console
print("GeeksforGeeks")
```

```
a, b = 1, 3 # Declaring two integers
sum = a + b # adding two integers
print(sum) # displaying the output
```

Year 10 Computer Science 2 . 4

LOGIC GATES AND TRUTH TABLES

Computational logic has only two outcomes: true or false. This is represented in binary with 1 and 0. **Boolean logic** reduces all values to the these two states. Computer processors contain 1 billion **TRANSISTORS** and these transmit current (on- true) or don't (off – false).

LOGIC GATES use transistors to carry out all calculations and run program instructions in the processor. These are represented by the symbols below.
A TRUTH TABLE is used to show how a "logic gate" works in an easy to read format.

With "AND" logic there are two inputs and one output. If both of the inputs are positive then the output will be positive.
With "OR" logic there are two inputs and one output. If either of the inputs is positive or if both of the inputs are positive then the output will be positive.
With "NOT" logic there is just one input and one output. It changes the input to the opposite value.

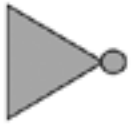
Truth Tables

AND			OR			NOT	
A	B	A AND B	A	B	A OR B	A	NOT A
0	0	0	0	0	0	0	1
0	1	0	0	1	1	1	0
1	0	0	1	0	1		
1	1	1	1	1	1		

Boolean Operators	Logic Gate Symbol
AND *(Conjunction)*	
OR *(Disjunction)*	
NOT *(Negation)*	

Binary Logic Gate Diagrams

NOT



A	Out
0	1
1	0

AND

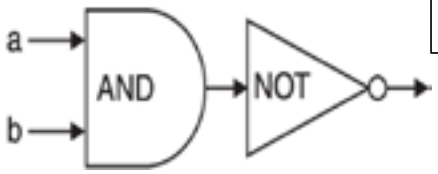
A	B	Out
0	0	0
0	1	0
1	0	0
1	1	1

OR

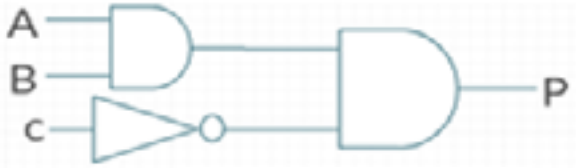
A	B	Out
0	0	0
0	1	1
1	0	1
1	1	1

NOT (a AND b)

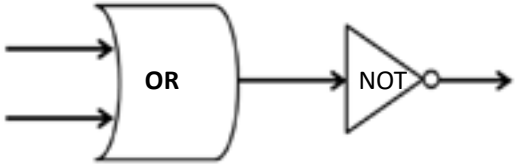
A	B	NOT (a AND b)
0	0	1
0	1	1
1	0	1
1	1	0



P=(A AND B) AND NOT C



Input (A)	Input (B)	Q = A OR B	Not Q
0	0	0	1
0	1	1	0
1	0	1	0
1	1	1	0



a. Q=(NOT A) AND B

A	B	NOT A	Q
0	0	1	0
0	1	1	1
1	0	0	0
1	1	0	0

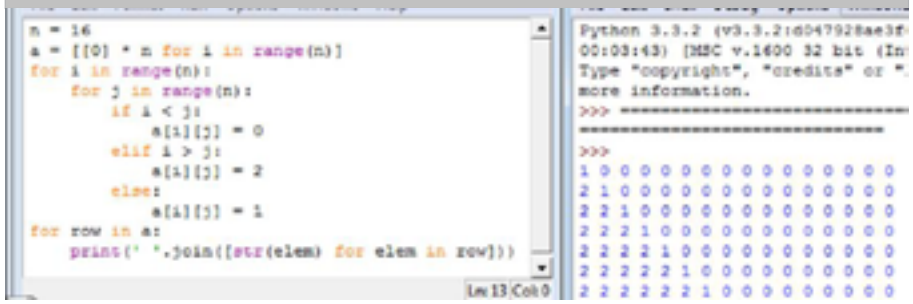
b. Q=(NOT A) OR B

A	B	NOT A	Q
0	0	1	1
0	1	1	1
1	0	0	0
1	1	0	1

Year 10 Computer Science 2 . 5

Translators: For assembly and high level languages to be understood systems require **TRANSLATORS** to interpret them.
Compilers: Translate the source code into machine code
Interpreters: Translates code in a line by line process
Assemblers: Translate the mnemonics of the language

An **Integrated Development Environment (IDE)** is an application software that allows programmers to develop code and test operations with a variety of facilities . An example is Python IDLE



Common IDE Tools
Editor to enable program code to be entered/edited
Error diagnostics / debugging to display information about errors (syntax / run time) / location of errors and suggest solutions
Run-time environment to enable to the program to be run and check for run time errors / test the program
Translator / compiler / interpreter to convert the high level code into machine code / low level code / binary AND to enable to code to be executed / run
Breakpoint to stop/pause program execution at a specific point
Watch window to check contents of variables
Syntax completion suggests/corrects code
Keyword highlighting / colour coding keywords / pretty printing colours command words / variables
Best to memorise three for the exam

Python IDLE contains a variety of features that support the development of code including
- **Syntax Highlighting** – coloured illustration of coded elements
- **Auto indentation** – keeping subroutines in proper locations
- **Bracket Matching** – Indicating matching sets of delimiters
- **Auto complete** – finding key words from dictionaries to aid with code entry
- **Syntax error checking** – Illustrating the lines within the code that contain errors

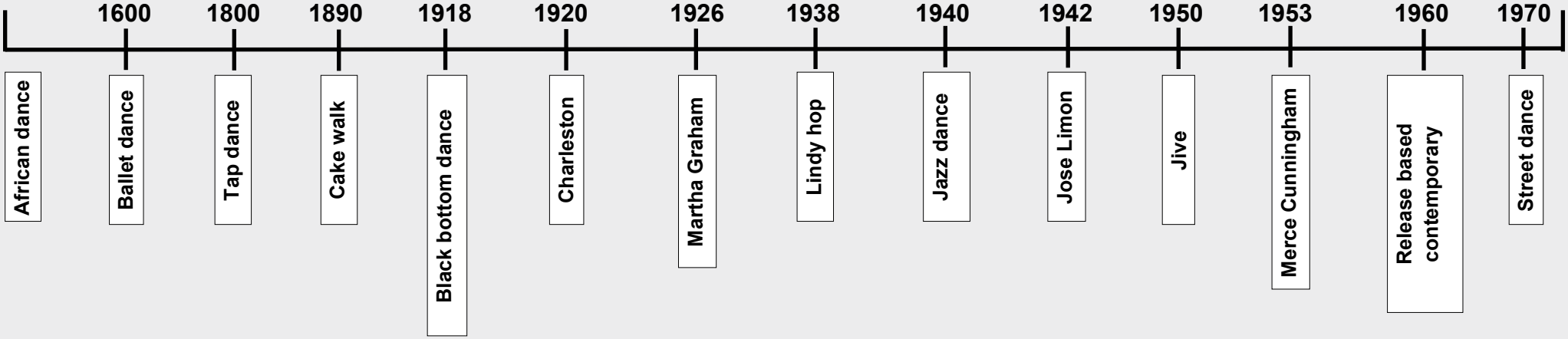
Computer Languages
Computer instructions can be written in a variety of different programming languages which need to be translated into machine code for computers to understand them. Languages exist at low and high levels

Assembly Language	Machine Code
LOAD 3	0011 0011
STORE 12	0100 1100
ADD 3	0110 0011
ADD # 7	0111 0111
SUB 5	1000 0101
SUB # 10	1001 1010
HALT	1110 0000

Low Level Language		High Level Language
Machine Language Processors only understand language in binary format 1s and 0s	Assembly Language contains instructions that are directly equivalent to machine language. Mnemonics are used to replace the commands in the code	Java and Python are examples of High level languages and these use terms that are clear like 'print'. Most software programs are written in high level language.
Used in: embedded systems (in tv's, microwave ovens, etc.) **Used for:** Device drivers, real time systems Assembly languages are machine specific and cannot be transferred to different devices		**Used in** most software apps Portable between devices Used on different computing systems

Year 10 - Knowledge Organiser - Dance

Dance styles chronology



Tier 3 vocabulary

Key features - the main movements used/ what does it look like.

Historical context - when in history the dance form emerged.

Social context - what was happening in society when the dance form emerged.

Personal aims - what you want to achieve as a dancer.

Theme - the subject or topic that the dance will explore.

Collaboration - working with other people to produce something.

Narrative - telling a story by playing a character.

Reflecting - Structure for success

WHAT is the skill?

HOW do you know it is a strength/weakness?

WHY is this skill important for a dancer to have?

IMPACT that the skill has on the audience?

IMPROVEMENT - strategy to improve

Dance - Dance Styles 2

Jazz dance

Jazz dance uses extensions and foot positions from ballet, but aims to have a freer feel to the movement by using contractions and arches in the back and a variety of floor work.	**Key people**	**Key movements**		
	Bob Fosse	Leaps	Drags	Jazz pirouette
	Jack Cole	Kicks	Contractions	Pas de bourree

Contemporary dance

Martha Graham		Jose Limon		Merce Cunningham	
	Martha Graham technique focuses on the idea of contraction and release in the torso and also explores twists in the spine. It uses weight and gravity as a dramatic tool whilst falling to the floor.		Limon technique focuses on fall and recovery, suspension and momentum and rebound. Sequences will often move in and out of the floor in an effortless manner.		Cunningham technique focuses on the 5 movements of the back; tilt, twist, curve, arch and straight. He also invented chance choreography which used random methods to determine the movements, staging and music.

Street dance

Street dance has many sub-styles like hip hop, popping and locking and breaking. These are normally up-beat and energetic movements that suit the style of the current music trend.	**Key people**	**Key movements**		
	Rock steady crew	Top rocks	Body ripples	Slides
	New York City Breakers	Up rocks	Tutting	Tricks
	Diversity	Freezes	Isolations	Breaking

Evaluation Skills

Term	Definition
Evaluation	Working out what was good about the performance and what could have been better.
Strength	What was good about the performance. Always refer to an **acting skill**.
Weakness	What could have been better about the performance. Always refer to an **acting skill.**
Example	The specific moment or line that you are writing about. If possible, always use a quote.
Target	What you will do next time to make your work better.

When you make a comment about a strength or a weakness you must always do these four things:

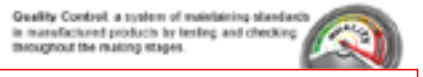
1. **Describe** the strength/weakness.
   e.g. In this scene one of my weaknesses was my tone of voice.
2. Give an **example** of the strength/weakness. Try to use a **quote**.
   e.g. When I said 'Look out! It's a bear!' I didn't sound very scared.
3. Explain **why** it made the performance better/worse. Try to reference **impact on the audience**.
   e.g. This might have made the audience think my character was not scared of the bear which would confuse them as I am supposed to be a coward.
4. Explain **how** you could improve the weakness by describing a **specific acting exercise/technique.**
   e.g. I will make sure I write out the subtext for each of my lines on my script so I know exactly what my character is thinking while they speak.

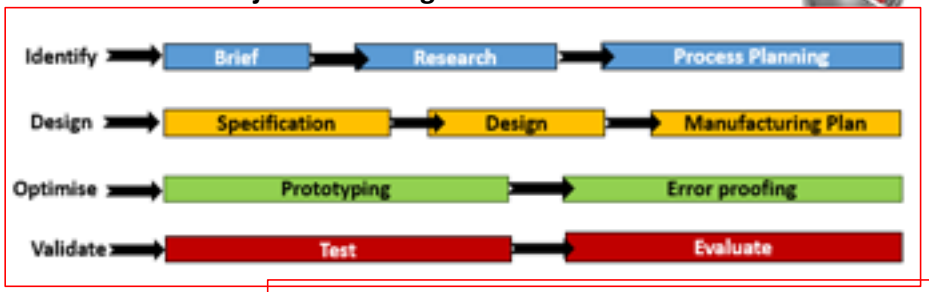
Try using theses Sentence Starters to get you going...

1 Strength / Weakness:	2 Example:	3 Why:	4 Target:
A strength of mine in this scene was… A weakness of mine in this scene was...	This was evident in the line...	This made my character seem...	I would do this again next time because….
A skill I used well was… A skill I could have been better at was…	You could see this when I...	This was a problem because it made the audience think that...	To improve my work I could...
My performance was good because of my… My performance was harmed because of my…	An example of this was...	This could have confused the audience because...	To avoid this in the future I will...
Something I did well was... Something I could have done better was...	This was obvious when I...	This suggested to the audience that my character was...	When I am getting ready for my next performance I will...

D&T - Engineering Design 1

R105: OCR Engineering design Examination Subject Knowledge



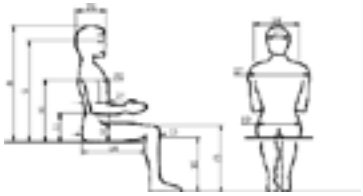


- A **Design Brief** is a ***statement of how you are going to solve the Design Problem***.
- Research findings and Client feedback can be used to create a **Process Plan.**
- A **Design Specification** is a ***list of requirements your product has to meet in order to be successful.***
- After a Specification has been developed, the **designing** of the product will begin.
- Once the final design has been chosen, a **Manufacturing Plan** is then created.
- **Prototyping** is the creation of a **model or "mock-up"** of a product after the Design Process
- **Error Proofing** is ensuring that the product cannot be assembled or used in an incorrect way
- **Testing** and **Evaluation** happens because designers need to ensure the product is successful before being released, and is competitive with the market.

Specification Points	Meaning
Aesthetics	What the product will look like, style, colour, etc.
Customer	Who the **Target Market** is, how it will appeal to them, what **Anthropometrics** and **Ergonomics** will be used, etc.
Cost	Cost to make, as well as cost to sell
Environment	Where it will be used
Safety	How it will be safe to use, what standards and regulations it will have to meet
Size	What dimensions it will be, as well as components and parts
Function	What the purpose of the product will be, and what **features** it will have
Materials	What is will be made from
Manufacture	How it will be be made

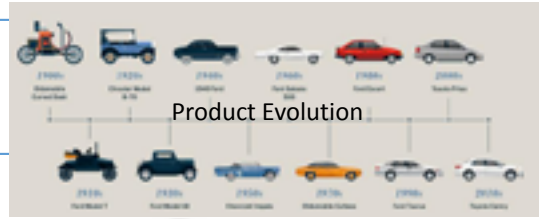
Product requirements are what a product has to meet/ must do.
Common requirements are:

- Features – *what makes a product unique and sellable*
- Performance – *how well it completes its function*
- Target Market – *how it appeals to its customers*
- Working Environment – *how it is suitable for where it will be used*
- Constraints – *what is must do or must not do*
- Ergonomics – *how its comfortable and safe to use*
- Lifecycle – *what environmental impact it makes (and how that can be reduced)*



Anthropometrics is the ***study of measurements of the human body***
Ergonomics is the ***application of anthropometrics in order to make products and places efficient, comfortable and safe to use***

Technology Push is when *new developments in materials and technologies improve existing products/ create new ones*
Market Pull is when consumers demand improvements/new products. Often found by conducting market research



Sales and Supply of Goods Act 1994	All Products have to be of a "satisfactory quality. They have to be safe, fit intended purpose, not be faulty
Trade Descriptions Act	False or misleading information must not be given out about products. E.g. accurate information must be given out who made the product
Consumer Protection Act 1987	The right to claim compensation if a defective product causes death, damage or injury
The Waste Electrical and Electronic Equipment Regulations 2013	The government regulate the amount of electronics going to landfill as the chemicals and electronics can harm the environment and wildlife Companies must provide electronic disposal for their products

One-off Production
This is the manufacture of **one item**
This item can be custom made/ designed (bespoke manufacture)

Batch Production
This is where small quantities of identical items are made (10s-1000s)
To ensure all items are identical, jigs, moulds and templates to aid workers

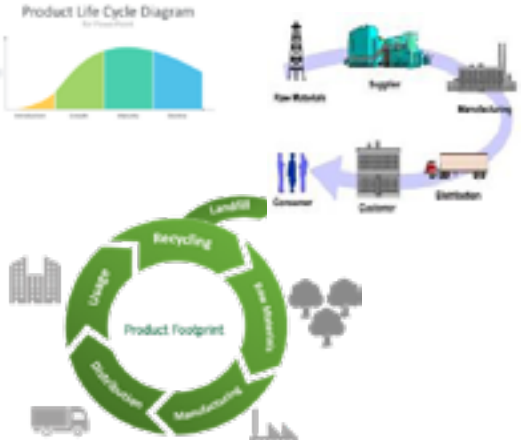
Mass Production (High-Volume Production)
This is where large quantities of products are made (10,000s-100,000s)
There are often assembly lines (for the main product) and sub-assembly (for small pieces and components)

Continuous Production
This is when large quantities of products is produced (100,000s +)
However, unlike Mass Production this is **never ending** production e.g. power plants

Just-in-time production (JIT)
This is when products made to order, but can be used in conjunction with any other scale of production

D&T - Engineering Design 2

R106: OCR Engineering design
Product Analysis and Disassembly

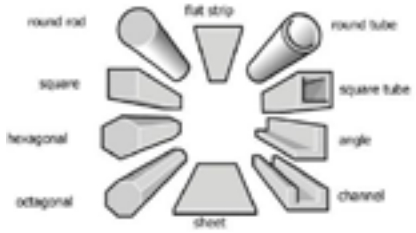


A **stock form** is when a raw material has been machined/processed into a stock/standard size, shape or form. This can be easily used during manufacturing on a production line.
Like standard components, buying in these stock forms is often easier and cheaper that companies trying to create their own and are internationally recognised

When manufacturing a product, there are several considerations that need to be planned for. There considerations often include:

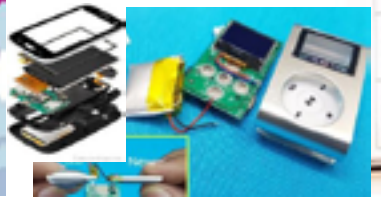
- Standard Components
- Stock Forms
- Supply Chains
- Durability and Maintenance
- Product Safety
- Costs and Budget

A **standard component** is usually an individual part or component, manufactured in thousands or millions, to the same specification. These are often bought in bulk and saves companies money, rather than them trying to make their own.
The sizes of standard components are often internationally recognised, making manufacturing easier to communicate



Disassembly may refer to any of the following:

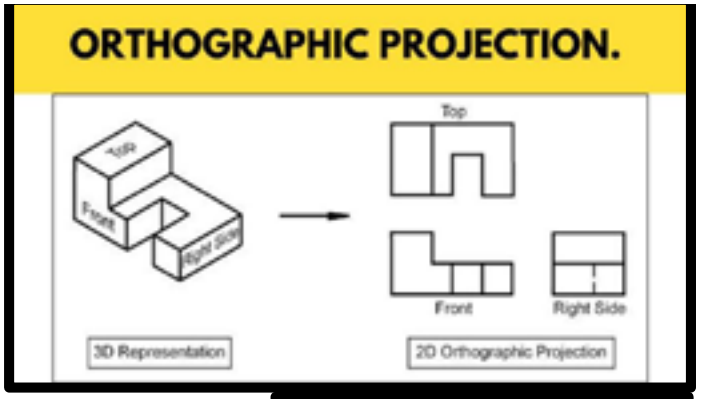
1. When referring to hardware, **disassemble** is the process of breaking down a device into separate parts. A device may be disassembled to help determine a problem, to replace a part take the parts and use them in another device or sell them individually. For example, if a computer has a bad processor, may need to open the computer case, disassemble the heat and processor, and manually replace it.

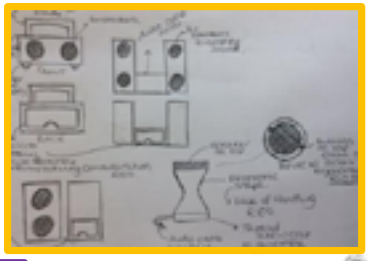


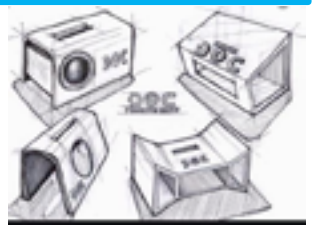
Specification Points	Meaning
Aesthetics	What the product will look like, style, colour, etc.
Customer	Who the **Target Market** is, how it will appeal to them, what **Anthropometrics** and **Ergonomics** will be used, etc.
Cost	Cost to make, as well as cost to sell
Environment	Where it will be used
Safety	How it will be safe to use, what standards and regulations it will have to meet
Size	What dimensions it will be, as well as components and parts
Function	What the purpose of the product will be, and what **Features** it will have
Materials	What is will be made from
Manufacture	How it will be be made

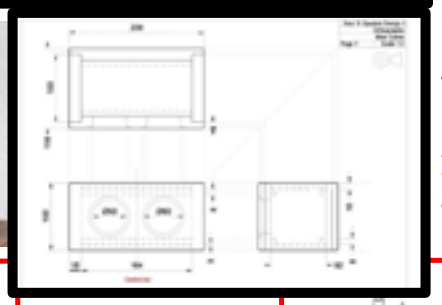
D&T - Engineering Design 3

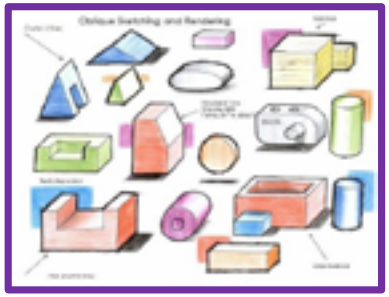
R107: OCR Engineering design
Designing and developing Ideas

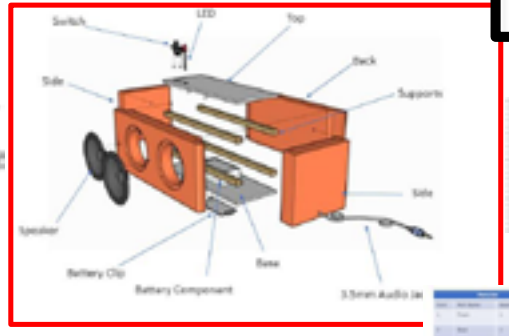


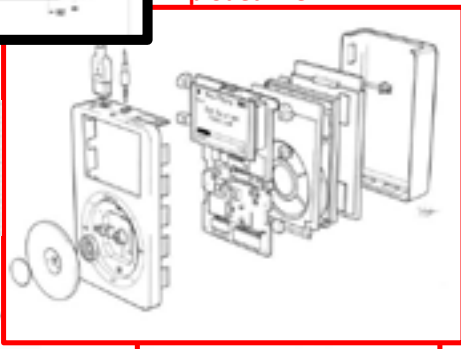


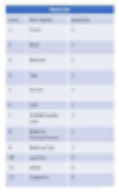


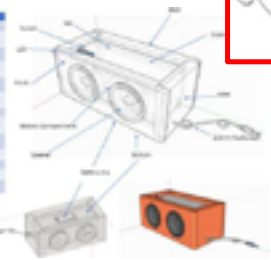


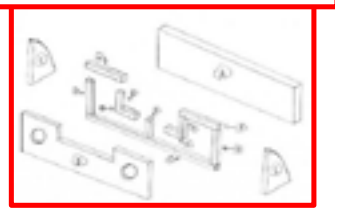




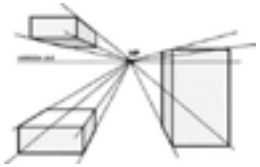




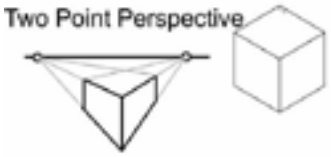




One Point Perspective



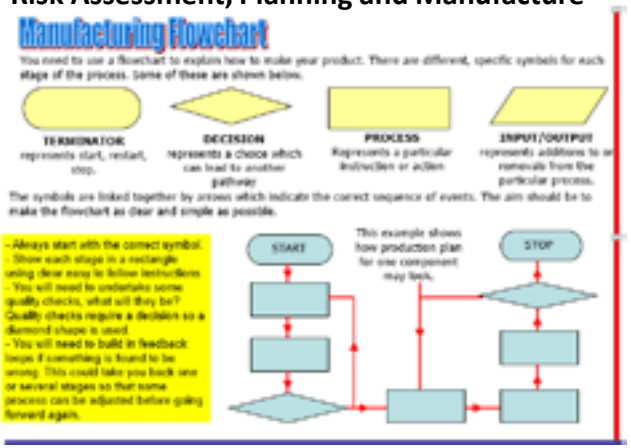
Two Point Perspective

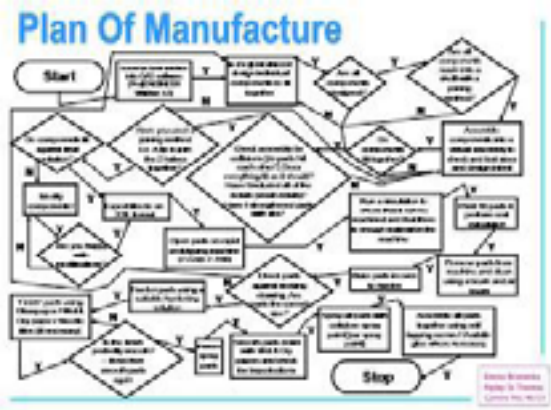


Key Words:
Thumbnail sketch
Initial idea
Developed idea
Working drawing
Dimension
CAD
Standardised
Component
Oblique
One Point Perspective
Two point perspective
Orographic Projection
Freehand
Thick and Thin lines
Rendering
Annotation
Two Dimensions
Three Dimensions
Exploded View

D&T - Engineering Design 4

R108: OCR Engineering design
Risk Assessment, Planning and Manufacture





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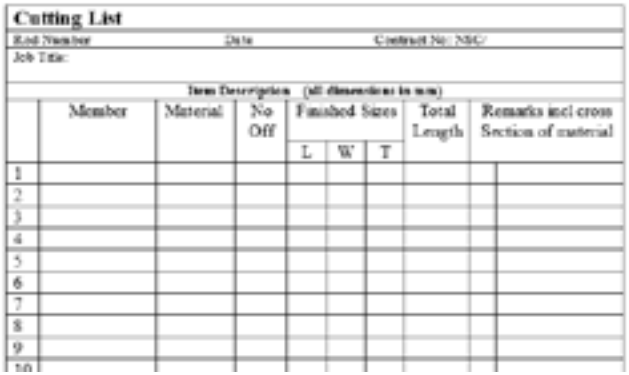


Planning Steps/ Flow diagram
Manufacturing Specification
Risk assessment
Making Diary
Modelling, testing and Developing
Cutting list
Final Product- Range of manufacturing skill

English

THE PORTFOLIO

Over the course of your GCSE studies, you will be creating a **portfolio** of work. You will be familiar with the portfolio system from previous years; however, the Year 10 and 11 portfolio is a much more extensive project, over which you have a higher degree of control and creative freedom.

WHY DO YOU HAVE TO CREATE A PORTFOLIO?

The portfolio allows you to present a clear, visible pathway to success from initial planning and drafting to final pieces of work. It is a self-curated working record of the evolution of your learning across a range of forms and skill areas. So the portfolio helps you to reflect on your own learning, and to see how you have made progress. 'Self-curated' means that *you are in charge*. Because of this, the portfolio also allows you to develop vital skills of organization and self-management.

WHAT WILL GO IN THE PORTFOLIO?

You will produce a range of essays and analytical responses for *Othello, Blood Brothers* and poetry. You will have the opportunity to set your own questions for some of these tasks. In addition to the literature work, you will also produce a piece of creative prose writing.

You will also need to produce 'supporting work' for your written pieces. This will include annotated extracts, annotated poems, plans, research and rough drafts. You can choose to include as much supporting work as you like.

HOW IS THE PORTFOLIO ASSESSED?

At the end of the portfolio process in Year 11, you will have a 10-minute spoken assessment with a Harrow Way English teacher. This is called the **viva assessment.** Before the viva, you will have organized and indexed your portfolio, and had time to prepare what you want to say. During the viva, you will present and discuss some of the key pieces of work in your portfolio and the teacher will ask you questions about the work you have produced. *During the viva, your speaking and listening skills are also assessed as part of the English Language GCSE.*

CREATIVE VOCABULARY

Enhance your creative prose writing by using a wider range of vivid adjectives. Here are some to try:

stark – severe; bare; striking

turgid – swollen or congested

tumultuous – chaotic

capricious – prone to sudden changes in behaviour or mood

ponderous – slow-moving due to heaviness

caustic – sour; scathing; bitterly sarcastic

shrewd – intelligent in a calculating and self-serving way

inane – lacking in sense; silly

puerile – childish

iridescent – many-coloured

QUIRKS AND ODDITIES

The English language is full of quirks and oddities. Here are a few that you should be aware of:

WHO/WHOM – These have the same meaning; however, you can only use 'whom' in the object position of a clause. *The subject in a clause does the action; the object receives the action.* So you can say 'I will marry whom I choose', but you cannot say 'Whom is coming to my wedding?'

MYSELF – This word is often used incorrectly. It is not an object pronoun, and therefore is not interchangeable with the word 'me'. This means that you can say 'They invited Josie and me to the party', but you cannot say 'They invited Josie and myself to the party'.

LESS/FEWER – These have the same meaning; however, there is a specific rule for which one you use. 'Less' is used with mass nouns, like 'joy' or 'water', whereas 'fewer' is used with count nouns like 'students'. *If it is counted in separate units, use 'fewer'. So fewer lessons leads to less education!*

HWCS English Department

Summer Term

CREATIVE PROSE TIPS

For this project, you will be required to produce a piece of creative writing of around 600-1000 words. This sounds a lot, but it is actually quite short for a piece of story writing. For this reason, you should try to keep the narrative itself quite simple. This will allow you to focus on creating a believable protagonist with whom your readers can empathize; it will also enable you to demonstrate skill in creating artful sentences and beautiful imagery.

Try to include the following elements in your creative prose writing:

WEATHER AND SETTING – It is a good idea to start the piece by describing a place or location in vivid detail. Focus on big and small details, and describe what the weather is doing. This is a great way to set up mood and atmosphere in your story.

CONFLICT – All stories need conflict. This is simply the sense that something is 'out of the ordinary' or 'not ideal' for the protagonist. *It can be really effective to include emotional conflict, i.e. problems with relationships or friendships, family issues, or personal issues experienced by the protagonist.*

NARRATIVE MOVEMENT – Your story needs to 'go somewhere', but this can be as simple as the protagonist moving from one room to another, or getting on a bus, or walking home from school. Characterization is more important than plot.

SECONDARY CHARACTER – Try to bring another person into the story. Describe the physical appearance of this person, including the eyes and face, in vivid detail.

MEMORY SEQUENCE – Having your protagonist think back to a past event that was significant to them in some way can be an excellent way to develop their character and make the protagonist feel more 'real'. Try to make the memory itself link in some way to the conflict in the story.

DIALOGUE SEQUENCE – Include a conversation between the protagonist and the secondary character. This will help you to convey the relationship between them.

GOOD STUDY HABITS

KEEP YOUR NOTES ORGANIZED – Your exercise books are your responsibility. Keep them tidy and organized, so you know where to find key information and pieces of work.

WORK ON YOUR MEMORY – If you want to make progress in a subject, it is important to have strong memory recall. Sharpen up your memory of key curriculum content by self-testing. Challenge yourself to remember what you have been taught in lessons. *You can do this by simply jotting down a few notes after class, or by creating 'gap-fill' exercises for poems or quotations, or even by collaborating with a friend – why not set questions for each other?* Remember: the more effort you put into memorizing something, the easier it will ultimately be to remember!

SEEK OUT EXTRA STUDY MATERIALS – The HWCS English Department have created a wide range of additional resources, including podcasts and video lessons – all available in the 'Student Resources' Google Drive folder. These will help you to consolidate and develop your learning from class. You could also conduct your own independent research into the texts we study.

GET TALKING! – Talk about what you are learning. Repeating key knowledge out loud can be useful for embedding memories, but it also helps you to re-engage with what you have learned, and even see things in new ways. Try to talk to your friends, family and teachers about what you have learned.

IMPROVE YOUR CONCENTRATION – To study effectively, we need to train our minds to stay focused on one thing for a decent amount of time. This requires steady practice. You can help yourself out by eliminating distractions such as phones, TV and social media while you are working.

ASK QUESTIONS – If you aren't sure on something, or you need additional clarification, seek out the help of an English teacher or your peers. Ask for feedback when you feel you need it.

KEY LITERATURE TERMS

PLOT – The main sequence of interrelated events in a story.

CHARACTERIZATION – The process of developing a character; showing a character's personality.

PROTAGONIST – The main character in a story.

JUXTAPOSITION – Deliberately placing two contrasting images or ideas side-by-side in order to better reveal the contrast between them.

IRONY – When things are described, or appear, in an opposite way to how they really are - creating a humorous or dramatic effect.

METAPHOR – An imagery technique whereby something is compared to something else in a nonliteral way in order to better aid the communication of meaning.

VERB INFINITIVES

1-ETRE = to be
2- AVOIR = to have
3- FAIRE = to do
4- ALLER = to go
5- JOUER = to play
6- REGARDER = to watch
7- ECOUTER = to listen
8- AIMER = to like
9- MANGER = to eat
10- BOIRE = to drink
11- TRAVAILLER = to work
12- HABITER = to live
13- VISITER = to visit
14- SORTIR = to go out
15- PRENDRE = to take
16- ACHETER = to buy

PRESENT TENSE VERBS WITH "JE"

1- je suis = I am
2- j'ai = I have
3- Je fais = I do
4- je vais = I go
5- je joue = I play
6- je regarde = I watch
7- j'écoute = I listen
8- j'aime = I like
9- je mange = I eat
10- je bois = I drink
11- je travaille= I work
12- j'habite = I live
13- je visite = I visit
14- je sors = I go out
15- je prends = I take
16- j'achète = I buy

PAST TENSE VERBS WITH "JE"

1- j'étais = I was
2- j'avais = I had
3- j'ai fait = I did
4- je suis allé(e) = I went
5- j'ai joué = I played
6- j'ai regardé = I watched
7- j'ai écouté = I listened
8- j'ai aimé = I liked
9- j'ai mangé = I ate
10 – j'ai bu = I drank
11- j'ai travaillé = I worked
12- J'ai habité = I lived
13- j'ai visité = I visited
14- je suis sorti(e) = I went out
15- j'ai pris = I took
16- j'ai acheté = I bought

FUTURE TENSE VERBS WITH "JE"

1- je serai = I will be
2- j'aurai = I will have
3- je vais faire = I will do
4- je vais aller = I will go
5- je vais jouer = I will play
6- je vais regarder = I will watch
7- je vais écouter = I will listen
8- je vais aimer = I will like
9- je vais manger = I will eat
10- je vais boire = I will drink
11- je vais travailler = I will work
12- je vais habiter = I will live
13- je vais visiter = I will visit
14- je vais sortir = I will go out
15- je vais prendre = I will take
16- je vais acheter = I will buy

French GCSE Foundation
Core Language

KnowIT

TIME MARKERS

PAST
1- hier = yesterday
2- l'année dernière = last year
3- la semaine dernière = last week
4- le mois dernier = last month
5- avant = before
6- Il y a 3 ans = 3 years ago

FUTURE
1- demain = tomorrow
2- l'année prochaine = next year
3- la semaine prochaine = next year

1- Aujourd'hui = today
2- maintenant = now
3- quelquefois = sometimes
4- tous les jours = everyday
5- une fois par semaine = once a week
6- toujours = always
7- souvent = often
8- l'été = summer
9- l'automne = autumn
10- l'hiver = winter
11- le printemps = spring
12- soir = evening
13- matin = morning
14 – d'habitude = usually

OTHER VERY IMPORTANT PHRASES

1- je peux +inf = I can
2- je veux +inf = I want
3- je voudrais / j'aimerais = I would like
4- on peut = we can
5- on doit / il faut = you have to
6- depuis = for / since
7- il y a = there is
8- plus…. que = more…. than
9- moins que = less…. than
10- qui = who
11- où = where
12- dans = in
13- devant = in front of
14- derrière = behind
15- ne….pas = not
16 – ne……plus = not anymore
17- ne…. Jamais = never

CONNECTIVES AND INTENSIFIERS

1- d'abord = first
2- puis / ensuite = then
3- enfin = finally
4- et = and / ou = or
5- mais = but
6- cependant = however
7- si = if
8- quand = when
9- même si = even if
10- par contre = on the other hand

1- trop = too
2- très = very
3- assez = quite
4- un peu = a little
5- vraiment = really

OPINIONS

1- à mon avis / selon moi = in my opinion
2- je pense que / je trouve que = I think that
3- c'est = it is
4- c'était = it was
5- ce sera = it will be
6- parce-que / car= because

génial / chouette = great
Intéressant = interesting
marrant / drôle = fun
ennuyeux / barbant = boring
pénible = annoying
nul / horrible = rubbish

French Higher - Core Language

IMPERFECT

1- je faisais = I used to do
2- nous faisions = we used to do
3- je jouais = I used to play
4- nous jouions = we used to play
5- j'allais = I used to go
6- nous allions = we used to go
7- je regardais = I used to watch
8- nous regardions = we used to watch

CONDITIONAL

1- j'aurais = I would have
2- je serais = I would be
3- je ferais = I would do
4- nous ferions = we would do
5- je jouerais = I would play
6- je regarderais = I would watch
7- nous regarderions = we would watch
8- j'écouterais = I would listen

FUTURE

1- j'aurai = I will have
2- je serai = I will be
3- je ferai = I will do
4- nous ferons = we will do
5- je jouerai = I will play
6- je regarderai = I will watch
7- nous regarderons = we will watch
8- j'écouterai = I will listen

EXPRESSIONS WITH MULTIPLE VERBS

1- après avoir (+ fait / regardé/ joué/ visité/ écouté etc) = after (+doing / watching / playing / visiting / listening etc)
2- après être allé(s) = after going
3- j'espère pouvoir (+ aller / regarder / jouer etc) = I hope I will be able to (+go / watch / play etc)
4- j'aurais dû (+ aller / regarder / jouer etc) = I should have (+ gone / watched / played etc)
5- j'aurais voulu (+ aller / regarder / jouer etc) = I would have liked to (+go / watch/ play etc)
6- j'ai toujours rêvé de (+ aller / regarder / jouer etc) = I have always wanted to (go / watch / play etc)

French GCSE Higher

Core language!

Use It!

EXPRESSIONS THAT MAKE YOU SOUND GREAT (IDIOMS)!

1- c'est un perte de temps = it's a waste of time
2- quel dommage = what a shame
3- quel gaspillage = what a waste
4- quelle honte = how shameful
5- c'est le pied = it's awesome
6- ce n'est pas grave = it's not a big deal
7- j'en ai marre de (+ inf) = I'm fed up of…
8- ça vaut le coup = it is worth it
9- cela n'a pas de sens = it doesn't make sense
10- j'ai envie de (+inf) = I feel like (+ -ing)
11- ca m'est égal = I don't mind
12- j'ai horreur de (+inF) = I really hate..
13- ca me donne envie de (+inf) = it makes me want to ….
14- au lieu de (+inf), on devrait (+inf) = instead of (-ing) , we should …
15- il faut regarder le bon côté des choses = we have to look at the bright side

SUBJUNCTIVE

1- il faut que je fasse = I have to do
2- il faut que je sois = I have to be
3- bien que ce soit = although it is
4- il est possible que ce soit (vrai) = it's possible that it is (true)

OPINION – SYNONYMS!

1- génial = épatant, extra, top, sensass, formidable, splendide, merveilleux, inoubliable
2- intéressant = captivant, fascinant
3- nul = épouvantable, lamentable, affreux, horrible, désastreux
4- ennuyeux = barbant, monotone, razoir
5- stupide = ridicule, idiot, bête
6- pénible = agaçant, casse-pieds, énervant
7- triste => déprimant

Ma vie au collège – My Life at School

Les matières	School subjects
le commerce	business studies
le dessin	art
le français	French
la biologie	biology
la chimie	chemistry
la géographie	geography
la musique	music
la physique	physics
la religion	religious studies
la technologie	technology
l'allemand (m)	German
l'anglais (m)	English
l'art dramatique (m)/le théâtre	drama
l'EPS (f)/le sport	PE
l'espagnol (m)	Spanish
l'étude des médias (f)	media studies
l'histoire (f)	history
l'informatique (f)	ICT
l'instruction civique (f)	citizenship
les arts ménagers	home technology
les maths	maths

L'emploi du temps	The timetable
à neuf heures	at nine o'clock
à neuf heures dix	at ten past nine
à neuf heures et quart	at a quarter past nine
à neuf heures et demie	at half past nine
à dix heures moins vingt	at twenty to ten
à dix heures moins le quart	at a quarter to ten
lundi/mardi	(on) Monday(s)/Tuesday(s)
mercredi/jeudi	(on) Wednesday(s)/Thursday(s)
vendredi	(on) Friday(s)
la récré(ation)	break time
l'heure du déjeuner	lunchtime
Lundi à neuf heures, j'ai … histoire/maths.	On Monday at nine o'clock, I have … history/maths.
Vendredi, j'ai deux heures de français.	I have two French lessons on Fridays.
La récré commence à …	Break time starts at …
J'ai (deux) heures de (musique) par semaine.	I have (two) hours of (music) per week.
Mes cours finissent à (16h00) tous les jours.	My lessons finish at (4.00 p.m.) every day.
Je n'ai pas cours (le mercredi après-midi).	I don't have lessons (on Wednesday afternoon).

Ce que j'aime et ce que je n'aime pas	What I like and what I don't like
Ma matière préférée est …	My favourite subject is …
Je suis fort(e) en …	I am good at …
Je suis faible en …	I am weak at …
Je (ne) suis (pas) doué(e) en …	I (don't) have a talent for …
Je trouve …	I find …
Je pense que … est/sont …	I think that … is …
intéressant(e)(s)	interesting
passionnant(e)(s)	exciting
ennuyeux/-euse(s)	boring
… parce que …	… because …
c'est facile/fascinant/ difficile/utile/inutile	it's easy/fascinating/ difficult/useful/useless
Je suis fort(e)/faible/doué(e) en …	I am strong/weak/gifted in …
Le/La prof est bon(ne)/sympa/marrant(e)/ sévère/gentil(le)/impatient(e).	The teacher is good/nice/funny/ strict/kind/impatient.
On a trop de devoirs.	We have too much homework.

Mon bahut	My school
Comment s'appelle ton collège?	What's your school called?
Mon collège s'appelle …	My school is called …
C'est quelle sorte d'école?	What sort of school is it?
C'est un collège mixte pour les élèves de onze à seize ans.	It's a mixed school for pupils from 11 to 16.
Il y a combien d'élèves?	How many pupils are there?
Il y a 750 élèves et quarante-cinq professeurs.	There are 750 pupils and 45 teachers.
Quels sont les horaires du collège?	What are the school hours?
Les cours commencent à 8h30.	Lessons start at 8.30 a.m.
le gymnase	sports hall
le hall	(assembly) hall/auditorium
le terrain de basket	basketball court
le terrain de sport	sports ground
la bibliothèque	library
la cantine	canteen
la cour de récréation	playground
la piscine	swimming pool
la salle de sport	gym
les labos de science	science labs
les salles de classe	classrooms
les vestiaires	changing rooms

L'uniforme scolaire	School uniform
Je porte …	I wear …
un pantalon/un polo	trousers/a polo shirt
un sweat/une chemise	a sweatshirt/a shirt
une cravate/une jupe	a tie/a skirt
une veste	a blazer/jacket
mes propres vêtements	my own clothes
La mode n'a pas de place à l'école.	Fashion has no place in school.
L'uniforme coûte cher.	Uniform is expensive.
Tout le monde se ressemble.	Everyone looks the same/alike.
C'est démodé et embarrassant.	It's old-fashioned and embarrassing.
C'est pratique et confortable.	It's practical and comfortable.

French - Ma Vie au College 2

Le règlement scolaire	School rules
Dans cette école, il faut …	*In this school, you must …*
être à l'heure	*be on time*
faire ses devoirs	*do your homework*
porter l'uniforme scolaire	*wear a school uniform*
Il ne faut pas …	*You must not …*
manquer les cours	*miss lessons*
tricher pendant un contrôle	*cheat in a test*
Il est interdit de/d' …	*It is forbidden to …*
mâcher du chewing-gum	*chew gum*
utiliser son portable en classe	*use your mobile in class*
porter des bijoux/des piercings/ trop de maquillage	*wear jewellery/piercings/too much make-up*
harceler d'autres élèves	*bully other pupils*
sortir de l'école pendant l'heure du déjeuner	*leave school during the lunch hour*
Je trouve ça …	*I find that …*
raisonnable/logique	*reasonable, sensible/logical*
juste/injuste	*fair/unfair*
ridicule/frustrant	*ridiculous/frustrating*
… parce que/car …	*… because …*
c'est/ce n'est pas dangereux	*it's (not) dangerous*
il faut protéger les jeunes	*you must protect young people*
on n'est pas des bébés	*we're not babies*
il faut respecter les autres	*you must respect others*
la mode n'a pas de place à l'école	*fashion has no place at school*
c'est/ce n'est pas important	*it's (not) important*
l'école, c'est pour apprendre	*school is for learning*
J'ai eu une heure de retenue/de colle.	*I had an hour of detention.*
J'ai dû copier des lignes.	*I had to write lines.*
Quelle perte de temps!	*What a waste of time!*

Les succès au collège	Successes at school
Je suis fier/fière de moi.	*I am proud of myself.*
Je joue dans l'orchestre.	*I play in the orchestra.*
Je suis membre du club informatique.	*I'm a member of the IT club.*
J'ai toujours de bons commentaires sur mon bulletin scolaire.	*I always get good comments in my school report.*
Les sorties scolaires sont une bonne/ mauvaise idée parce que/qu' …	*School trips are a good/bad idea because …*
on se fait de nouveaux amis	*you make new friends*
on s'amuse ensemble	*you have a laugh together*
c'est trop cher/ennuyeux	*it's too expensive/boring*

L'école chez nous, l'école chez vous	School here and with you
Je préfère le système (anglais/français) parce que …	*I prefer the (English/French) system because …*
les horaires sont plus raisonnables	*the hours are more sensible*
l'uniforme scolaire est pratique/inutile	*school uniform is practical/useless*
l'école fournit l'équipement	*the school provides the equipment*
le redoublement (n')est (pas) une bonne idée	*repeating the year is (not) a good idea*
on (n')étudie (pas) …	*we/they (don't) study …*

Geography - Distinctive Landscapes 1

What is a landscape?

A landscape has visible features that make up the surface of the land. Landscapes can be broken down into four 'elements'.

Landscape Elements

Physical	Biological
• Mountains • Coastlines • Rivers	• Vegetation • Habitats • Wildlife
Human	**Variable**
• Buildings • Infrastructure • Structures	• Weather • Smells • Sounds/Sights

Relief of the UK

Relief of the UK can be divided into uplands and lowlands. Each have their own characteristics.

Key

Lowlands

Uplands

Areas +600m: Peaks and ridges cold, misty and snow common. i.e. Scotland

Areas -200m: Flat or rolling hills. Warmer weather. i.e. Fens

Erosion

The break down and transport of rocks – smooth, round and sorted.

Attrition	Rocks that bash together to become smooth/smaller.
Solution	A chemical reaction that dissolved rocks.
Abrasion	Rocks hurled at the base of a cliff to break pieces apart.
Hydraulic Action	Water enters cracks in the cliff, air compresses, causing the crack to expand.

Transportation

A natural process by which eroded material is carried/transported.

Solution	Minerals dissolve in water and are carried along.
Suspension	Sediment is carried along in the flow of the water.
Saltation	Pebbles that bounce along the sea/river bed.
Traction	Boulders that roll along a river/sea bed by the force of the flowing water.

Glaciation in the UK

Over many thousands of years, glaciation has made an impression on the UK's landscape. Today, much of upland Britain is covered in u-shaped valleys and eroded steep mountain peaks.

During the ice age

Ice covered areas eroded and weathered landscapes to create dramatic mountain scenery.

After the ice age

Deep valleys and deposition of sediment revealed

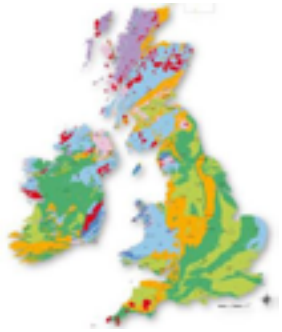
Geology of the UK

The UK is made from a variation of different rock types. The varied resistance of these rocks influences the landscape above.

Igneous Rock
Volcanic/molten rock brought up to the Earth's surface and cooled into solid rock.

Sedimentary Rock
Made from broken fragments of rock worn down by weathering on Earth's surface.

Metamorphic Rock
Rock that is folded and distorted by heat and pressure.



Soil & Landscape

- Soils are created from weathered rocks, organic material and water. Rock types have influence over fertility of soil.
- Low-laying areas such as the Cambridgeshire Fens have deep soil whereas uplands have thin soil.
- Deep soil is more often associated with deciduous woodland rather than coniferous woodlands.

Human activity on Landscape

Farming has changed the vegetation which grows there.	**Much of the rural landscape has been replaced by urban sprawls.**	**Infrastructure such as roads and pylons cover most of the UK.**
Over thousands of years, much of the UK's woodlands have gone.	**Increasing population of the UK means more houses are needed.**	**UK's marshes and moorlands are heavily managed by people.**

Topic 3
Distinctive Landscapes

Climate and Weather in the UK

The variations of climate and weather means there are different influences on the UK's landscape.

Climate

The rainfall map of the UK shows variations in average rain.

- **Less** precipitation occurs in low land areas. East England
- **Most** precipitation occurs in upland areas. Scotland.

These differences mean...
Uplands experience more weathering, erosion and mass movement.

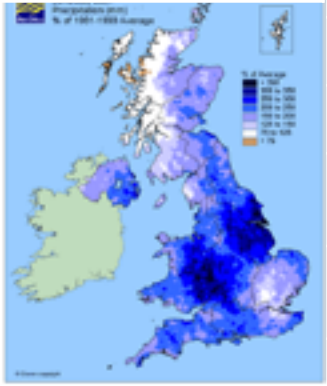
Weathering

Mechanical
Caused by the physical action of rain, frost and wind.

Chemical
Action of chemicals within rain dissolving the rock.

Biological
Rocks that have been broken down by living organisms.

Average rainfall in the UK

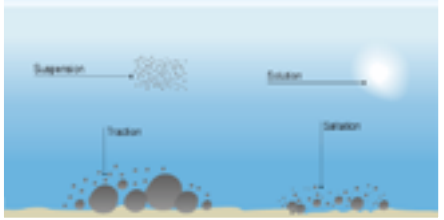


Freeze-thaw weathering

Stage One
Water seeps into cracks and fractures in the rock.

Stage Two
When the water freezes, it expands about 9%. This wedges apart the rock.

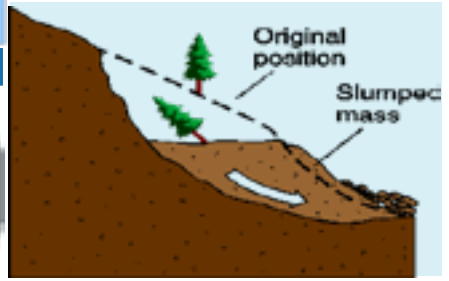
Stage Three
With repeated freeze-thaw cycles, the rock breaks off.



Mass Movement

A large movement of soil and rock debris that moves down slopes in response to the pull of gravity in a vertical direction.

1	Rain saturates the permeable rock above the impermeable rock making it heavy.
2	Waves or a river will erode the base of the slope making it unstable.
3	Eventually the weight of the permeable rock above the impermeable rock weakens and collapses.
4	The debris at the base of the cliff is then removed and transported by waves or river.

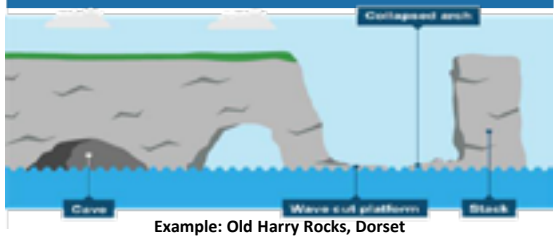


Geography - Distinctive Landscapes 2

Deposition

When the sea or river loses energy, it drops the sand, rock particles and pebbles it has been carrying. This is called deposition.

Formation of Coastal Stack



Example: Old Harry Rocks, Dorset

1) Hydraulic action widens cracks in the cliff face over time.
2) Abrasion forms a wave cut notch between HT and LT.
3) Further abrasion widens the wave cut notch to from a cave.
4) Caves from both sides of the headland break through to form an arch.
5) Weather above/erosion below –arch collapses leaving stack.
6) Further weathering and erosion eaves a stump.

Coastal Defences

Hard Engineering Defences

Groynes	Wood barriers prevent longshore drift, so the beach can build up.	✓ Beach still accessible. ✗ No deposition further down coast = erodes faster.
Sea Walls	Concrete walls break up the energy of the wave . Has a lip to stop waves going over.	✓ Long life span ✓ Protects from flooding ✗ Curved shape encourages erosion of beach deposits.
Gabions or Rip Rap	Cages of rocks/boulders absorb the waves energy, protecting the cliff behind.	✓ Cheap ✓ Local material can be used to look less strange. ✗ Will need replacing.

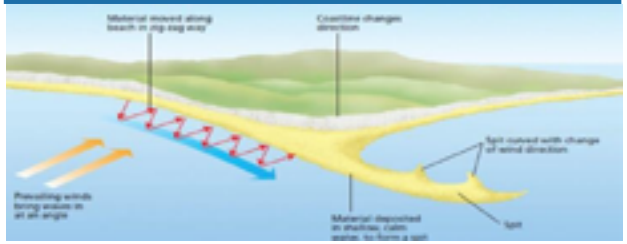
Soft Engineering Defences

Beach Nourishment	Beaches built up with sand, so waves have to travel further before eroding cliffs.	✓ Cheap ✓ Beach for tourists. ✗ Storms = need replacing. ✗ Offshore dredging damages seabed.
Managed Retreat	Low value areas of the coast are left to flood and erode naturally.	✓ Reduce flood risk ✓ Creates wildlife habitats. ✗ Compensation for land.

Formation of Bays and Headlands

1) Waves attack the coastline.
2) Softer rock is eroded by the sea quicker forming a bay, calm area cases deposition.
3) More resistant rock is left jutting out into the sea. This is a headland and is now more vulnerable to erosion.

Formation of Coastal Spits - Deposition



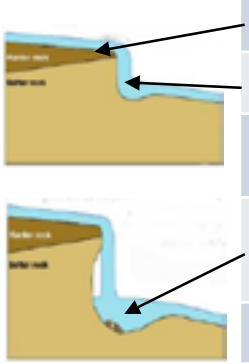
Example: Dorset coast

1) Swash moves up the beach at the angle of the prevailing wind.
2) Backwash moves down the beach at 90° to coastline, due to gravity.
3) Zigzag movement (Longshore Drift) transports material along beach.
4) Deposition causes beach to extend, until reaching a river estuary.
5) Change in prevailing wind direction forms a hook.
6) Sheltered area behind spit encourages deposition, salt marsh forms.

Upper Course of a River

Near the source, the river is flows over steep gradient from the hill/mountains. This gives the river a lot of energy, so it will erode the riverbed vertically to form narrow valleys.

Formation of a Waterfall

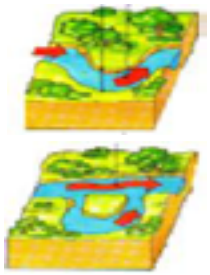


1) River flows over alternative types of rocks.
2) River erodes soft rock faster creating a step.
3) Further hydraulic action and abrasion form a plunge pool beneath.
4) Hard rock above is undercut leaving cap rock which collapses providing more material for erosion.
5) Waterfall retreats leaving steep sided gorge.

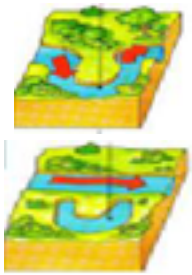
Middle Course of a River

Here the gradient get gentler, so the water has less energy and moves more slowly. The river will begin to erode laterally making the river wider.

Formation of Ox-bow Lakes



Step 1
Erosion of outer bank forms river cliff. Deposition inner bank forms slip off slope.



Step 2
Further hydraulic action and abrasion of outer banks, neck gets smaller.

Step 3
Erosion breaks through neck, so river takes the fastest route, redirecting flow

Step 4
Evaporation and deposition cuts off main channel leaving an oxbow lake.

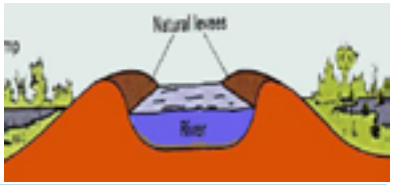
Lower Course of a River

Near the river's mouth, the river widens further and becomes flatter. Material transported is deposited.

Formation of Floodplains and levees

When a river floods, fine silt/alluvium is deposited on the valley floor. Closer to the river's banks, the heavier materials build up to form natural levees.

✓ Nutrient rich soil makes it ideal for farming.
✓ Flat land for building houses.



River Management Schemes

Soft Engineering

Afforestation – plant trees to soak up rainwater, reduces flood risk.
Demountable Flood Barriers put in place when warning raised.
Managed Flooding – naturally let areas flood, protect settlements.

Hard Engineering

Straightening Channel – increases velocity to remove flood water.
Artificial Levees – heightens river so flood water is contained.
Deepening or widening river to increase capacity for a flood.

Case Study: Jurassic Coast

Location and Background
South Coast of England, stretches from **Lyme Regis** in the west **to Bournemouth** in the east

Geomorphic Processes
Tall, more resistant chalk cliffs being eventually eroded and weathered
'Hard' mass movements frequently occur here – wave-cut platforms, caves, arches stack and stumps
Mostly low clay cliffs and sandy beaches with pronounced Longshore Drift
Soft mass movement frequently occur– spits + beaches

Management
-High population centres such as Swanage are protected by 'hold the line' defence measures such as sea walls, groynes & heavy beach nourishment.
-Underpopulated & economic centres, such as farmland, are under 'managed retreat' schemes.

Case Study: The River Tees

Location and Background
The River Tees is located in the North east of the UK to the west of Hartlepool. The river's source is in the Pennines and travels east before reaching the mouth at the North Sea. The river is 137 km long.

Geomorphic Processes
Upper –Moorland, Features include V-Shaped valley, rapids, waterfalls and plunge pools – High Force (20m)
Middle – Features include meanders and ox-bow lakes.
Lower – Greater lateral erosion creates features such as floodplains & levees. Floods are common downstream of Middlesbrough. Mudflats at the river's estuary.

Management
Hard engineering: Cow green Reservoir (1961) for recreational and flood protection, channel straightening in 1800's for navigation and Tees Barrge.
Soft engineering: Afforestation, flood protection and prediction (Environment Agency works with Met office).
95% of land in middle course used for farming and heavy industry located in lower reaches – access to sea

Geography - Resource Reliance 1

What is Resource Reliance?

Resources are things that humans require for life or to make our lives easier. Humans are becoming increasingly dependent on exploiting these resources, and as a result they are in high demand.

Resource Required

Resources such as food, energy and water are what is needed for basic human development.

FOOD	WATER	ENERGY
Without enough nutritious food, people can become **malnourished**. This can make them ill . This can prevent people working or receiving education.	People need a supply of **clean and safe water** for drinking, cooking and washing. Water is also needed for food, clothes and other products.	A good supply of energy is needed for a basic standard of living. People need **light and heat** for cooking or to stay warm. It is also needed for industry.

Demand outstripping supply

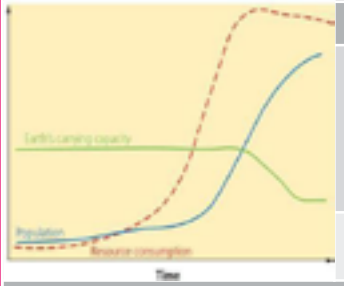
The demand for resources like food, water and energy is rising so quickly that supply cannot always keep up. Importantly, access to these resources vary dramatically in different locations

1. Population Growth

- Currently the global population **is 7.7 billion**.
- Global population has risen **exponentially** this century.
- Global population is expected to reach **9 billion by 2050**.
- With more people, the **demand** for food, water, energy, jobs and space **will increase**.

2. Economic Development

- As **LIDCs** and **EDCs** develop further, they require **more energy** for industry.
- **LIDCs** and **EDCs** want similar lifestyles to **ACs**, therefore they will need to **consume more resources**.
- Development means **more water is required** for food production as diets improve.



Resource Reliance Graph

Consumption – The act of using up resources or purchasing goods and produce.
Carry Capacity – A maximum number of species that can be supported.

Resource consumption exceeds Earth's ability to provide!

3. Changing Technology and Employment

- The demand for resources has driven **the need for new technology** to reach or gain more resources.
- More people in the **secondary and tertiary industry** has increased the **demand for resources** required for electronics and robotics.

Reasons for NOT Meeting Modern Resource Demands.

Climate	• **Global warming** effects cycles and seasons and therefore farming. • **Rainfall patterns** are changing and are becoming unpredictable. This is a problem for farming.
Geology	• Not all countries have **access to fossil fuels** or suitable landscape for renewables. • Many **minerals are finite** and therefore once used will reduce the resources available. • R**ock types** might limit the availability to store water.
Conflict	• **War** can disrupt transport of resources by damaging roads and water pipes.
Poverty	• LIDCs are unable to **afford technology** to effectively exploit the natural resources available.
Natural Hazards	• **Increase in hazard events** due to climate change. • Prime agricultural regions in Asia and Africa and are also in **hazard zones**. • Has the ability to **destroy infrastructure** needed to transport resources.

Topic 8
Resource Reliance

Environment and Food: Fishing and Farming

	Methods	Environmental and Ecosystems
Fishing	**Bigger nets and fishing boats** have allowed for greater catches. **GPS and sonar** has also find the fish easily.	• **Overfishing** of certain fish has caused their decline. • **Dredging** can damage seafloor habitats. • Decline of one species has a **knock on** effect on other marine species.
Farming	**Tractors, computer programming** and **GPS** technology is producing food more effectively and at a larger scale.	• Field sizes have caused **hedgerows to decline** in biodiversity. • **Fertilisers and pesticides** enter water courses and harm or kill organisms. • Heavy machinery can cause **soil erosion**.

Environment and Energy: Deforestation and Mining

	Methods	Environmental and Ecosystems
Deforestation	Logging using **modern machinery** and **transportation** has made deforestation more productive & convenient.	• **2 billion people depend on wood** for fuel, which therefore creates high **CO2 emissions** • Forests provide for **important habitats**. • Clearing of forests leads to **soil erosion**. • Tree intercepts rain and **prevents flooding**.
Mining	Large machines and drill technology can remove and reach through material effectively.	• Mining waste **can pollute soil and contaminate water** supplies. • **Habitats are destroyed** in mining zones. • Fossil fuels burnt **release greenhouse gases**

Environment and Water: Reservoirs and Water Transfer

	Methods	Environmental and Ecosystems
Reservoirs	Increasing **storage to hold more water** and constructing more dams to **control river flow** can provide a reliable source of water.	• Can **flood** a large area of land and damage **habitats** and **natural landscapes**. • Dams can be **a barrier for certain species** to migrate upstream. • Natural flow of sediment is disrupted, which then **reduces fertility of land** further down.
Water Transfer	Constructing pipes and canals to divert water surplus to areas in need of a water supply.	• Large-scale engineering works can **damage ecosystems** along the route. • **Lots of energy** is required to pump water over long distances.

Food Security

'Food Security' is when people at all times need to have physical & economic access to food to meet their dietary needs for an active & healthy life. This is the opposite to **'Food Insecurity'** which is when someone is unsure when they might next eat.

Human

- **Poverty** prevents people affording food and farmers buying modern equipment.
- **Poor infrastructure** makes food difficult to transport fresh food.
- **Conflict** disrupts farming and prevents supplies.
- **Food waste** due to poor transport and storage.
- **Climate Change** is affecting rainfall patterns making food production difficult.

Physical

- **Temperature** needs to be ideal for certain crops to grow.
- The **quality of soil** is important to ensure crops have the necessary nutrients.
- **Water supply** needs to be reliable to allow food to grow.
- **Pest, diseases and parasites** can destroy vast amounts of crops that are necessary to feed large populations.
- **Extreme weather** events can damage crops (i.e. floods).

Malthus and Boserup's Theories about Food Supply

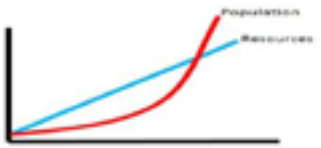
With the population growing very quickly, there are different ideas about whether or not this will lead to a food crisis.

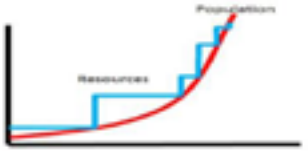
Malthus Theory

- Believed that **population would increase faster than food supply**.
- This would lead to a lack of food being available.
- Malthus believed this would cause **large scale famine, illness** and **war**
- This would occur until population returned to level that can be supported.

Boserup Theory

- Believed that however big the population grew**, people would find ways to manage**.
- If food supplies became limited, **people would find new ways** to increase production.
- These solutions would often involve **creating new technologies**.





Geography - Resource Reliance 2

Measuring Food Security

Food security varies around the world. Some people and places are more food secure than others. This can often depend on how much a country can grow and is able to afford.

The Global Hunger Index

- This shows how many people are suffering from **hunger or illness** caused by lack of food.
- The index gives a value for each country from **0** (no hunger) to **100** (extreme hunger).

Daily Calorie Intake

- This shows how many **calories per person** that are consumed on average for each country.
- This can indicate the global distribution of **available food** and **food inequality**,

Case Study: UK Food Security

Food Availability in the UK

- The UK is ranked **17th out of 109** in Global Food Security Index with a score of **79.1 out of 100.**

Local Scale: Food Banks

- Food banks are established by charities (Andover Food Bank, The Trussell Trust) and give three days' worth of food for people and families who cannot feed themselves.
- In 2014, 1.1 million people used food banks in the UK.

Past Attempt: Genetically Modified Crops

- Uses technology to achieve food security by taking DNA from one species and putting it into another.
- The Green Revolution in the 1960's cross bred rice and wheat seeds that produced very high yields. However, new strains were suited to intensive farming which needed lots of water, fertilisers and pesticides. This also reduced biodiversity and put farmers at risk of poor crops and debt.

Present Attempt: Thanet Earth

- Large industrial agriculture in Kent, South East England. It is the largest greenhouse complex in the UK, four greenhouses the size of 10 football pitches grow salad vegetables all year round using hydroponics. The development aims to be sustainable as each greenhouses has its own power station to provide heat and lighting. Water supply from rainwater collected from the roofs. Hot air and carbon dioxide from the power stations is pumped back into the greenhouses.

Food consumption in the UK

Average daily calorie intake in the UK comes in sixth place. People consume an average daily calorie intake of 3,440. 14.3 million people are in poverty in the UK.

Successes

- Raise awareness of hunger and poverty
- Signpost to a host of information and services, including money management, family care and nutrition

Limitations/Criticisms

- For some people, this is their main source of food
- Sometimes the food is unhealthy and unsuitable

Successes:

- GM crops engineered to resist drought and frost will grow in places currently not suitable.
- Crops can be modified with DNA harmful to pest and insects and reduce the need for pesticides.
- Food with other health benefits can be engineered

Limitations/Criticisms:

- GM crops might not be safe to eat.
- Pollen spreads and contaminates other plants.
- GM seeds are made by TNC's; profit over security?

Successes

- Salad vegetables grown all year round, reducing the need for imports and reducing food miles.
- Bees are used for pollination, 500 jobs created.

Limitations /Criticisms

- Natural habitats lost and ecosystems disrupted.
- Money generated mostly goes to large investors rather than local communities.
- Greenhouses are built on high land and artificially lit - visual and light pollution.
- Large amounts of energy are required to power the greenhouses.

Attempts to Achieve Food Security

There are various measures to maintain or even improve our food security. These measures are often taken to be socially, economically, environmentally viable for the longer term.

Social	Economic	Environmental

Ethical Consumerism

This involves buying products that have a positive social, economic and environmental impact today, without compromising future generations.

Fairtrade	• This is a global movement to give farmers a **fairer price for their products**. • The profits benefit the community **with schools and medical facilities**. • Involves using farming methods that **protects rather than destroys environments**.
Food Waste	• One-third of all food gets lost or wasted. • Aim to **eat locally sourced food** to reduce waste through transport. • Eating 'ugly' food despite it not being 'ideal' can prevent waste and **save money**. • Prevents wasted energy for producing food and therefore **reduces CO2 emissions**.

Food Production

This involves producing as much food as possible in as small a space as possible. They often involve using machines and chemicals to gain as much produce as they can.

Intensive Farming	• Makes the most of the land and allows for higher yields. This can make growing food more **productive and therefore cheaper** to produce. • Chemical fertilisers, pesticides and herbicides can **pollute the environment** and **harm people**, animals and insects.
Organic Methods	• This involves the banned use of chemicals and **ensuring animals are raised naturally**. • This can lead to **lower yields of 20%** and products being **more expensive**.

Technological Developments

Through better understanding of science and improved technology, it is now possible to change the food we grow and protect and harvest the crops more effectively.

Genetically modified (GM)	• Involves changing the DNA of foods to enhance their productivity and properties. • Crops can be **better protected from disease and drought**, but also made larger or include more **health benefits**.
Hydroponics	• This is a method of growing plants without soil. Instead they use nutrient solution. • Less water is needed and a **reduced need for pesticides** to be used. • However, this method is **very expensive** so only used for high value crops.

Small Scale 'Bottom Up' Approaches

This involves a small scale production of food and relies on individuals and communities, rather than government or large organisations.

Allotments	• This is an area of land that is divided into plots and rented to **individuals to grow their own fruit and vegetables**. • Allows people in urban areas to produce their **own cheap** & **healthily food** close to home.
Permaculture	• This involves **people growing their own food** and **changing their eating habits**. • This can create **more natural ecosystems** and fewer resources are required.

Health and Social Care Knowledge Organiser: Component 3 Health and Wellbeing

LAA Factors that affect health and wellbeing

A1 Factors affecting health and wellbeing

1. **Definition of health and wellbeing**
   a. A combination of physical health and social and emotional wellbeing, and not just the absence of disease or illness
2. **Physical and lifestyle factors that can have positive or negative effects on health and wellbeing:**
   a. Genetic inheritance, including inherited conditions and predisposition to other conditions
   b. Ill health (acute and chronic)
   c. Diet (balance, quality and amount)
   d. Amount of exercise
   e. Substance user, including alcohol, nicotine, illegal drugs and misuse of prescribed drugs
   f. Personal hygiene
3. **Social, emotional and cultural factors that can have positive or negative effects on health and wellbeing:**
   a. Social interactions, e.g. supportive/ unsupportive relationships, social intergration/ isolation
   b. Stress, e.g. work-related
   c. Willingness to seek help or access services, e.g. influenced by culture, gender, education
4. **Economic factors that have a positive or negative effect on health and well-being**
   a. Financial resources
5. **Environmental factors that can have a positive or negative effect on health and well-being:**
   a. Environmental conditions, e.g. levels of pollution, noise
   b. Housing, e.g. conditions, location
6. **The impact of life events relating to relationship changes and changes in life circumstances**

LAB Interpreting health indicators

B1 Physiological indicators

1. **Physiological indicators that are used to measure health:**
   a. Pulse (resting and recovery rate after exercise)
   b. Blood
   c. Peak flow
   d. Body mass index (BMI)
2. **Using published guidance to interpret data relating to these physiological indicators**
3. **The potential significance of abnormal readings: risks to physical health**

B2 Lifestyle indicators

1. **Interpretation of lifestyle data, specifically risks to physical health associated with:**
   a. Smoking
   b. Alcohol consumption
   c. Inactive lifestyles

LAC Person centred health and wellbeing improvement plans

C1 Health and wellbeing improvement plans

1. **The importance of a person-centred approach that takes into account an individual's needs, wishes and circumstances**
2. **Information to be included in plan:**
   a. Recommended actions to improve health and wellbeing
   b. Short term (less than 6 months) and long term targets
   c. Appropriate sources of support (Formal and/ or informal)

C2 Obstacles to implementing plans

1. **Potential obstacles**
   a. Emotional/ psychological – lack of motivation, low self-esteem, acceptance of current state
   b. Time constraints – work and family commitments
   c. Availability of resources – financial, physical, e.g. equipment
   d. Unachievable targets – unachievable for the individual or unrealistic timescale
   e. Lack of support, e.g.from family and friends
   f. Other factors specific to individual – ability/ disability, addiction
   g. Barriers to accessing identified serv ices

History - Paper 1 - Overview

Part 1. Saxon & Norman 1060-1500

	Saxon Justice	Norman Justice – following the Battle of Hastings in 1066
Crime	Murder, theft	Forest laws, murdering a Norman
Punishment	Fines – Wergild, Execution, mutilation	Murdrum fine, Wergild paid to the King, stocks and pillory
Policing	Hue & Cry, Tithings	Constables, coroners
Trials	Trial by Jury, Trial by Ordeal	Trial by combat, Royal Courts

Case study: The role of the Church
Sanctuary, benefit of the clergy, church courts, trial by ordeal (Hot water, cold water, blessed bread, hot iron)

Part 2. Early Modern

	The Early Modern period
Crime	Heresy, Treason, Vagabondage, Witchcraft
Punishment	Hanging, drawing and quartering, Prison (awaiting trial or debt) Whipping/Flogging, Houses of correction, Transportation to America, The Bloody Code introduced
Policing	Habeas Corpus, Justices of the Peace, watchmen, constables, coroners, rewards
Trials	JP's – manor courts, quarter sessions, Royal judges

Case studies:
The Gunpowder Plot 1605; Matthew Hopkins (Witchfinder General) 1645-47

Crime & Punishment 1000-1999: Paper 1 OVERVIEW

Part 3. Industrial

	Industrial Period
Crime	Highway Robbery, Smuggling, Poaching, Tolpuddle Martyrs
Punishment	Bloody Code, Transportation to Australia, Prisons – Separate (1830's) and silent system (1860's), Gaols Act 1823, Prison reformers
Policing	Fielding Brothers and the Bow Street Runners, Metropolitan Police (1829)
Trials	Trial by Jury

Case studies:
The work of Sir Robert Peel – creation of the Gaols Act 1823; the creation of the Metropolitan Police 1829

Pentonville Prison and the separate system

Part 4. 20th Century

	20th Century
Crime	Car crime, terrorism, hate crimes, smuggling, violent and sexual crimes
Punishment	Prison, death penalty abolished, open prison, suspended sentences,
Policing	Police force, nation wide forces, specialisation of the police (Fraud squad, drug squad) PCSO's Police National Training, new technology in policing – fingerprinting, DNA testing
Trials	Trial by Jury

Case studies:
Conscientious objectors in both WW1 & WW2
Derek Bentley and the abolition of the death penalty

The '8 Factors'

Government and Lawmakers, Church & religion, beliefs & attitudes, individuals, urbanisation, travel & technology, wealth & poverty, the media.

Time periods

1000 – 1500 Medieval Period
1500 – 1700 Early Modern Period
1700 – 1900 Industrial Period
1900 – 2000 20th Century

Crime & Punishment 1000 – 1500 The Medieval Period

Crime

Anglo Saxon England:
Most common crimes were those **against property**, usually theft. More serious crimes included murder

Norman England:
Following the Norman invasion definitions of crime changed.
Killing a Norman and prevention of hunting, known as the **Forest Laws.**

Policing

In the absence of a formal police force communities would police themselves. People lived close together and thought it was their duty to help each other enforce the law. Both the following methods were continued following the Norman invasion.

Tithings: groups of 10 men over the age of 12 all responsible for each others behaviour. If one broke the law the others had to bring him to court or pay a fine.

Hue & Cry: If a crime was committed the whole village would be expected to hunt for the criminal. If someone did not join in then the whole village would pay a fine.

During the later middle ages:

Constables: appointed annually, unpaid volunteers, usually respected members of the community.

Coroners: Royal officials responsible for investigating unnatural deaths.

Sheriff: Each county had a Sheriff who would raise a Posse if the Hue & Cry failed to track down a criminal

Punishment

Anglo Saxon England:
Anglo Saxon punishments were mainly fines but they also used corporal and capital punishment.

Wergild: Compensation payment made to the victim of the crime, the level of which was set by the king's laws.

Execution: The death penalty was used for serious crimes, treason against the King or betraying your lord.

Mutilation: Reoffenders could lose a body part, usually a hand, an ear, nose or even be blinded.

Norman England:
Following the Battle of Hastings, William needed to control 2 million Anglo-Saxons with around 7000 Norman soldiers.

Murdrum fine: Payable by the whole village if a Norman was murdered,

Forest Laws: Trees could no longer be cut down and living near forest you were forbidden to own dogs or bows. If caught two fingers were chopped off, repeat offenders were blinded.

Trials

Trial by Ordeal – ended 1215

Trial by Cold Water: usually taken by men, accused lowered into water on the end of a rope; if they sank below 'pure water' they were innocent, if they floated guilty.

Trial by Hot Water: usually taken by men, accused hand in boiling water to retrieve an object. Hand bandaged, 3 days later if healing and clean deemed innocent.

Trial by hot iron: usually taken by women, three paces with a hot weight, again hands bandaged.

Trial by blessed bread: usually taken by priests

Trial by Combat: Introduced by the Normans, two people would fight to the death

Trial by local jury: Local people that knew both the accused and accuser

During the later middle ages:

Manor courts: local courts to deal with minor crimes

Royal judges: travelled around the country hearing more serious cases.

Case Study

Did the Church help or hinder justice in the Medieval Period? ***Hinder – to make things difficult**

Sanctuary: On the run from the law, you could claim sanctuary in a church, where you would be under the churches protection – 40 days to either, face trial or leave the country.

Church courts: Introduced by the Normans the church claimed the right to try any churchman accused of a crime. They were more lenient, never convicting someone to death.

Benefit of the Clergy: This was the claim by an accused person to be tried in the church courts. In theory only intended for priests but in reality anyone connected with the church used it.

Trial by ordeal: Trials took place inside the church or on consecrated ground, used if a jury could not reach an overall verdict.

Key words

Tithing
Hue & Cry
Wergild
Execution
Mutilation
Constable
Coroner
Trial
Normans
Community

Crime & Punishment 1500 – 1700 The Early Modern Period

Crime

Heresy: The crime of holding religious beliefs that differed from the monarch.
Treason: Disobedience or disloyalty to the monarch
Vagabondage: Being a wandering beggar, also called vagrancy
Witchcraft: regarded as a serious crime for many reasons including religious change, the media and the English Civil War.

Policing

Citizens were still expected to deal with crimes in the absence of a formal police force.
Hue & Cry: If a crime was committed the whole village would be expected to hunt for the criminal. If someone did not join in then the whole village would pay a fine. This method continued during this period
Constables: appointed annually, they continued to be unpaid volunteers, usually respected members of the community. They dealt with minor offences and had the ability to inflict punishments like whipping.
Coroners: Royal officials responsible for investigating unnatural deaths.
Watchmen: In larger towns Watchmen were employed to patrol the streets; expected to arrest drunks and vagabonds. They were poorly paid and were ineffective.
Rewards: These were offered for the arrest of particular criminals; rewards could be high, sometimes equal to a years income for a family.

Punishment

Hanging, drawing and quartering: The punishment was usually used for Treason. Offenders hanged by the neck, gutted, beheaded and cut into four pieces.
Burning at the stake: The punishment for Heresy, held in public
The swim test: Used on those accused of Witchcraft – if they floated they were deemed guilty.
Houses of correction: Inmates were whipped and made to do hard labour
Prison: Used for those in debt of those awaiting trial
The Bloody Code: Introduced in the 1680's; many more crimes were punishable by death
Transportation: In the 1660's criminals were transported to America on Hulks.

Trials

Manor courts: These still dealt with minor crimes such as drunkenness
Royal judges: Visited each country twice a year to deal with more serious offences, known as **County Assizes.**
Justices of the Peace (JP's): Assisted by the Constable they could issue fines or send people to the stocks.
Quarter sessions: held four times a year, JP's would come together to judge serious cases
Habeas Corpus Act 1679: Anyone arrested at the right to appear in court or be released.

Case Studies

The Gunpowder Plot 1605
- Robert Catesby plotted to blow up Parliament and Guy Fawkes placed 36 barrels of gunpowder under the Houses of Parliament
- An anonymous letter was sent to an MP warning them and The plotters were arrests and hanged

Matthew Hopkins and witchcraft
- Claimed to be the Witchfinder General due to his ability to spot witches
- Village tensions were a problem, vulnerable and elderly were accused
- Religious change led to superstition and talk of the Devil
- The English Civil War 1642-9 led to a breakdown in law and order
- Pamphlets were produced telling lurid stories of witches increasing fear

Key words

Pamphlets
Vagabondage
Poor rates
Heresy
Protestant
Catholic
Reformation
Treason
Familiar
Hinder
Watchmen
Habeas Corpus
JP's
Bloody Code

Crime & Punishment 1700 – 1900 The Industrial Period

Crime

Highway Robbery: The Crime of stopping a coach and robbing the passengers; more robbers because guns and horses were cheaper and lack of police meant it was easy to get away.
Smuggling: Bringing illegal goods into the country or bringing in goods and avoiding tax on them. Tax was a source of government income so had a huge impact on the economy.
Poaching: The illegal hunting of animals, poachers were regarded as a threat to wealthy landowners and their property. People considered this as a social crime as the poached food often supplemented the diets of poorer people.
Tolpuddle Martyrs: A group of 6 farm labourers in Tolpuddle Dorset. Having seen their wages cut several times they established a union and swore an oath of secrecy to support each other and the union. The Government were fearful that the ideas of unions would spread.

Policing

The Bow Street Runners

Created by London magistrates Henry and John Fielding, the Bow Street Runners were an organised group of 'thief-takers' who patrolled the streets of London in the evenings. They established a horse patrol to help stop Highway Robbery too.

The Metropolitan Police

The Metropolitan Police Act 1829 established a force of 3200 profession, full time police officers in London and later across the country.
1842: The Detective force was established by the Metropolitan Police
1856: Compulsory for each county to have a police force
1878: The Detective Force became the Criminal Investigation Department (CID)
1884: 39,000 policemen in Britain in over 200 separate forces

Punishment

Abolition of the Bloody Code

The Bloody Code was abolished in 1820's – crime was increasing, juries were not convicting people to death, ideas about punishments were changing; people began to think punishment should reform people.

Transportation to Australia

Considered by many juries as a suitable alternative to the Bloody Code and execution. Criminals were sent to Australia and made to work. It ended in 1860's as it was extremely expensive and the settlors felt that criminals were being 'dumped' in Australia.

Prisons

Following the ending of other methods prison became the main form of punishment. The work of Fry and Howard influenced improvements.
The Gaols Act 1823 meant that prison warders had to be paid, men and women were separate; prisoners were given food and clean water and magistrates inspected prisons in their area.
The separate system was introduced in the 1830's and the silent system from the 1860's.

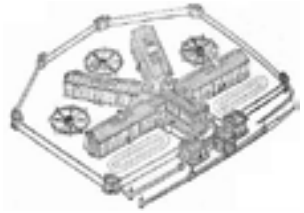
Case study

Sir Robert Peel

People initially worried that having a Police force would limit their freedom. However Peel's reform were successful for a number of reasons. Taxation had increased which could pay for the force; crime had risen again and there was a general fear of crime and protest; the growth of towns meant that the system of Watchmen was ineffective.

Pentonville prison and the Separate system

Built in 1842 Pentonville used the latest ideas to ensure that prisoners were kept separate from each other. Walls were thick; each prisoner had a basin, water and toilet; prisoner wore masks to ensure they could not see each other when exercising. The main aim of the prison was to reform prisoners, ensuring they returned to society better people and less likely to reoffend.



Prison systems

Separate system 1830's

Time alone in cells to reflect on behaviour; religious instruction to lead honest lives; work in cells to learn trade and hopefully secure work upon leaving prison. In the first 8 years of the system 22 went mad, 26 had breakdowns and 3 inmates committed suicide.

Silent system 1860's

Prisoners were kept silent at all times or face punishment; hard labour was completed for much of the day; the main idea was retribution.

Key words

Martyr
Trade Union
Rehabilitation
Retribution
Transportation
Pentonville

Crime & Punishment 1900 – 2000 The 20th Century

Crime

Car crime: Increasing amounts of car ownership has led to car theft. Motoring offences are common
Cybercrime: Fraudsters trick people into handing personal details which often leads to money being stolen. The internet has made this much easier. Hacking is also a criminal offence.
Shoplifting: Products being on display in shops and self service has increased this type of crime
Terrorism: The IRA carried out bomb attacks on buildings in Britain in the 1970's through to the 1990's. More recently extremist groups have committed acts of terror across the world.
Violent crimes: Mainly due to victims being unwilling to report crimes sexual offences and violent crime has risen
Murder: The number of murders had increased after 1900, but often victims know their killers and in some cases use new technology to commit crimes and cover tracks.
Hate crimes: New laws about hate crimes were introduced in 2007; commonly racist crimes and in more recent years they have been motivated by religious believes.
Smuggling: Legal items like tobacco are still smuggling into the country, avoiding taxation makes these items cheaper. Demand for drugs has also risen and these are smuggled frequently too. Immigration controls have also resulted in people trafficking.

Punishment

Prison is the main form of punishment in the 20th century. However new forms of prisons have been opened.
Open Prison: Allows prisoners to leave the facility to work during the day and they are locked back up at night time. Usually for those near the end of their sentence or those having committed minor crimes.
Suspended sentences: In the case of minor crimes often people do not have to complete time in prison but if they reoffend they will immediately go to prison.
Community service: Offenders can do community service rather than facing time in prison. This will be unpaid work.
Electronic tagging: Introduced in the 1990's they track an offenders location and courts can impose restrictions.
Young offenders: Custody is usually a last resort, but offenders can be held in secure facilities where education is provided.

Policing

Technology has heavily influenced the work of the police, in addition officers are more specialised and have greater training.
Specialisation: Officers undergo 14 weeks basic training at the National Police College. As crime has become more complex the police have adapted; there are now units to deal with fraud, terrorism and a drugs Squad. All these officers receive additional training to handle these crimes.
Science & Technology: Since 1901 fingerprinting and blood analysis has been used to identify criminals. DNA testing began in the 1980's. The Police National computer compiles data with fingerprints, motor vehicles and missing people in order to help solve crime. The Automatic Number Plate Recognition camera read registrations and identify vehicles of interest, making it easier for police to stop and track a vehicle.
Crime prevention: Neighbourhood watch schemes were established to support people in local areas. PCSO's on patrol attempt to improve community relations.

Case study

Conscientious objectors in WW1 & 2: Following the introduction of conscription men were forced to join the armed forces. The conscientious objectors were groups of men that refused to take part of religious or moral grounds. The Government introduced a local tribunal and those that refused to support the war were imprisoned. CO's faced hard labour and solitary confinement and were also banned from voting until 1926. During WW2 CO's were only imprisoned as a last resort.
Derek Bentley and the end of the death penalty: Derek Bentley and his accomplice Chris Craig were charged with murder. Craig was under 18 so too young to hang but Bentley faced execution if found guilty. At the trial he was, despite not having fired the fatal shot. The case led to people reconsidering the use of the death penalty. The case was considered a miscarriage of justice.

Key words

Cybercrime
Suspended sentence
Community service
Specialisation
Conscientious Objectors
Miscarriage of Justice
Non-custodial

History - Paper 1 - Whitechapel

Part 1. Housing & poverty

- The problems of housing and overcrowding (30,000 people in 4000 houses). **Lodging houses**, **doss houses**, the **Workhouse** and the **Casual ward**. Links between housing problems and poverty. Orphanages (Barnardos- 1870) The unstable nature of employment, underemployment and unemployment. Many worked in **sweat shops** or tried to find daily work on the docks.
- Attempts to improve housing: the **Peabody Estate, 1881**. Good ventilation and brick built to prevent damp, rules but also high rents which forced some out.
- **Immigration** was a cause of tension. Competition for jobs and housing exacerbated by migration from Ireland and Eastern Europe.
- There was a link between immigration and **anti-Semitism**. Remember the Goulston street graffiti?
- The growth of **Feniansim, Socialism** and **Anarchism** in Whitechapel. These ideas were often blamed upon Immigrants (Russian anarchists or Irish Republicans).

Part 3. The national and regional context

- H Division is part of the **Metropolitan Police** force which covered all of London.
- Efforts were made to improve he quality of police recruits. They had to be literate, have no more than two children and not have business interests in the area.
- Beat constables walked the beat equipped with a whistle, truncheon and note book.
- **The CID (Criminal Investigation Department)** was established in 1842. By 1888 it was under the control of the Police Commissioner, Sir Charles Warren. There was some tension between Warren and the Home Secretary.

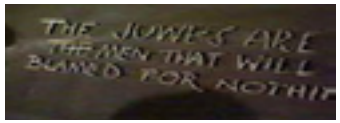
Working with historical evidence

- For questions about source utility (usefulness)- **NACHOS** (Nature, Author, Content, Happening, Omitted, Special reason). **Remember**: "**This is useful of this enquiry because**…"
- When following up an enquiry you need to consider **historical sources *from the time***; for example: housing and employment records, council records and census returns, Charles Booth's survey, workhouse records, local police records, coroners' reports, photographs as well as London and (perhaps occasionally) national newspapers.

Whitechapel Historic Environment 1870-1900: Paper 1

Part 2. The organisation of policing in Whitechapel.

- Whitechapel was policed by **H Division**. The rookeries, alleys and courts along with overcrowding and a multi-lingual population made it difficult to police.
- Police had to deal with problems caused by alcohol, prostitution, protection rackets, gangs, violent demonstrations (Bloody Sunday, 1887) and attacks on Jews.
- George Lusk set up the **Whitechapel Vigilance Committee-** frustrated at police failures to catch the Ripper. These vigilantes patrolled the area and offered rewards for information.
- How the police responded to **the Ripper case**: The developments in techniques of detective investigation, including the use of sketches, photographs and door-to-door enquiries. (Remember: No finger printing until 1900)
- Tensions between the Metropolitan Police and the **City of London Police.**
- Problems caused by the media reporting of the 'Ripper' murders**.** The press were critical of the police and also spread panic amongst the population.



Question types:

- Describe two features of…
- How useful are these sources for an enquiry into…?
- How would you follow up an enquiry?

Useful vocabulary:

Immigration/under-employment/ Provenance /Philanthropist/ Infirmary/ Anti-Semitism/ Socialist/ Anarchist/ Poverty/ Sweated labour/ forensics/ autopsy/ costermonger/ Fenianism/ Slumming/Social Reformer

Crime and Punishment example exam questions

Explain one way…(4)

- Policing methods were different in the later middle ages and the 19th century
- Smuggling was similar in the industrial period and the 20th century
- That the definition of crime had changed from the Medieval period to the Early modern period
- Policing methods were different during the later Industrial period and the 20th century

Explain why…(12)

- Heresy was punished so harshly in the Early modern period
- Punishments became harsher in the early modern period.
- Punishments changed in the industrial period.
- Crimes changed in the Industrial Period
- Policing has changed in the 20th century
- The definition of crime has changed in the 20th century

How far do you agree?…(16)

- The Norman Conquest saw a complete change to law enforcement and punishment in England, how far do you agree?
- Heresy was the most significant crime facing the lawmakers in England during the Early Modern Period, how far do you agree?
- The Tolpuddle Martyrs were the most significant threat facing the government and lawmakers in the Industrial Period, how far do you agree?

Whitechapel example exam questions

Describe two features…(4)

- Of the problems caused by alcohol in Whitechapel
- Of the difficulties policing Whitechapel
- Of a Whitechapel workhouse
- Of a slum
- Of the Peabody estate
- Of the racial tensions in Whitechapel

Follow up an enquiry about…(4)

- How would you follow up source B to find out more about how the public felt about the Ripper Investigation?

Detail I would follow up:
Question I would ask:
What type of sources I could use:
How this might help answer my question:

How useful are the sources…(8)

- How useful are Sources A & B for an enquiry into the problems the police faced when investigating the Ripper murders?

SOURCE A

Part of a picture printed on the front page of the Illustrated Police News, *October 1888.*

SOURCE B

From a report on a public demonstration in Bethnal Green, published in the Pall Mall Gazette, *1 October 1888.*

After several speeches upon the conduct of the Home Secretary and Sir Charles Warren, a resolution was unanimously passed that it was high time both officers should resign and make way for some officers who would leave no stone unturned for the purpose of bringing the murderers to justice, instead of allowing them to run riot in a civilised city like London.

History - Paper 2 - Cold War 1941-91

Part 1. Origins of the Cold War 1941-58

- **Ideological differences**: USA (Capitalist democracy versus USSR Communist dictatorship).
- The Grand Alliance (USA/GB/USSR). **1943 Tehran** (agreed to launch D-Day). **1945 Yalta** conference (Division of Germany & Berlin/free elections/Soviet sphere of influences).
- **Potsdam changes**: Death of Hitler, death of FDR, US atomic bomb leads to nuclear arms race, Soviet takeover of Eastern Europe.
- **Potsdam Conference** confirms Yalta & agrees to allow Soviet compensation from East Germany.
- **Long telegram** leads to **Containment** and the **Truman Doctrine/Marshall Aid (1947)**
- USSR sets up **Cominform** (1947) and **Comecon** (1949) to control Eastern Europe. and the formation of **NATO** (1949).

- 1948-49 **Berlin Crisis (blockade and airlift)**. Stalin shuts off access to West Berlin. Allies fly supplies into western sectors. Crisis ends with formation of the Federal Republic of Germany and German Democratic Republic and NATO (1949).
- **Warsaw Pact** formed 1955.
- **1956 Hungarian Uprising** following death of Stalin/Khrushchev's secret speech (de-Stalinisation).

Khrushchev responds with tanks following threat to leave **Warsaw Pact**. International community criticise but don't act. No further revolt in Eastern Europe until 1968.

Cold War 1941-91: Paper 2

Part 2. Cold War Crises 1958-70

- The building of the **Berlin Wall 1961**: Causes: the "brain drain" and Soviet fears of US espionage lead to Khrushchev's Berlin ultimatum (1958), and the summit meetings of 1959–61. JFK visits Berlin in 1963. Wall becomes concrete symbol of Cold War division.

- Cuba: **1959 Cuban Revolution**. USA refuses to recognise Castro's government. This leads to trade ban and the Bay of Pigs failure (1961).
- **1962 Cuban Missile Crisis**: Discovery of launch sites/naval blockade (quarantine). Resolution by faxes.
- Beginning of **détente**: Telephone hotline/Nuclear Test Ban treat 1963/Outer Space treaty 1967.

- **1968 Prague Spring (Czechoslovakia)**. Opposition to Soviet control leads to calls for reform under Dubcek. USSR sends in tanks and issues the **Brezhnev Doctrine**. USSR asserts right to interfere in Eastern Europe.

Part 3. End of the Cold War

- **Détente** continues into 70s with **SALT 1, Helsinki**, and **the Handshake in Space (1975**).
- Soviet invasion of **Afghanistan (1979)** ends détente and begins the **Second Cold War**. **Carter Doctrine** affirms US will interfere in Middle East. USA organises boycott of **1980 Moscow Olympics**.
- US President **Reagan** increased military spending including Strategic Defence Initiative (**Star Wars**)
- **Gorbachev** becomes leader of USSR- 'new thinking' (**Glasnost & Perestroika**) Gorbachev agrees to and the Intermediate-Range Nuclear Force (INF) Treaty 1987.
- Gorbachev's 'new thinking' shows weakening of Soviet grip on Eastern Europe. Criticism of Soviet economy and **Sinatra Doctrine** encourages calls for freedom in Eastern Europe. USSR refuses to help GDR crush freedom demonstrations. Hungary opens its borders with Austria.

- **1989 Fall of the Berlin Wall** shows beginning of collapse of the
- Soviet Union/end of Warsaw Pact

Question types:

- Give two consequences of (an event)
- Write a narrative account (tell the story in order with explanations and links between events)
- Explain the importance of x for the development of the Cold War.

Useful phrases

This led to/this caused/as a result/increased tension/ decreased tension/ kick started/ resulted in/thaw/escalation/ eroded trust

History - Paper 2 - Cold War Key Topic 1

Key topic 1: The origins of the Cold War

Early tension between East and West

- The **Grand Alliance** was formed of England, America and Russia – original delegates were Winston Churchill, Franklin Roosevelt and Josef Stalin.
- **Tehran November 1943:** Stalin, Roosevelt and Churchill

Key agreements: Russia to join war to fight against Japan; D-Day date was set; United Nations to be established post war.

- **Yalta Conference February 1945:** Stalin, Roosevelt and Churchill

Key agreements: Germany and Berlin divided – 4 zones; Stalin 'sphere of influence'; free elections in Nazi Occupied countries

- **Potsdam Conference July 1945:** Stalin, Truman, Attlee

Key Agreements: Finalise discussions from Yalta; but Poland now has Communist government in place and tension due to delegate change, Truman tested atomic weapon.

- **Soviet Expansion 1946-47:** USSR begin to take control of various Eastern European countries expanding area of control and spreading Communism. Hungary, Czechoslovakia, Yugoslavia and Bulgaria all became satellite states.
- **Iron Curtain speech 1946:** Winston Churchill talks of an imaginary line dividing the East and the West.
- **Long Telegram 1946:** Kennan – USA Chief working in US Embassy in Moscow, considers the USSR to be aggressive and suspicious.
- **Novikov Telegram 1946:** Sent in response to the Long Telegram sent by Novikov to Stalin.

Key words

Grand Alliance, Tehran, Yalta, Potsdam, Conference, Atomic, Satellite State, Ideology, Communism, Capitalism, Sphere of Influence, Containment, Comincon, Comecon, Trizonia, blockade, NATO, Warsaw Pact,

Key people

The development of the Cold War

- **The Truman Doctrine:** USA begins its policy of **Containment** The Doctrine meant that the USA could use military resources in an effort to prevent the spread of Communism.
- **Marshall Aid:** Truman supported his Doctrine with economic aid to Europe. Aid was offered to all countries impacted by war; money equipment and goods were offered to help rebuild industry, business and trade. By 1953 USA had provided $17million to European countries.
- **Cominform 1947:** The Communist Information Bureau establish to coordinate communist parties within Europe. Established to ensure that all states followed Soviet foreign policy and it also introduced economic policies like state control of industry.
- **Comecon 1949:** Council for Mutual Assistance was the soviet response to Marshall Aid. It was aiming to provide economic support for Communist countries, but in reality controlled finances and gave the Soviets access to resources.
- **The Berlin Crisis 1948-49:** Stalin blockaded all routes by land and rail into West Berlin in an attempt to starve West Berlin and force the allies out. The **airlift** was the USA response lasting 10 months. Planes flew in every 90 seconds and dropping 4,600 tons of supplies each day. A total of 275,000 flights. In May 1949 Stalin called off the blockade.
- **Trizonia** was formed – the Western Allies announced their zones would join forming the Federal Republic of Germany. Stalin later announced the formation of the German Democratic Republic.
- **NATO 1949:** The North Atlantic Treaty Organisation was formed, joining western allies together to prevent the spread of communism throughout Europe.

The Cold War intensifies

- **Stalin dies 1953:** Khrushchev establishes himself as leader and in 1956 denounces Stalin's policies in his **secret speech**. He announces **de-Stalinisation.**
- The **Warsaw Pact 1955**: A military alliance of 8 nations headed by the Soviet Union in response to NATO.
- The Soviet Union increases spending on armaments and tests its own atomic weapon.
- **Sputnik 1957:** The Soviet Union launches a rocket containing a satellite which could orbit the earth

The Hungarian Uprising 1956:

- **Matyas Rakosi** was the leader of Communist party in Hungary and considered himself **Stalin's best pupil.** Rakosi was forced from power and replaced with Imre Nagy.
- Demonstrations take place in **Budapest** and Khrushchev sends in troops to regain control.
- Nagy hold talks and it is agreed that troops will be removed. Nagy proposes reforms in Hungary.
- Nagy declares plan to leave the **Warsaw Pact** which angers Khrushchev. As new leader this puts him in a tricky position – seen as weak if he takes no action, but risks being like Stalin if he does.
- Following pressure from fellow Communist leaders Khrushchev sends in 200,000 troops and 6,000 tanks. The Hungarians fought back using Guerrilla tactics.
- Consequences: Kadar becomes new Hungarian leader; about 20,000 people died and 200,000 fled to Austria.
- The UN launched an inquiry, condemned the actions of the Soviet Union and Hungarian government under Kadar, but no further action was taken.

History - Paper 2 - Cold War Key Topic 2

Key topic 2: Cold War Crises

Increased tension between East and West

Tension had increased for a number of reasons during this period. Firstly there were a huge number of refugees leaving the Eastern sector of Germany and moving into the West – the Brain drain. This was increasing clear in Berlin, where it was considered to be a centre of **Espionage.**

- **The Berlin Ultimatum:** Khrushchev feels that the West are breaking the agreements at Potsdam. He issues his Ultimatum telling the West they should leave Berlin within six months, suggesting it should become a neutral and free city.
- **The Paris Summit 1960:** 9 days before the conference the Soviet Union shot down an American U2 spy plane.
- **The Vienna Summit 1961:** A final conference with JFK, Khrushchev feels he can push him around a little, but in reality JFK is keen to uphold the policy of containment.

Meanwhile in Cuba:

- **The Cuban Revolution 1959:** Cuba was important to America, being so close to the American mainland it was a holiday destination for Americans and they had trade links.
- The revolution saw the overthrow of the president Batista by **Fidel Castro** who wanted greater independence from America. Castro removed US capitalist companies and installed a Communist regime, proving that the policy of containment was not really working.
- **Immediate US response:** In response the USA banned the import of Cuban sugar which threatened the Cuban economy.
- **Immediate Soviet response:** Khrushchev was delighted to have a communist ally so close to the American mainland and he offered to buy the Cuban sugar.

Cold War crises

- **The Berlin Wall:** On 13th August 1961 Khrushchev closed the border between East and West. The new boundary was erected within the boundary of East Berlin. Initially constructed out of any materials the final wall structure was 3.6m high and 1.2m wide making it almost impossible to cross. Escape was difficult; some managed to tunnel under the wall but many died trying. The wall became the symbol of the division between East and West.
- **The Bay of Pigs 1961:** Following the Cuban Revolution in 1959 the CIA created a plan to regain American influence in Cuban. The plan involved sending Cuban exiles back into the country to cause an uprising against the government. The exiles were called **La Brigada 2506** and there were around 1500. The operation cost $45 million. However Castro was popular and the invasion failed resulting in embarrassment for JFK and costing $50 million in medicines and baby food to get captured exiles back.
- **The Cuban Missile Crisis 1962:** Following the failed Bay of Pigs mission Cuba and the Soviets grew closer and JFK discovered missile launch sites being constructed on the island. A blockade (quarantine) was enforced around the island to prevent the delivery of missiles to Cuba; the blockade stretched 3,300km's around the island. Eventually the situation calmed down and the soviet ships returned home.
- **The Prague Spring 1968:** Similarly to Hungary the economy in Czechoslovakia was in decline, leading to a fall in the standard of living for normal people. In 1968 Dubcek replaced Novotny as leader. The Prague Spring refers to reforms put in place by Dubcek in April 1968, which lasted until August 1968. He wanted 'socialism with a human face' keeping communism but making it less restrictive, removing secret police and allowing more freedoms. Crucially Dubcek did not threaten to leave the Warsaw Pact. However Brezhnev now leader of the Soviet Union needed to secure his control over Czechoslovakia and sent troops into Prague.

Reactions to the crises

The Berlin Wall: Khrushchev felt that the wall 'guarded the gates of socialist paradise.' The Wall was a physical divide between East and West and for the people of Berlin a daily reminder of the tension between the two sides. When JKF visited Berlin in 1963 he made a speech to around1.5 million people near the wall, so the people of the East could hear too.

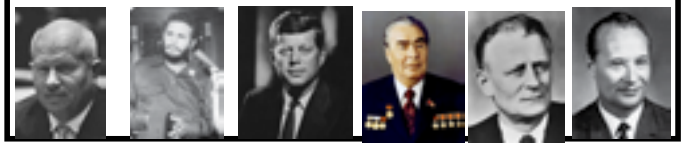
The Cuban Missile Crisis: Khrushchev was considered by his party of have failed, which led to his removal as leader. JKF was seen as a great leader.

- **A hotline** was established in 1963 allowing the two sides to talk directly, which arguably was the kick-start of Détente.
- **Limited Test Ban Treaty 1963** both sides agreed to stop testing nuclear weapons.
- **Outer space treaty** agreements not to place nuclear weapons in orbit.
- **Non proliferation treaty** designed to stop the spread of nuclear weapons.

The Prague Spring: Brezhnev created the Brezhnev Doctrine to justify his invasion of Czechoslovakia. This doctrine declared that the Soviets had the right to invade any Eastern European country that threatened the security of the Eastern Bloc.

- The USA did not send any help as they were busy in Vietnam.
- Dubcek was forced to resign as leader
- Western countries condemned the invasion but failed to send any assistance to the Czech people.

Key people



Key words

Ultimatum, summit, espionage, blockade, quarantine, CIA, refugee, socialism, doctrine, treaty, hotline, détente, brain-drain

History - Paper 2 - Cold War Key Topic 3

Key topic 3: The end of the Cold War

Attempts to reduce tension

Following the tension during the Cuban Missile Crisis there had been an improvement in the relationship between the two superpowers which became known as Détente.

Détente:

- **SALT I 1972:** Strategic Arms Limitation Talks were clear sign that there needed to be limitations on weapons. A five year freeze on the total number of ICBM's was imposed.
- **Apollo Soyuz mission 1975:** The US Apollo spacecraft docked with the Soviet Soyuz one and there was a symbolic handshake in space, demonstrating the improved relationship.
- **The Helsinki Agreements 1975:** These agreements were about Human Rights, security and cooperation. Each signatory agreed to recognise human rights and basic freedoms; the Soviets agreed to recognise the existence of West Germany and there were calls for closer economic and scientific links.
- **SALT II 1974:** Was agreed and the treaty was signed in 1979. This contained a ban on production of new land ICBM's and limits on development of new types of strategic offensive arms.

New thinking:

- Gorbachev becomes Soviet leader in 1985 and being much younger wanted to improve relations between the Soviets and the USA. He developed his principles of 'new-thinking' which included a number of separate measures.
- **Perestroika –** restructuring of the economy allowing people to own businesses
- **Glasnost –** openness and freedom of speech
- **Ending the arms race** and signing arms limiting agreements
- **Abandoning the Brezhnev Doctrine** and ending Soviet interference within the Eastern Bloc.

Cold War flashpoints

Soviet Invasion of Afghanistan 1979

- **A Communist government** had been put in place by Amin but there was unrest due to many anti-Muslim policies.
- **The Mujahedeen:** Due to persecution many Muslims had joined a Guerrilla fighting force in the mountains who claimed to be on a holy mission for Allah. They declared a jihad on the Amin government.
- **Dependence on the Soviets:** Amin's government was dependant on the Soviets for military equipment and Amin was keen to improve relationships and links with the USA.
- **Islamic Fundamentalism:** Brezhnev was concerned and the spread of Islamic fundamentalism and how this could impact and threaten the Soviet regime.
- **The invasion:** December 1975 50,000 Soviet troops were sent to Afghanistan to restore order. Amin was shot and replaced with Kamal who had been in exile in Moscow, but his position depended on support from the Soviet government. Many afghan soldiers deserted to join the Mujahedeen. The Kamal government needed 85,000 soldiers to cling hold to power.

IMPACT:

- **Carter Doctrine:** This was the name given to Carter's response to the invasion. It stated that the USA would use military force if necessary to defend its national interests in the Persian Gulf region.
- **Moscow Olympics 1980:** Controversially Carter encouraged the USA to boycott the Moscow Olympic games and other countries followed their example.
- **Détente:** The invasion of Afghanistan ended the period of Détente. The USA refused to ratify SALT II.

The Second Cold War

- **Reagan** defeated Carter in the election and began taking a tougher stance on the Soviet Union.
- **Defence spending** was dramatically increased – a programme developed 1981-87 was set to cost a trillion dollars.
- **Strategic Defence Initiative:** known as the Star Wars programme it was a plan for a ground and space based, laser-armed anti ballistic missile system which would act as a shield against attack.

The collapse of the Soviet Union

Impact of Gorbachev:

- **Glasnost and Perestroika** was adopted in many countries in the Eastern Bloc and Gorbachev wanted the idea to spread further.
- **The Sinatra Doctrine:** This was the idea that countries within the Warsaw Pact could make their own decisions without outside interference.
- **Removal of troops:** The Soviet troops across eastern Europe were removed in an attempt to reduce costs and save money.

The fall of the Berlin Wall 1989

- **Demonstrations** began after East Germany embraced Glasnost and Perestroika. The people of East Berlin wanted democracy and freedom.
- **Democratic** elections took place in Hungary which led to a mass movement of people from East Germany, through Hungary and into West Germany. This led to announcements about greater freedom in the East, which resulted in the border being opened, leaving the people able to dismantle the wall.

The Collapse of Communism

- **Gorbachev** was considered the Darling of the West as his policies had led to the collapse of Communism.
- **The Warsaw Pact** was rejected by the countries rejecting communism and the Soviet Union was dissolved in 1991.

Key people

Key words

defence spending, perestroika, glasnost, Strategic Defence Initiative, fundamentalism, mujahedeen, jihad,

History - Paper 2 - Elizabethan England

Early Elizabethan England 1558-1588: Paper 2

Part 1. Early Challenges & the Religious Settlement

- England was in debt. The ***economy*** was weak due to poor harvest, the collapse of the wool trade and the devaluation of English coinage.
- Elizabeth inherited a predominantly Catholic ***government*** from her sister, Mary I. Should she remain Catholic or return England to Protestantism?
- Threat of ***invasion*** from Catholic Spain and France. There were French troops stationed in Scotland.
- Elizabeth was expected to marry and provide an heir. Some questioned her legitimacy following the execution of her mother (Anne Boleyn) by her father (Henry VIII)

Elizabethan Religious Settlement 1559

Act of **Supremacy**

Act of **Uniformity**

(Officially Protestant- but a "Middle Way" promising tolerance of Catholics in return for loyalty)

Part 2. Plots and Revolts

- **Mary Queen of Scots**

Arrives in England in 1568. Has claim to the throne. Links to Catholic France. Imprisoned in Carlisle.

- **Revolt of the Northern Earls 1569**

Northern rebellion aimed at Catholic restoration & putting MQS on the throne of England. Defeated near York.

- **Papal Excommunication 1570-** Catholics could win place in Heaven by killing Elizabeth.
- **Ridolfi Plot 1571**- Italian banker plots to use Spanish money to fund a French invasion of England.
- **Throckmorton Plot 1583**
- **Bond of Association 1584**
- **Babington Plot-** final proof that MQS was involved in a plot to murder Elizabeth.
- **Execution of MQS-** Elizabeth finally signs death warrant of MQS.

Part 3. War with Spain

Causes:

- **Piracy & the Americas**: English pirates are raiding Spanish treasure ships in the New World
- **French Civil War-** removes threat of French attack on Spain- frees Spain to attack England.
- **Spanish incursions in the Netherlands/Treaty of Nonsuch-** Elizabeth sends aid to Protestant rebels fighting the Spanish in the Netherlands.

Defeat of Spanish Armada

- *Ship design & tactics*: English ships redesigned to be faster than Spanish galleons.
- English *fire ships* used to break Armada formation. Spanish cut anchors to escape.
- *The weather*- The Protestant winds: storms drive Spanish into Atlantic. Wrecked on coast of Ireland.

Part 4. Colonisation & Exploration

Drake was able to ***circumnavigate*** the World. This was possible due to: Better navigation (astrolabes), Increased accuracy of maps, desire for new markets and access to things like the slave trade.

English ***colonies*** established at Roanoke (Virginia). 1585. Failed due to infighting, bad timing (arrived too late to plant crops) and poor relations with the local Algonquin natives.

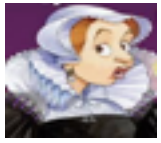
Part 4. Was there really an Elizabethan "Golden Age"?

For: Universities, Grammar schools, sport, dancing, theatre, music & rising literacy rates.

Against: poverty due to enclosure, rising population and poor harvest led to vagrancy,

Key names:

Elizabeth Tudor, Francis Walsingham, King Philip of Spain, Francis Drake, Walter Raleigh, John Howard, Mary Queen of Scots, Ralph Lane, William Cecil, Pope Pius V



Question types: Describe two features (4 marks)/Explain why (12 marks)/How far do you agree? (16 marks)

History - Paper 2 - Elizabethan England KT1

Key topic 1. Queen, government & religion 1558-69

Part 1 The situation on Elizabeth's accession

- Elizabeth inherited the throne from her sister, Mary I. Society was divided by years of religious turmoil (Catholic versus Protestant). Mary had converted England back to **Catholicism** following the reign of **Protestant** Edward.
- Elizabeth faced problems as she was a woman. Many in society feared another version of Mary I (Bloody Mary). Many Catholics saw Elizabeth to be **illegitimate** (bastard child of Henry VIII & Anne Boleyn).
- Elizabeth made it clear she didn't wish to marry. She refused a proposal from Philip of Spain. He had been married to Mary I.
- Elizabeth was cultured, well educated and a strong character- arguably due to experiences in her childhood. She was unwilling to share power with a husband.
- England was in debt. The ***economy*** was weak due to poor harvest, the collapse of the wool trade and the devaluation of English coinage. England had been almost constantly at war with France since the days of Henry VIII. The threat of invasion from France continued.

Part 2. The Religious Settlement

Elizabeth inherited a predominantly Catholic ***government*** from her sister, Mary I. Should she remain Catholic or return England to Protestantism?
England was a deeply divided community due to the religious rollercoaster of the previous years. As a result Elizabeth needed a religious settlement that would heal these divisions.

Elizabethan Religious Settlement 1559

Act of **Supremacy-** Elizabeth become Supreme Governor (avoiding "Head of Church" so as not to anger Catholics). Officially converts England to Protestantism. but a "Middle Way" promising tolerance of Catholics in return for loyalty).
Bishops run the Church and people swear an oath of allegiance.

Act of Uniformity: Protestant Prayer Book, services in English. Some decoration and vestments in churches. Act of communion open to individual interpretations. Clergy were allowed to marry.

Part 3. Challenges to the religious Settlement

Puritan Challenge

The Puritans were few in number and did not want to remove Elizabeth. They feared another Catholic Queen like Mary I. They occupied places in the Universities and some key members of Elizabeth's government were Puritans (e.g. Francis Walsingham)

Catholic Challenge

Many Catholics did not like the religious settlement.
England was now officially a Protestant and surrounded by hostile Catholic countries.

Part 4. The problem of Mary Queen of Scots

Mary QS was made Queen of Scotland as a baby. Sent to French court aged six. Married the heir to the French throne. So, strong links between France & Scotland. As a result the French placed troops in Scotland which was a threat to England.
1560 Returns to Scotland following the death of her husband (King Francis). Resumes position as ruler of Scotland. This is a divided society. Mary is hugely unpopular with many Scottish nobles
1565 Marries Lord Darnley, a bi-sexual alcoholic sex addict. They have a child which strengthens her claim to the throne.
Elizabeth angered as she wanted MQS to marry Dudley, Earl of Leicester.Darnley is murdered and Mary is implicated in the death.
Civil war in Scotland between Catholics & Protestants. MQS is imprisoned in Lochleven castle. She is forced to abdicate and her son is placed of Scotland as a baby. She escapes and flees to England.
Her arrival in Carlisle was a huge threat to Elizabeth. Mary is technically the heir to the English throne and Elizabeth has her imprisoned.

Key words:

Catholic, Protestant, Settlement, Illegitimate, Papacy, Puritan, heir, economy

History - Paper 2 - Elizabethan England KT2

Key topic 2. Challenges to Elizabeth at home & abroad 1569-88

Part 1 Plots & Revolts at home

- 1569 The **Revolt of the Northern Earls**; **Westmorland and Northumberland** led the Catholics of the North and 4500 supporters in an attempt to overthrow Elizabeth and replace her with Mary Queen of Scots. They forced their way in Durham Cathedral, destroy the new protestant prayer books and conducted a catholic mass. They did not appear to have the support of the Pope or any other nation and the revolt was easily stopped by Elizabeth and her army.
- In 1570 the Pope **Excommunicated** Elizabeth.
- **1571 Ridolfi Plot**: Italian banker Ridolfi was used by Mary Queen of Scots to send letters to the Duke of Alva in the Netherlands. They wanted to plan an invasion, to remove Elizabeth and replace her with Mary. However foreign forces not keen to invade until Elizabeth had been removed from power. Walsingham was aware of the plot and it was easily prevented; Elizabeth expels the Spanish Ambassador from court.
- **1583 Thockmorton Plot:** Following the assassination of William of Orange in the Netherlands there was a greater fear of Catholic uprising. Francis Throckmorton was used by Mary Queen of Scots to carry letters to the French and Spanish Ambassadors. They planned to start an uprising in the North and French to invade from the south. Throckmorton was already under surveillance so the plot was ended easily. As a result of the plot Elizabeth government put in place the **Bond of Association in 1584** which meant that if elizabeth's life was threatened Mary could be executed.
- **1586 The Babington Plot:** Anthony Babington was a young Catholic and he and Mary Queen of Scots sent letters to each other planning to remove Elizabeth and restore Catholicism in England. Walsingham suspects Mary is planning something and places spies in her household. They convince her it is safe to hide letters in barrels to correspond secretly. Mary agrees to Babingtons plan and Walsingham has the evidence he needs to put her on trial. She is moved to Fotheringhay Castle and executed in 1587.

Part 2. Relations with Spain

- The relationship between England and Spain had grown steadily worse. Owing to the fact that Elizabeth was deeply in debt when she acceded to the throne, Elizabeth took the opportunity to raise funds using **privateers.** Francis Drake went on various missions and destroyed Spanish ships and stole gold. These ventures were approved by Elizabeth and as a result she gained funds but created friction with the Spanish. In 1572 Drake stole silver worth £20,000 (about 30 million today)
- Following the various Catholic plots 1569 - 1986 Elizabeth had finally agreed to the execution of Mary Queen of Scots. The death of this Catholic anointed Queen seriously impacted the relationship with the Spanish. They were not happy that the prospect of a Catholic Queen in England once again was greatly reduced.
- The Spanish controlled large areas of territory in the Netherlands and in 1572 there was a Protestant uprising. The fact that Elizabeth was willing to help fellow protestants would have impacted on the relationship.

Part 3. Outbreak of war with Spain

- France had always been the traditional enemy of Spain, but when a civil war between Protestants and Catholics broke out in 1562 this left them dealing within an internal crisis until 1598. As a result France were no longer a real threat to Spain, freeing Spain up to focus on England.
- Following the Protestant uprising in the Netherlands in 1585 Elizabeth signed the Treaty of Nonsuch and sent an army of 7000 to help the protestants. This was direct military involvement and to Spain looked as if Elizabeth was laying claim on the Netherlands and the Spain territory. This of course angered Philip.
- In April 1587 Francis Drake was sent to Cadiz. The Spanish had begun the preparation of the Armada and Drake sailed into the harbour and destroyed numerous galleons and equipment. This event became known as the **Singeing of the King's beard.** This attack led to a delay in sending the Armada.

Part 4. The Armada.

- May 1588 ships leave Lisbon heading for England, commanded by the Duke of Medina Sidonia. The plan was to meet Spanish troops in the Netherlands, transport them to England and invade.
- June 1588 the fleet arrives in Corunna needing repairs and stays for one month.
- July 1588 the fleet passes Plymouth and heads for Calais, sailing in a close crescent formation.
- August 1588 the fleet arrives in Calais, aiming to meet 30,000 troops from Netherlands and the Duke of Parma, however these additional forces are delayed for a week. The English send fire ships causing chaos, resulting in the Spanish fleet having to cut their anchors to leave in a hurry.
- Following further fighting at Gravelines many of the Spanish fleet flee, sailing away towards Scotland. The weather has paid a huge role in the defeat of the Armada leaving many of the Spanish vessels shipwrecked.

Key words:

Plot, Bond of Association, Privateer, Spy Master, Ex-Communication, Treaty of Nonsuch, Galleon, Vessel, Ridolfi, Throckmorton, Babington,

History - Paper 2 - Elizabethan England KT3

Key topic 3. Elizabethan society in the age of exploration 1558-88

Part 1 Education & Leisure

- Many English people were **illiterate** and depended on signs with pictures to navigate their way around shops and businesses. Due to this there were books written in picture format to appeal to lower classes. More wealthy people would be able to read.
- Young boys would be able to attend **grammar schools**; these were mainly for the sons of **Yeoman** or **merchants**, but some were bright students from lower classes. Demand for grammar schools had increased as many classes had begun to want to educate their children.
- Many rich families had private tutors for their children; this would be the case for both boys and girls. Elizabeth herself had received a high level of education. However for poor families education is not a necessity and as a result only 1 in 10 women can read or write compared with 3 in 10 men.
- Poorer people enjoyed a variety of leisure activities including **bear baiting,** wrestling and football. Archery is also enjoyed by the lower classes along with hunting, although this is limited to smaller animals
- Richer people enjoy tennie, **bowls and fencing** in addition to archery and hunting - mainly deer.
- All classes enjoyed the theatre however the seats you had did depend on how much money you had. If you were poorer you would be in the **'pit'** as a **'groundling'** These people paid just one penny for their tickets, whereas three pennies would provide a seat under cover.

Part 2. The problem of the poor

Elizabeth came to the throne at a time of poor harvests. This meant less food grown and so prices were rising. At the same time the population was rising- putting further strain on resources. Henry VIII had closed the monasteries and this removed a source of help of the poor.

The wool trade with the Netherlands had collapsed and wages were stagnating- not keeping pace with rising prices.Farmers had begun to enclose their land and turn it over to sheep farming.As this required fewer people it also contributed to rising unemployment.

Elizabethan reactions

There was a fear that huge gangs of unemployed vagrants would damage the social order.

1572 Vagabonds Act: vagrants who could be whipped, bored through the ear and executed if repeatedly caught begging.

1601 Elizabethan Poor Law: brought in a **compulsory** nationwide **Poor Rate** system.

Everyone had to contribute and those who refused would go to jail. Begging was banned and anyone caught was whipped and sent back to their place of birth.**Almshouses** were established to look after the impotent (or deserving)poor.

Part 3. Exploration & Voyages

Trade expanded in this period, driven by war with Spain, a need to pay off debts and the need for new markets as the wool trade with Europe shrank. The Elizabethans cashed in on the trans-Atlantic slave trade and English privateers raided Spanish colonies in the New World.

This expansion was made possible by:

1. Improvements in ship design with Galleons capable of holding more cargo and carrying more guns.
2. Improvements in navigation such as astrolabes and printed maps. Thomas Harriot devised a method of determining a ships direction at sea using the sun. Elizabethan cartographers were able to draw and print increasingly accurate maps.
3. Investment in voyages by rich people, such as Elizabeth who funded and profited from these voyages.

As a result of these voyages Elizabethan finances improved (thanks to stolen Spanish gold). At the same time our Knowledge of the wider world was expanded.

Key words:

Illiterate, grammar schools, yeoman, merchant, bear baiting, fencing, bowls, pit, groundling, astrolabe, navigation, Almshouses, Poor rate, colonies

Part 4. Raleigh & Virginia.

The 1585 Expedition:

- Richard Grenville set off for Virginia in 1585, a total of 5 ships including the flagship The Tiger reached the coast of America in June. However strong winds and currents forced the fleet onto the sandbanks and the ships were battered by waves, causing seawater to ruin the supplies and nearly all the seeds for crops.
- To begin with relations with the Native Americans were good, but after Grenville noticed a silver drinking cup was missing a disagreement broke out leaving a village in flames and fear and suspicion growing. In addition Natives were beginning to die from unknown causes, which made them think the colonists had supernatural powers - in reality this was measles and smallpox, illnesses to which the natives had no immunity.
- Grenville returned to England for supplies leaving Ralph Lane in charge, but the soldiers remaining began to uprise and disobey orders. The fleet arrived too late to plant crops so there were food shortages and the natives initially were happy to help needed precious resources for themselves. Following orders from the Chief they decided to no longer help the colonists. Fortunately for the colonists help was on its way; Francis Drake arrived in 1586 to check in with the colony. The English were keen to leave as quickly as possible.

The 1587 Expedition

- Second Expedition tried to learn lesson of the first- for instance taking farmers rather than soldiers. It also failed for largely the same reasons; the fleet hit bad weather, supplies were ruined and they arrived at the wrong time to plant crops. The captain refused to land at Chesapeake Bay and stranded the settlers at Roanoke. Here they were attacked by Native Americans who remembered the first colony. Governor White also managed to attack the friendly Croatan tribe by accident and so alienated the only Native Americans who might help the colonists.
- Many historians think that the colony was finally wiped out by either the local tribes or by disease.

Superpower relations and the Cold War example exam questions

Explain two consequences of…(8)

- Of the Potsdam conference in 1945
- The Berlin Crisis 1948-49
- The Hungarian Uprising in 1956
- The building of the Berlin Wall in 1961
- The Bay of Pigs invasion in 1961
- The Prague Spring in 1968
- The Soviet Invasion of Afghanistan in 1979
- Gorbachev's 'new thinking' on eastern Europe.

Write a Narrative account…(8)

- analysing the key events of the peace conferences in the years 1943-45.
- analysing the main events of the East-West rivalry over Berlin 1958 - 1961.
- analysing the main events in superpower rivalry in Cuba in the years 1959 - 1962.
- analysing the key events of the Soviet invasion of Czechoslovakia in 1968.
- analysing the key events in attempts to reduce tension during the 1970's and 1980's
- analysing the key events in the Soviet Union and Eastern Europe in the years 1989-1991.

Explain the importance of…(8) x 2

- the Bay of Pigs for the development of the Cold War.
- the building of the Berlin Wall for the development of relations between USA and Soviet Union.
- Cuban Missile Crisis for the relationship between the USA and the USSR.
- of SALT 1 for the development of the Cold War.
- the Marshall Plan for the development of the Cold War.
- of NATO for the development of the Cold War
- the Soviet invasion of Afghanistan in 1979 for relations between the USA and the Soviet Union.
- Of Gorbachev's new thinking for the development of the Cold War

Early Elizabethan England 1558 – 1588 example exam questions

Describe two features of…(4)

- Activities for poorer people
- Activities for richer people
- Elizabeth's education
- The Babington Plot
- Early challenges facing Elizabeth
- The attack by the Armada
- Drake's circumnavigation of the globe
- Attempts to colonise Virginia
- Elizabethan theatres

Explain why…(12)

- Mary Queen of Scots created a problem for Elizabeth when she came to England in 1568.
- Mary Queen of Scots was executed in 1587.
- England went to war with Spain.
- England was able to defeat the Spanish Armada.
- Elizabethan's were worried about idle poor and vagabonds.
- Men such as Drake went on voyages of exploration

How far do you agree?(16)

- 'The threat of invasion was Elizabeth's main problem when she became Queen in 1558'
- 'Elizabeth dealt with the problems of 1558 successfully'
- 'Elizabeth's religious settlement was a successful compromise.'
- 'The Babington Plot was the main reason for Mary's execution in 1587.'
- 'Lack of foreign support was the main reason why Catholic Plots against Elizabeth failed.'
- 'Poor harvests were the main reason for poverty in Elizabethan England.'

History - Paper 3 - Germany 1918-39

Part 1. Early Challenges to the Weimar government

- Threat of Revolution: Germany in 1918 was very volatile. The navy mutinied at Kiel and there was threat of Communist revolution. The new government met in Weimar.
- The Weimar Constitution: Proportional representation, equality for men and women. Article 48 allowed President to ignore Reichstag in an emergency.
- Left & Right wing revolts: 1919 Spartacists Revolt and Red Rising in the Ruhr (left wing/crushed by Freikorps). 1920 Right wing Kapp Putsch (stopped by General strike in Berlin)

The Versailles treaty and its impact

Land: Germany lost land like Saar to France/Polish Corridor to Poland. Both rich in natural resources.
Army: Reduced to 100,000/no tanks/subs/planes- hard to defend & caused unemployment
Money: Germany to pay £6.6 billion in reparations (gold & raw materials)
Blame: Article 231- War Guilt clause

Ruhr invasion & Hyperinflation

- **1921** Treaty of London gives Germany reparations bill.
- **1923** Germany fail to pay second instalment so France & Belgium invade Ruhr (industrial area). German workers strike but government prints money in order to pay them.
- Value of currency ruined. **1924 Dawes plan** needed to fix.

Part 4. Securing control

- **February 1933 Reichstag fire**. Blamed on Communists and used as excuse to arrest and put into Concentration camp.
- **March 1933 Enabling Act-** Hitler persuades Reichstag to pass legislative powers to him.
- Communist party banned.
- **1934 Night of the Long Knives**. Murder of Rohm and leading SA members. Hitler secures control of Nazi party.
- **Death of Hindenburg-** Hitler combines offices of President and Chancellor to become Fuhrer.

Germany 1918-39: Paper 3

Part 2. Development of the Nazi Party

- Drexler sets up **Germany Workers Party** /D.A.P. (Hitler joins).
- Hitler becomes leader of D.A.P. Excellent speaking skills
- November 1923 Nazis led by Hitler and Ludendorff stage **the Munich Putsch** to seize power in Southern Germany.
- Putsch fails (but Hitler uses trial as propaganda platform).
- Hitler sent to Landsberg prison and writes **Mein Kampf.**
- "Lean years" 1924-29 Nazis make only small gains due to improvements in economy after **Dawes Plan** and US investment.
- 1926 **Bamberg Conference-** Hitler unites the Socialist and Nationalist sides of the party and adopts tactic of Winning power by election.

Part 3. The Great Depression and Nazi electoral success

- **1929 Wall St Crash-** USA recalls Dawes plan loans and Germany economy crashes.
- German unemployment hits 5.5 million by 1932.
- Nazis quick to offer **Work & Bread** to the unemployed.
- Middle classes fearing Communist revolution begin to support Nazis.
- Nazis train members in public speaking to encourage support.
- As Nazis win seats in
- Reichstag **Von Papen &**
- **Hindenburg** decide to offer Hitler a deal.
- **1933** Hitler becomes **Chancellor.**

Question types: Inferences from source (4 marks) Explain why (12 marks)/How (4 marks) and why (4 marks) do interpretations differ?/ How far do you agree? With the interpretation x? (16 marks) + 4 SPAG

Part 5. Life in Nazi Germany

- **Control** via: Gestapo. Block leaders, propaganda, People's Receiver & fear of concentration camps.
- **Unemployment** tackled via building of Autobahns, Rearmament (including conscription 1935) and removal of Jews & women from statistics. Germany Labour Front controls workers. Strength through Joy rewards workers.
- **Youth:** School curriculum controlled/Hitler Youth membership made compulsory (1936).
- **Women**; Removed from jobs. Encouraged to have babies (Honour Cross/Lebensborn project).
- **Policy on Jews**: 1933 Jewish shop boycott. Nuremburg laws- official anti-Semitic policies from 1935.
- **Resistance**: Edelweiss Pirates/Navajo/Roving Dudes.
- **Churches**: Concordat with Papacy (1933).

Some resistance from Germany Church e.g. Pastor Niemoller.

History - Paper 3 - Topic 1

Part 1. The Weimar Constitution & revolts

- **Armistice** November 1918. Germany agrees to peace talks. Nationalists begin to claim Germany was "stabbed in the back" by Jews & Communists. The government earn the nickname "**November Criminals**"
- Threat of Revolution: Germany in 1918 was very volatile. The Kaiser **abdicated**. The navy mutinied at Kiel and there was threat of Communist revolution. The new government met in Weimar because Berlin was regarded as too dangerous.
- **The Weimar Constitution**: Proportional representation meant that parties got the % of seats in the Reichstag that they had % of votes. Constitution agreed equality for men and women. Chancellor (Prime Minister) governed with support of Reichstag. Article 48 allowed President to ignore Reichstag in an emergency and pass laws himself.

Left & Right wing revolts:

1. 1919 **Spartacists Revolt**. Left wing rising led by Leibknecht & Luxemburg. Aimed at Communist style government. Ebert (Chancellor) used the **Freikorps** (Nationalist, ex-soldiers) to crush the revolt. Leaders were executed.
2. 1920 Dr **Wolfgang Kapp** led a Putsch of 5000 Freikorps which caused the Weimar government to flee to Dresden. Kapp declared himself leader and promised to scrap the Versailles treaty. The Putsch was only stopped by General strike in Berlin with workers shutting down the city.
3. **Red Rising** in the Ruhr. 60,000 Communist workers seize the industrial Ruhr and set up Soviet style workers councils. Crushed by Freikorps.
4. November 1923 Hitler persuades politicians in Munich to support an armed rebellion. 600 Nazis stage a failed putsch. **Munich Putsch** is Stopped by police. 16 Nazis killed and Hitler is sent to Landsberg prison.

Topic 1: Weimar 1918-29

Part 2. The Versailles treaty and its impact

Signed **28 June 1919**.

Terms of the Treaty:

Land: Germany lost land like **Saar & Alsace Lorraine** to France. **Polish Corridor** and Upper Silesia to Poland. Germany lost all overseas colonies. . Impact: Lost land was rich in natural resources. Millions of Germans were now living under foreign rule.

Army: Reduced to **100,000 soldiers**/no tanks/submarines/military aircraft. Impact: this made Germany very hard to defend & caused unemployment. Rhineland was demilitarised.

Money: In 1921 Germany to was ordered to pay **£6.6 billion in reparations**. Payable in gold & raw materials (iron ore, coal etc). Impact: Germany now in debt until at least 1984. Harms ability of Germany to recover from WWI.

Blame: **Article 231- War Guilt clause**. Germany was made to take blame for causing WWI. Impact: German people felt war was more due to Serb terrorism- so therefore unfair.

Part 3 Ruhr invasion & Hyperinflation

- **1921 Treaty of London** gives Germany reparations bill.
- **1923** Germany fail to pay second instalment so France & Belgium **invade Ruhr** (industrial area). The Weimar government instruct the workers in the Ruhr to adopt "**passive resistance**" to the French. German workers strike and refuse to work for the French. However, workers need to be paid and no goods are being produced so government prints money in order to pay them.
- Printing of money for which there is no supporting gold supply leads to **hyperinflation.**
- Value of currency ruined. Prices rise. Life savings wiped out. People on fixed incomes struggle to cope. Some use crisis to pay off debts and mortgages.
- **1924 Dawes plan** needed to fix the problem

Part 4. Stresemann & The Golden Years

- **Gustav Stresemann**: Chancellor & Foreign Secretary- works with American banker**, Charles Dawes** to arrange a loan to help fix hyperinflation. Loans allows for **a new currency- the Rentenmark**. Also encourages US investment in Germany and helps to create rising employment.
- **Foreign policy successes**: 1925 Locarno pact: Germany agrees to stick to its western borders from the Versailles treaty. 1928 Kellogg-Briand Pact: Germany joins other countries in agreeing to use peaceful means to solve international disputes. Germany is finally allowed to join the League of Nations. 1929 Young Plan allows Germany to re-negotiate the reparations bill (reduced payments).
- **Investment and improved economy** allows for cultural changes: Theatre and cinema boom. Architectural movements such as Bauhaus show off Germany's new confidence and success.
- Stresemann warns that Germany is "dancing on a volcano". This shows his awareness that German economic stability was based upon the Dawes plan loans.

Key people




Keywords

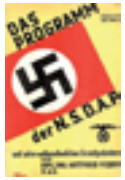
Armistice, abdicated, constitution, proportional representation, revolt, Putsch, Freikorps, Chancellor, reparations, passive resistance, hyperinflation, Rentenmark, communist, nationalist, Bauhaus,

History - Paper 3 - Topic 2

Topic 2: Hitler's rise to power

Part 1. The Early Years of the Nazi Party.

- Hitler is sent to Munich by the army after WWI. His mission is to gather intelligence on extremist political parties.
- Joins the **D.A.P. The German Workers Party** formed by Anton Drexler.
- Hitler becomes responsible for recruitment and propaganda due to his abilities as an excellent public speaker**. D.A.P. becomes N.S.D.A.P** (addition of National Socialist to German Workers Party)
- 1920 Hitler & Drexler issue **the 25 Point Programme-** includes Union of all German speaking people, abolition of Versailles, anti-Jewish measures and creation of a strong central government.
- 1921 Hitler becomes party leader and establishes the **Fuhrerprinzip** (total authority over Nazi party)



Part 2. The Munich Putsch & Lean Years

- November 1923 with the chaos of the Ruhr invasion and hyperinflation, Hitler and Ludendorff stage **the Munich Putsch** to seize power in Southern Germany.
- 600 Nazis meet in the Burgenbraukeller and take three local politicians hostage until they agree to support the Putsch.
- Expected support from police fails to appear and Nazis are met by armed resistance. 16 Nazis are killed.
- Putsch fails and Hitler is arrested. He uses his trial as a propaganda platform and via media attention begins to become a national name.
- Hitler sent to Landsberg prison and writes **Mein Kampf.**
- While Hitler is in prison support for the Nazis falls.
- "Lean years" 1924-29 Nazis make only small gains due to improvements in economy after **Dawes Plan** and US investment.
- 1926 **Bamberg Conference-** Hitler unites the Socialist and Nationalist sides of the party and adopts tactic of Winning power by election rather than by armed uprising. "We must hold our noses and enter the Reichstag."

Part 3. The Depression

- **October 1929 Wall Street Crash**. As US economy collapses they re-call all loans made under the Dawes plan. This causes collapse of German economy.
- As **unemployment rose**, Chancellor Bruning cut unemployment payments and raised taxes on basic goods.
- Six million unemployed by 1932.
- Nazis capitalise on **Depression**- offering "Work & Bread". Nazis train members in public speaking techniques to get across message that they are the only party capable of solving the Depression.
- **1932 Election campaign**, Hitler travels all over Germany by plane to give speeches and mass rallies. Nazi share of the vote increases dramatically (37% of seats).
- **President Hindenburg** begins to support idea of Hitler as Chancellor

Part 4. Hitler becomes Chancellor

- **1932 Elections** see Nazis win 230 seats in Reichstag.
- **Chancellor Von Papen** refuses to give up the post and make Hitler Chancellor. However, Von Papen's Centre Party have failed to win a majority in the Reichstag.
- Von Papen lost support from Hindenburg and resigned. He was **replaced by Schleicher** who tried to create a cross-party **coalition** (bringing left and right wing parties together to form a government.
- Determined to regain power, Von Papen meets with Hitler to propose that Hitler become Chancellor with Von Papen as Vice-Chancellor.
- Many **powerful industrialists and landowners** supported Von Papen's plan as they saw Schleicher as trying to hand power to the Communists.
- Hindenburg (President) supports the plan and **in January 1933 Hitler becomes Chancellor** of Germany.

Key people

Keywords

Propaganda, NSDAP, Putsch, Mein Kampf, President, Economic Depression, unemployment, Reichstag, coalition, industrialist, Chancellor,

Topic 3: Control & Dictatorship 1933-39

Part 1. Reichstag Fire & Enabling Act

- **February 1933 Reichstag fire**. The fire is blamed on Marius Van Der Lubbe, A Dutch Communist.
- Hitler uses the fire to persuade President Hindenburg to pass the **Decree for the Protection of the People and State**. This suspends the Constitution and places Germany into a state of permanent emergency.
- Communists, including their leader, Ernst Thalmann are arrested and put into Dachau, the first Concentration camp. Communist newspapers are banned.
- March elections, Nazis win the most votes but not a majority. They form a coalition with the German National Party.
- **March 1933 Enabling Act-**

Hitler persuades Reichstag to pass legislative powers to him. This allows Nazis to pass laws for the next four years without needing the approval of the Reichstag.

Part 2. Removing Opposition

Banning of trade unions
2 May 1933 All trade unions (who represented workers rights) were abolished. Nazis said that as they had created a national community these organisations were no longer needed. Nazis set up DAF (German Labour Front) to organise workers and set pay. Strikes were banned.

Ban on political parties
14 July 1933 Ban on Formation of new Political parties. Existing political parties severely restricted. November 1933 elections Nazis won 95.2% of vote.

Abolition of the Lander
January 1934 Nazis abolished the Lander (regional governments). This centralised all political power with the Nazis in Berlin.

Part 3. Night of the Long Knives

- **1934 Night of the Long Knives**. Murder of Rohm and leading SA members. Hitler secures control of Nazi party.
- The SA had been instrumental in helping Hitler get to power. They were the street fighting unit that had intimidated voters and beat up Communist rivals.
- Hitler was aware that the SA represented a private army within the Nazi party (under the leadership of Rohm).
- The SS (Hitler's personal bodyguard) led by Himmler wanted to break with SA. The SS were used to murder
- Rohm and SA leaders.
- **Death of Hindenburg-** Hitler combines offices of President and Chancellor to become Fuhrer.

Key people

Part 4. Securing support of the army

The SA had been unpopular with the leaders of the German army.
Night of the Long Knives helped Hitler to secure control over the regular German army (Wehrmacht)
1934 Following the death of President Hindenburg, the army swore a direct oath of support to Hitler as Fuhrer.

Keywords

Reichstag, Constitution, Enabling Act, Legislation, Trade Union, Abolition, Opposition, President, Fuhrer,

Topic 4: Life in Nazi Germany 1933-39

Part 1.Development of the Nazi Police State

The SS: 50,000 members by 1934. Total loyalty to Hitler. Ran concentration camps. Within SS were the SD (Security Division) responsible for security within the country & party.

The Gestapo: The secret state police led by Himmler. Relied upon a network of informers (including Block Leaders) to gather information on the German people. Most people arrested by Gestapo ended up in Concentration camps.

Concentration Camps: Allowed from removal of political opponents. Run by SS who also benefitted from using inmates as slave labour. Camps were constant threat to citizens of consequences of dissent.

Ministry of Propaganda

Run by Josef Goebbels. This ensured Nazi control of cinema, newspapers and radio broadcasts. Films were accompanied by news bulletins. Mass production of People's Radio receiver allowed Nazis to broadcast into homes.

Annual mass rallies were held at Nuremberg.

The Legal System: All judges had to be Nazis.

People's Courts allowed for death penalty for acts of treason.

Part 2. Church, Youth & Opposition

The Church

1933 Nazis signed a Concordat with the Pope. Agreement that Catholics could worship as long as they did not interfere in Nazi policies. Protestant Reich Church was run by a member of the NAZI party. Some Protestants resisted such as Martin Niemoller- who was sent to Sachsenhausen camp for preaching against the Nazis.

Hitler Youth

Compulsory membership after 1936. Preparation for life in the army plus propaganda and political indoctrination. Camping, wrestling, marching drills. Uniforms were worn. League of German Maidens for girls.

Schools

Textbooks re-written to emphasise German history and teach military skills. All teachers had to be Nazis. Day began with National anthem. Girls taught needlework and cooking skills. 1938 Jewish children expelled from schools

Edelweiss Pirates & Swing Youth

Resisted Hitler Youth by continuing to listen to banned music, smoke, drink, beat up Hitler Youth. Edelweiss Pirates wore clothes considered outlandish by Nazis. Created no-go areas for Hitler Youth in some cities. Swing Youth- more middle class. Listened to Swing music.

Part 3. Policies on women

The Nazis wanted women to stay at home and have children. (Kinder, Kuche, Kirche: Children, kitchen church). This also helped to reduce unemployment figures (as women were not included)

Marriage Loans

Newly married couples could borrow a years wages (for a worker). For each child born the re-payments on the loan were reduced.

Honour Cross of German Mother

Given out to encourage child bearing. Gold cross for eight babies.

Lebensborn

Policy allowing single girls to be paired up with members of the SS in order to "have a baby for Hitler".

Part 4. Persecution of the Jews

The Nazis aimed at creating a **Herrenvolk** or Aryan Master Race. This would be achieved by selective breeding and the destruction of the Jews.

1933 **Boycott** of Jewish shops. SA placed themselves in doorways of Jewish shops to discourage people from entering. Most Germans ignored the boycott.

1935 **Nuremberg Laws**.- only those of pure blood could be German citizens. Jews banned from voting. Marriages between Jews and Aryans banned.

1938 November- **Kristallnacht- Night of Broken Glass**. Attacks by Nazis on Jewish homes, businesses and Synagogues across Germany. 100 Jews were killed. 20,000 sent to concentration camps.

Part 5. The Nazi Economy

Reich Labour Service: Provided manual labouring jobs to men aged 18-25. Workers lived in camps, wore uniforms and received very low pay. Women and Jews were pushed out of jobs.

Re-armament created jobs: 1935 introduction of **conscription**: Army grew from 100,000 to 1,400,000 by 1939. Building motorways (**autobahns**) and other public construction works employed hundreds of thousands of workers. Building planes, tanks and other weapons further created jobs and stimulated the economy.

Strength Through Joy (KdF) aimed to reward workers with holidays, trips, theatre tickets.

Beauty of Labour Movement aimed to improve working conditions in factories.

Wages rose overall but cost of living also rose. Consumption of meat and fresh fruit fell. Many hated the lack of freedom caused by Nazi employment policies.

Key people

Keywords

Gestapo, Concentration camp, propaganda, Nuremberg laws, Kristallnacht, Lebensborn, Motherhood cross, Edelweiss Pirates, opposition, rearmament, conscription, autobahns

Weimar and Nazi Germany 1918 – 1939 example exam questions

1. Give two things you can infer about…(4)

- Infer – what you can gather or assume from the information.
- Add your proof (what the source says or shows to prove your inference)

2. Explain why…(12)

- **there were challenges to the Weimar Republic in the years 1919-1923.**
- **the Weimar Government recovered in the years 1924-1929.**
- **why there was a Golden Age in the Weimar Republic**
- **Hitler was able to secure the position of Chancellor in January 1933.**
- **Hitler was able to secure his position as Dictator in 1934.**
- **the police state was a success in removing opposition to the Nazi regime.**
- **there were changes to the lives of Jewish people in Nazi Germany in the years 1933 - 1939**

3a . How useful are the sources…(8)

- Use **NACHOS** to help with your answer here.
- **Nature** – What type of source is it? Photo, newspaper…
- **Author** – Who wrote it? Are they an expert? Might they be lying?
- **Content** – what does it actually tell you?
- **Happening** – What was going on at the time? Does the source match your knowledge?
- **Omitted** – Has anything been deliberately missed out?
- **Special reason** – Has it been produced for a special reason or purpose?

3b . How are the interpretations different?…(4)

- Read through, identify the main difference and prove it using quotes from both interpretations.

3c . Why are the interpretations different?…(4)

- Usually interpretations are different because people get their information from different sources. Try to match the interpretations to one of the sources in 3a and use these as examples to explain your answer.

3d How far do you agree with the interpretation about…?(16)

- Talk about the interpretation in the question
- Quote from the interpretation and add evidence to support the quotes
- Talk about the other interpretation
- Quote from it and add evidence to support
- Conclusion…your overall opinion

History - Paper 3 - Example Exam Questions 2

I have often listened to the debates with real concern, glancing timidly to the gentlemen of the Right, fearful lest they say to me 'Do you hope to give a parliamentary system to a nation like this, one that resists it with every sinew in its body?' One finds suspicion everywhere; Germans cannot shake off their old political timidity and their deference to the authoritarian state.
From a speech to the new Constituent Assembly, by Hugo Preuss, head of the Commission that drew up the Weimar Constitution in 1919. He was talking about the new constitution

How useful is source A for an enquiry about German attitudes towards the newly formed Weimar Republic in 1919?

No one knew how many of them there were. They completely filled the streets…They stood or lay about in the streets as if they had taken root there. The streets were grey; their faces were grey and even the hair on their heads and the stubble on the cheeks of the youngest there was grey with the dust and their adversity.
From 'A fairytale of Christmas' a short story written in 1931 by Rudolf Leonhard – a member of the Communist Party – writing about the unemployed in Germany.

How useful is source B for an enquiry into the effects of unemployment in Germany 1929-1932?

Interpretation 1: **An adapted extract from *Weimar and Nazi Germany* by John Hite and Chris Hinton an A Level text book published in 2000.**
'Many Germans actually benefitted from hyperinflation. Many people in debt, such as mortgage holders paid off their debt with the devalued currency. Businessmen used cheap credit to borrow, make profit then pay back to loans when the value of money dropped.'

Interpretation 2: **An extract from *Nazi Germany 1933-45* by Chris Culpin and Steve Mastin an A Level text book published in 2013**.
'Some of the images from this period of hyperinflation might seem funny to us: kites made of banknotes, housewives burning notes in their cooking stoves. But it was not funny really. Prices rose so fast that employees were paid every other day. But they never had enough to live on. Many starved and infant mortality (death of children under the age of one) rose. For those on fixed incomes it was a catastrophe.'

3d. How far do you agree about the effect of Hyperinflation in 1923?

1. Give two things you can infer about tactics used by the Nazi Party to gain support.

Hospitality & Catering Part 1

The hospitality and catering industry includes hotels, guest houses, bed and breakfasts (B&Bs), inns and pubs, restaurants, cafes and takeaways, contract catering (such as weddings), catering in leisure attractions (such as museums) and motorway service areas. It includes aeroplane meals and snacks on trains. It also includes food served in hospitals, prisons, schools and the armed services.

LO1 Understand the environment in which hospitality and catering providers operate

Commercial – make profit e.g. hotel

Non commercial – don't make profit e.g. prisons

Residential- can book in to stay over night

Non residential – cannot stay overnight

commercial	Non commercial
hotels	hospitals
B&B's	schools
pubs	army
Guest houses	Care homes
Holiday parks	prisons

Cafes/Coffee Shops

Restaurants

Hospitals Prisons Armed Services Fast-food & Take-away Outlets

Air-line Meals

Main sectors of the Hospitality Industry are:

- Accommodation e.g. Hotels & **guest houses**
- **Food and drink e.g. Pubs & restaurants**
- **Meetings and events e.g. hotels and conference centres**
- **Entertainment and leisure e.g. spas , leisure centres , golf clubs, bowling alleys**
- **Travel and tourism e.g. Aeroplanes , cruise ships and hotels**

- 1.7 million people employed
- £85 billion brought into the UK economy
- £7.5 billion on accommodation

Marriott Niagara

- 4 star Hotel
- 3 different themed restaurants
- Breakfast restaurant
- Room service
- Starbucks attached to ground floor!

Bristol hotel Gibraltar

- No food or restaurant on site
- Shared breakfast room across street with another hotel

Meals on wheels

Social meal service provided by volunteers, to people unable to prepare their own food.

Care home meals

food served may depend on the needs of the clients, some may have conditions which need special meals. Some residents may need help eating and drinking

Bed & breakfasts, Guesthouses, Farmhouses

Often showcase local themes or produce.
May be breakfast, Half board or full board, family run

Motels & Holiday parks

Lower standard than hotels, food is usually buffet style breakfast. Corporate or independen

CONTRACT CATERERS

These provide food and drink for a function where catering facilities are not already provided

They prepare the food for functions such as, weddings, banquets, garden parties, and parties in private houses. They may prepare and cook food in advance, and deliver it the venue, or they may cook it on site. They may also provide staff to serve the food if required.

Great for - **parties**

Weddings

Proms

Establishments that do not have facilities to provide food and drink

Armed services meals

Mass catering, Camps on active service, Canteens at bases.High energy, balanced nutritionally

Prisons

Food is prepared in by prison inmates to ensure that tight budgets for food are met

Restaurants

Variety of styles and food types, may be specialist eg italian, or gourmet or fine dining
Styles of service vary with types of food and cost
See styles of service section for more...

Cafes

Can vary from independent "greasy" spoon, Tea rooms or coffee shops.
Serve snacks and full meals.

Type of Service	Description
Plate	Meals are pre plated in the kitchen. Good portion control methods. All plates are consistent in the food presentation. The method relies more on skilled kitchen staff than serving staff. Time consuming for the kitchen staff.
Family	The food is placed on the table, spoons are provided and customers serve themselves. It is a sociable method and it is easy and quick to serve. It requires larger tables. There is less portion control. It suits families.
Silver	Food is served by the staff using a spoon and folk. Full silver service is when all the food is served in this way. It provides a more personal customer experience, service can be slow. It is expensive and staff costs are high as more serving staff are required.
Gueridon	A person serves food from a side table of trolley. Sometime dishes are cooked or assembled in front of the customer. This requires skilled service and is very specialist. It is time consuming with high staff and menu costs.

Type of Service	Description
Cafeteria	Counters displaying food. Customers queue up. Simple basic experience for customers. High turnover and fast method. Low skill of serving staff. Customers may impulse buy from the displays.
Buffet	Food set up along a table, can be self service or served by staff. Less formal than plated or silver service. Fast and simple method, can be low cost depending of the food served. Poor portion control.
Fast food	Take-away service with the option to eat in. Customers collect food from a counter. Quick and simple method. Can have a high customer turnover. Often limited menu choice. Food served in disposable packaging.
Tray or trolley	A meal provided in a tray or a choice of food from a trolley. Food is served like this on airlines and in hospitals.
Vending	Food service from a machine. Food can be served 24 hours. Usually snacks are served in this way but it can also be hot meals.
Home delivery	Delivered to a house. Can be a take-away such as a Chinese or Indian meal. Care services such as meals on wheels also use this type of food service.

Fast food

Chains eg KFC, Dominos or independent businesses
Limited menu, low cost, eat in or take away
Disposable packaging

Take aways

Dedicated take away or restaurant attached or may be just take away, most food is cooked to order.

Public houses

Can serve "basket" meals sandwiches or full table service. Some chain pubs have a fixed menu eg Wetherspoons.

Bars

more cosmopolitan menu than pubs , often themed to the type of establishment. Table service or eat at the bar

Hospitality & Catering Part 2

What are the benefits of ratings?

- Reviews can make or break a business! A good review can increase business for establishments, as people will often try an establishment based on a recommendation.
- Reviews and ratings generate publicity, awards get you in the press!
- Customers might come from further away to dine or stay or both based on reviews.
- Customers can identify less favourable establishments that they will then avoid.

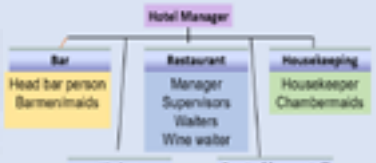
Michelin and rosette inspections are anonymous and are just 1 persons opinion. Trip Advisor and The Good Food Guide are lots of peoples opinions, so likely to be accurate.

Restaurant manager

- The restaurant manager is in overall charge of the restaurant,
- Takes bookings, relays information to the head chef, completes staff rotas, ensures the smooth running of the restaurant

Maître d'Hôte

Staff structure in a hotel



Employers want to employ most workers when they have busy times

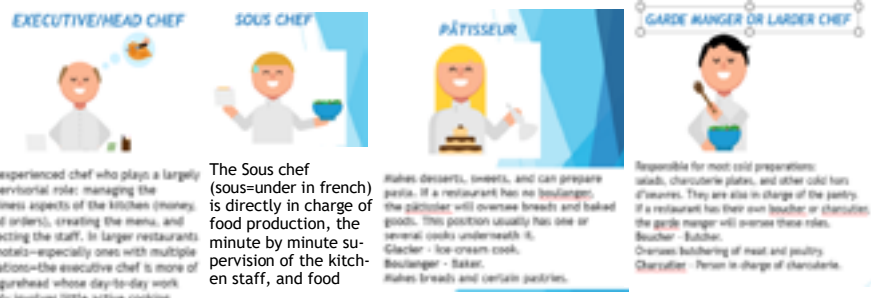
Busy times of year:
- Christmas
- Tourist season
- School holidays
- Mothers day
- valentines

Days of the week
- Friday
- Saturday
- Sunday
- Pay day

Time of day
- Lunchtime
- Afternoon
- Dinner time
- (breakfast)

The kitchen brigade

Hospitality Brigade



An experienced chef who plays a largely supervisorial role: managing the business aspects of the kitchen (money, food orders), creating the menu, and directing the staff. In larger restaurants or hotels—especially ones with multiple locations—the executive chef is more of a figurehead whose day-to-day work

The Sous chef (sous=under in french) is directly in charge of food production, the minute by minute supervision of the kitchen staff, and food

Makes desserts, sweets, and can prepare pasta. If a restaurant has no boulanger, the pâtissier will oversee breads and baked goods. This position usually has one or several cooks underneath it.
Glacier - Ice cream cook.
Boulanger - Baker.
Makes breads and certain pastries.

Responsible for most cold preparations: salads, charcuterie plates, and other cold hors d'oeuvres. They are also in charge of the pantry. If a restaurant has their own boucher or charcutier, the garde manger will oversee these roles.
Boucher - Butcher.
Oversees butchering of meat and poultry.
Charcutier - Person in charge of charcuterie.

PLONGEUR or ESCUELERIE

Kitchen Porter / Dishwasher.

ENTREMÉTIER/VEGETABLE CHEF

Entrée preparer/manager. Note that an entrée, under Escoffier, is a starter and not a main dish. Thus, the entremétier traditionally handles vegetable, egg, or soup dishes—generally things that do not involve meat. He or she may supervise the potager and legumier or take on these roles.

CHEF DE PARTIE

Senior cooks, line cooks.
Each is the head of a particular station, which prepares specific dishes or types of cuisine. This includes:

Considered the most respected of the chefs de partie, the saucier often reports directly to one of the sous-chefs. Their central role is preparation of sauces and possibly sautéed dishes.

Responsible for the roasting and braising of meats. In the traditional Escoffier brigade, the rôtisseur would also be in charge of the grillardin and friturier. Today, he or she may simply take on these roles.
Grillardin - Grill cook.
In charge of the grill, specifically grilled meats.
Friturier - Fry cook.
Takes care of all frying, specifically deep frying.

Prepares and oversees all fish and seafood dishes. This position usually involves butchering the fish as well. Restaurants with an emphasis on shellfish may also employ an écailler. An écailler prepares fruits de mer or shellfish (i.e., shucking oysters).

COMMIS

Work at specific stations under one of the chefs de partie. They are responsible for the tools at their station. Also described as a kind of apprentice who is usually a recent graduate of culinary school.

PERSONAL ATTRIBUTES TO WORK IN THE HOSPITALITY AND CATERING INDUSTRY ARE VERY IMPORTANT BECAUSE IT IS CUSTOMER DRIVEN

- Friendly personality
- Pleasant and polite manner
- Clean and proper clothing, possibly a set uniform
- Spotlessly clean hands and nails
- A pleasant smell, i.e. no overpowering after-shave or perfume and no body odour
- Fresh breath, discreet make-up, long hair tied back, well-groomed appearance
- Steady hands to be able to carry and serve food
- Knowledge of the menu in order to answer any customer queries and advise on allergies, etc
- Enthusiasm for the job and a willingness to serve others
- Good health because of long hours on feet
- Polite, calm and tactful even when dealing with awkward customers
- Loyalty to place of work and the ability to 'sell' and 'promote' facilities to customers
- Ability to handle compliments and complaints

- **Personal Qualities:** Reliable, punctual, team worker etc.
- Can operate machinery e.g. coffee machines.

The organisation depends on the type and size of the establishment;a large restaurant may include all these roles:

- Head Chef or Executive Chef
- One or two sous chefs
- Chefs de parties or sectional chefs looking after each section (e.g. pastry)
- A demi chef de partie, reporting to and working the opposite shift to the chef de partie
- One or two commis chefs per section per shift
- An apprentice per section per shift.

Full time

No specific number of hours that makes someone either full or part time, but a full time worker usually works more than 35 hours. The law says that workers don't usually have to work more than 48 hours a week on average, unless they choose to. This law is sometimes called the 'working time directive' or 'working time regulations'.

Part time

Part-time work is when a worker is contracted for anything less than the basic full-time hours. There are no set number of hours that makes someone full or part-time, however average part-time contracts are often 16-20 hours.

Agency Staff:
As an employer, you can hire temporary staff through agencies.
This means:
- you pay the agency, including the employee's National Insurance contributions (NICs) and Statutory Sick Pay (SSP)
- it's the agency's responsibility to make sure workers get their rights under working time regulations
- after 12 weeks' continuous employment in the same role, agency workers get the same terms and conditions as permanent employees, including pay, working time, rest periods, night work, breaks and annual leave
- you must provide the agency with information about the relevant terms and conditions in your business so that they can ensure the worker gets equal treatment after 12 weeks in the same job
- you must allow agency workers to use any shared facilities (e.g. a staff canteen or childcare) and give them information about job vacancies from the first day they work there
- you are still responsible for their health and safety

Casual/Seasonal

Casual workers are hired on an irregular basis for a short period of time (no more than 12 weeks). There is no continuing commitment from the employer to offer work, and no obligation on the part of the casual worker to do the work offered.

Full-time and part-time employees must have

Staff can earn extra money if they are given tips because the service and food they have delivered has been good. It is sometimes considered rude not too tip. More expensive restaurants automatically add 10-12.5% extra to a bill to cover tips

Hospitality & Catering Part 3

Factors affecting success

Legislation that protects workers

- Disabled Discrimination Act 1995
- Equal Pay Regulations 1970
- Health and Safety At Work 1974
- National minimum wage
- Working Times Regulations 1998
- Part-time workers Regulations 2000

Type of staff	Benefits for employer	Benefits for employees	Disadvantages for employer	Disadvantages for the employees
Full-time 36 hours plus 28 days holiday	Reliable Permanent staff Staff have a good knowledge of services provided	Regular income Job security Permanent contract with holiday benefits. Regular hours of work Will receive sick pay	Bound by contract terms Has to pay sick pay, maternity leave and holidays. Expensive to employ Require lunch breaks unlike part time staff	Usually have to work shifts Less flexibility
Part-time 4-16 hours 28 days holiday	Can be employed at busier times of the day such as lunch or dinner service	Can be more cost effective with less wages needed	Will need to pay for training of more staff rather then small amount of full time staff	Need to work basic requirement of hours before they are entitled to holidays and sick pay
Casual	Can be employed for functions or busy times of the year	Can choose when they want to work	Can be unreliable Have to pay agency fees Don't know the routines Casual staff haven't been trained Unfamiliar with services provided	Called at short notice to work Not a regular income No sick pay Often don't know where they will be working until the week before

Food costs are large **percentage** of costs for most **hospitality businesses**. When planning menus chefs must **calculate** how much dishes will **cost per portion** to be able to **justify** keeping it on the menu. **Expensive** dishes that are not ordered often may lead to **wasted ingredients** that are unused, which result in **less profit.** Chef's must design dishes that generate a profit to stay operational.

Costs for an establishment

Materials costs
Soap, loo roll,
Menus
Order pads
Cleaning materials
flowers

Food costs
Ingredients
Pre made foods
Bar food and drink
Food and drink for staff

Overhead costs
Heating, lighting
Furniture
Maintenance of equipment
Curtains, carpets

Personnel costs wages
Chefs
Kitchen assistants
Bar staff
Waiting staff
Managers
Casual staff

Cost per portion x 100 / 40

Independent shops may supply some establishments

Large Wholesalers

Advantages	Disadvantages
• Very large range of commodities and sundries • Can have in house butchery department • Pre made and pre portioned food • Large bulk packaging of ingredients	• May be expensive for pre made foods • Have to order well in advance • Set delivery days • Have to order large quantities to get a discount

Benefits of portion control

- Keeps the food costs down
- Keep losses in food preparation and serving to a minimum
- Offer a consistent portion to customers
- Minimise waste eg leftovers
- To make a profit which is constant

Controlling portion size

Controlling portion size

Catering equipment

Specialist large scale catering and kitchen equipment from specialist companies

Specialist markets

Advantages	Disadvantages
• Large choice of commodities • Several suppliers at the market means costs are kept down by competition • Supplies are always at their freshest • New supplies in every day	• May not be easy to get to eg London • Work through the night and close early in the morning • Costs of transport back may be expensive • Purchaser has to judge quality for themselves before they buy

Local suppliers

Advantages	Disadvantages
• Local deliveries, less environmental impact • May use local farms and companies for commodities • Smaller firms, personal business relationship • May be able to change order at short notice	• May not have a wide selection • Smaller companies buy in smaller quantities so costs more • May not be able to supply large orders

It's important to remember that local sourcing can encompass much more than just using locally supplied and seasonal food. **Local sourcing can also include toiletries for guest rooms and flowers for reception**

Hospitality & Catering Part 4

Kitchen workflow

Workflow in the kitchen should follow a logical process by using different areas so that the clean stages in food production never come into contact with the "dirty" stages.

1. Delivery
2. Storage
3. Food preparation
4. Cooking
5. Holding
6. Food service area
7. Wash up
8. Waste disposal

Workflow

Organising the kitchen into separate areas for separate jobs is the heart of hygienic kitchen design. The e layout will depend upon the size of the kitchen as well as on the type of meals it prepares.

Kitchen Layout

LO2 Understand how hospitality and catering provisions operate

Delivery
Goods vehicles should have adequate access to premises, providing direct deliveries to catering areas. This limits the length of time chilled foods may be in the danger zone. Have adequate space to check orders before they enter the catering area. Check temperature of van and visually examine goods.

Storage
Storage should be near to the delivery area to limit delivery staff entering the catering area. This also reduces the need to move heavy items of stock that may cause injury to staff. Make sure adequate room is available for stock.

Food Prep
Separate hand wash, pot wash and food wash areas/sinks need to be provided as well as separate areas for potential allergen containing food prep. Where premises are small, systems should be in place to ensure utensils are kept separate.

Cooking
Cooking equipment should be selected based on the menu being produced and the ability of the staff using it. State-of-the-art equipment such as water baths, programmable Rational ovens and computerised deep-fat fryers would be desirable, however, if they are not necessary they are a waste of money. Most importantly, the equipment layout should be safe and manageable to work around to prevent accidents.

First In, First Out (FIFO) is a system for storing and rotating food. In FIFO, the food that has been in storage longest ("first in") should be the next food used ("first out"). This method helps restaurants and homes keep their food storage organized and use food before it goes bad. First In, First Out is an effective system that should be standard operating procedure for every food service establishment.

Cooking
A 900mm corridor should be allowed for around the front of cooking equipment, ideally 1200mm. You may be limited by the energy supply available, gas may not be permissible in the building or the incoming electrical supply may be limited. Large scale equipment, whilst can be energy efficient and have energy saving features such as thermostats and auto switch-off, often requires a large electrical supply to run in the first place.

Holding
The food holding area should be near the food service area in order to keep the food at the right temperature (above 63°c). Some kitchens may require separate refrigerator areas to keep desserts chilled and away from raw foods..

Food Service Area
In an à la carte restaurant adequate space needs to be considered to allow plating up.

Food Service Area
In a buffet of canteen system, multiple food collection points can limit queuing. Large service areas may need stock replenished frequently, such as all you can eat buffets, therefore the food service area should be located near the kitchen area.

Wash Up Area
An integral part of the kitchen. If the dish washing area does not function, neither does the kitchen. Ample space should be given to both the size of dish washing area needed for the number of dishes, pots, pans etc. are used in one night as well as adequate space to store and sort washing up. As hot water produces steam, adequate ventilation is required.

Waste Disposal
Dirty plates and waste food needs to be kept separate from food prep and storage areas to prevent cross contamination. Ideally a separate refuse bay should be made available well away from the kitchen entrance (so customers do not see this side of the business)! Adequate changing rooms/facilities should also be provided for staff to change at the start and end of shifts and also easily accessible staff toilets nearby.

Hygienic kitchen design

Work surfaces
Must be strong, hard wearing and easily cleaned. Stainless steel with wheels that can be moved out of the way while cleaning

Floor
Hard wearing, easy to clean , non absorbent and non slip
Coving with the walls prevents dirt and food particles from accumulating

Walls
Smooth, can be tiled or lined with stainless steel as splashback light colour to show dirt easily

Hygienic kitchen design

Ventilation
Effective ventilation system to remove the heat, steam and condensation from the kitchen. Bacterial growth in moist conditions

Sinks
For washing food and utensils. Hot and cold water, stainless sinks are the best

Waste disposal
Waste disposal unit or separate waste bin with a lid that can be foot opened

Importance of documentation

Why must they be completed?

1. Maintaining organisational procedures
2. Safety of staff and customers
3. Legal requirements
4. Complying with food safety legislation
5. Complying with accounting and taxation practices
6. Ensuring accurate payment of bills
7. Ensuring profitability of kitchen

Chef's uniform

- Chef's jacket
- Chef's pants
- Hat
- Neckerchief
- Apron
- Hand towel
- Slip-resistant shoes

Some establishments have staff wear the same uniform; this makes them easily identifiable for staff and customers. The uniform may change depending on which area of the establishment they work in.

Protective clothing as part of a uniform must be paid for by the employer.

Documentation and Administration

Types of Kitchen Documents

- Temperature charts – fridge, freezer, display, point of sale. Taken at least twice per day.
- Time sheets – logging staff working hours
- Accident report forms – used to report any accidents and near misses
- Food safety information – blast chill records, food related incidents and cleaning rotas
- Equipment fault reports – What was the issue and how was it dealt with.
- Stock usage reports– order books, stock control sheets, requisition books, invoice, delivery notes

Documentation and Administration

Complete kitchen documents:

- They must be legible (readable)
- At correct interval (daily, hourly)
- Completed accurately
- They must be signed and date.

Where do you get kitchen documentation from?:

- Purchased from stationers
- Designed in-house
- Central purchasing

Advantages
Effective work flow systems, both in the kitchen and front of house staffing, will lead to:

- Good communication between sections/ departments
- More efficient working (time/labour saving)
- Improved quality of the finished product
- Reduce the risk of accidents
- Maintain high standards of hygiene and food safety

All of the above will lead to better customer service and therefore satisfied customers.

In Summary:
When planning a kitchen you must consider:

- The type of customers you wish to attract
- The type of menu (à la carte, table d'hôte, seasonal, ethnic, children's, rotating ...)
- The type of service (self service, plated, buffet, fast food, canteen ...)
- The kitchen brigade structure and number of staff required to make your menu
- Compliance with legislation

Stock control

Staple foods and supplies that are canned, bottled, dried or frozen
These have a longer shelf life and so do not need to be purchased as frequently. Larger amounts can be bought to get cheaper prices and can be stored .

- Condiments,
- Canned vegetables
- Frozen foods including meat, fish and deserts
- Sauces
- Flour, sugar, fat,oil
- FIRST IN FIRST OUT stock rotation

Perishable food and products that do not stay fresh for very long

- Fresh fruit, vegetables
- Dairy products
- Meat and fish
- Only buy enough to last a few days because they will not last
- FIRST IN FIRST OUT- stock rotation

Hospitality & Catering Part 5

Food Service Equipment

Food service equipment is equipment used to **serve food** in the catering industry

Service equipment can be anything which is **used by customers** or to **serve food to the customers.**

Hand Held Equipment

Hand equipment is non-powered equipment which is used to serve or consume food and drink.

Tableware:
Equipment usually used to 'set' a table
Includes crockery, glasses, cutlery etc

Serving equipment:
Equipment for serving food. This includes utensils for placing food onto tableware such as tongs and ladles.
It also includes items such as wine coolers, champagne buckets and bottle openers.

Care, Use and Maintenance of Hand Equipment

1. Equipment used by customers must be **cleaned at least once a day.**
2. Equipment must be cleaned according to the manufacturer's instructions.
3. Powered equipment **must be serviced** regularly.
4. Powered equipment should be switched off when not in use.
5. Equipment which requires training to use must not be available to customers.

Powered Equipment

Kettle
A jug for boiling water

Mincing machine
For mincing meat

Microwave
For defrosting, reheating and cooking

Food processor
For chopping, mixing and blending food

Blender
A jug with a rotating blade for blending foods to smooth texture

Large Powered Equipment

Identify the name and use of each item.

Specialist Hand Equipment

Hand Equipment: Knives

Care, Safe Use and Cleaning

- If equipment has a blade always take care when using and cleaning: **keep fingers away from sharp edges.**
- **Clean items as soon after use as possible.** If food dries on they will be harder to clean effectively.
- **Choose correct cleaning utensils** which can reach all parts of the equipment – such as a brush for between the wires in a whisk.
- Store small utensils in a drawer or on hooks so they are not lost easily.
- **All equipment should be cleaned in hot water using detergent.**

Powered Equipment: Care, Safe Use and Cleaning

Should be **serviced regularly** by an electrician. Usually at least once a year.

Should be cleaned according to a regular routine and a record kept of maintenance.

Staff must be trained in safe operation of larger equipment.

Manufacturers instructions for cleaning and use must be read, followed, and kept safely.

Equipment should be **switched off at the wall while not in use.**

Equipment must not be situated where it could create **a fire hazard.**

Safety notices should be placed on all large pieces of equipment.

Customer rights

- The right to be protected (against hazardous goods)
- The right to be informed (about quality, quantity, allergies etc)
- The right to have their complaints be heard
- The right to seek redressal (compensation.)
- The right to receive satisfactory goods that match their product description

How can you reduce the risks?

- **Reduce cash handling** by staff, have specific staff take responsibility for money.
- Train staff to **identify suspicious packages** and **individuals.**
- Use **security passes;** ask visitors to sign in.
- **Restrict** workmen or outside agencies to certain areas.
- **Security mark** all equipment.
- Use strict **stock control** procedures, have a **checking system** in place.
- Keep all areas **well-lit.**
- Use **CCTV** cameras.
- Check **guest identification** on check-in with photo I.D.

Staff allocation

The restaurant manager coordinates all activities at the restaurant.

The restaurant manager must define the tasks that staff must perform Consider

- The size of the restaurant,
- Flow of customers, type of clientele and
- Menu offerings
- Different skills and personnel requirements related to changes of volume and customer preferences.

Customer trends

Customers are influenced by

- TV
- Magazines
- Health
- Travel abroad
- Technology
- Ratings and reviews

Safety and security

Health and safety, hygiene

- Fire certificate
- Staff training records
- Accident book
- Food hygiene checks
- Cleaning checks
- First aid records

Monitor stock levels for re ordering
Decide frequency of stock check
First in First out for items with a shelf life
Stock level checks could be for

- Wines
- Spirits
- Coffee
- Order pads
- Garnishes
- Cutlery
- Crockery
- Drinks in bar area
- Nuts, breadsticks
- Other consumables

Food service

Food can be served in many ways. The type of service depends on the following factors:

- The type of establishment or where it is
- The type of food or menu being served
- The cost of the meal or food
- The time available for the meal
- The type of customer
- The number of customers expected
- The availability of skilled serving staff

Documentation

A senior staff member such as the head chef or kitchen manager is responsible for carrying out administrative tasks that ensure the efficient working of all equipment and machinery.

Other documentation such as HACCP checks and accident records are kept up to date to comply with legislation.

Temperature control charts
Reading temperature of refrigerators, freezers and store cupboards

Hygiene information
Hazard Analysis Critical Control Points (HACCP)

Time sheets
Staff shifts, rotas

Accident forms
It is the law to report all accidents that occur on the premises

Equipment faults
Any equipment not working properly must be recorded and reported to the appropriate person. Where equipment is under warranty it must be reported to the manufacturer for repair.

Bookings and reservations

- Electronic booking system
- Electronic reservations system
- Diary with bookings and reservations
- Feedback forms

The EPOS system is a computerised piece of technology that **records data.** In the hospitality industry it is used when customers **purchase** services or food. It can be set up to **record bookings**, therefore preventing double bookings as well as updating **food stock levels** as menu items are purchased.

It can be used for –

- Recording sales
- Updating stock levels
- Providing accurate pricing information
- Enable fast and efficient customer service
- Keeping track of sales and taxes

Hospitality & Catering Part 6

Types of customer

Leisure	Local residents	Business / corporate
Customers who visit the establishments in their leisure time e.g. a meal with friends, a family day out, tourists,	Customers who live in the local area who visit the establishment often eg regular Sunday lunch, or get togethers	e.g. business lunches. Use business facilities in establishment for meetings or presentations . Courses and conferences

Leisure customers requirements

- Value for money
- Good facilities
- Families want child menus, play area, child friendly
- Tourists want local food, easy to communicate
- Older people may want more formal service
- Good customer service
- Varied choice of menu
- Dietary needs eg allergies, intolerances, vegetarian catered for without having to ask for special foods
- Facilities for physically impaired customers

Local customers requirements

- Value for money
- good standard of customer service so they return
- Catering for local needs (culture, religion)
- Consistent dishes served
- Loyalty schemes
- Recognised by staff- feel welcome
- Menu specials
- Theme nights
- OAP discount day
- Child friendly
- Entertainment
- Mailing list or email for special offers

Business customers requirements

- Dedicated corporate (business) contact at establishment
- Discounted rates
- Meeting rooms
- Water, juice on tables
- Presentation equipment, projector, tv,
- Office facilities- printer, phone, fax, internet, stationery
- Tea and coffee for breaks
- Lunch or other meals- buffet or restaurant
- Accommodation if attendees are from a long distance
- Quick service for lunch meetings

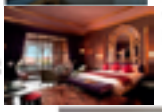
What is good customer service?

Types of Bedroom Accommodation

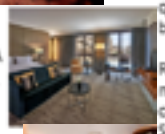
Youth hostel (YHA)
Accommodation is usually in comfortable bunk bedded rooms, sharing with people of the same sex.

Showers and toilets are shared. Bed linen, pillows, duvet and blankets are provided free of charge for you to make up your bed.

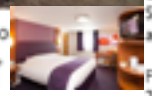
A full meal service is usually provided. Some locations also have self-catering kitchens. Most locations will have a sitting area, drying room and cycle store.

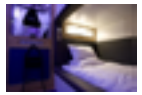


Hotel deluxe suite (Hilton)
Stylish suite with separate living room and large bathroom with free soap, shampoos and creams. A toweling bath robe and slippers are also provided.



Desk with high-speed Internet connection.
Also provided: Safe, iron, ironing board, clock, radio and radio alarm, hair-dryer, sofa bed, trouser press, TV with teletext, satellite channels and on-demand films, tea- and coffee-making facilities, bottled water and biscuits.





Cabin room at airports (Yotel)
Book from just a few hours, day or night, to 24 hours or more. Large single bed 2m x 1m (large enough for one or two people at a push) with full sitting height.
Bathroom with shower, revitalising all-in-one body wash, heated mirror and soft towels.
Fold-out work desk and stool (doubles for unpacking), overhead hand-luggage stowage, suit-bag hanging and storage areas for small pieces.
Complete range of power and connectivity including free Internet access and local lighting.
20-inch flat-screen TV with choice of films, radio, games and Internet. 'Cabin'-service menu on screen, and 24-hour 'galley' café service.

Boutique hotel
Designed with a sophisticated and modern slant on the Moroccan theme. Funky leather bed and "bellydancing" ornate bottles. Luxury room featuring a chameleon-floor seating area in the bay window.

New luxury Italian tiled en-suite shower and toilet, CD player (with shower-room speakers), flat screen TV with Free view, fridge, hair-dryer and hot beverage facility.

Motel (Premier/Travel Inn)
Comfortable king-sized beds. Good quality duvets and pillows. En-suite bathrooms with shower gel.

Remote control TVs. Tea- and coffee-making facilities. Hairdryers. Heater control.
Spacious desk area with Internet access.

Family rooms, with cots on request. 24-hour reception. Restaurant and licensed bar nearby. Hot breakfast available.

Equality Act 2010

If you provide any sort of accommodation, serviced or self-catering, the Equality Act 2010 applies to you.

- The Act protects anyone who is disabled, is thought to be disabled or is associated with someone who is disabled.
- The Act gives these people rights of access to goods, facilities and services (including tourist accommodation) and ensures that they are treated no less favourably than other customers.
- You are also required to make reasonable adjustments to the way you deliver your services and to the physical features of your premises to make it easier for disabled guests to use them.

Why is customer service so important in the hospitality industry?

Customer service is what an establishment does in order to meet the **expectations** of their customers and generate customer satisfaction.

- **So customers return.** - People will not return to a place where they were not satisfied with the service. Repeat business means a successful business.
- **Exceeding expectations**-This makes repeat business more likely
- **Growth of the business-** If customers receive a high standard of service and return, they will spend more money and also tell other people about the business

Instruction	Guidelines	Sign
Stop	Prohibition Sign • Round shape. • Black pictogram. • White background. • Red edging.	
Danger	Warning Sign • Triangular shape. • Black pictogram. • Yellow background. • Black edging.	

Obey	Mandatory Sign • Round shape. • White pictogram. • Blue background.	
Safety	Emergency Escape or First Aid Sign	
Fire	Fire Fighting Sign. • Rectangular or square. • White picture. • Red background.	

Risk and Security

Workers can be at risk from security hazards in the same way they are from safety hazards.
Security risks include

- Disagreements between customers
- Customers being intoxicated (alcohol)
- Customers who have used drugs
- Verbal abuse
- Physical assaults

Risk factors

- Handling large amounts of money in open areas
- Face to face contact with customers
- Opening late in the evening or early in the morning
- Dealing with customer complaints or disputes
- Selling high value items such as alcohol
- Establishment in an isolated area eg country pub
- Poor lighting
- Establishment in a high crime area

Staff (and customers) may feel threatened by physical assaults, threats and intimidation and verbal abuse
People at risk includes

- Young workers who have less experience
- Night shift workers where there are less people
- Lone workers e.g. people working early or late
- Customers in the establishment

Prevention

- Brightly lit areas
- CCTV
- Easy escape routes
- Area for handling larger sums of money
- Appoint more senior staff to deal with problems and complaints
- Train staff to diffuse angry customers
- Contact local police if necessary
- Make sure lone workers are aware of risks
- Keeping doors and windows secure and locked

Hospitality & Catering Part 7

LO3 Understand how hospitality and catering provision meets health and safety requirements

The Health and Safety at Work Act (HASAWA) 1974, regulates health and safety issues.

The act aims to:

- secure the health, safety and welfare of persons at work
- protect other people from health and safety risks caused by work activities
- control the use and storage of explosive and dangerous substances.

Under the Health and Safety at Work Act, employers have responsibilities to:

1. ensure the health, safety and welfare of employees
2. provide and maintain safe equipment and systems of work
3. make arrangements for safe use, handling, storage and transport of articles and substances
4. provide information, instruction, training and supervision
5. provide a safe place of work, safe entrance, exit, and work environment
6. provide adequate toilet, washing and changing facilities.

Under the Health and Safety at Work Act, employees have responsibilities to:

1. follow safety instructions and training received
2. co-operate with their employer
3. not to misuse or tamper with anything provided in the interests of health and safety
4. take reasonable care of their own and other people's health and safety
5. tell someone if you think the work or inadequate precautions are putting anyone's health and safety at serious risk.

PPER - Personal Protective Equipment

Employers have duties concerning the provision and use of personal protective equipment (PPE) at work.

PPE is equipment that will protect the user against health or safety risks at work. It can include items such as safety helmets, gloves, eye protection, high-visibility clothing, safety footwear and safety harnesses. It also includes respiratory protective equipment (RPE).

These prevent injuries to:

- the lungs, eg from breathing in contaminated air
- the head and feet, eg from falling materials
- the eyes, eg from flying particles or splashes of corrosive liquids
- the skin, eg from contact with corrosive materials
- the body, eg from extremes of heat or cold
- PPE is needed in these cases to reduce the risk.

RIDDOR - Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013.

What to report?

- Deaths and injuries
- Occupational Diseases
- Carcinogens, mutagens and biological agents
- Specified Injuries to Workers
- Dangerous Occurrences
- Gas Incidents

Who should report it?

If you are an employer
If you are an employer, you must report any work-related deaths, and certain work-related injuries, cases of disease, and near misses involving your employees wherever they are working.

If you are in control of premises
If you are in control of premises, you must report any work-related deaths, certain injuries to members of the public and self-employed people on your premises, and dangerous occurrences (some near miss incidents) that occur on your premises.

Agency Workers/Casual Staff
Agencies should ensure that responsibility for reporting under RIDDOR is clearly assigned to the appropriate person based on the particular facts of the employment relationship. Agencies should ensure that reporting responsibilities are clearly understood by host businesses and the workers.

Accidents are reported to the **HSE** Health and Safety Executive

Record other accidents resulting in injuries where a worker is absent from work or is incapacitated for more than 3 days.

H.S.E Health and Safety Executive.

- H.S.E stands for the **Health and Safety Executive.**
- The H.S.E will investigate any complaints and safety incidents.
- The H.S.E employ Health and Safety Enforcement Officers who will inspect safety procedures being used.
- They have the power to serve notice and/or issue legal proceedings over safety incidents.
- It is compulsory to contact the H.S.E if an operative has an absence of more than three days following an accident at work.

First Aid

- Employers have to provide first aid facilities at work
- As a minimum, there should be a fully stocked green first aid box and a person appointed to take charge in an emergency
- Some workplaces have qualified first aiders and first aid rooms
- Green and white notices should inform you where the first aid box is kept and who the first aider(s) or appointed person(s) is/are

Fire safety

- Employers must have arrangements in place
  - to prevent fires
  - To raise the alarm
  - To fight fires (fire extinguishers)
  - Emergency evacuation (including a pre-arranged meeting place for staff to assemble following evacuation)
- Notices showing the safe evacuation routes from buildings should be green and white

COSHH - Control of Substances Hazardous to Health Regulations 2002

COSHH covers substances that are hazardous to health.
Substances can take many forms and include:

- chemicals
- products containing chemicals
- fumes
- dusts
- vapours
- mists
- nanotechnology
- gases and asphyxiating gases and biological agents (germs). If the packaging has any of the hazard symbols then it is classed as a hazardous substance.
- germs that cause diseases such as leptospirosis or legionnaires disease and germs used in laboratories.

Employers must display health and safety posters in work areas where necessary, especially related to COSHH.

Every substance that is a hazard has a COSHH safety sheet

Employees responsibilities under COSHH

1. Use control measures and facilities provided by the employer
2. Ensure equipment is returned and stored properly
3. Report defects in control measures
4. Wear and store personal protective equipment (PPE)
5. Removing PPE that could cause contamination before eating or drinking
6. Proper use of washing, showering facilities when required
7. Maintaining a high level of personal hygiene
8. Complying with any information, instruction or training that is provided

PPE in catering situations

- You **must** wear the p.p.e. if it has been provided for you. You could be held personally liable if you had an accident which could have been prevented by you wearing your p.p.e.
- You must care for it, store it and clean it as necessary;
- You must report any defects.

What Is Manual Handling?

- Any transporting or supporting of a load by hand or bodily force
- Lifting, putting down, pushing, pulling, carrying or moving

The top 4 injury types in Hospitality and catering

- Cuts
- Burns
- Sprains & strains
- Slips, trips and falls

How Can Cuts Be Prevented?

- To prevent knife cuts:

Cut properly, using the bridge and claw grips


incorrect


correct

- Carry knives with point down and backwards
- Wear gloves that protect your hands from cuts.

- To prevent machine cuts:
  - Be sure moving parts are covered by guards.
  - Turn off power and unplug to clean.
  - Keep your hands, face and hair away from moving parts.


Meat Slicer

Teens under the age of 16 are prohibited from operating food slicers.

- Not wearing clothing or jewelry that could get caught in machines.

- Not using equipment that you have not been trained to use.

How Can Strains Be Prevented?

- Ask for help with heavy loads.
- Ask for training in safe lifting methods.
- Push loads rather than pull them.

- Don't lift and then twist.
- Don't lean out drive-through windows.

How Can Slips, Trips & Falls be Prevented?

To prevent trips, slips and falls:

- Make sure your path is clear, clean and dry before carrying a load.

- Move boxes and carts out of the way.
- Watch for mop and broom handles

- Use non-slip floor pads.


Slip-resistant shoes

Customer safety

- Warning signs when cleaning is taking place
- Do not allow customers in areas where maintenance work is happening
- Signs "mind your head" "watch the step" "hot water"

- Use ladders correctly

- Don't lean out
- Move it closer
- Have a helper

Causes of fires

- **Equipment** that is not serviced regularly can cause over heating and cause fires.
- **Human Error** many fires that happen in catering. Such as fat fryers.
- **Electrical** smouldering wires can develop unseen overnight and be the cause of major incidents,
- **Arson** rare occurrence. grudge between employee and employer, or insurance fraud.
- **Chemical** not very common now due to the COSHH regulations.

Action on Discovering a Fire.

- Raise the alarm. *Break the glass of the nearest alarm point.*
- Call the fire services.

- If safe to do so tackle the fire, if in doubt get out.
- Leave the building via the nearest exit calmly. DO NOT run or use lifts.
- Evacuate the premises and report to your designated assembly point.

How Can Burns Be Prevented?

- To prevent other oil and grease burns:
  - Watch out for spatters and spills.
  - Use protective apron and mitt.
  - Clean up spills as soon as they happen.


Protective Mitt

- To prevent burns from open flames:
  - Keep hair and clothes away from flames.
  - Keep flammable materials away from flames.

To prevent steam burns:

- Watch out for steam cloud when you open dishwasher, steam table or other places where steam occurs.
- Wear protective gloves whenever you open something filled with steam.

Hospitality & Catering Part 9

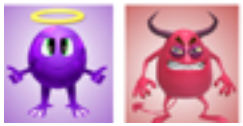
LO4 Know how food can cause ill health

BACTERIA

Bacteria are microscopic organisms which are commonly referred to as **'GERMS'**. They found everywhere including on and in people, on food, in water, soil and air. Some are **good** for us, and some are **bad!**

MICROBES (or BACTERIA) are found in:

- Soil and Water
- Plant and Plant Products
- Air and Dust
- Animal Fur
- Gut of animals and humans
- Food handlers
- Food prep and serving utensils



AT RISK GROUPS

COMMON CAUSES OF FOOD SPOILAGE

- Inadequate temperature storage
- Prolonged storage times
- Inadequate ventilation
- Cross contamination
- Delays between delivery and storage
- Delays between preparation and cooking

WHAT FOOD SPOILAGE LOOKS LIKE

MOULDS

- Tiny fungi which grow from spores found in the air
- Settle on food products and multiply
- When visible, food is described as 'mouldy'
- Causes food spoilage

PARASITES

Parasites are organisms that derive nourishment and protection from other living organisms known as hosts. The most common foodborne parasites are protozoa, roundworms, and tapeworms.

Causes food poisoning when humans ingest undercooked meat products in which the parasite has often survived.

CHEMICALS

- Remnants of cleaning chemicals
- Pesticides
- Insecticides
- Paint (wall surfaces)

PHYSICAL

Physical Contaminants Include:

- Hair
- Finger nails
- Broken utensils
- Pests

POISONOUS PLANTS

Some plants naturally produce poisonous chemicals. If these are eaten they may cause death. Other foods may contain chemicals that give rise to allergies in some people.

Other poisonous plants: some fungi, rhubarb leaves, parts of potatoes which are exposed to the sun while growing.

Metals like lead and mercury stay in our body for a long time and make us ill. Foods may taste or smell funny.

Mercury is a naturally occurring element found in air, water and soil. A highly toxic form (methylmercury) builds up in **fish, shellfish** and animals **that eat fish.** Fish and **shellfish** are the main sources of methylmercury exposure to humans. Fish that typically have higher levels of mercury include **king mackerel, marlin, shark, swordfish, tilefish,** and tuna.

Many of these types of fish are used in sushi.

SIGNS AND SYMPTOMS

- Impairment of peripheral vision
- Disturbances in sensations 'pins and needles'
- Lack of coordination
- Impairment of speech, hearing, walking
- Muscle weakness

Intolerance	Allergy	Poisoning
Hours to days to see effect	Can occur within minutes of exposure to food	From 30 min for toxins 12-48 hours bacterial
Digestive system cant process the food	Immune response to allergen	Bacteria poison or disrupts digestive system
Possible to eat a small amount without effect	Body reacts to tiny amounts of food	Toxins- few bacteria Large amounts colonise gut
Stop eating the food and it goes away	May need adrenaline or anti histamines	Runs its course of illness then ends
Easier to detect the food	Allergens may be small amount in ingredients	No smell, no taste, no sign
Symptoms if you eat a lot or frequently	Symptoms every time even tiny amounts	Symptoms if the food is contaminated
Moderate to serious illness	Can be fatal	Serious illness to fatal

Food intolerance

Mouth ,may be sore, bad breath

Skin rash, redness, itching swelling eczema

Gut abdominal pain, bloating, heartburn, cramping, vomiting, diarrhoea or constipation

Lungs chronic cough, wheezing

Head headache, brain fogginess, migraines

Perception irritable, moody, panic, depression

PESTICIDES AND HERBICIDES

Some of the chemicals used in farming may remain on or in the food we eat. These may cause us harm.

Farmers spray pesticides on crops to kill the insects that may reduce crop yield. They also spray herbicides to kill weeds that may compete with the crops. Some of these chemicals may remain on the surface of, for example, fruit. Others may be absorbed by the plant and therefore be present in the crop.

The European Union has strict laws that determine how much of these chemical residues are permitted in foods.

If you suspect someone of going into anaphylaxis you must:

- Call an ambulance
- Check for the casualty's Epi-Pen and help them use it. **You may have to do this for them, all pens have instructions on the side.**
- Lie the casualty down with their legs elevated to treat for shock
- Stay with the casualty and reassure them while you wait for the ambulance

ALLERGENS

Some people may develop an allergy to peanuts or to the gluten in wheat. If they eat foods containing these, they may become very ill, and possibly die.

The 8 most common food allergies include:

- Cow's milk
- Eggs
- Tree Nuts
- Peanuts
- Shellfish
- Wheat
- Soy
- Fish

Symptoms can occur anywhere from a few minutes after exposure to a few hours later, and they may include some of the following:

- Swelling of the tongue, mouth or face
- Difficulty breathing
- Low blood pressure
- Vomiting
- Diarrhea
- Hives
- Itchy rash

COW'S MILK

Milk, Milk powder, Cheese, Butter, Margarine, Yogurt, Cream, Ice cream

TREE NUTS

Brazil nuts
Almonds
Cashews
Macadamia nuts
Pistachios
Pine nuts
Walnuts

SHELLFISH

Shrimp, Prawns, Crayfish, Lobster, Squid, Scallops

In more severe cases, a food allergy can cause anaphylaxis. Symptoms, which can come on very quickly, include an itchy rash, swelling of the throat or tongue, shortness of breath and low blood pressure. Some cases can be fatal.

Hospitality & Catering Part 10

INTOLERANCES: LACTOSE INTOLERANCE

What is the issue?

Can't digest lactose.

What are the problem ingredients?

Lactose can be found in dairy products.

What food products cannot be eaten by coeliac disease sufferers?

Milk, Milk powder, Cheese, Butter, Margarine, Yogurt, Cream, Ice cream

INTOLERANCES: COELIAC DISEASE/GLUTEN INTOLERANCE

What is the issue?

Can't digest gluten.

What are the problem ingredients?

Gluten can be found in wheat and other grains.

What food products cannot be eaten by coeliac disease sufferers?

Flours, Pasta, Bread, Cereal, Certain alcoholic drinks

What is an Environmental Health Officer?

EHOs are personnel qualified in Environmental Health laws, enforcement and inspection methods. They have a 3 year degree in Environmental Health

Many organisations employ EHOs including

- Local councils
- Private companies
- NHS
- Military
- Food Standards agency

EHO roles in the Hospitality and Catering industry

Legislation enforced by EHOs

The Food Safety Act.
Food safety from the manufacturer or producer to the point of sale. Might involve different companies or premises e.g. suppliers, manufacturers or kitchens, shops or restaurants.

The Food Safety Act (General Food Hygiene) Regulations.
Ensures food producers **HANDLE** all food hygienically.

Legislation enforced by EHOs

The Food Safety Act (Temperature Control) Regulations.
Temperatures at which to store or hold food.
- Freezers from –18°C
- Chillers from 3°C to 8°C
- Fridges from 0°C to 5°C
- Cooked core temperature at 75°C or above
- Hot holding above 63°C

The Food Composition Regulations.
Specifies what ingredients **CAN** or **CANNOT** be used in the manufacture of foods e.g. bread, breakfast cereals and use of additives

Inspecting businesses for food safety standards

- Powers of entry at any reasonable time
- Inspect food and premises
- Power to seize and detain food
- Serve notices
- Power to close
- Prosecute

Why do we have Food Hygiene Regulations?

- We have food hygiene regulations to prevent outbreaks of food poisoning.
- Customers need to know that food is safe to eat.
- Food safety regulations are constantly changing and establishments should follow the latest guidelines.
- Food safety and hygiene regulations are enforced by Environmental Health Officers (EHO) who regularly check all food premises.

The Environmental Health Officer's (EHO) role is to inspect premises in order to ensure the food a establishment produces is safe to eat.

At the end of their visit, in England, Wales, and Northern Ireland, they will present the establishment with a score from the Food Hygiene Rating scheme of 0 - 5. The scheme is standardised across England and Wales to maintain a consistent assessment of safety standards. Any business should be able to achieve a "5 - very good" rating.

These regulations cover three main areas:

- Food premises
- Personal hygiene of staff
- Hygienic practices

Food premises must:

- Be well maintained.
- Be regularly cleaned.
- Have lockers for employees.
- Have hand-wash facilities provided.
- Have clean cloakroom and toilet facilities.
- Have first aid available.
- Have clean storage areas.
- Have temperature-control fridges and freezers.
- Have equipment that is clean and in good working order.
- Be free from pets, pests, etc.

Food handlers must:

- Have a **certificate/regular training in food safety.**
- Be dressed in **clean** 'whites' or other uniform.
- Have **hair tied back** (and ideally wear a hat or hair/beard net).
- Have **short, clean nails** - no nail varnish or jewellery.
- Be in **good health** (they cannot work with upset stomachs).
- Have **'good' habits**, e.g. no coughing or sneezing over food.
- **Wash their hands** after handling raw meat, after blowing nose, after going to the toilet, etc.
- Cuts should be covered with coloured waterproof plasters.

Examples of good hygiene practices include:

- Food deliveries should be checked thoroughly.
- Food should be labelled and stored correctly (in freezers, chillers, fridges and dry stores).
- Food should be 'rotated' (first in, first out).
- Care should be taken with temperature control in the kitchen (i.e. food kept out of the danger zone of 5°-63°C).
- Food should be prepared quickly and as close to cooking time as possible.
- Hot food should be maintained at above 63°C.
- The core temperature of cooked food needs to be at least 75°C.
- Chilled food should be stored below 5°C
- Washing up should be done in hot soapy water if there is no dishwasher available.
- Waste should be disposed of safely.

Hospitality & Catering Part 11

HACCP (2006)

What does it stand for?

Hazard
Analysis
Critical
Control
Points

What does it mean?

- Legal requirement
- Identify the most critical (dangerous in terms of bacteria) areas of their business to make sure they are under control

HACCP System

Food companies need to:

- Analyse the hazards to food safety
- Assess the level of risk from each hazard
- Decide the most critical points that require controls
- Implement appropriate controls
- Establish a monitoring system
- Set up procedures to correct problems (corrective action)
- Review the system when operations change

Hazard
Analysis

A hazard is something that has the potential to cause harm.....

Type of hazard	Example
Biological	Salmonella in chicken
Chemical	Contamination from cleaning materials e.g. bleach
Physical	Damaged packaging, glass found in food

Critical
Control
Points

A critical control point is a step which eliminates or reduces the hazard

Control is essential to reduce the risk of food poisoning.

If a caterer gets it wrong they could be breaking the law all stages from purchasing through to preparation and serving is controlled.

The Consumer Protection Act 1987

This protects the public by:

- prohibiting the manufacture and supply of unsafe goods
- making the manufacturer or seller of a defective product responsible for damage it causes
- allowing local councils to seize unsafe goods and suspend the sale of suspected unsafe goods
- prohibiting misleading price indications

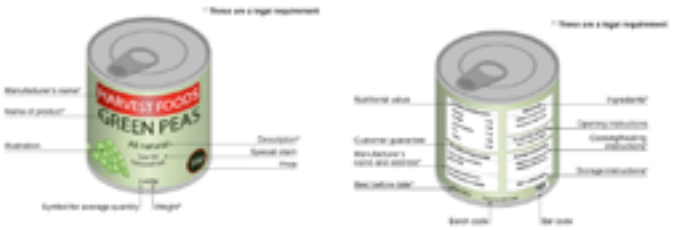
The Trade Descriptions Act 1968

The Trade Descriptions Act makes it an offence for a trader to make false or misleading statements about goods or services.

It carries criminal penalties and is enforced by Trading Standards Officers, making it an offence for a trader to:

- apply a false trade description to any goods
- supply or offer to supply any goods to which a false trade description has been applied
- make certain kinds of false statement about the provision of any services, facilities or accommodation

Food Labelling Regulations (1996)



Examples of CCP's (Critical Control Points) are:

- Inspection of goods on delivery
- Storage & handling of ingredients & finished product
- Temperature of fridges, freezers & ovens
- Cleaning procedures for equipment
- Cross-contamination
- Personal hygiene & health standards
- Proficiency of use and cleaning of equipment

Record Keeping

Legal requirement that certain records are kept as part of the HACCP-based food safety management system, eg:

- Fridge/freezer records
- Cooking/hot-holding temperatures
- Cleaning records
- Training records
- Pest control checks

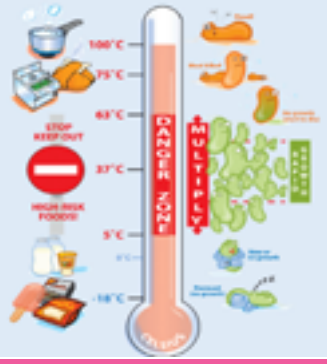
The Food Hygiene regulations 2006

- Applies to high-risk foods
- Cold foods- store below 8°C
- Hot foods – store above 63°C

During service :-

- Cold food max 4hrs at room temperature then discard or refrigerate
- Hot food maximum 2 hrs
- Buffet food 90mins at room temperature

Influence of temperature



Dead!.
Destroys most pathogens

Too hot (start to die 63°C)

Multiply rapidly

Spoilage slow growth, most pathogens no growth (<5°C)

Dormant (no growth – spoilage or pathogens).

Defence of Due Diligence

- The principal of defence under The Food Safety Act 1990
- A business must be able to demonstrate that it has done everything within its power to safeguard consumer health
- Accurate records are useful in proving this defence; these may include:
  - Temperature control records delivery/storage/cooking
  - Microbiological records
  - Hygiene training for staff
  - Use of HACCP system
  - Pest control records
  - Hygiene manuals, cleaning schedules
  - Hygiene policy

Food poisoning

Mouth increase in saliva

Head headache

Skin fever, shivering

Gut abdominal pain, nausea vomiting, diarrhoea

Circulation, low blood pressure, weak pulse, fatigue

The Food Safety Act 1990

Food businesses:

- Must ensure that the food served or sold is of the nature, substance or quality which consumers would expect, e.g. :
  - Nature - pollock rather than cod;
  - Substance - contains foreign material including glass or packaging;
  - Quality – mouldy bread or stale cake.
- Ensure that the food is labelled, advertised and presented in a way that is not false or misleading, e.g. photos on menus that do not look like the dishes served to customers.

Hospitality and Catering Businesses can be fined up to £20,000 or owners can face up to 2 years in prison for failing to comply with food laws.

1. Keep yourself clean.
2. Keep the workplace clean.
3. Wear suitable clothing.
4. Protect food from contamination.
5. Store, prepare & serve food at the correct temperature.
6. Inform a manager if you are ill.
7. Do not work with food if you have symptoms of food poisoning.

PREVENTION: Personal Hygiene

- Tie hair back
- Remove jewellery
- Roll up sleeves
- Wear an apron
- WASH HANDS THOROUGHLY

Hospitality & Catering Part 12

Campylobacter

Found in: raw meat and poultry

Contract Me!

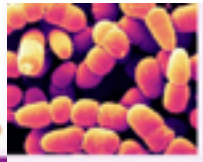
Symptoms: Can last for 10 days

Fever
Headache
Abdominal pain
Diarrhoea

Illness caused by small numbers.

Most common form!

Friend suggestions:
Salmonella
E-coli
Clostridium Perfringens
Listeria
Bacillus Cereus
Staphylococcus Aureus



Clostridium Perfringens

Found in: animal poo, soil, manure, sewage, raw meat, and poultry

Contract Me!

Symptoms: Can last for 3 weeks!

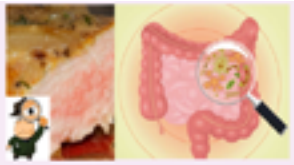
Can take 8-18hrs for symptoms to show:
Nausea
Abdominal pain
Diarrhoea
Can be fatal!

Produces spores which may not be killed by cooking!

Friend suggestions:
Campylobacter
Listeria
Bacillus Cereus
Staphylococcus Aureus
Salmonella
E-coli

E-coli

Found in: the gut of animals and humans



E Coli 0157 found in raw and undercooked meats and raw vegetables

Can survive refrigeration and freezing

Illness caused by small numbers.

Symptoms:

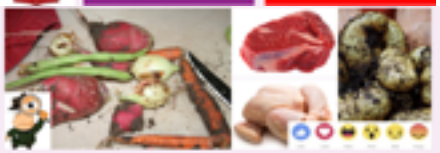
Can take up to 5 days for symptoms to show:
Diarrhoea
Can be fatal!

Friend suggestions:
Campylobacter
Clostridium Perfringens
Listeria
Bacillus Cereus
Staphylococcus Aureus
Salmonella

Salmonella

Found in: raw meat, poultry and unwashed vegetables

Contract Me!



Symptoms: Can last for 3 weeks!

Can take 48hrs for symptoms to show:
Fever
Vomiting
Abdominal pain
Diarrhoea
Can be fatal!

2nd most common form of food poisoning!

Caused by large numbers

Friend suggestions:
Campylobacter
E-coli
Clostridium Perfringens
Listeria
Bacillus Cereus
Staphylococcus Aureus

High Risk Foods

- Foods high in protein
- Foods high in moisture
- Stocks, sauces, gravies and soups
- Eggs
- Meat, poultry and other meat products
- Milk and dairy products
- Fish and Shellfish
- Cooked rice
- Foods which are handled and those which are reheated
- However, preserved foods, or those with high concentrations of vinegar, salt or sugar, are low-risk.

Listeria

Found in: soil, vegetation, meat, poultry, soft cheese and salad vegetables

Contract Me!

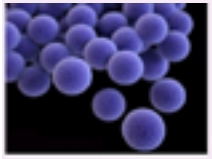
Symptoms: Can last for 3 weeks!

Can range from:
Flu like symptoms
Meningitis
- Pregnant women
- Elderly
- Very Young

at greater risk!

Can grow at low temperatures

Friend suggestions:
Campylobacter
E-coli
Clostridium Perfringens
Salmonella
Bacillus Cereus
Staphylococcus Aureus



Staphylococcus Aureus

Found in: on the skin, cuts and boils and up the nose!

Contract Me!

Symptoms: Onset within 6hrs

Two types:
Severe vomiting
Diarrhoea
Abdominal pain
Can last 6 days!

Transferred to food from hands, nose or mouth

Survives refrigeration

Caused by large numbers

Produces a toxin which may survive cooking

Friend suggestions:
Campylobacter
E-coli
Clostridium Perfringens
Salmonella
Listeria
Bacillus Cereus

INFECTIVE POISONING
Result of eating contaminated food with bacteria itself;
Examples: Salmonella, Listeria

TOXIC POISONING
Some bacteria produce toxins, these toxins cannot be destroyed with cooking. Examples: Staphylococcus Aureus, Clostridium Perfringens

Bacillus Cereus

Found in: soil and dust

Contract Me!

Frequently found in: rice dishes

Symptoms: Usually lasts less than 24hrs

Two types:
After 1-5hrs
Vomiting
After 8-18hrs
Diarrhoea and Abdominal pain

Forms spores that are resistant to heat

Illness can be caused by a small number of bacteria

Friend suggestions:
Campylobacter
E-coli
Clostridium Perfringens
Salmonella
Listeria
Staphylococcus Aureus

Yr10 Cambridge National LO1

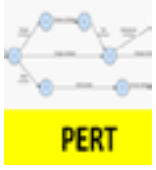
Key Words	
Workflow	What task is dependent on another
Contingency	Time in a project plan that has no tasks assigned. Making sure the project still meets the final deadline.
Milestone	A point in time when a task is expected to be started, completed or checked.
Interaction	How the phases link together.
Iteration	The repeating of a phase.
Data dictionary	A description of the structure, contents and format of a spreadsheet or database. The relationships within the database can be included.
Asset log	A list of all the resources used in a project
Iterative process	A process of repeatedly carrying out a process
Concurrent: Tasks	Tasks that can be completed at the same time
Dependency	A task that cannot be started until a previous task has been completed.
Feasibility report:	Created during the initiation stage and considers each of the questions and constraints. Success criteria and objectives are also defined.

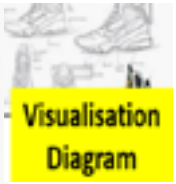
Advantages of the Project Life Cycle

It provides a structured approach.
It shows clearly defined tasks to be carried out in each phase.
The inputs and outputs of each phase are defined
The roles and responsibilities of each project team member are defined.
Resources are allocated at the start of the project.
The project progress can be monitored to make sure the final product is delivered to the client on time.

Constraints:
Time
Resources
Regulations
Security/Risk management
Mitigation of Risks

Phase	Input	Output
Initiation	User requirements User constraints	Feasibility report Legislation implications Phase review
Planning	Feasibility report Legislation implications	Project plan Test plan Constraints list Phase review
Execution	Project plan Test plan Constraints list	Deliverable product Test results Phase review
Evaluation	Deliverable product Test results	Release of deliverable product User documentation Final review report





Planning Tools

Gantt Chart Components: Dates/days along the top. Tasks down the left side. Milestones. Dependent tasks. Concurrent tasks.

PERT chart Components: Nodes/sub-nodes. Time. Dependent tasks. Concurrent tasks. Critical path.

Visualisation diagram Components: Multiple images. Position and style of text. Font. Annotations. Colours/themes.

Flow Chart Components: Start point. End point. Decisions. Processes. Connection lines. Direction arrow.

Mindmap Components: Nodes. Sub-Nodes. Branches/connecting lines. Key words. Colours. Images.

Task list Components: Tasks. Sub-tasks. Start date. End date. Duration. Resources.

Mitigating Risk

Time
- Is there enough time to reasonably develop the product?
- Is there extra time available if problems are found?

Resources
- What hardware is needed?
- Do you have access to them?
- Can you use them?
- What software is needed?
- Do you have access to them?
- Can you use them?

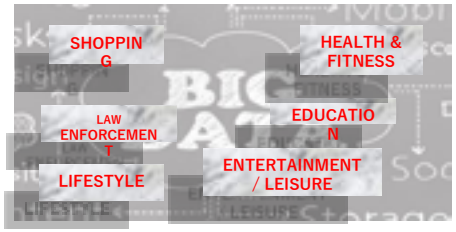
Regulations
- What laws do you need to think about?

Security
- What data needs to be protected?
- Who needs access to the data?
- Do different groups needs to be able to do different things?

Ethical and moral
- What data do you need?
- Who should not see it?
- What should not happen with the data?

ICT Cambridge National LO3

Cambridge National LO3



Key Words	
Bias	Considering only one point of view.
Closed question	A question with only a set of number of questions.
Open question	Allows the person completing the questionnaire to give a detailed answer in their own words.
Data subject	The person the data is being stored about.
Data types	A specific kind of data item that is defined by the values that can be stored using it.
Information	Processed data that has a meaning and is in context.
Interviewee	The person answering the questions.
Interviewer	The person asking the questions.
Record	A collection of data about a single item. Each record must be unique.
Personal data	Information held about an individual.
Primary research method	When the data and information collected is fresh data collected for a specific purpose.
Secondary research methods	Methods that use data and information that has already been collected
Validation:	Can include length checks, presence checks, format checks, range checks and input masks.
Validity:	How believable the data and information collected is.

Methods used to collect data

1. Questionnaire
2. Email
3. Sensors
4. Interviews
5. Consumer panels
6. Loyalty schemes
7. Statistical reports

Data Collection Tools

Barcode Reader
QR Codes
Web Based
Surveys
Wearable Technology
Mobile Technologies

Data	Raw facts collected for a purpose
Information	Data in Context - making sense of the data.

Data must be processed to become information.
Information = data + [structure] + [context] + [meaning]

Process

What is cloud storage?

Online devices to …
…place, keep and retrieve electronic data

What is physical storage?

Physical solid devices to …
…place, keep and retrieve electronic data

Data Types	
Text	Any character
Alphanumeric	Any combination of letters, symbols, spaces and numbers
Integer	Whole numbers
Real	Any number with or without a decimal place
Currency	Numbers in the form of money, sometimes with 2 decimal places and a currency symbol
Percentage	A number that includes decimal places and a % symbol
Fraction	A number which allows fractions to be input and manipulated
Decimal	A number which includes a decimal point.
Date/time	Different formats of the way he date and time can be displayed.
Limited choice	Restricts the choice by a user and used to gather information reducing data errors on input. (e.g. drop down lists, radio buttons, tick list)
Object	An additional component. It can consist of a chart graph or image.
Logical/Boolean	There are only 2 choices Yes/No True/False

Storage Methods

The Cloud - Hard Disk Drive - Solid State Drive - Optical Drive - Flash Memory

ICT Cambridge National LO4

Yr10 Cambridge National LO4

Vulnerabilities which can be exploited in a cybersecurity attack:
Environmental - natural disasters
Physical - theft of identity, theft of property
System - insecure software applications, weak passwords, insecure modems

Prevention Measures	
Physical:	Biometric access device Emerging measures
Logical:	Access rights and permissions including authentication, usernames and passwords - anti-virus software - encryption - secure backups of data.
Secure destruction of data:	Over writing - magnetic wipe - physical destruction

Malware		
Malware Type	**Why/how it's used**	**How to mitigate**
Adware	Generates revenue for its author: this is any software that shows adverts such as pop-ups.	Install, run and update a security software package. Do not run software/click links from unknown sources.
Bot	Takes control of a computer system: this is a type of malware that works without a user's knowledge. It can result in a 'botnet', which is a network of infected computer systems.	
Bug	Connected to flaws in software; usually the result of human error during coding of the software.	Check for and install any patches that are released from software vendors.
Ransomware	Holds data on a computer system to ransom; usually encrypts files and displays a message to the user. It spreads like a worm.	Install, run and update a security software package. Do not run software/click links from unknown sources.
Rootkit	Designed to remotely access a computer system; allows a remote cyber attacker access to steal/modify data and/or configuration on a computer system.	Difficult to detect as they are not usually detected by security software; regular software update, keeping security software up to date and not downloading suspicious files are the only ways to trying to avoid a rootkit being installed.
Spyware	Collected data from infected computers; usually hidden from the user and installed without the user's knowledge.	
Trojan horse	Standalone malicious program designed to give full control of a PC to another PC; can be hidden in valid programs.	Install, run and update a security software package. Do not run software/click links from unknown sources.
Virus	Attempts to make a computer system unreliable; replicates itself from computer to computer.	
Worm	Standalone program that replicates itself to other computers; almost always cause harm to networks even if only by using bandwidth.	

Current relevant IT legislation:

GDPR 2018	Aims to protect the rights of the owners of data – the data subjects. It does not protect the data itself.
Copyright, Design and Patents Act 1998	Makes it illegal to copy a work without permission from the owner or copyright holder. It is also illegal to make unauthorised copies of software.
Computer Misuse Act 1990	Aims to protect data and information that is held on computer systems.
Health and Safety at Work Act 1974	Provides guidance to employers and employees when working with computer systems. The act also defines actions that an employer should take to protect employees who work with computers in their job.
Freedom of Information Act 2000	Provides public access to information held by public authorities.

Security/risk Management

Logical protection methods include:
- Firewalls
- Encryption
- Access rights
- Usernames and passwords

Physical protection methods include:
- Locking rooms that computer equipment is located in.
- Bolting computers to desks.
- Using device locks.
- Using and closing blinds at windows.

LO4: Understand the factors to be considered when collecting and processing data and storing data/information

RFID: Radio Frequency Identification Tags can use radio frequency to transfer data from the tags to a computer system, for example to allow access to a room.

Access rights: Control over who has access to a computer system, folder, files, data and/or information.

Permissions: A set of attributes that determine what a user can do with files and folders, for example to read, write, edit or delete.

Encryption software: Software that is used to encrypt a file or data.

Encryption code/key: A set of characters, phrase or numbers that is used when encrypting or decrypting data or a file.

The impacts of a cyber-security attack
Denial of service (DoS) to authorised others
Identify theft
Data destruction
Data manipulation
Data modification
Data theft
Consequences of a cyber-security attack
Loss: financial - data - reputation
Disruption: Operational - financial - commercial
Safety: individuals - equipment -finance

ICT Cambridge National LO6

Yr10 Cambridge National LO6

LO6: Understand the different methods of processing data and presenting information

Distribution channel: The methods that can be used to share information by individuals

- Email
- Social Media
- Websites
- Intranet – private network
- Internet
- VoIP – enables voice calls to be made over the internet
- Multimedia – text, sound, video and graphics
- Cloud
- Mobile apps
- Integrated document – document containing components from other documents
- End user documentation – User guide

DISTRIBUTION CHANNELS

EXAMPLES OF ...

Messaging services	Websites	VOIP	Cloud Based
Email Social Media	Websites	Skype Podcasts Lync	Google Drive Office 365

Multimedia	Mobile Apps
YouTube & Web Conference	Fitness app: e.g. Couch to 5k ☺

Spreadsheet software

PROS
Stores and processes text and numerical data
Can create charts from processed data
Can carry out calculations

CONS
Data entry takes time
Easy to make errors in formulas
Needs experience to use effectively

Word Processing software

PROS
Easy to enter Text
Excellent for reports
Excellent for mail merge
CONS
Costly to buy
Takes time to learn mail merge
Limited to word processing

Presentation software

PROS
Easy to manipulate text & images
Excellent for slides

CONS
Costly to buy
Takes time to learn

Desk top Publishing software

PROS
Easy to manipulate text & images
Excellent for marketing

CONS
Costly to buy
Takes time to learn

Database software

PROS
Fewer data entry errors
More accurate data
Independence from applications programs

CONS
Skills are required to set up a database
Multiple tables can take time to set up
Lots of training required for all users

Key Words	
Table	Contains data about 'things'. EG A customer's table.
Validation	Can include length checks, presence checks, format checks, range checks and input masks.
Validity	How believable the data and information collected is.
vlog	A video blog.
VoIP	Voice over Internet Protocol is a system that enables voice calls to be made over the internet.
Workbook	A collection of worksheets.
Worksheet	One spreadsheet contained within a workbook.
Integrated document	A document featuring components from other documents.
Distribution channel	The methods that can be used by an individual or businesses to share information.
Blog	A regularly updated website that is usually run by one person.

TARGET AUDIENCE	CONTENT LIMITATIONS	AVAILABILITY OF INFORMATION	IMPACT OF DISTRIBUTION
Gender Age Ethnicity Income Location Accessibility	A database is not suitable for presenting to an audience	Real- Time Location Delay effects	Grabbing the attention of the audience

PRESENTATION METHODS

Reports	**Tables**
Presentations	**Integrated Documents**
Graphs/ Charts	**User End Documents**

Maths F - Quadratic Equations & Graphs

EXPAND DOUBLE BRACKETS v14

F O I L

first outer inner last

$(x+8)(x+5)$

$x^2 + 5x + 8x + 40$

$x^2 + 13x + 40$

$(2y-6)(y+7)$

$2y^2 + 14y - 6y - 42$

$2y^2 + 8y - 42$

Smiley Face

$(x+3)(x+4)$

$= x^2 + 12 + 3x + 4x$

$= x^2 + 7x + 12$

Grid Method

$(x+5)(x+7)$

	x	$+5$
x	x^2	$+5x$
$+7$	$+7x$	$+35$

$= x^2 + 12x + 35$

PLOT QUADRATIC GRAPHS v264

Graphs of Quadratics

The graph of a quadratic function is a *parabola*.

A parabola can open up or down. The "turning point" is called the *vertex*.

If the parabola opens up, the vertex is the lowest point and called the minimum.

If the parabola opens down, the vertex is the highest point and called the maximum.

Vertex

Vertex

Plotting Quadratic Graphs

Plot the graph of: $y = x^2 + 3$

x	-3	-2	-1	0	1	2	3
x^2	9	4	1	0	1	4	9
+3	3	3	3	3	3	3	3
y	12	7	4	3	4	7	12

(-3, 12)

1) Split the equation into separate terms in the table.
2) Complete each row.
3) Total the columns
4) Use the x value with the y value as coordinates.

Plotting Quadratic Graphs

Plot the graph of: $y = x^2 - 3x + 2$

x	-3	-2	-1	0	1	2	3
x^2	9	4	1	0	1	4	9
$-3x$	9	6	3	0	-3	-6	-9
+2	2	2	2	2	2	2	2
y	20	12	6	2	0	0	2

1) Split the equation into separate terms in the table.
2) Complete each row.
3) Total the columns
4) Use the x value with the y value as coordinates.

SOLVING GRAPHICALLY v267c

Solving Quadratic Equations by Graphing

The x-intercepts of a graph are the solutions of the equation.

A quadratic equation can have one of three types of solutions:

Two Solutions

One Solution

No Real Solution

KEY PARTS QUADRATIC GRAPH v265

y-axis

x-axis

(-2, 0)

(5, 0)

$y = x^2 - 3x - 10$

The parabola cross the x-axis at $x = -2$ and $x = 5$. These are the roots of the quadratic equation.

We can compare this solution to the one we would get if we were to solve the quadratic equation by factoring as we've done earlier.

$x^2 - 3x - 10 = 0$

$(x+2)(x-5) = 0$

$x = -2$ or $x = 5$

SOLVE QUADRATIC (FACTORISING) v266,

$(x - 7)(x + 2) = 0$

$x - 7 = 0$ or $x + 2 = 0$

$+7 \quad +7 \qquad -2 \quad -2$

$x = 7$ or $x = -2$

Set each factor equal to 0 and solve each equation separately.

Solve $x^2 + 2x + 25 = 11x + 5$

$x^2 + 2x + 25 = 11x + 5$

$-11x \quad -5 \quad -11x \quad -5$

$x^2 - 9x + 20 = 0$

First, set the equation equal to 0 (move everything to one side).

$(x - 5)(x - 4) = 0$

Next, factor the quadratic.

$x - 5 = 0$ or $x - 4 = 0$

$+5 \quad +5 \qquad +4 \quad +4$

$x = 5$ or $x = 4$

Use the Zero Product Property to split into two equations and solve each one separately.

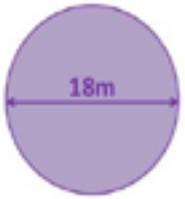
Maths F - Circles, Surface Area & Volume

CIRCUMFERENCE v60

Area of a circle
= π x radius²

Circumference of a circle = π x diameter

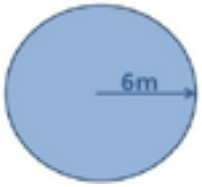
remember that the diameter = 2 x radius



C = π x D

C = 3.142 x 18

C = 56.56m



C = π x D

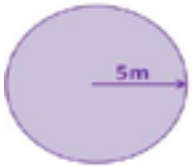
C = 3.142 x 12

C = 37.70m

AREA OF A CIRCLE v59

Area of Circle

To calculate the area of a circle we square the radius of the circle then multiply the answer by pi (π). It is essential that you understand the difference between the radius and the diameter.



Area = π r²

Area = 3.142 x (5)²

Area = 3.142 x 25

Area = 78.55m²

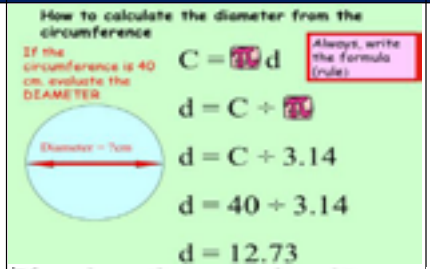
Example

Area = π (3)²

Area = 9π

Area = π (radius)²

FINDING RADIUS OR DIAMETER



If you know the area and need to calculate the radius the formula is:

$r = \sqrt{(A \div \pi)}$

For example, what is the radius of a circle with an area of 120 cm²?

r = √(120 ÷ 3.14)

r = √38.217

r = 6.18 cm to 2 d.p.

SEMI CIRCLES AND SECTORS v47, 46, 62

AREA OF SECTOR (DEGREE)

By propotion,

$\frac{Area\ of\ Sector}{Area\ of\ Circle} = \frac{Central\ Angle}{360^0}$

$\frac{A}{\pi r^2} = \frac{n}{360^0}$

$A = \left(\frac{n}{360^0}\right)\pi r^2$

$Area = \left(\frac{n}{360^0}\right)\pi r^2$

$= \left(\frac{45^0}{360^0}\right) \times 3.142 \times 6^2$

$= \frac{1}{8} \times 3.142 \times 36$

$= 14.14\ cm^2$

PERIMETER OF A SEMICIRCLE

- Remember that the perimeter is the distance round the outside. A semicircle has **two edges**. One is **half of a circumference** and the other is a **diameter**
- So, the formula for the perimeter of a semicircle is:

Perimeter = πr + 2r

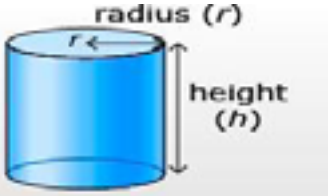
EXAMPLE (PERIMETER)

Perimeter = πr + 2r

= (3.142)(7/2) + 8

= 20.56 cm

VOLUME of CYLINDER v357

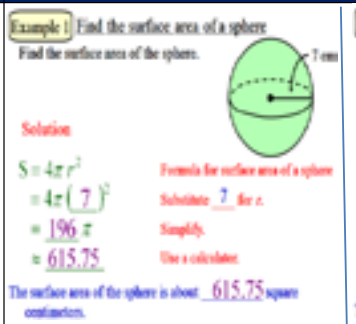


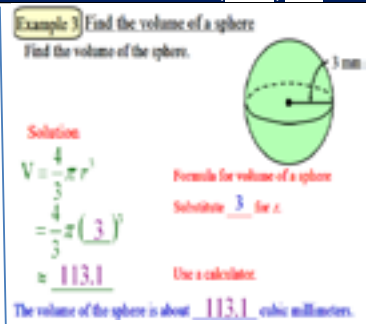
Cylinder (Circular Prism)

$V = \pi \times r^2 \times h$

$V = B \times h$

VOLUME & SURFACE AREA OF A SPHERE ,v313, 361





FORMULAS MNEUMONIC

Circumference and Area of Circle

Cherry pie's delicious

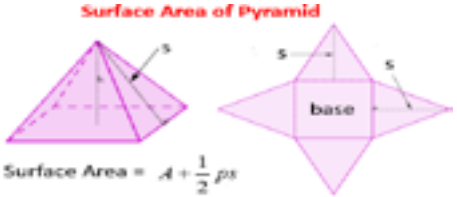
$C = \pi d$

Apple pies are too

$A = \pi r^2$

PYRAMIDS

Surface Area of Pyramid



Surface Area = $A + \frac{1}{2}ps$

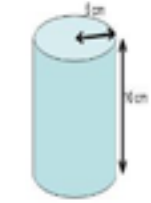
A = Area of base

p = perimeter of base

s = slant height

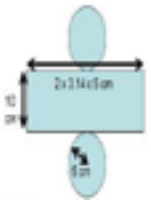
Volume of pyramid = $\frac{1}{3}$ × area of base × height

SURFACE AREA CYLINDER v315



Find the surface area of a cylinder of radius 5 cm and height 10 cm

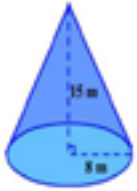
- Area of rectangle = 2πrh
  = 2 x 3.14 x 5 x 10
  = 314 cm²
- Area of two ends = 2πr²
  = 2 x 3.14 x 5 x 5
  = 157 cm²
- Total surface area is 2πrh + 2πr²
- Total surface area = 314 + 157
  = 471 cm²



VOLUME & SURFACE AREA OF A CONE v314, 359

Volume of Cone

$= \frac{1}{3}\pi r^2 h$



$V = \frac{\pi r^2 h}{3}$

$V = \frac{\pi 8^2 \times 15}{3}$

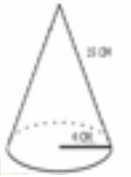
$V = \frac{3014.4}{3}$

$V = 1004.8\ m^3$

$SA = \pi r l + \pi r^2$

radius · Slant height · radius

Find the surface area in terms of π of a cone with a slant height of 15 cm and a radius of 4 cm.



$SA = \pi r l + \pi r^2$

$SA = \pi(4)(15) + \pi(4)^2$

$SA = \pi(60) + \pi(16)$

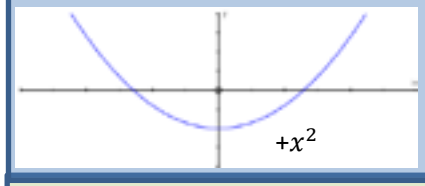
$SA = 76\pi\ cm^2$

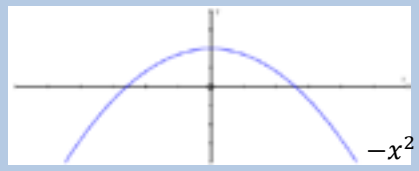
OR $SA = 238.6\ cm^2$

Year 10 Higher Half term 5, Topic 1 Harder Graphs

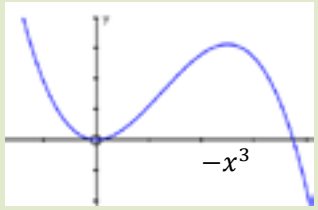
Quadratic: the highest power of x is 2 V264, V265,
If the x^2 term is positive the graph is a "bucket" shape – a parabola.
Examples y= x^2 y= x^2 - 2 y = x^2 - 4x + 7 y= $4x^2$ + 7x - 2

If the x^2 term is negative the graph is an upside down "bucket" shape.
If the equation is in the form y = (x+a)(x+b) the graph will cross the x axis at –a and -b These are the **roots** of the equation.





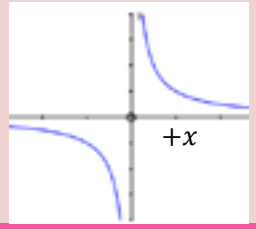
Cubic: the highest power of x is 3 V344
If the x^3 term is positive the shape goes up and then down
Examples y = x^3 y= x^3 + 5 y= x^3 + $3x^2$ - 4x + 7
If the x^3 is negative the graph goes down then up
If the equation is in the form y = (x + a) (x+ b) (x + c) the graph will cross the x axis at –a, -b and –c. These are the **roots** of the equation.

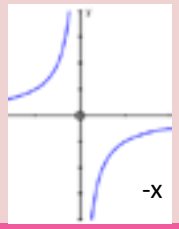


Reciprocal: the power of x is -1 giving y = $\frac{1}{x}$ V346

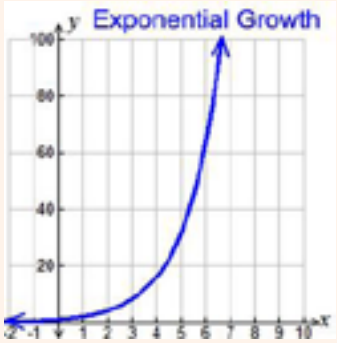
Examples y = $\frac{4}{5x}$ y = 5 + $\frac{6}{x}$

Note that the value of y is undefined when x = 0 so the graph has asymptotes



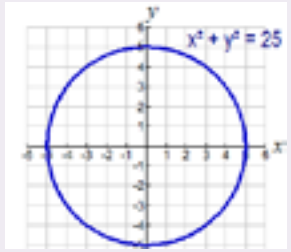


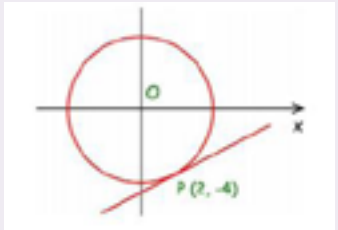
Exponential graphs: to the power of x , y = k^x V345
Examples y = 2^x All exponential graphs of this type go through (0,1) as any number to the power of 0 is 1. If there is a multiplier as in y = a $(k)^x$ the graph will go through (0,a)
If the x is positive, as it increases, y increases very fast. If x is negative, as it increases, y decreases very fast.



A typical question gives two points and asks for the value of the constants in the equation. E.g. The points (2, 100) and (0, 25) lie on a graph with the equation y = mn^x . Work out m and n.
Solution: Remember any number to the power of 0 is 1. Substitute in the values of x and y. 25 = m x n^0 so m = 25, 100 = 25 x n^2 so n = $\sqrt{4}$ = 2

Circles: have an equation in the form x^2 + y^2 = r^2 where r is the radius V12





Example Find the equation of the tangent to a circle at P (2, -4). V372

Note the tangent is perpendicular to the radius.
The gradient of the radius = $\frac{change\ in\ y}{change\ in\ x}$ = $\frac{-4}{2}$ = -2 so gradient of tangent is $\frac{1}{2}$
Substitute the point P into y = $\frac{1}{2}$ x + c to solve for c.
-4 = $\frac{1}{2}$ x 2 + c , so c = -5 Equation of tangent is y = $\frac{1}{2}$ x - 5

Maths H Real Life Graphs

Year 10 Higher Half term 5, Topic 2 Real Life Graphs

Remember

The equation of a straight line is given by the rule y = mx + c

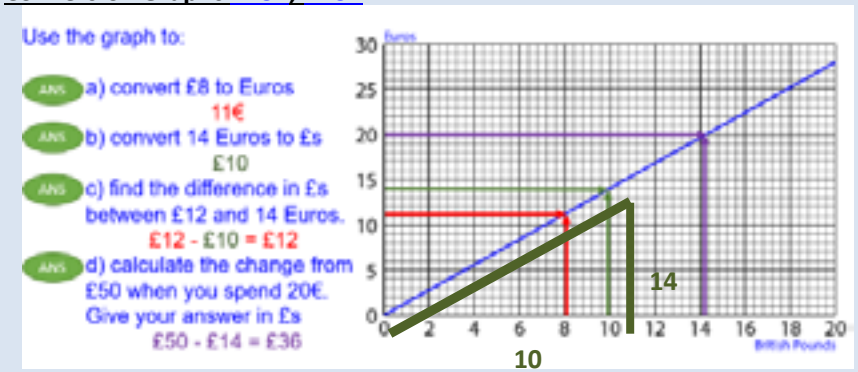
where m is the gradient i.e. $\frac{change\ in\ y}{change\ in\ x}$

and c is the y intercept i.e. the value of y when x is 0, the giving the point (0,c) where the line crosses the y axis.

In real life graphs the x and y axis labels refer to the context of the graph.

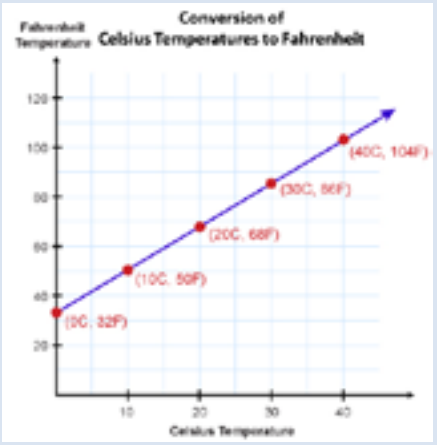
If the graph has time on the x axis, Rate = gradient of the graph, showing how quickly something changes

Conversion Graphs V151, V152



The gradient will give the rate of exchange – looking at the triangle $\frac{14}{10} = 1.4$

So the rate of exchange is €1.4 = £1

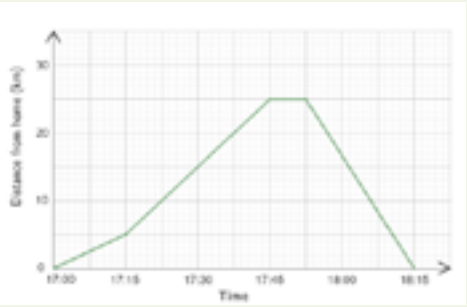


Not all conversion graphs go through (0,0).

The formula to convert Centigrade to Fahrenheit can be worked out from the graph. The gradient is $\frac{(68-32)}{20}$= 1.8 and the intercept is 32 (0°C = 32°F) giving the formula

C = 1.8F +32

Distance time graphs V171



The gradient is speed = $\frac{distance}{time}$, the steeper the line, the greater the speed. Horizontal lines are 0 gradient = 0 speed = stopped. Negative gradients are "returning home".

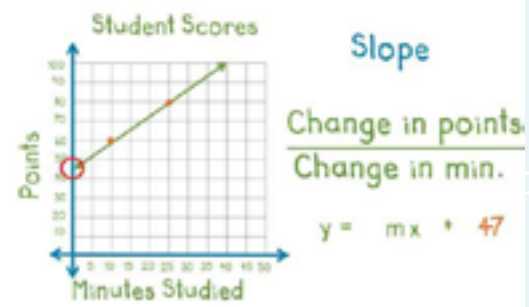
Velocity Time graphs

The gradient is acceleration = $\frac{speed}{time}$, the steeper the line, the greater the acceleration. Horizontal lines are 0 gradient = 0 acceleration = constant speed. Negative gradients are deceleration.

Note: the area under a velocity time graph = distance

Scatter graphs

The equation of the line of best fit gives the relationship between the variables.



$= \frac{100-47}{40} = 1.325$

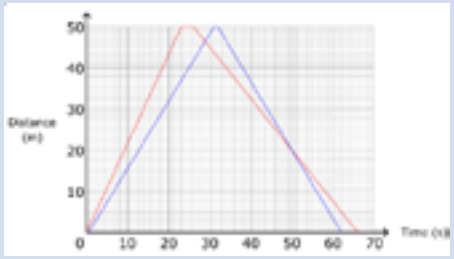
Student scores (points) = 1.325 x minutes studied + 47

Maths H Gradient & Area Under Graphs

Year 10 Higher Half term 6, Topic 1 Gradient and area under graphs

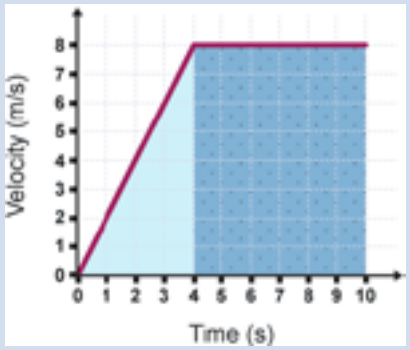
The gradient of a line tells you the rate of change of the y -variable in relation to the rate of change of the x-variable.

Gradient = $\frac{change\ in\ y}{change\ in\ x}$



Distance time graph

Gradient gives speed (m/s, km/h, mph)

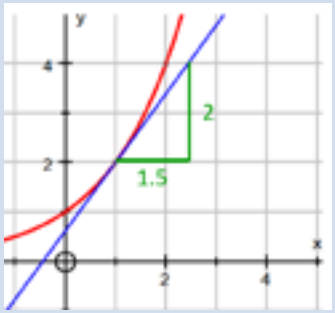


Velocity time graph

Gradient gives acceleration (m/s^2 , km/h^2)

Curved graphs – the gradient is constantly changing. V390, V390a

To calculate the gradient at a particular point, you need to draw a **tangent**

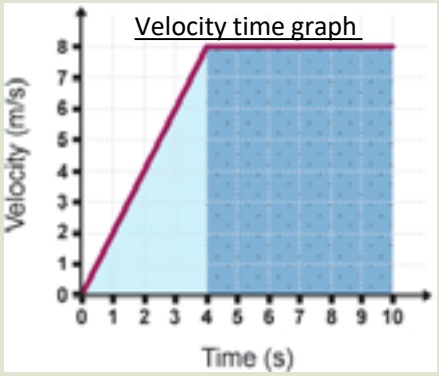


The gradient at x = 1 is

$\frac{2}{1.5} = \frac{4}{3}$

You can calculate the average rate of change over a period of time by drawing a chord (line) between two points and finding the gradient of this line.

The area under the graph tells you the product of the two units on the two axes V389



Area gives distance (m, km, miles)

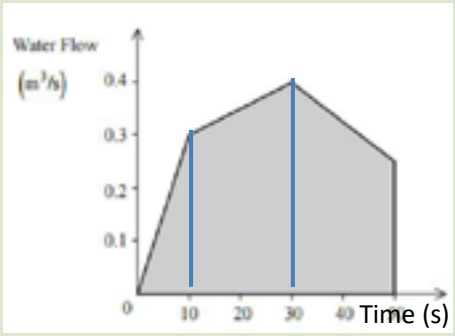
Area = $\frac{m}{s} \times s$

= metres

Remember the formula for the area of a trapezium

A = $\frac{(a+b)}{2}$ x h, where a and b are the parallel sides.

Distance = $\frac{(10+4)}{2}$ x 8 = 56m



Area = $\frac{m^3}{s} \times s$

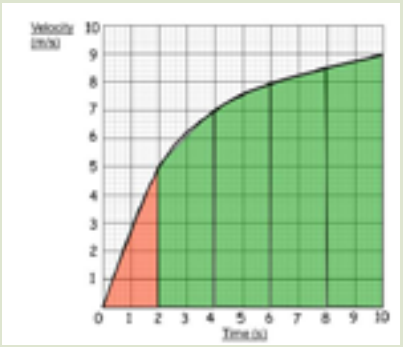
= m^3 volume of water

The shape needs to be split into shapes we know how to do the area of and these are added together.

$\frac{10x0.3}{2} + \frac{(0.3+0.4)}{2}$x20 + $\frac{(04+0.3)}{2}$ x 20

= 15.5m^3

Area under curved graphs - To find an estimate for the area under a curve, split the area under the curve into triangles and trapezia and calculate the area of each shape.



Area = $\frac{2x5}{2} + \frac{(5+7)x2}{2} + \frac{(7+8)x2}{2} + \frac{(8+8.5)x2}{2} + \frac{(8.5+9)x2}{2}$

Area = 5 + 12 + 15 + 16.5 + 17.5

Area = 66 units

∴ Distance = 66m

Over-estimate – lines forming shapes are above the curve

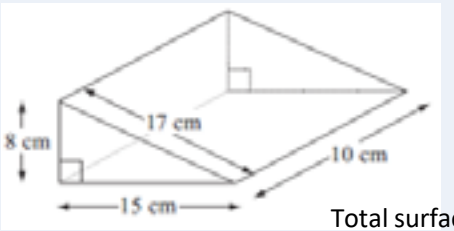
Under-estimate – lines forming shapes are below the curve

Maths H Volume & Surface Area

Year 10 Higher Half term 6, Topic 2 Volume and surface area

Surface Area – the sum of the areas of all the faces V311, V312

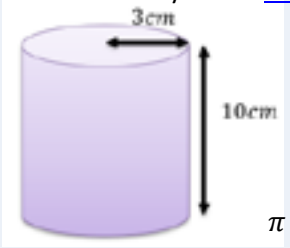
Most 3D shapes will have faces where you know the formula for the area



Back – rectangle 8 x10 = 80
Base – rectangle 15 x 10 = 150
Front – rectangle 17 x 10 = 170
Sides 1– triangle $\frac{8 \times 15}{2}$ = 60
Side 2 – triangle (same) = 60

Total surface Area = 80+150+170+ 2 x 60 = 520 cm²

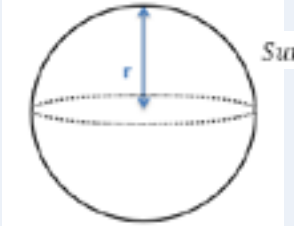
Surface area of cylinders V315



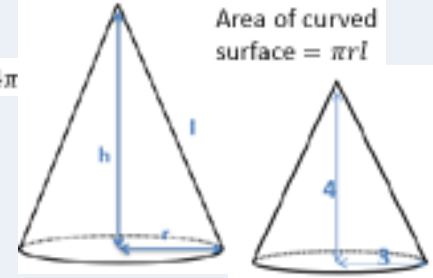
Top πr^2 + Base πr^2 + Curved surface area Πd x h

$\pi \times 3^2 + \pi \times 3^2 + \pi \times 6 \times 10 = 78\pi = 245.04cm^2$

You are given the formulae for the surface area of spheres and cones within the question V313, V314

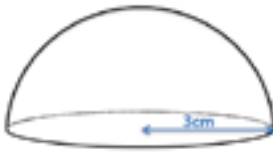


$Surface\ Area = 4\pi$



Area of curved surface = πrl

Hemisphere – half a sphere but don't forget to add the circular base



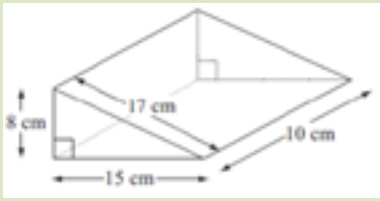
$\frac{4\pi \times 3^2}{2} + (\pi \times 3^2)$
$= 18\pi + 9\pi$
$= 27\pi\ cm^2$

Sometimes you need Pythagoras to work out the slant height, l
$l = \sqrt{(3^2+4^2)} = 5$

$Total\ Surface\ Area$
$= (\boldsymbol{\pi \times 3^2}) + (\boldsymbol{\pi \times 3 \times 5}) = \boldsymbol{24\pi}$

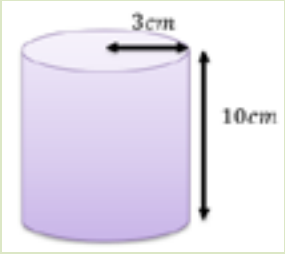
Volume - learn

Volume of a prism = area of cross section (shape on end) x length V356



Volume = $\frac{8x15}{2}$ x 10 = 600cm³

Volume of a cylinder (circular based prism) = $\pi r^2\ x\ h$ V357

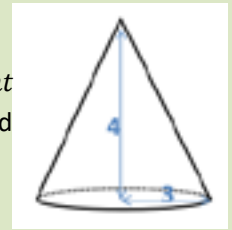


Volume = $\pi \times 3^2$ x 10 = $90\pi = 282.7\ cm^3$

V359, V360, V360a

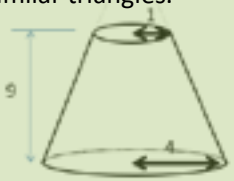
Volume of a pyramid = $\frac{1}{3}\ area\ of\ base\ x\ height$

For a cone (circular based pyramid) = $\frac{\pi r^2 h}{3}$



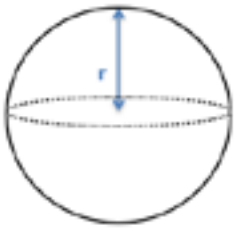
Volume = $\frac{\pi \times 3^2}{3}$ x 4 = $12\pi = 37.7 units^3$

A frustum is a cone with part of the top chopped off. You work out the volume of the whole cone and subtract the volume of the cone chopped off. Sometimes you need to work out the radius of the top cone using similar triangles.

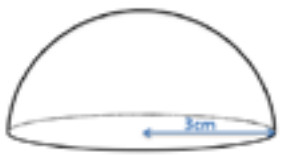


$\text{Volume} = \left(\frac{1}{3}\pi \times 4^2 \times 12\right) - \left(\frac{1}{3}\pi \times 1^2 \times 3\right)$
$= 64\pi - \pi$
$= 63\pi$

You are given the formulae for the volume of spheres within the question V361



$Volume = \frac{4}{3}\pi r^3$

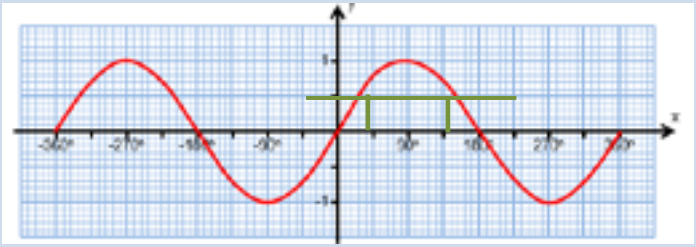


$Volume = \frac{1}{2} \times \pi \times 3^3 = 13.5\pi = 42.4cm^3$

Maths H - Trigonometric Graphs

Year 10 Higher Half term 6, Topic 3
Trigonometric Graphs

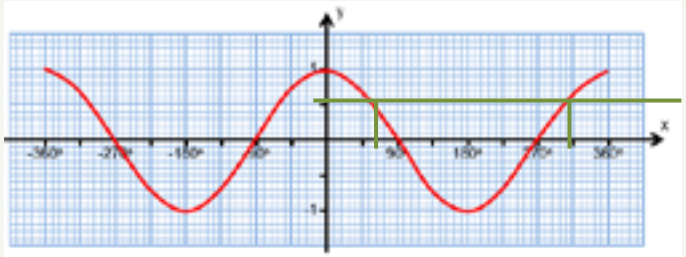
Sine Wave y = sin (x) V338



Key features
- Max value 1, minimum value -1
- Goes through (0,0) , (90, 1), (180, 0), (270, -1), (360, 0)
- Repeats every 360°

Example
Solve sin x = 0.5 Find all solutions in the range $0° \leq x \leq 360°$
$x = \sin^{-1}(0.5) = 30°$, looking at the symmetry of the graph, there is another solution at 180-30= 150°

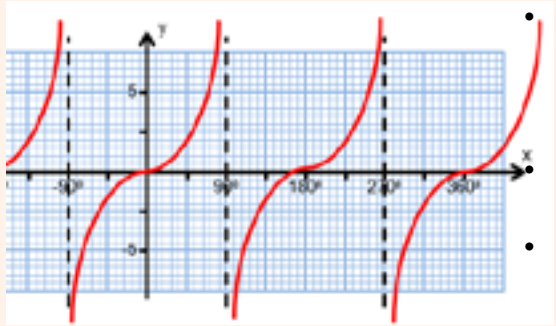
Cosine Wave y = cos (x) V339



Key features
- Max value 1, minimum value -1
- Goes through (0,1) , (90, 0), (180, -1), (270, 0), (360, 1)
- Repeats every 360°

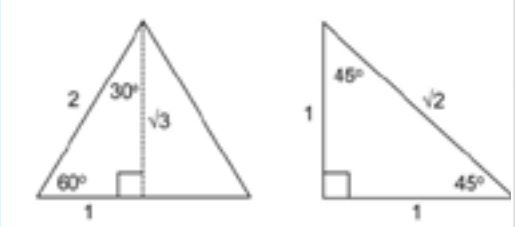
Example
Solve cos x = 0.5 Find all solutions in the range $0° \leq x \leq 360°$
$x = \cos^{-1}(0.5) = 60°$, looking at the symmetry of the graph, there is another solution at 360-60= 300°

Tan graph y = tan (x) V340



Key features
- Is undefined at 90° (and all multiples of 90°). Asymptotes drawn to show comes from $-\infty$ and goes to $+\infty$
- Goes through (0,0) , (180, 0), (360, 0) etc.
- Repeats every 180°

Exact Trig Values V341 Can be worked out from an equilateral triangle of sides 2 and a right angled isosceles triangle of sides 1



Angle	0	30	45	60	90
Sin	$\frac{\sqrt{0}}{2}$	$\frac{\sqrt{1}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{4}}{2}$
Cos	$\frac{\sqrt{4}}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{1}}{2}$	$\frac{\sqrt{0}}{2}$

$$\tan x = \frac{\sin x}{\cos x}$$

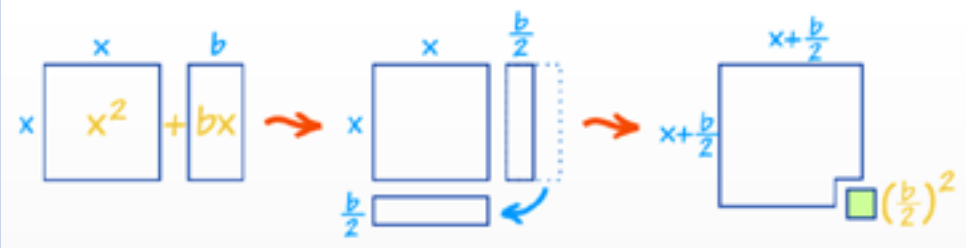
θ	0°	30°	45°	60°	90°
$\sin\theta$	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1
$\cos\theta$	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0
$\tan\theta$	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	undef.

Maths H - Completing the Square

Year 10 Higher Half term 6, Topic 4
Completing the square V10

Completing the square means to write the quadratic in the $(x+p)^2 + q$

$x^2 + bx + c = (x + \frac{b}{2}) - (\frac{b}{2})^2 + c$ giving $p = \frac{b}{2}$ and $q = -(\frac{b}{2})^2 + c$



$x^2 - 4x$

Half

$= (x-2)^2 - (4)$

Square

If there is a number on the end, c, complete the square on the first two terms and add c in at the end.

$x^2 + 12x - 3$

$= (x+6)^2 - (36) - 3$ — Complete the square for the first 2 terms

$= (x+6)^2 - 39$ — Simplify

You can't "complete the square" if the first value isn't a single 'x^2'. If it isn't you need to factorise first.

$2x^2 + 16x$

$= 2(x^2 + 8x)$ — Take out 2 as a factor

Half

$= 2((x+4)^2 - (16))$ — Complete the square for the inner part; Multiply both inner parts by the 2

Square

$= 2(x+4)^2 - 32$

$2x^2 - 12x + 40$

$= 2\{x^2 - 6x + 20\}$

Half

$= 2\{(x-3)^2 - (9) + 20\}$ — Complete the square for the first 2 terms

Square

$= 2\{(x-3)^2 + 11\}$ — Collect like terms

$= 2(x-3)^2 + 22$ — Simplify

Solving Quadratic Equations by completing the square V10 from 4:35 min
(can be easier than using the quadratic formula!)

$x^2 + 4x - 3 = 0$

Half

$(x+2)^2 - (4) - 3 = 0$ — Complete the square for the first 2 terms

Square

$(x+2)^2 - 7 = 0$ — Collect like terms

$(x+2)^2 = 7$ — Add 7 to both sides

$x + 2 = \pm\sqrt{7}$ — Square root both sides

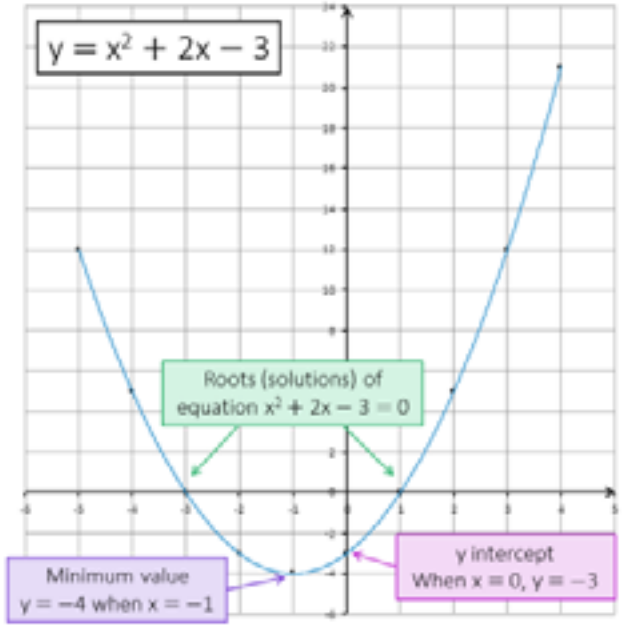
$x = -2 \pm \sqrt{7}$ — Subtract 2 from both sides

This gives the exact answers in SURD form

Finally, you can calculate the answers!

$= 0.65$ *or* -4.65

Sketching a quadratic curve – work out 4 points V371, V265



Factorising and solving
$x^2 + 2x - 3 = 0$

$(x+1)(x-3) = 0$
$x = 1$ $x = 3$

Completing the square
$x^2 + 2x - 3$

$(x+1)^2 - (1)^2 - 3$
$(x+1)^2 - 4$

Minimum value when $x + 1 = 0$, so $x = -1$

This minimum value is $y = -4$

MEDIA LANGUAGE

Signs are designed to convey meaningful and important information in a condensed way.

The study and understanding of signs and the meaning they communicate is called semiotics.

In the media, it is agreed among producers and audiences that specific meanings can be attributed to certain signs.

Denotation refers to what is literally visible within a sign or symbol.

Connotations are the meanings associated with a sign or symbol.

Charles Sanders Peirce was an American philosopher who identified three different types of signifier:

An **icon** is a signifier which resembles. *For example, a bicycle is used to indicate a cycle lane.*	
An **index** is a signifier which is physically or literally connected to what is being signified. *For example, the skull and cross bones indicates a toxic substance.*	
With a **symbol** there is no resemblance between the signifier and the signified. *For example, the interlocking symbols indicate male and female solely due to a collective agreement among people.*	

Ferdinand de Saussure was one of the key founders of semiotics. He proposed that signs have meanings via two elements.

1. **The signifier** is the form of a sign – something which can be seen, heard, touched, smelt or tasted.
2. **The signified** is the idea or meaning conveyed by that signifier. An example of these two elements working in correlation can be found in the theatrical poster for the film *Jaws* (1975). **The signifier** is a young woman swimming in the ocean with an open-mouthed great white shark swimming beneath the surface of the water. **The signified** is the idea that the shark is probably about to eat the woman. You are likely to find examples of this in all four media frameworks.

Roland Barthes was a French theorist and semiotician who suggested that a story's narrative uses five different types of code. These codes work together to enable the reader to make sense of what is happening in the story.

1. Action Codes – an object or event (often very simple) that leads to narrative progression *e.g. the drawing of a gun suggests that violence will occur*
2. Enigma Codes – the set-up and resolution of a puzzle, *e.g. a film poster might contain an image of a closed treasure chest (the puzzle). The audience must see the film in order to discover what is inside the treasure chest (the resolution)*
3. Semic Codes – signs referring to additional meaning through the use of connotation, *e.g. A model lifting weights implies that they are strong or like exercising*
4. Symbolic Codes – a range of non-literal references found in an image or a text, normally presented through two contrasting codes, *e.g. good vs bad, man vs woman*
5. Cultural codes – all references found within a text that can be understood with a good knowledge of news, events and culture, both contemporary and historical, *e.g. the image of the Union flag usually implies British pride*

Mode of address – The type of media language used to speak to audiences. *For example, in most lifestyle magazines the cover star will look into the frame (at the audience) creating a direct mode of address.*

Iconography – Visual codes that audiences associate with certain genres. *For example, frightening masks will often appear on the posters for horror films.*

Typography – The style of font. This helps to create a house style or brand identity for a print media product as well as helping to establish genre. *For example, large boldface typography is a common convention of tabloid newspapers.*

Intertextuality – When a media text references another text in order to shape meaning and affect audience interpretation. *For example, advertisements may contain references to a popular film in order to create comedy and make them stick in the audience's head.*

Genre provides us with a way of clearly categorising media products.

We can determine which products fit into which genre by looking out for the **repetition** of certain codes and conventions. ➡ *For example, a film is likely to fit into the crime genre if it contains certain character types (gangsters, detectives), narrative beats (a heist, an arrest), technical codes (rapid editing, low-key lighting) and familiar visual iconography (guns, dark suits, getaway cars).*

Producers incorporate new and unexpected codes and conventions into their products in order to maintain audience interest. **Genre hybridity** (the incorporating of codes and conventions from multiple genres into a single product) is an effective way of achieving this. ➡ *For example, the film Shaun of the Dead effectively blends elements of the horror genre with elements of the romantic comedy genre.*

NARRATIVE DEFINITIONS

Content	Refers to what happens in the story as well as the meaning behind it
Form	Refers to the text type that the writer uses *e.g. magazine, newspaper, website*
Plot	The term used to describe how the main events in the story unfold
Structure	Relates to the order of events in a narrative and the form in which it is told
Storytelling	The activity of presenting a story to an audience
Action	Either the physical movements of the people in the story or their behaviour
Dialogue	The engagement of conversation or vocalised thought of the people in the story
Conflict	The struggle that often presents itself in a story
Character	Any person, animal or figure presented in a story
Setting	The time and place in which the story takes place
Event	Something that will happen, has happened, or is thought to happen in the future

Vladimir Propp is a theorist whose work is derived from his studies of Russian folk tales with a particular focus on their characters. Through his studies, Propp identified eight types of character, not unlike stock characters, which he claims serve a specific purpose to the story's narrative. It is likely that different character types will overlap, e.g. the dispatcher and the princess's father.

Vladimir Propp – Character Types

1. Hero – the protagonist of the story. Embarks upon a journey motivated by the lack or loss of something.
2. Villain – an antagonistic character who wants to ruin the hero's journey
3. Donor – someone who provides the hero with either an object or the advice they need to complete their journey
4. Helper – someone who aids the hero on their journey (often described as a sidekick)
5. Princess/reward – someone who / something that is unattainable throughout the journey. The story usually ends with the hero acquiring this prize.
6. Princess's father – the person who rewards the hero with the prize at the end of their journey
7. Dispatcher – sends the hero on the journey and illustrates the importance of the journey
8. False hero – raises complications. Tries to take credit for the hero's action and obtain the reward.

Remember: the majority of media products are **polysemic**. This means that their meanings can be multilayered and interpreted in a number of different ways. For example, the image of a scantily clad woman in a fashion magazine might connote liberation and female empowerment for some viewers while connoting objectification and oppression for others.

MEDIA REPRESENTATION

When it comes to analysing representation in the media, it is useful to be aware of contextual factors that have affected cultural attitudes in Western society. Listed below are a number of specific or ongoing events that are likely to inform your analysis.

Gender	Ethnicity	Age
		
In 2017, there was a huge series of accusations from women accusing powerful men in the media of sexual harassment and assault. The hashtags #MeToo and #TimesUp were shared by thousands of women exposing an underlying sexism running through mainstream media (particularly the film industry). This movement has greatly enhanced conversations about female representation in the media.	Martin Luther King Jr's 'I Have a Dream' speech in 1963 was a **defining moment for the civil rights movement**. With it came a rapid change in rights for the US African-American community.	Traditionally in the media, children have often been depicted as being helpless and in need of saving. Particularly in mainstream cinema, recent representations, e.g. *Stranger Things* and *Pokemon*, have shown children to be capable and often 'more in the know' than their parents about important issues.
A recent statistic revealed that the **greatest killer of men under 45 in the UK is suicide**. A concerted effort has been made to counter hypermasculine representations in the media and allow men to be presented as being emotionally vulnerable.	The Black Lives Matter movement was founded in 2013 following a number of unprovoked shootings by police on African-Americans in the USA.	Historically, teenagers have been depicted either as stroppy or as violent and rebellious thugs. Over time, mainstream media has started to acknowledge the complex issues of adolescence, representing teenagers as ambitious and three-dimensional. This particularly caters to the **millennial generation**, largely defined by concerns about mental health and an uncertain job market.
According to certain statistics, women (on average) earn 78% of the average male salary in the United States. This inequality is largely reflected in the media. For example, only two of 2016's top 10 paid actors were women.	The hashtag #OscarSoWhite was a retaliation to the abundance of white nominees at the 2015 Academy Awards. In June 2016, the British people voted to leave the European Union. Many believe that racist attitudes towards immigrants largely determined the result of the vote, *e.g. a column in The Sun (the highest-selling newspaper in Britain) described Syrian migrants as 'cockroaches'.*	The majority of the baby boomer generation are currently in their 60s or 70s. More so than in previous generations, many baby boomers are still healthy, highly active and in possession of significant disposable income. This is being reflected in the mainstream media, particularly in advertising as producers will often target the grey pound (a marketing term used to describe the high amounts of money older people have to spend on consumer goods).

Stereotypes are representations that reduce a person or a group of people to a narrow set of traits and characteristics, *e.g. all women want to be domestic housewives.*

Counterstypes are representations that emphasise the positive attributes of a person or a group of people, often combating stereotypes in the process, *e.g. women are physically capable and courageous.*

Representation Terms

Passive objects are characters that have no active role in shaping the narrative. They are only there to be looked at as events unfold around them.

Active subjects are characters that affect the progression of the narrative. They take action and make things happen.

Under-representation

Definition: People or social groups who do not appear (or who appear very briefly) in a media product which might benefit from an individual's or a group's perspective.

Example: Homosexual couples have been historically under-represented in television adverts.

Misrepresentation

Definition: When a media product depicts a person, a group of people or an event in a way that is misleading or unfairly negative.

Example: Many people accuse newspapers such as *The Sun* of misrepresenting the entire British Muslim community as a threat to traditional British values.

The process by which producers **select** and **combine/construct** elements of media language to feature in a media product is known as **mediation**. The messages and ideas that are shown in the product will often be constructed in a way that establishes a particular **point of view**. For example, a newspaper article might use first-person pronouns to align the audience with a particular person's point of view. This process is known as **audience positioning**.

The Theory of 'Otherness'

Representations in the mainstream media have been constructed and mediated by people who are in possession of great social, economic and political power. Stuart Hall argued that media representations often result in an emphasis on 'otherness'. For years this has had a negative effect on representations of active, three-dimensional characters that are not straight, white or male.

Media representation is all about the way in which media producers choose to portray something or someone in a product. Reality is complex, so representing every part of society within a single product is impossible. This is why producers consciously decide who their product is being made for (i.e. its target audience) and then select the parts of life that this group of people can relate to. In doing so, producers construct a version of reality for this particular audience. Representation is often concerned with Gender, Age, Sexual Orientation, Social Class, Ethnicity and Religion. Use the acronym 'GASSER' to help you remember

Important Theories for discussing Gender Representation

Male gaze – Laura Mulvey was a feminist theorist who suggested that visual media (particularly mainstream cinema) is constructed in a way that caters specifically to the pleasure of a male heterosexual audience. This theory largely explains the various ways in which women's bodies have been objectified in mainstream media.

Patriarchy – the idea that Western civilisation is structured in a way that provides socio-economic advantages for white heterosexual males (more specifically father figures) at the expense of women and minorities.

The development of the feminist movement throughout the past 100 years has majorly influenced representations of men and women in the media. The second wave of feminism in the 1960s and 1970s was a time of particular social change– For example, the contraceptive pill wasn't made widely available in the UK until 1974.

MEDIA AUDIENCES

Active audience: An audience that actively selects the types of media product they consume. They are also able to actively engage and interpret messages within a media text, applying different readings to different messages.

Passive consumer: An audience that consumes various types of media without actively engaging with the content's messages. They are also happy to accept the meaning of a media product on the most basic and superficial level.

Mass audience: A large audience with mixed interests that collectively consumes the same media product that appeals to the general interests of the masses. It is often mainstream media that appeals to mass audiences.

Niche audience: A small audience with specialised and particular interests. Producers often create much smaller-scale products for these audiences as the financial return is not often very high.

A **demographic** is a group of people distinguished by their identity or socio-economic status: gender, race, age, class, marital status, ability/disability.

A **psychographic** is a group of people distinguished by their lifestyle, habits and interests: Donald Trump supporters, sports enthusiasts, cinema goers, feminists, musicians, etc.

The **primary audience** is the main group targeted by a media product. For example, e.g. GQ magazine has a primary audience of young men.

The Effects Debate: For a long time, it was widely accepted that a large section of the general public were passive consumers, taking the messages encoded in media products at face value. This in turn sparked a debate as to whether the media could shape people's attitudes and behaviours for the worst. A key example of the effects debate taking place in British history is the outrage that was provoked by the release of video nasties: a list of unregulated horror films which began to circulate through video shops throughout the 1980s. Politicians and the popular press expressed their moral outrage and began a fierce campaign to have these videos banned. They argued that the general public (particularly young people) could be encouraged to commit violent behaviour if they were exposed to these films. In hindsight, this campaign is generally considered to be an extreme overreaction and a patronising way of viewing media audiences.

Stuart Hall – Reception Theory

It is widely agreed that media producers encode messages into their products in order to invoke a particular response from the audience.

The audience in turn will decode these messages. However, they will not always do this in the way the producer(s) intended.

Preferred Reading – The audience accepts the messages encoded in the text, interpreting the product in the exact way in which it was intended, e.g. 'Call of Duty is an exciting game with fantastically realistic graphics'.

Negotiated Reading – Certain encoded messages are accepted by the audience whereas others are challenged e.g. "Call of Duty is very well designed, but the gameplay becomes boring. I don't think I'm the target audience"

Oppositional Reading – The audience rejects the encoded messages entirely, e.g. "Call of Duty is a disgusting game that encourages teenagers to become violent killing machines. It is also incredibly boring!"

The uses and gratifications model was originally proposed by Jay Blumler and Elihu Katz in 1974. These theorists developed the model based on the idea that media audiences are not passive. On the contrary, audiences have the ability to select what media they consume, based on their own needs and desires. To a large degree, this theory empowers audiences by suggesting that media producers acknowledge the requirements of an audience and fulfil these requirements in order to prevent their products from being left without an audience.

Uses and Gratifications

Entertainment/Diversion
e.g. The James Bond action films offer audiences escapism from the boredom of daily life.

Education/Information
e.g. BBC World Service informs audiences of the latest news and events.

Personal Identity
e.g. Many people read tabloid newspapers to have their political opinions reaffirmed.

Social Interaction
e.g. Many video games allow audiences to compete with their friends and exchange tactics.

Demographics

Media products tend to establish target audiences based on the following demographics:

Gender: Perhaps the most widely considered demographic in media. Magazines and advertisements in particular will usually establish a demographic based on gender, *e.g. GQ specifically targets young men.*

Age: Certain media industries will establish specific age bands. However, most will establish general age categories, *e.g. children, teenagers, adults, elderly people.*

Ethnicity: Audiences are rarely targeted based on ethnicity as racism remains such a contentious issue. There are notable exceptions, *e.g. Pride magazine specifically targets women of colour.*

Class: While it is rare for audiences to be targeted based on class, demographics in the UK can be broken down into the following socio-economic groups: A, B, C1, C2, D, E.

The **secondary audience** will be a group that consumes a media product even though they are not the main target audience, e.g. young women might also read *GQ* magazine in order to understand men's interests.

A **water-cooler topic** is a huge, widely recognised event or topic that can be discussed in the workplace during lunch breaks as well as in other public spaces.

The **mode of address** describes the way in which a media product communicates with its audience, e.g. adverts often use imperatives such as 'Buy this!'

Media conglomerate: A large media company that owns a number of smaller media companies

Vertical integration: The act of a media company owning most (if not all) of the chain of production for a media text

Horizontal integration: When a media company which is already established in creating a particular form of media text acquires another company operating within the same form. This may also be referred to as **diversification.**

Synergy: Different parts of a media conglomerate combining to promote two separate products

Cross-platform marketing: Involves campaigns that span across different media platforms

Viral marketing: Exclusive to the Internet (particularly to social media); its success is dependent on the success of, and awareness raised by, collective sharing and discussion of the product being marketed

Convergence: The act of media products that were previously perceived as being exclusively separate from one another coming together to enhance the media form in question or create a new one. Originally, mobile phones were used to make calls and text. Now, mobile phones can be used to enhance our lives in ways that were not considered possible before the creation of smartphones.

Instagram
Founded: 2010

Facebook
Founded: 2004

Twitter
Founded: 2006

The distribution and circulation of modern media products have been significantly affected by the development of online technology. Most media companies will maintain active social media pages, allowing them to target a wider range of audiences. *For example, distribution companies will generate hype for a new film by releasing posters and trailers through various social media accounts. They then rely on audiences to share this marketing material, building a larger audience through word of mouth.*

MEDIA INDUSTRIES

Every media product goes through three general stages...

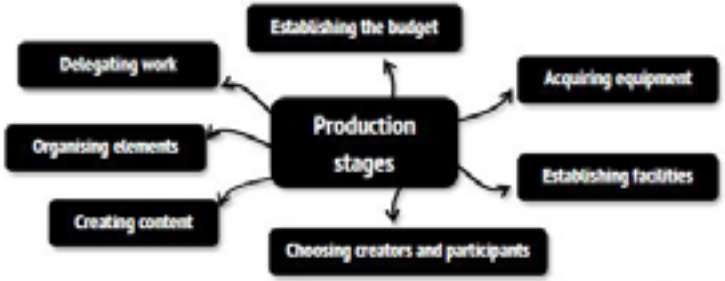
Production: the initial construction of a media product – e.g. writing, shooting and editing a film

↓

Distribution: the delivery of a media product through the appropriate platforms – e.g. stocking newspapers in shops / delivering newspapers to people's homes

↓

Consumption: the audience's experience of 'consuming' the media product – e.g. playing a video game



How are different media products distributed?

Media Form	Methods of Distribution
Magazines	Online editions, delivery through subscription, shops stocking physical copies, physical copies in public spaces (e.g. cafés, waiting rooms)
Newspapers	Online editions, delivery through subscription, shops stocking physical copies, physical copies in public spaces (e.g. cafés, waiting rooms), shares on social media
Advertisements	Television, cinemas, billboards, posters, pages in magazines and newspapers, official websites, shares on social media
Films	Cinemas, DVD, Blu-ray, streaming services, iTunes, television programming
Radio	Live broadcasts, repeat broadcasts, online catch-up services, iTunes, downloadable podcast
Video Games	Physical copies for consoles, console-specific store (e.g. Nintendo eShop), mobile app stores, PC, arcades

Regulation

The rise of online media has made regulation significantly more difficult. An effort has been made to establish online regulation for **video on demand** services such as BBC iPlayer under the watch of ***Ofcom*** (Office of Communications). However, it is almost impossible to effectively regulate online media, meaning more young people than ever before are exposed to adult content.

Many media products are produced by subsidiaries of large organisations. These products will usually have a high amount of financial backing, and access to the best resources and talent, and will, therefore, tend to have high production values (the technical quality of a media product). However, there is more pressure for these media products to appeal to a mass audience otherwise these large organisations risk losing huge amounts of money. ***Notable examples: News Corporation, Channel 4, Sony***

VS

Many media products are produced by independent companies. While these products may lack a huge amount of financial backing, there are advantages for companies operating outside of the mainstream. These products are less restricted by the aims and political biases of media conglomerates. They can also be designed to target a more niche audience, without the producer's vision becoming compromised. ***Notable examples: Pride Media Group, Atlantic Productions***

FILM INDUSTRIES

THE IMPORTANCE OF A GOOD WEBSITE

Audiovisual material: Links are provided to the film's three main trailers. There are also links to featurette videos and lyric videos for songs which appear in the film.

Technical information: The film's high budget spectacle and unique animation style make it an event film. Much emphasis is placed on the availability of 3D screenings in cinemas.

Critical reception: Since the film's release, *Spider-Man: Into the Spider-Verse* has received extreme critical acclaim and an Academy Award. This information is regularly added to the

Sponsorship: Unusually, the film directly promotes its sponsorship partners by advertising McDonalds Happy meals and Jordan trainers, among various other associated brands.

Interactive features: An augmented reality feature is available on the website for smartphone and tablet users. This demonstrates that the film's producers are aware of the ways in which films and video games can converge.

Narrative and character: There is a 'Gallery' page and a 'Characters' page included, encouraging audiences to become familiar with the film's characters.

Link to Website: https://sites.sonypictures.com/spiderverse/site/

Did you know?
A decent number of mainstream films earn over 50% of their gross profit in the opening weekend that they are released.

Disney is a media conglomerate that owns both its films and the merchandise associated with those films.

Horizontal Integration

Vertical Integration

Disney has bought film franchises such as *Star Wars* and MCU(reducing competition from other studios.

Key Stages of Mainstream Film Production
The budget is decided
Rights are purchased; particularly as so many modern films are based on existing properties or franchises
The script is written
Shooting locations are selected
The cast and crew are hired
The production schedule is created
The film is shot
The film is edited
If necessary, digital effects are added
Any sound effects or soundtracks are added
The film is distributed; usually through cinema screenings or streaming services
Marketing campaigns are launched
Trailers, TV spots, promotional interviews, press packs and posters are released for public consumption

1. Discrimination
2. Drugs
3. Imitable behaviour
4. Offensive language
5. Nudity
6. Sex
7. Threat
8. Violence

British Film Regulation

Age ratings applied to films in the UK are decided by the British Board of Film Classification (BBFC). Films are assigned one of several core age certificates, based on a set of eight content categories.

DISTINGUISHING RATINGS

Remember that films are only rated **12A** when they are distributed to cinemas. This rating means people under the age of 12 can see the film, providing they are accompanied by an adult. Home media releases are rated **12** and can only be purchased by those who are older than 12.

KEY DEFINITIONS

A distribution company is responsible for the marketing and promotion of the film, as well as the channels which the film will go through in order to reach audiences, e.g. cinemas, television rights, streaming services, DVD

Sponsorship describes deals between film companies and alternative companies, which allow them to promote one another, e.g. James Bond will often be shown drinking Heineken beers on screen. This is known as product placement.

Syndication is the process in which the rights to a media company's material are sold to another company for exhibition or integration with their material

Blockbusters are high-budget films designed to appeal to a wide demographic and make studios a lot of money, e.g. Spectre, Skyfall

A production studio is responsible for the development and creation of the film e.g. casting, shooting, editing, soundtrack

Independent forms of media are free from the influence of government or corporate interests. Independent films tend to be made with a great deal of creative freedom, e.g. *Lady Bird*, *I, Daniel Blake*.

Mainstream media products are considered to be most popular at the time of their release. It is often films produced in Hollywood that fit the mainstream criteria, e.g. *Star Wars*, *Avengers*, *James Bond*.

Exhibition is the process in which films are presented on various platforms, such as television, streaming services and, most commonly, cinemas

Film Industries

Production studio: Eon Productions and United Artists	Budget: $245 million (approx.)	Director: Sam Mendes
Distributors: MGM and Columbia	Profit: $880 million (approx.)	Producers: Michael G Wilson and Barbara Broccoli
Exhibition: 4,000 cinemas (approx.)	Release date: 26/10/2015 (UK)	Original author: Ian Fleming

Daniel Craig: Since being cast as James Bond in 2005, Craig has achieved international stardom, appearing in films ranging from *Cowboys & Aliens* (2011) to *The Girl with the Dragon Tattoo* (2011). For many audiences, Craig has become the quintessential *Bond* actor, appearing in some of the franchise's most critically acclaimed films, as well as in a video segment at the 2012 London Olympics.

Sam Mendes: Following an Academy Award for his feature film debut *American Beauty* (1999), Mendes continued to direct critically acclaimed dramas throughout the 2000s. In 2012, Mendes directed *Skyfall*, arguably the most critically and financially successful *Bond* film of all time. Mendes demonstrated here that mainstream cinema and artistic film-making can sometimes be one and the same.

Christoph Waltz: This German actor shot to fame playing the infamous 'Jew hunter' in the film *Inglorious Basterds* (2009). Waltz has since become one of the most iconic screen actors of recent years, bringing his sinister charm to the role of Bond's most classic nemesis, Blofeld (a character who had already appeared in six films in the franchise prior to *Spectre*).

Naomie Harris: Despite working as a character actress throughout the noughties, Harris rose to fame thanks to her co-starring role in *Skyfall* (2012) and *Spectre* (2015) as the iconic character of Moneypenny. Appearing in such a large franchise has put Harris on the road to global stardom. In 2017, Harris received an Academy Award nomination for her performance in *Moonlight* (2016).

Comparing the production budgets and worldwide gross (not adjusted for inflation) for the oldest *Bond* films against the most recent *Bond* films

Film	Production Budget	Worldwide Gross
Dr. No	$1.1 million	$59.6 million
From Russia with Love	$2 million	$79 million
Goldfinger	$3 million	$124.9 million
Thunderball	$9 million	$141.2 million
Casino Royale	$150 million	$599 million
Quantum of Solace	$200 million	$586.1 million
Skyfall	$200 million	$1.18 billion
Spectre	$245 million	$880.7 million

Analysing the official poster for *Spectre* can offer good insight into the ways in which producers have attempted to market the film. As shown above, the producers of *Spectre* have utilised exciting technologies to create a sense of grandeur around the film's opening. The film was released in IMAX theatres, demonstrating to the audience that the film would be of a high visual quality and require viewing on the big screen.

The Appeal of *Spectre*

- Daniel Craig has established star appeal and become the quintessential Bond for many contemporary audiences.
- The soundtracks to *Skyfall* and *Spectre* (sung by Adele and Sam Smith respectively) have both won Academy Awards and reached number one in the UK charts. *Bond* themes have arguably become as iconic – in some cases, more so – than the films themselves.
- *Spectre* fulfils the minimum requirements of a mainstream film produced for a mass audience. It is a big-budget action film with a familiar genre, a three-act structure and a satisfying resolution.
- The franchise has largely remained popular on account of its use of exotic locations. For example, scenes from *Spectre* were shot across Rome, Soelden, Morocco, Austria and Mexico City (the setting of the opening scene).

SPECTRE Marketing Strategies

- A James Bond themed comedy sketch was released on Red Nose Day, featuring the film's principal cast
- Companies sponsoring the film, such as Heineken and Omega, integrated aspects of the film into their advertisements in exchange for product placement
- The Aston Martin DB10 was revealed as Bond's official car for the film at a press conference
- Video logs and production stills were posted on Eon's social media pages

Production Issues

Since *Die Another Day* (2002), every James Bond film has received a 12A rating. However, producers at Sony were forced to cut certain images of violence in order to secure a 12A rating in the UK and allow a family audience to see the film. It is likely that this decision was made without the approval of director Sam Mendes, demonstrating that the generation of profit is more important to the film's producers than artistic integrity.

The complicated process of film production is reflected in the fact that the James Bond franchise was very nearly cancelled. The production of the 2012 Bond film *Skyfall* was suspended when MGM Studios were revealed to be on the verge of bankruptcy. The company eventually managed to secure $500 million revolving credit.

Newspaper: Audience and Industry

Traditional ways in which newspaper readers could become active audiences

Writing letters to editors; holding a protest; calling the paper's offices and lodging a complaint; taking legal action; boycotting the paper

Contemporary ways in which newspaper readers can become active audiences

Sending direct emails; joining online message boards; condemning the paper on social media; promoting protests online (e.g. through Facebook, YouGov)

Greater public exposure to issues relating to the ethics of journalism, particularly through cases such as the Leveson Inquiry

An increasing access to news from different types of media platform (e.g. unedited long-form podcasts). Audiences have to be more selective about the form of news they choose to consume.

How have newspaper audiences become more active over time?

The rise of the Internet and digital media platforms has made audiences increasingly aware of tabloids and their habits of not reporting fully accurate information (e.g. an apology for printing false information is made public)

Multiple news platforms are increasingly contradicting each other, forcing people to interpret information that claims to be factual

Newspapers such as the *Metro* and *The London Evening Standard* that are given out for free are often called **free sheets**. The vast majority of free sheets are tabloids as they aim to appeal to as universal an audience as possible. They tend to generate profit solely through advertising revenue

The vast majority of newspapers in the UK have experienced a steady decline in profits throughout the past several years. This is mostly down to the increasing availability of news online, e.g. through phone apps and social media. For instance, look at the daily readership figures for *The Guardian* for each media platform:

Print: 741,000 adults

PC: 1,492,000 adults

Mobile: 3,547,000 adults

Key Terms

Gatekeepers are the people responsible for dictating, filtering and disseminating the information which is broadcast or uploaded. These are usually the owners of the media company, *e.g. Rupert Murdoch.*

Opinion leaders are people in society who have the power to affect what people think about things. Celebrities are easily identifiable opinion leaders in today's society, but sports personalities, journalists, politicians, religious leaders and activists are also appropriate examples.

Bias is an inclination or prejudice for or against something, *e.g. The Sun is currently biased in favour of the Conservative Party.*

Columns are short, compressed newspaper articles in which a writer or opinion leader will express their opinion on a certain topic or issue, *e.g. Katie Hopkins and Giles Coren are notable examples of this.*

News of the World © News International, 2011

News of the World **used to be *The Sun*'s sister paper and another successful subsidiary of News Corp. In 2011, the paper was forced to close when a number of its journalists were implicated in the phone-hacking scandal and advertisers withdrew their support.**

REGULATION OF UK NEWSPAPERS

Until recently, British newspapers and magazines were regulated by the Press Complaints Commission (PCC), a body of voluntary representatives of each major publisher. However, the PCC was disbanded in 2014 following the infamous phone-hacking scandal in which the private voicemail messages of various celebrities, politicians and murder victims were illegally accessed and listened to. Much of this misconduct was discussed and exposed in the Leveson Inquiry, an investigation into the ethics of the British Press announced by then Prime Minister David Cameron. It was agreed in the inquiry that British news publications should be self-regulated but ultimately monitored by an unbiased organisation that has the liberty to respond to public complaints and hold British publications to proper professional standards. Most British newspapers are now regulated by the Independent Press Standards Organisation (IPSO), an independent body created to advise journalists and editors of appropriate ethical approaches, uphold standards and handle complaints from the public in a fair and balanced way.

The Editors' Code of Practice promises to....

1. Set out the standards to which most British news publications are now held
2. Deal fairly with complaints from the general public
3. Conduct investigations from an unbiased perspective
4. Balance both the rights of the individual and the public's right to know
5. Uphold general standards to which all publications are held: journalistic harassment; accuracy; privacy; intrusion into grief; reporting of suicide; reporting on children; confidential sources; payments received by criminals, etc.

Set Product: Audience and Industry

	2019	2018	2017	2016	2015
Daily circulation (January)	1.396 million	1.545 million	1.667 million	1.787 million	1.978 million

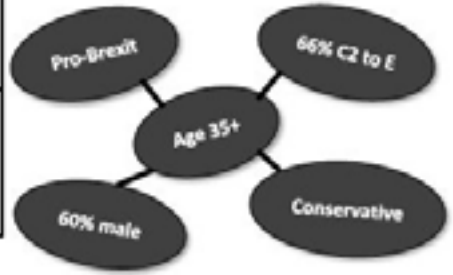
Did you know?
One-seventh of all the money spent on groceries in the UK is spent by a reader of *The Sun*.

Uses and Gratifications

	The Sun provides **information** by printing contemporary news stories, particularly those relating to human interest, sport and national politics.
	The Sun provides **entertainment** and **diversion** to its readers by featuring celebrity gossip, strong opinion pieces, human interest stories, various brainteasers and crosswords.
	The Sun appeals to its audience's sense of **personal identity** by featuring stories about ordinary people while endorsing certain sociopolitical ideologies and presenting news in layman's terms.
	The Sun encourages **social interaction** by enabling online comments on its website and providing material for water-cooler topics (things that can be discussed casually in a place of work).

Tactics used	• Bright, flashy colours • Bold layout • Shocking headlines • Sensationalism • Clear political bias
The risk of these tactics	• Perceived lack of quality • Misinformation • Lack of journalistic integrity • Greater focus on scandal than on truth

Core Demographic



There are two main sources of revenue: **payment for physical issues and advertising.** The news industry's heavy focus on advertising has led many to start seeing journalism as a commodity rather than an impartial form of delivering information.

Making money → The Sun → Losing money

A growing reduction of publishing rights, advertisers moving from print to digital media, paying redundancies when employees are no longer required and legal payments for the ongoing phone-hacking scandal. The latter has cost News Corp. £366 million in legal payments.

Political Allegiance

In **1964**, *The Sun* was founded as an independent publication; it had no loyalty to any particular political party until it was purchased by Rupert Murdoch's News Corporation UK five years later.

In **1979**, *The Sun* responded to Margaret Thatcher's Conservative government by dramatically changing its political stance as expressed in the headline 'VOTE TORY THIS TIME'.

In **1997**, the following headline was printed: 'The Sun backs Blair'. This saw the paper switching its political allegiance back in favour of Labour.

In **2009**, shortly after the financial crash, *The Sun* published the headline 'Labour's lost it'; it has consistently supported the British Conservative Party ever since.

The Hillsborough Disaster: In April 1989, 96 people were crushed and killed at the Hillsborough Stadium in Sheffield during a football match between Nottingham Forest and Liverpool. A few days later, *The Sun* newspaper printed a headline entitled 'The Truth', in which it accused Liverpool fans of stealing from victims of the tragedy, assaulting police officers and preventing efforts to save lives. The people of Liverpool were outraged at the way in which *The Sun* had used sensationalist language and unverified facts to portray Liverpool supporters as hooligans with no remorse for their fellow fans. *The Sun* later apologised for the way in which it had reported the tragedy. Since The Hillsborough disaster, there has been a widespread boycott of *The Sun* throughout Liverpool leading to a significant reduction in readership. Journalists are taught to 'never bite the hand that feeds you' in relation to the owners of media companies. What this shows is that betraying your audience can prove costly.

The Sun: Stuart Hall's Audience Reception Theory

Preferred	A Conservative voter in their 50s who voted Brexit and wishes their news to be entertaining
Negotiated	A Conservative voter in their 20s who voted Brexit but prefers to read news that is more densely packed with information
Opposed	A Labour voter in their 20s who voted Remain and wants their news to adopt an impartial, informative mode of address

Between 2013 and 2015, *The Sun* provided an online subscription called ***Sun+***. This service generated approximately £24.5 million during its run, averaging at around £250,000 per week.

Sun+ cost £2 per week for audiences to access. However, too many other British newspapers (including the *Daily Mail* and *The Guardian*) were already offering the same kind of online service for free, so News Corp. scrapped its service.

Magazine Covers

Genre Conventions of Lifestyle Magazines

- **High-key lighting** – *Lighting designed to create visual clarity and prevent shadows*
- **Mode of address** – *Direct: cover star makes eye contact with the reader*
- **Cover star** – *Will usually be a celebrity or an elite person*
- **Shot types** – *Cover stars are usually framed in full or medium shots*
- **List-based articles** – *A clear, readable way of conveying life advice*
- **Imperatives** – *Media language which instructs the audience: 'Do it!'*
- **Audience appeal** – *Highly gendered and generally appealing to 'aspirers'*
- **Ideology** – *Focus on buying products promotes* **consumerism**
- **Coverline features** – *Many include pull quotes from celebrity interviews*

Circulation	The number of people who exchange money for the consumption of a magazine
Readership	The number of people who consume a magazine regardless of whether they have bought it, *e.g. in a waiting room*
Selection	The combination and exclusion of elements in a magazine. Generally, current affairs will be selected over past affairs.
Construction	The way a magazine is pieced together before it is provided to consumers. This mainly refers to the layout and design stages.
Mediation	The final process the magazine goes through before it is released to consumers, usually overseen by editors and media owners

Dateline and **issue number** refer to information relating to the date of publication and the number of previous publications.

Cover price: information that reveals the price of the publication. In tabloid magazines, this will appear in a larger font.

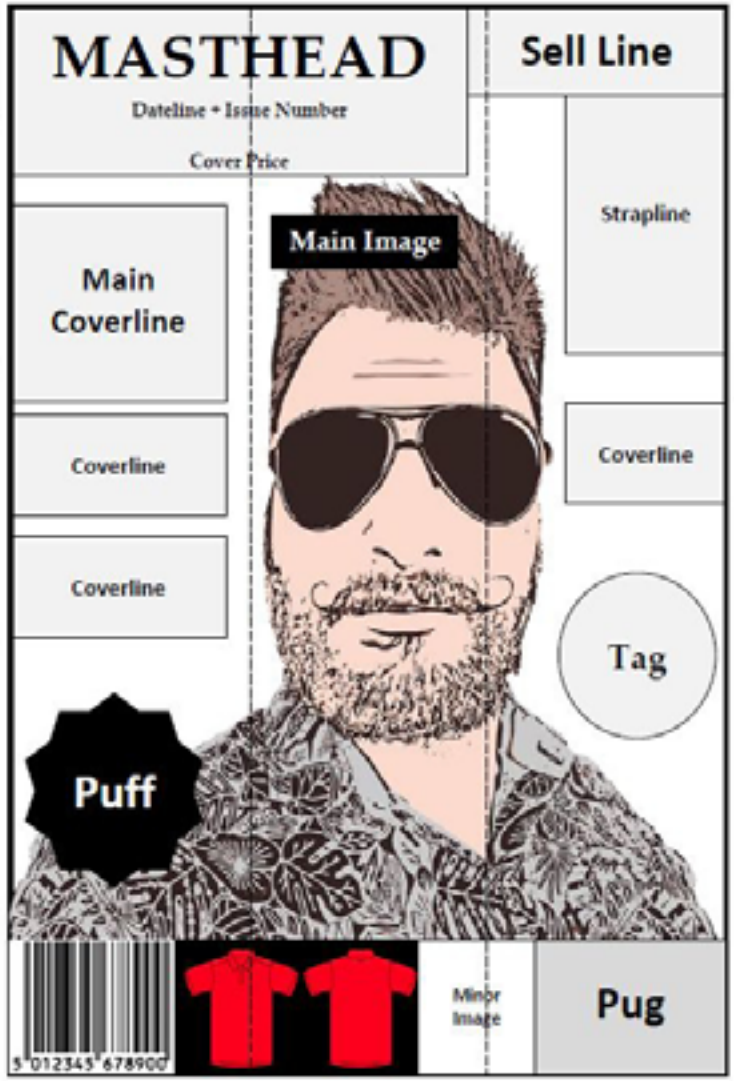
The **main coverline** is considered the main title of the cover page. This often corresponds to the main image or to the model of that issue.

Cover lines are titles/excerpts from articles found in the issue which appear on the front cover. Editors believe these will sell the issue if they feature heavily.

A **puff** is an added incentive featured on the magazine cover (e.g. a voucher or instructions for a new diet). This usually contrasts stylistically with the rest of the cover.

The **masthead** is the title of the magazine, designed and displayed on the front page.

The **sell-line** is generally found close to the masthead. It acts as a hook to gain audience interest and make the publication stand out.



A **barcode** will often feature in the bottom corner of the cover.

Most covers can be split into **thirds**.

Minor images are positioned in the outer sections of the cover and do not intrude on the main image.

A **strapline** is fairly similar to a sell line; however, it directly relates to articles found in the issue. Often located down the right-hand side of the cover.

A magazine cover will typically feature one **Main image** (sometimes called the **cover image**) – often of a model or a celebrity – that ties into themes of the issue.

Tags are phrases used to catch the reader's attention. Often sensational, with exclamatives such as 'Exclusive interview!' or 'Plus!'. Can also be called **buzzwords**.

Pugs are pieces of information located on the outer corners of the cover, used to catch the reader's eye and draw their attention to the magazine. Can be in the form of straplines, promo info and imagery.

Media - Magazines: GQ

Language

Colour scheme
Colours carry dozens of meanings and connotations. Media producers are highly aware of the qualities that audiences associate with certain colours. Producers will use this knowledge to create a colour palette that helps to establish a particular tone or genre. In the case of *GQ*, the following colours combine to emphasise ideas of physical strength, determination and becoming the ultimate 'masculine man'.

Colour	Connotations
Red	anger, passion, danger, power, sexuality, courage
Black	strength, power, danger, mystery
White	goodness, perfection, a successful beginning

Imagery

Gaze
The Rock faces directly into the camera, making eye contact with the reader. Cover stars will almost always look outwards towards the reader in order to form a personal connection between the reader and the magazine.

Facial expression
Stern, brooding expression – invokes emotions often associated with traditional masculinity. Also a sense of Johnson challenging the reader to aspire to his success.

Shot type
Johnson's biceps is presented in an extreme close-up, placing emphasis on the actor's strong physical appearance rather than his clothes (which a fashion magazine may emphasise using a full shot).

Body language
The Rock's chin is resting on his flexed biceps, emphasising his muscular physique. This invokes themes of modern masculinity and being 'the perfect man'.

Magazines: Set Product
GQ (Gentlemen's Quarterly)

Publisher
Condé Nast Inc.

Circulation (2018)
114,000

Readership (2018)
400,000

Founded in
1931

Catchphrase
'The magazine for men with an IQ'

Cover star
Dwayne 'The Rock' Johnson

Tone
Viola Beach were a British indie rock band whose members died in a car crash in Sweden (evidence of more serious journalism from the magazine).

3 THINGS TO KNOW ABOUT DWAYNE 'THE ROCK' JOHNSON

1. The Rock was the highest paid actor of 2016 with an annual income of $64 million (US dollars), a huge increase from 2015.
2. In the summer of 2016, The Rock was promoting *Central Intelligence*, one of 2016's most financially successful comedy films.
3. The Rock started his career as a professional wrestler. His muscular physique established him as a Hollywood action star.

The focus of *GQ* magazine...

Representation

The film industry has a particularly long history of under-representing non-white faces both on and off camera.

In 2015, April Reign (the editor of *Broadway Black*) initiated #OscarsSoWhite in response to the all-white list of acting nominees at the 2015 Academy Awards. This act of under-representation was repeated the following year.

Ethnicity in Magazines

The Rock is of mixed racial background (black Nova Scotian and Samoan).

The Rock's status as the highest paid actor in Hollywood has made him an inspiring role model for BAME audiences.

Gender: Stereotypes vs Countertypes

'Man Up!' (Coverline) → Stereotype

A common phrase associated with male bullying, toxic masculinity and representations of 'how a man should act' in the media.

'GQ's rebooted fashion guide' (Puff) → Countertype

Fashion has traditionally been represented as a 'feminine' interest in mainstream media.

'Mind, Body & Masculinity' (Strapline) → Combination

The importance of a strong body has been historically encouraged in men. The importance of a healthy mind is a more contemporary and sensitive approach to masculinity.

BAME – black, Asian and minority ethnic
Metrosexual – Heterosexual men living in urban environments who hold more 'feminine' interests, such as fashion and shopping
Spornosexual – men who care about their physical appearance but focus mainly on having a toned, muscular body
Hypermasculine – describes stereotypical 'male' qualities, such as strength and aggression

Media - Magazine: Pride

CONTEXT

Distributor COMAG A subsidiary of Condé Nast Inc.	Catchphrase 'Celebrating the Woman of Colour'
Circulation 30,000 per month (as of 2018)	Readership 146,000 per month (as of 2018)
Founded in 1990	Cover star Naomie Harris

Cultural references
'Bond' (the popular British spy film franchise)
'FGM' (female genital mutilation)
'Harley Street' (a street in London known for private medical practices)

The Focus of *Pride* magazine...


Life stories


News


Hair and beauty


Entertainment


Fashion


Health

3 THINGS TO KNOW ABOUT NAOMIE HARRIS

1. Naomie Harris was still a rising star in the film industry in 2015. Her most recognisable role to date had been as Calypso in the *Pirates of the Caribbean* film franchise.
2. By November 2015, Harris had gained some global prominence due to having starred alongside Daniel Craig in the 24th Bond film: *Spectre* (2015).
3. Harris is the first black actress to play the iconic role of Eve Moneypenny in the James Bond franchise. (Her mother and father emigrated from Jamaica and Trinidad respectively.)

Magazines: Set Product
Pride magazine

MEDIA LANGUAGE

Colour scheme: In this context, bright red is likely to connote power, passion and courage. White is likely to connote perfection and success.

Strapline: *Celebrating 24 years at the top!* – highlights an achievement. Lends a sense of accomplishment to loyal readers, providing a sense of community.

Masthead: hidden slightly by the cover star – this shows the editor's confidence that the magazine is established enough to still be recognised by the core target audience, even if the magazine's main identifier is not fully visible.

Coverlines
- Rhetorical questions
- Audience-specific subjects
- List-based articles
- Exclamatory sentences
- Direct mode of address

Intertextuality: *Bond And Beyond* – this cover was published in November 2015 while the James Bond film *Spectre* was enjoying its run in cinemas. The selection of Harris is significant considering that she was neither the lead actress (*Léa Seydoux*) nor the most high-profile actress (*Monica Bellucci*).

Thirds: the left third focuses on the strapline and coverlines. The right third focuses on the image of Harris. The right third focuses predominantly on the main coverline.

Imagery: like the majority of cover stars, Harris stares directly into the frame, looking outwards towards the audience. Harris is not sexualised in the image, nor is her skin Photoshopped to appear whiter (A common magazine convention).

Main coverline: simply states the name of the actress. The phrase 'Bond And Beyond' tells the audience that they can learn about Harris's involvement in the franchise as well as her wider career or personal life.

#BlackLivesMatter is a social movement which began in 2013 following a number of unprovoked shootings by American police officers on African-Americans.

REPRESENTATION

The word 'pride' has been historically associated with the civil rights movements of the 1960s and 1970s. As a result, *Black Pride* and *Gay Pride* have become common expressions. *Pride* magazine's title emphasises the idea that BAME British women should feel empowered and proud of their ethnicity. It has maintained its status as a market leader for BAME audiences.

The topics discussed on the cover are very representative of women in the twenty-first century: free and autonomous from men to some extent but still systematically oppressed by the opposite sex.

'Failed by Feminism' – feminism is a major hot topic in many social circles. Any article pointing out criticisms of this movement is likely to attract the attention of women with activist tendencies or just a passing interest in the matter.

Female Issues

'FGM on Harley Street!' – refers to the exposure of a horrific practice carried out on women of all ages happening in Central London.

'Objectified. Sexualised. Mocked.' –gives the target audience of black women a communal sense of concern about the ways in which their bodies are perceived in contemporary society.

Stereotypical representation	Pride representation
Women have historically been represented as the fairer sex and the homemaker.	The combination of Harris's confident body language and the controversial issues in the coverlines imply that women can be strong, independent and unafraid of a challenge
In lifestyle magazines, women are often sexually objectified for a heterosexual male gaze.	Harris wears a long dress and is standing upright, as opposed to lying down or sitting. The coverlines address issues of objectification and unrealistically high beauty standards.
Black women are often stereotyped as having thick, curly and unmanageable hair.	The juxtaposition of Harris with long, sleek, straight hair and 'The wig revolution is here!' suggests that Harris has hair women should aspire to have.
Lifestyle magazines often suggest women are primarily interested in fashion, beauty and physical appearance.	The coverlines featured on *Pride* cover a range of intellectual issues from social activism to feminism and political change to the exposure of FGM.

FILM MARKETING

MEDIA LANGUAGE AND REPRESENTATION

Different Types of Film Marketing

- Trailer
- TV spot
- Press pack
- Social media
- Website
- TV interview
- Merchandise
- Articles
- Poster

Star names: The names of the principal actors are included in order to bring in audiences. Marketing producers used the established fan bases of Keanu Reeves and Laurence Fishburne (who had previously appeared in *Speed* (1994) and *Boyz n the Hood* (1991) respectively) to sell the film.

Main image: A central image connoting the genre, characters or narrative of the film. The costumes and sunglasses of the characters connote the cyberpunk subgenre of the film. The guns connote the presence of conflict and binary opposites.

Title: Piques the audience's interest and reveals information about the film's tone, content or genre. 'Matrix' connotes deep intellectual themes surrounding society and culture. Its vagueness creates enigma and audience intrigue.

Billing block: Reveals the film's key creative contributors. Certain writers, supporting actors, composers and producers are famous enough to increase audience hype; for example, following the success of *The Matrix*, mentioning the Wachowskis as directors would be an effective method of selling a new film.

High-concept: Refers to a film in which the premise is striking and easy to summarise, e.g. a boy is transformed into a superhero when he is bitten by a radioactive spider.

Distributor: The company responsible for marketing a film and getting it seen in cinemas, on streaming services, on DVD, etc.

Terms that really need to be known!

Tent pole: A film with a significantly high budget, often designed to financially provide for a major film studio.

Franchise: A series of films that collectively cover a single narrative or character, e.g. *Star Wars*

Tzvetan Todorov was a Bulgarian-French philosopher who proposed that there is a repeated structure for all linear narratives. He discovered this while researching classic folk stories and fairy tales. This structure can be particularly applied to mainstream cinema.

Equilibrium – A state of balance in the story. There is no conflict.
Disruption – The point at which equilibrium balance is disturbed by an action or event.
Recognition – The point at which the protagonist acknowledges that equilibrium has been disrupted.
Resolution – The character(s) attempt(s) to solve the problem.
New equilibrium – Balance is restored.

This poster is riddled with enigma codes. The costumes and sunglasses suggest that the characters are unified in some way, but we are not sure how. Furthermore, the vertical green computer coding layered over the background connotes something that needs solving in the narrative.

The thin, distorted typography of the title suggests that something in the story is broken or manipulated by a higher power. The sans serif font of the stars' names and the tag line resembles the typography seen online. This connotes modern technological themes and elements of the science-fiction genre.

Tag line: A catchy slogan used to increase audience intrigue. This is a rare example of a tag line being blended with the release date. The words 'fight' and 'future' immediately connote the genres of action and science fiction. The line also invokes binary opposites through the promise of a fight between two sides.

Technical information: Situated below the billing block are the age rating (R is an American rating), the logos for the two major production companies (Warner Bros. and Village Roadshow Pictures) and a link to the film's official promotional website, encouraging active audience participation.

The Matrix © Warner Bros. / Village Roadshow Pictures / Silver Pictures, 1999

Examples of Propp's character types in the *Bond* franchise:

Hero – James Bond is always sent on a dangerous mission motivated by the desire to save the world and serve 'queen and country'.

Villain – Every *Bond* film has a main antagonist motivated by either a personal vendetta against Bond or a desire to destroy the world.

Princess/Reward – Every *Bond* film has a romantic interest. Their main function in the narrative is usually to be saved by Bond and to fall in love with him.

Helper – In most films, the 'Bond Girl' will take the role of the helper as well as the princess. They often share a similar motivation to Bond.

Dispatcher / Princess's father – 'M' is James Bond's boss. He/she appears in most films to give Bond his mission and congratulate him when he succeeds.

Dispatcher – 'Q' is James Bond's quartermaster. He is usually there to provide Bond with the gadgets he will need to complete his mission.

False hero – The majority of *Bond* films will feature an additional female character. Bond is attracted to her at first, but it is later revealed that she is working with the villain.

Media - Film Marketing: Spectre

Set Product 1: *Spectre* (2015)

FILM MARKETING

Action code	Bond's pistol (fitted with a silencer) suggests that violent conflict will take place in the narrative.
Enigma code	The sinister figure in the background is wearing a skeletal mask to conceal his identity. The audience must watch the film to discover the identity of this figure and the true meaning behind the word 'Spectre'.
Semic code	Bond's white tuxedo implies that the character will have to infiltrate 'high-class' events. From previous films in the franchise, we can assume these might be casino nights or functions in private bars.
Symbolic code	The contrast between the sinister shades of dark blue and grey with Bond's white tuxedo and the elegant gold typography culminates in binary opposites: light and darkness; good and evil, the familiar and the unknown.
Cultural code	The figure in the background is dressed for the 'Day of the Dead' festival. This implies that Bond may travel to Mexico at some point in the story.

THREE EXAMPLES OF INTERTEXTUALITY IN THE SPECTRE POSTER

Daniel Craig's white dinner jacket and blood-red corsage directly mirror the tuxedo worn by Sean Connery in the classic James Bond film *Goldfinger* (1964).

The pistol fitted with a silencer is a piece of iconography historically associated with the James Bond character. There is not one major James Bond poster in which the titular character is not holding a gun.

Daniel Craig's cool and calm posture pays homage to previous images of the character in film marketing material (particularly Sean Connery, the first actor to play the role of James Bond).

Representation of Masculinity

Bond holds his iconic pistol close to his chest. This is iconography of the classic Hollywood action hero, who solves narrative conflict through violence. This stereotype almost always manifests itself in male characters, perpetuating the idea that men are physically stronger and more violent than women.

Bond's white tuxedo is a brand from celebrated designer Tom Ford. The image forms a glamorous and elegant representation of masculine values as the character is painted as a gentleman.

Bond is positioned centrally within the frame. His arms are folded and his legs are spread apart culminating, in a strong, secure posture. His masculine qualities are presented as strengths which contribute to his status as the film's hero.

Like all previous lead actors in the franchise, Craig is a white, middle-aged actor who speaks in an RP accent, connoting middle-upper-class roots. He possesses many of the same identifying qualities as classic action heroes from the early days of Hollywood cinema.

Bond stares into the camera with cold, glaring eyes. He fits into the stereotype of the stoic action hero who never shows emotional vulnerability and who will always 'get the job done'. This is a fairly old-fashioned representation of masculine values.

How do we know this is a darker take on the James Bond character?

The title in itself is an enigma code invoking images of a ghost or a mysterious and dangerous presence. It might also suggest that Bond is haunted by something in his past, suggesting a deeper look into the character's psychology.

The juxtaposition of cloudy blue and grey contributes to a bleak colour scheme connoting a sinister sense of the unknown.

The background image of a looming skeletal figure connotes themes of death and haunting. The fact that the image is faded and obscured in darkness could imply the skeleton represents Bond's inner demons, connoting themes of fear, guilt and mental health. This shows some evidence of movement towards a more complex representation of masculinity.

Bond's facial expression is cold and devoid of emotion. He is presented more as a ruthless killing machine than he is in posters for other *Bond* films, such as *The Man with the Golden Gun* (1974).

Technical information: A tent-pole film such as *Spectre* will often be marketed not just as a film but as a 'cinema experience'. This poster emphasises that the film will be screened in IMAX, a cinematography technique which significantly increases the size and richness of a film's image.

Day of the Dead: The pre-title sequence of *Spectre* takes place during the 'Day of the Dead' festival in Mexico City. The film inspired the Mexican government to organise a parade similar to the one seen in the film the following year. This was seen as a brilliant way of promoting the vibrancy of Hispanic culture, and the parade was attended by over 250,000 people. This is a core example of a mainstream film inspiring events in real life.

Media - Film Marketing: Golden Gun

Set Product: *The Man with the Golden Gun* Poster (1974)

Eon Productions and United Artists	$7 million	$97 million
Production Company and Distributor	The Film's Production Budget	The Film's Worldwide Box Office Takings

Representation of Men	Representation of Women
Only the men hold guns in the poster	The character dressed in the karate outfit is the only example of a woman who is not represented as a sexual or domestic object
James Bond has his arms crossed, exuding strength, confidence and calm in the midst of chaos	The women are illustrated in a way which emphasises the shape of their bottoms and breasts for heterosexual male pleasure
James Bond and the henchman NickNack are dressed in full-piece suits	Both women are heavily sexualised by the fact they are wearing revealing bikinis
Roger Moore receives top billing followed by Christopher Lee reflects the way men were traditionally cast as the active leads in action films	Britt Ekland is the only woman to receive billing on the poster – suggests that women take a 'back seat' role in the story
Bond looks into the camera frame, establishing familiarity with the audience	Both women look into the camera, establishing familiarity with the audience

THREE THINGS TO KNOW ABOUT *THE MAN WITH THE GOLDEN GUN*

Laura Mulvey's theory of the male gaze can definitely be applied to the *Bond* franchise as a whole. Up until 1990, all major *Bond* posters depicted women in various states of undress, presumably for the pleasure of a heterosexual male audience.

The film was released shortly after the 1973 energy crisis. The poster's representation of power plants and explosions relates to certain Arab countries ceasing to supply oil to the West due to its involvement in the Egypt–Israel conflict.

The Man with the Golden Gun was the second film starring Roger Moore as Bond. He had appeared in *Live and Let Die* the previous year. Moore had also attracted a large fan base due to his playing the lead role in the TV series *The Saint* (1962–1969).

EXAMPLES OF ROLAND BARTHES' CODES

Action code: The golden gun being loaded with a bullet with '007' inscribed on it implies that the unknown assailant intends to shoot James Bond

Enigma code: The face and body of the man loading the golden gun are not visible. The audience must question who the man with the golden gun is – a question they can only answer by watching the film.

Semic code: The fact that both white women wear revealing bikinis suggests that these characters will form sexual or romantic relationships with Bond.

Cultural code: The man in the boat on the top right-hand side is wearing a conical hat, possibly hinting at an Asian setting.

Symbolic code: Multiple binary opposites are present in the poster: two women, one protecting Bond and one pointing him out to the shooter (good vs evil); Bond (the hero) facing off against the man with the golden gun (the villain); the blown-up beach hut on the left contrasting with the untouched hut on the right (chaos vs order).

PROPP'S CHARACTER TYPES

Hero: James Bond – The main character who goes on a quest, often for the greater good. *Bond is positioned centrally within the poster, making direct eye contact with the audience. In the tradition of most action film heroes he is a white, handsome man holding an iconic weapon.*

Villain: the man with the golden gun – an evil character who wants to antagonise the hero. *The mysterious man in the foreground of the frame is pointing a gun directly at Bond. The fact he is not shown leads to enigma.*

Princess: blonde woman – the reward given to the hero for overcoming the villain. *Britt Ekland plays the bikini-clad woman who falls for Bond and must be saved by him. However, the fact that she is trying to shield Bond from a bullet suggests that she may also act as a helper in the film.*

The film's poster was illustrated by American artist Robert McGinnis, who worked on multiple *Bond* posters throughout the 1960s and 1970s.

Media - Advertisement

ADVERTISE MENT

Context- Gender Roles in Society

In terms of women's roles, the 1950s are known as an era of domesticity and conformity. Having been forced into traditionally male jobs during the Second World War, women were largely encouraged to be domestic housewives and allow men to retain their positions as 'breadwinners'. Despite the social change that occurred as a result of the civil rights movement and the second wave of feminism in the 1960s and 1970s, advertisements (until quite recently) have primarily depicted white, middle-class models that conform to patriarchal ideas. Print advertising became a booming industry during the 1950s. The Conservative government at the time repeated the slogan 'Set the people free', promising to allow the general public more access to arts, entertainment and luxury. A similar technological boom has occurred in the last 15 years or so, with the invention of YouTube, Facebook, smartphones, etc.

Commercial advertising describes the promotion of goods or services for a consumer audience, *e.g. McDonald's, Gillette.* **Non-commercial advertising** seeks to provide the audience with public information relating to a certain issue. In most cases, this form of advertising will encourage the audience to take some form of action, *e.g. Think! OxFam*

Personification: When human characteristics or personality are applied to a non-human object. This can make advertising more vivid and allow audiences to view a product in a certain way.

'I really am that tasty'

'These are berry, berry tasty'

Wordplay: Experimenting with the multiple meanings or spellings behind words create humorous effect (often in the form of puns).

'Stupendous strawberries'

Alliteration: When the same consonant sound is repeated at least twice in a phrase or sentence in order to emphasise style or a particular emotion (often humour).

Rhetorical question: A question that dramatically implies an answer without stating it, allowing the audience to answer for themselves.

'What are you waiting for?'

Hyperbole: When language is used to exaggerate statements and make something sound larger or more extreme than it really is.

'The finest strawberries in the South'

'Ripe strawberries ripe'

Intertextuality: When a media text references another text in order to shape meaning and effect audience interpretation, e.g. 'Ripe strawberries ripe' references the musical: *Oliver!*

'Get them while they're half price!'

Imperatives: Media language which directly instructs or commands the audience to take action (in this case, the action is to buy a particular product).

Each of these quotes could qualify as the SLOGAN for a strawberry advertisement. Slogans are designed to summarise the benefits or importance of a product, service or message in a short, memorable manner.

'Ripe. Juicy. Jam-packed with flavour.'

Rule of three: The act of making speech or text more memorable, emotive and satisfying by breaking down ideas into three points.

Key Definitions!

Shock Tactics – when elements of media language are used to invoke a highly emotional response from an audience, *e.g. adverts tackling domestic abuse may use violent images to shock the audience into recognising the seriousness of the issue*

Advertising campaign – the strategy an advertising company will use to promote a particular product, service or message, possibly across multiple media platforms, *e.g. This Girl Can used a range of print and video advertisements to encourage women to participate in sport*

Public service announcement – the promotion of a message through the media on the basis of public interest or to raise social awareness, *e.g. anti-smoking adverts*

Targeting – the ways in which media producers select and mediate their content in order to appeal to a particular audience demographic, *e.g. adverts for toy lightsabers have traditionally targeted an audience of young boys*

Aspiration – describes the desire people have for greater levels of wealth or success, *e.g. advertisements for beauty products will often feature actors or models who present a high standard of beauty for audiences to strive to*

Advertising copy – the main body of text in a print advert explaining the functions and benefits of a product, service or cause, *e.g. an explanation of each flavour in a tin of chocolates*

HARD SELL – an advertisement which places sole emphasis on the promotion of a product, service or message

SOFT SELL – an advertisement which places less direct emphasis on the central product, service or message, rather it constructs a scenario which indirectly shows the benefits of this

Set Product 1 – Quality Street Advert

Framing – The male character is positioned centrally within the frame facing out towards the audience. This encourages the audience to identify primarily with his situation.

Advertising copy – The advert is mainly image-based. The most detailed copy comes in the form of the descriptions of the three individual chocolates in the bottom third of the page.

Typography – Tall, elegant characters emphasise the luxurious nature of the brand. The brand name is written in large text in order to catch the audience's attention.

Targeting – The age of the characters and the comedic approach to representing gender suggests that the target audience are young professionals aged between 21 and 40.

Alliteration – The use of repeated 'd' sounds ('delicious dilemma') rolls off the tongue, creating a sense of strength behind the brand.

Narrative – The male character is positioned as the hero (according to Vladimir Propp's character type theory). His dilemma in the story revolves around which of the two women (the princesses) he will choose.

Repetition – The word 'delicious' is repeated three times across the advertisement, emphasising the quality of the brand and implying that, above all else, the product tastes good.

Enigma codes – The advert sets up a puzzle by providing detail on only three of the individual chocolates. The audience must buy the entire tin in order to solve this puzzle.

Quality Street © Alamy Stock Photo, 1956

Mode of address – The advert establishes a mode of address which is playful and casual in its use of alliteration and hyperbole. However, the audience is not directly addressed through the image or the text.

Anchorage – The positioning of the male character's head in front of the golden frame forms the image of a halo, providing him with godlike status.

Cultural codes – The painting in the background shows a couple dressed in clothes reminiscent of the Regency era. Certain audiences will associate these characters with a sense of luxury and cultural development. Furthermore, certain audiences will recognise the couple as Miss Sweety and Major Quality from the 1930s adverts for Quality Street, solidifying the brand's identity.

The advert enforces the stereotype that there is a universal love of chocolate among women. Many chocolate advertisements identify young women as their key target audience due to scientific evidence that chocolate increases levels of serotonin in women's brains.

There is clear reinforcement of patriarchy in the two women are given a choice in the advert, but the man is allowing the women to select a chocolate. This is emphasised by centrally framing the male character and giving him possession of the product.

KEY REPRESENTATIONS

The male character's eyeline is directed at the product which is placed suggestively on his lap. This gives the product something of a phallic significance (it is an effective way of attracting the opposite sex).

By placing the audience's identification with the male character, the advert acts as a clear illustration of Laura Mulvey's theory of the male gaze (in which media is framed from the perspective of a heterosexual, patriarchal male audience).

How do we know this is an advert from the 1950s?

1. The male model wears a traditional pinstriped suit with a handkerchief.
2. The women wear colourful, long frilly skirts, typical of the period.
3. The pastel coloured illustration style is highly typical of the period. Photographic imagery is most commonly used for contemporary adverts.
4. The image shows a domestic environment in which characters are well dressed and conform to traditional gender roles.
5. Quality Street was still a fairly recent brand. It was still necessary to illustrate and describe the specific types of chocolate in the tin. Nowadays, a Quality Street advert is likely to be more enigmatic and focus on the already established brand identity.

ADVERTISE MENT

Little Boxes of Context on Quality Street

Quality Street chocolates were originally manufactured by Harold Mackintosh in 1936.

They were originally named after a theatrical play by JM Barrie.

Quality Street is currently produced by Nestlé.

Initially only families from middle- to upper-class backgrounds could afford to buy tins of chocolates.

Throughout the 1950s, Mackintosh endeavoured to make the product affordable for working-class families following the post-war rationing period.

The characters in the framed painting are typical of the Regency era (1811–1837), a time of great development in culture and architecture for the United Kingdom.

Colour Scheme

Colour is one of the most important indicators of meaning in print-based media. The colours in the Quality Street advert carry dozens of meanings and connotations.

Red: love, passion, danger, power, sexuality, courage, fire, blood, anger

Purple: reflection, wisdom, royalty, luxury

Gold: extravagance, quality, value, wealth, status

Set Product 2 – This Girl Can Advert

ADVERTISE MENT

Framing – The young woman is framed centrally within the print advertisement. She is shown in a medium shot, allowing the reader to see not just her facial features but her strong, slim body as she exercises.

Model selection – The woman is neither a celebrity nor a spokesperson. She is more relatable to the general public. Audiences can realistically aspire to her level of fitness.

Colour scheme – The image is tinted with a red glow, creating a clashing colour scheme that connotes passion, strength and growth (principles that are likely to inspire women to participate in sport).

Audience participation – The hashtag in the top left corner draws attention to aspects of the campaign beyond those which are visible from the print advert. Women are provided with a sense of social cohesion as they can share their stories of getting fit and overcoming barriers through various social media sites, particularly Twitter.

Main image – The central character is visibly sweating. Her armpits are bare and her hair is stuck to her face. Instead of looking embarrassed, she is lost in the moment and has an expression of determination and pure satisfaction.

Advertising copy – The advert is mainly image-based with minimal text. The advert's catchphrase subverts the negative connotations of 'sweating like a pig' and reframes it as something to be proud of. The phrase 'feeling like a fox' contains alliteration, which implies a sense of strength and energy. Furthermore, negative connotations surrounding the word 'girl' are subverted; in this context, it is used to imply universality among women.

Traditional Connotations

The word 'girl' is often associated with negative connotations, *e.g. throwing like a girl, crying like a girl.* Furthermore, feminists argue that when it comes to the male sex, men are never referred to as 'boys', so it is rather demeaning that women are often referred to as 'girls' even as they enter adulthood.

'Sweating like a pig' is usually an unflattering phrase used to describe someone who is physically large and who tires easily while exercising.

'Feeling like a fox' – in many contexts, describing a woman as 'a fox' implies that she is sexually attractive, cunning and beautiful.

Subverted Connotations

The word 'girl' is used to describe women universally and express the idea that approaching a task like a girl is a positive and inspiring thing.

The juxtaposition of the active female model and the phrase 'sweating like a pig' produces positive connotations. Rather than being a sign of weakness, sweat is implied to be a satisfying result of the woman's hard work.

In this context, there is no sense of the model being sexualised as she exercises. The word 'fox' might instead refer to her qualities as a fierce and motivated woman.

The 'This Girl Can' campaign was promoted across multiple platforms ranging from print advertisements and television advertisements to social media campaigns and an official working website.

THIS GIRL CAN CONTEXT

- 1.6 million women have started exercising regularly as a result of the campaign.
- In a large-scale survey conducted by Sport England, women identified the 'fear of being judged' as the main factor preventing them from getting into sport.
- The central aim of the *This Girl Can* campaign was to help women overcome social barriers and excel within sport.
- The This Girl Can campaign was developed by Sport England and is currently funded by the National Lottery, making it a prime example of non-commercial advertising.
- Sport England initiated the campaign having discovered a significant gender gap in the number of 14–40-year-olds regularly participating in sport.

Model Character Type – The Hero (Propp)

By fiercely exercising, the woman in the advert is embarking on a journey with the central motivation of becoming healthier. On the other hand, the audience is arguably positioned as the hero. In this sense, the model acts as the **donor**, providing the audience with the inspiration they need to exercise. This is a more abstract reading of the advertisement.

Media - Newspapers: Language

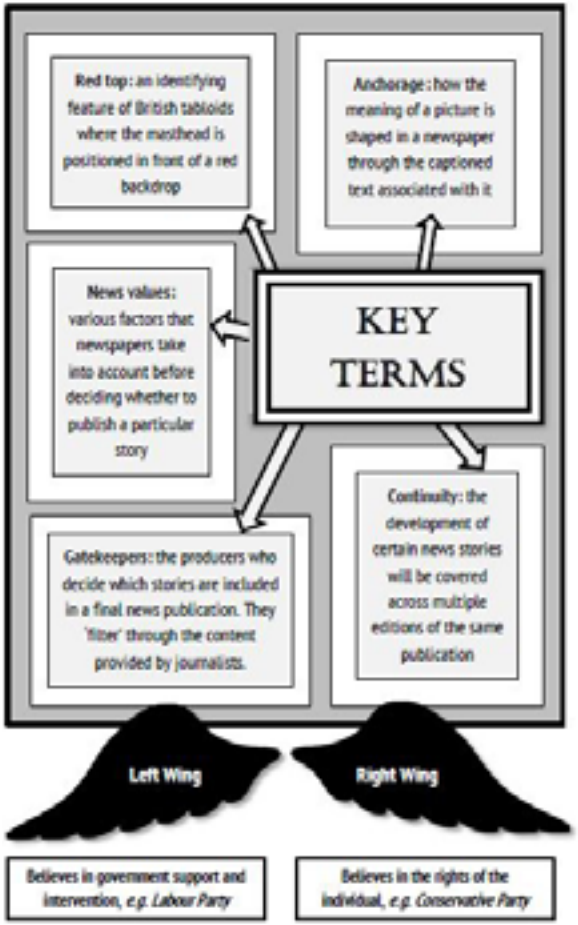
News Conglomerates

There are generally considered to be three media conglomerates that own over 70% of news publications in the UK. These are:

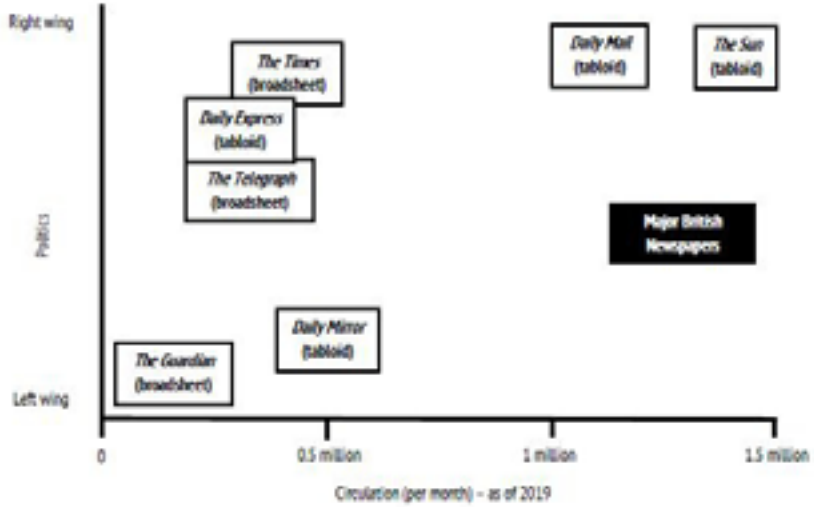
- **DMGT** – *Daily Mail, Metro*
- **Reach PLC** – *Daily Mirror, Mail on Sunday*
- **News UK** – *The Sun, The Times*

Note: **Reach PLC** was formerly known as **Trinity Mirror** until 2018

Rupert Murdoch – owner of News UK



Newspapers –
Media Language and Representation



Tabloids often use layman's terms (simplistic language) and sensationalist imagery	VS	Broadsheets will often use formal language, factual evidence and tasteful imagery
Tabloids tend to target an audience between C2 and E of the British social grade classification	VS	Broadsheets tend to target an audience between A and C1 of the British social grade classification
Tabloids include shorter articles with minimal content on the front page	VS	Broadsheets feature much longer articles, including multiple stories on the front page
The layout of tabloids will often consist of bold typeface, vibrant colours and huge headlines	VS	The layout of broadsheets will often consist of smaller typeface, limited colours and reasonably sized headlines
Tabloid stories will evolve around celebrity gossip, national issues, scandals and stories about 'ordinary' people	VS	Broadsheet stories will evolve around politics, cultural issues and economics, as well as national and international stories

Codes and Conventions

Masthead	The title of the newspaper, designed and displayed on the front page (usually in the top left corner)
Headline	The title of a news article, summarising the topic (usually in a large font size and style in order to command the reader's attention)
Byline	The name of the author (*remember: a 'line' of text that tells you who the story is 'by'*)
Standfirst	Presented in a different size or font to the rest of the article, the standfirst is a small paragraph of text summing up the story or enticing the audience to read on
Imagery	Pictures used to provide further context, suggest thought or provoke information
Caption	A description of the image, normally in a way that relates to the story
Pull quote	An important quote from the article that is enlarged and used to break up the story
Subhead	A subtitle for the article, normally expressed in a single line
Crossheads	Extracts from the main text (displayed in a large font) used to break up the article and add more white space. These are utilised in the same fashion as pull quotes but they do not quote a source directly.
Body text	The main text of the article. On many occasions this will not appear on the front page (particularly in tabloids).
Imprint	Information found in the newspaper that contains the publisher's information and contact information
Lead story	The story that is considered 'most important' by newspaper producers

Media - The Sun

THE Sun

The main body of text is cut off mid-sentence so the audience is encouraged to read the rest of the article on later pages. This teasing of information could be identified as an enigma code, according to the narrative theory proposed by Roland Barthes.

THE SUN – FACT SHEET

Format: Tabloid

Date of Publication: 12th June 2018

Average Circulation: 1,302,951 (As of May 2019)

Core Demographic: C2DE. 52% male readership

Politics: Right wing, pro-Brexit

Ownership: News Corporation (owned by Rupert Murdoch)

Sister Papers: *The Sun on Sunday* (previously *News of the World*)

Online Readership: 5,310,000 (daily)

Dominant Image: A digital composition of the British countryside featuring quintessentially British elements including the Shard Tower in London, the Houses of Parliament, a double decker bus, Stonehenge, and the Angel of the North, among other things

The Sun has a long history of constructing highly negative representations of certain individuals and groups. Notable examples of this are listed below...

Positively represented	Negatively represented	Under-represented
• Hard Brexit • Tougher laws for immigration • British sovereignty • *The Sun* • *The Sun*'s readers • Boris Johnson	• European Union • Rebel Tory MPs • Jeremy Corbyn • The Labour Party • Islam	• Migrants • Left-wing voices • Pro-EU voices • Muslim voices

Brexit Timeline

February 2016 – Despite publicly claiming that he wishes for Britain to remain a part of the European Union, Prime Minister David Cameron calls for a referendum to decide whether Britain should leave the EU

23 June 2016 – The British people vote to leave the European Union (51.9% voted to leave, 48.1% voted to remain). David Cameron resigns as prime minister the following day.

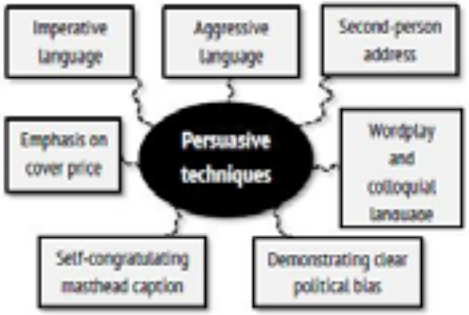
13 July 2016 – After little competition or objection in the leadership race, Theresa May becomes prime minister of the UK.

18 April 2017 – Theresa May calls a snap election in the hope that the Conservatives will win a larger majority in the House of commons, thus strengthening the party's position to negotiate Brexit deals with the EU

8 June 2017 – The Conservatives lose their overall majority and are forced to form a coalition with the Democratic Unionist Party of Northern Ireland. May's party is left weakened and divided by the result.

12 June 2018 – Theresa May's government narrowly wins a Brexit bill vote ensuring that pro-Remain Conservative MPs don't override her Brexit negotiations (*Date of Set Product Publication*)

24 May 2019 – Having suffered three defeats in the House of Commons, Theresa May announces her resignation as prime minister



Masthead: Written in a large, bold font, allowing it to stand out for readers. The text is written in italics (slanting forwards), connoting the paper's informal cutting-edge style and setting the paper apart from the competition posed by other red tops, such as the *Daily Mirror*.

Masthead Caption: 'For a Greater Britain' is a slogan that clearly attempts to appeal to the reader's sense of national pride. The implication is that *The Sun* is fighting to make Britain as glorious a nation as possible.

Puff Box: Draws attention to the publication's reasonable pricing, particularly for audiences in the C2DE class bracket. An opportunity is also taken to criticise rival tabloid *The Daily Mirror*.

Red Top: Includes a date line, cover price and official website address. Positioned in the top third of the page, ensuring that the paper will stand out on shop shelves and appeal to *The Sun*'s loyal target audience.

Main Headline: Highly emotional and sensationalist, appealing to an audience of passive consumers. It makes strong use of **binary opposites** ('Great Britain or Great Betrayal') and first-person pronoun ('We say to them') in order to empower readers and persuade them to adopt a pro-Brexit ideology.

Colour Scheme: The Alpha jets create the colours of the Union Jack, a national symbol of British pride and patriotism. By using a symbol of British nationalism, the paper is provoking its readers' patriotism to elicit a response.

Main Image: Britain is shown to be made up of glorious countryside. The image could act as a reference to the lyrics 'green and pleasant land' from the song 'Jerusalem' (originally written as a poem by William Blake). This is considered by many to be the most patriotic British anthem of all time.

Digitally Imposed Images: Implies that Britain is responsible for extraordinary achievements in terms of architecture (The Shard), industry (the steam from cooling towers), sporting achievements (a football), fascinating history (Windsor Castle), and brands (Minis and red double-decker buses)

The Sun © News UK, 2018

Standfirst: Highly emotive terms such as 'Rebels' and 'destroy' emphasise a sense of conflict. The line ('The 17.4 million majority voted for') is the only point on the front page in which *The Sun* backs up its political opinions with facts and logic.

Layout and Design: The high ratio of images to text appeals to an audience that might not have the time or the desire to read large portions of text. Furthermore, the headline takes up the majority of the page space. This appeals to an audience who are more willing to take information at face value.

theguardian

THE GUARDIAN – FACT SHEET

Format: Broadsheet (compact since 2018)
Date of Publication: 12th September 2018
Average Circulation: 134,567 (as of April 2019)
Core Demographic: ABC1, 52% male readership
Politics: Liberal (left wing), anti-Brexit
Average Age of Readers: 44
Ownership: Owned and published by Ghe Guardian Media Group (This allows the paper to maintain editorial independence)
Sister Papers: *The Observer*; *The Guardian Weekly*
Online Readership: 42.6 million
Dominant Image: Conservative MPs (Boris Johnson, Peter Bone and Jacob Rees-Mogg) are shown looking bored and frustrated during a gathering in the House of Commons
Secondary Images: An image of Hungarian Prime Minister Viktor Orbán; a hand-drawn animated image of a young woman skating with her dog

The Guardian represents itself as a serious paper by covering serious topics: The financial crash; the economic effects of Brexit; A scientific approach to Health and Fitness

CONTEXT: THE MEN ON THE COVER

Boris Johnson: Previously famous for being Mayor of London from 2008 to 2016, Johnson was one of the most notable Leave campaigners in the run-up to the Brexit vote and was consistently critical of Prime Minister Theresa May's failed attempt to negotiate a Brexit deal. In July 2019, Boris Johnson replaced May as Prime Minister of the United Kingdom.

Jacob Rees-Mogg: A Conservative MP who (as of July 2019) is serving as Leader of the House of Commons. Rees-Mogg has remained one of the most notable Leave campaigners and has continually supported Boris Johnson throughout his political career.

Viktor Orbán: The Conservative Prime Minister of Hungary who has received international criticism for his socially conservative attitudes and his moderate support of nationalism. Many critics have described Orbán as an authoritarian leader.

Representations of Right-wing Figures in a Left-wing Paper

Boris Johnson was accused of peddling lies ahead of the Brexit referendum; most notably, that Britain would be able to put an extra £350 million towards the NHS if it left the EU.

***The Guardian* is able to maintain a certain level of journalistic integrity because it is not largely owned by shareholders. While it makes no claims of political bias, its content generally suggests a left-wing ideology.**

Representation	Context	Implication
Main Image shows bored and exhausted looking Conservative MPs, ironically juxtaposed with the sign in the background: 'From Project Fear to Project Prosperity'	Johnson and Rees-Mogg are often controversial politicians due to their stances on Brexit among other political issues, e.g. immigration, abortion	The three Tory MPs are either not taking Brexit seriously enough or are unsure of how Britain will be able to leave the European Union
Image is anchored by a caption revealing that these men are Brexit supporters gathering at the House of Commons	*The Guardian* has consistently supported the Remain campaign and is often quick to produce articles calling out racism, sexism and right-wing nationalism	The men leading the Leave campaign are struggling to come up with an effective way of exiting the European Union
Headline: Theresa May has come under criticism from one of Britain's most successful business owners for using 'tactics' and risking 'thousands of jobs'	*The Guardian* has consistently criticised the Conservative Party and its leaders, particularly since the party's policy of austerity began in 2010	Although the criticism is subtly implied, May is represented as a weak and careless leader. This is framed through the viewpoint of an influential business owner.
Juxtaposition of 'Orbán v the EU' and an image of Orbán looking aggressively into the camera frame	*The Guardian* is both pro-Europe and left wing (politically the opposite to Orbán)	Orbán is an aggressive and authoritarian leader who is causing problems for the European Union

Puff Box Image: Unusual to see an animated image in a broadsheet newspaper; however, it accompanies a light-hearted self-help/lifestyle article. Such an image would not be used to accompany a story focusing on politics or economics

Colour Scheme: The colours are noticeably less bright and vibrant compared to tabloid papers. The majority of the front page is comprised of a formal black-and-white colour palette. The top third of the page is mostly dark blue, connoting a sense of strength and reliability. There is also bright yellow text to highlight a less serious article on staying fit.

In October 1929, the United States stock market crashed, leading to the Great Depression, which lasted 12 years and had a serious effect on the economy of most Western countries. 'The Great Crash' was a term coined in 1955 by an author exploring the causes of the crash.

Main Headline: The use of emotive language ('warns' and 'risks') creates a sense of danger. *The Guardian* use the audience's assumed knowledge about the Brexit deadline to create a compelling story. The reference to Jaguar (one of Britain's most recognisable manufacturers) lends a sense of legitimacy to the headline.

Main Image: Juxtaposition of the background poster with the deflated politicians creates a sense of irony as they do not appear to actually believe prosperity is on the horizon. The image is taken from close proximity (a convention of broadsheet papers).

Imprint: Very detailed in the context of all British newspapers. It reveals the price of the publication, the date and the issue number.

Masthead: The use of small typeface and curved font gives the paper a unique style that differentiates it from the competition. The style invites connotations of subtlety and approachability.

Secondary Headline: Focuses on issues of healthy eating: something audiences with disposable income are more likely to consider. The headline justifies itself as front page news as it contradicts a wide consensus that dairy food can be unhealthy if not eaten in moderation.

Trail: Directs audiences to the page on which they can continue to read the story in more detail. It is a convention of both tabloids and broadsheets to have these break up sentences mid-flow.

Secondary Image: Right-wing PM pointing aggressively at a document. This implies that he is a confrontational and untrustworthy public figure.

Body Text: The language used is formal and serious in tone and there is a much higher proportion of text to images. This is thought to be appropriate for a well-educated, ABC1 target audience.

Image Caption: Clarifies that the three politicians are in a meeting with Brexit supporters. They look bored and exhausted, implying that even these men who have supported Brexit are doubting whether leaving will lead to a positive outcome.

Music - Composition Pathway

Keywords

Bass line	The low-pitched instrumental part or **line usually** played by a bass guitar.
Octave	 The space between one note and the next of the same name. For example C – C.
Pentatonic Scale	A musical scale made up of five notes per octave.
Chord Progression	**Chord progressions** are series of two or more **chords** used in a piece of music.
Tempo	The speed of the music, usually measured in beats per minute (BPM).
Major	Music that sounds happy/cheerful
Minor	Music that sounds sad/serious
Conjunct	Melodic movement where most notes are close in pitch (move by step) ("Mary Had A Little Lamb").
Rhythm Track	A regular repeated pattern, often heard on drums.

Creating a melody using pentatonic scales

Once you have created a chord sequence, use the below **pentatonic scales** to help you if you are struggling for melodic ideas.

E.g. if you are playing a C chord, use note from the C pentatonic scale. If you are playing an F chord, use notes from the F pentatonic scale.

C Major = C D E G A

F Major = F G A C D

G Major = G A B D E

A Minor = A C D E G

In order to make your melody catchy, try to move mostly by step. In order to keep your melody interesting you may want to add a few leaps in.

Don't be afraid to repeat ideas!

COMPOSITION CHECKLIST

1. Rhythm Track – drums or percussion?
2. Bass line – repetitive or melodic riff?
3. Harmonic Progression – how many chords? Will they change for different sections?
4. Melody – short motifs/riffs in phrases – structure.
5. Lyrics – sung or bars?

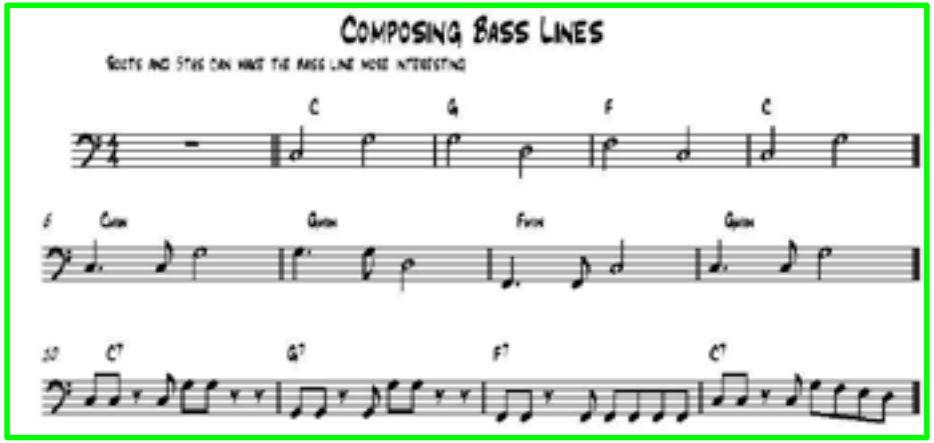
Creating a harmonic progression in C

- The most commonly used chord progression in popular music is: **I - V - vi - IV**
- Each Roman numeral represents a note of the scale.
- If we were in the key of C this would mean that the harmonic progression was:

I = C (C-E-G)
V = G (G-B-D)
vi = Am (A-C-E)
IV = F (F-A-C)

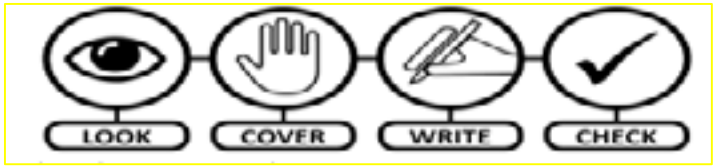
Usually, each chord is held for four beats.

Watch how to write a hit song: https://www.youtube.com/watch?v=M87ffKATJo4



M	A	D	T	S	H	I	R	T
melody	articulation	dynamics	texture	structure	harmony	instruments	rhythm	tempo
the tune	how notes are played	loud / soft and any other volume changes	layers of sound and how they fit together	sections of music and how they are organised	chords used	types of instruments heard	the pattern of notes	the speed

Music - Instrumental Study



Performing:	To play an instrument (including voice) to an audience.
Practice:	To do something repeatedly in order to acquire or polish a skill.
Rehearsal:	To prepare for a performance, typically as part of a group.
Maintenance:	Activities required or undertaken to conserve the original condition of an item.
Health & safety:	Regulations or procedures intended to prevent accident or injury.
Technical ability:	Precise control; a skillful or efficient way of doing something.
Dexterity:	Readiness and grace in a physical activity; skill and ease in using the hands/voice manually.
Stamina:	The ability or strength to keep doing something for a long time.
Control:	Ability to manage an instrument; remaining in control of an instrument or piece.
Modifications:	Changes you have made to the original piece of music or performance. *E.g changing the key to suit your voice.*
Warm-up	An act of preparation for a rehearsal or performance - a gentle exercise or practice.

Rehearsal Skills: What makes a great rehearsal?

WARM UP
- Technical exercises: scales, arpeggios, strokes, etc.
- Understand the music – identify as much theory as possible – look for keys, scales, chords, patterns, rhythms).

SET A TARGET
- Know which skill/s you need to work on in the rehearsal.

RECORD YOURSELF
- Compare this with what the piece **should** sound like and identify the problem areas.

IDENTIFY THE PROBLEM AREAS
Practice the parts you can't play (not the parts you can) first:
- Use a metronome to help with timing
- Play/sing it slowly, then speed it up
- Aim to play it correctly **three time in a row** – if you make a mistake, start again!

BREAK IT DOWN
- Play the piece section by section: split the piece into **small** parts; practice each one until right; combine each section as you work through the piece. Try to memorise sections.
- Don't just play through the whole piece repeatedly, be focused

IF YOU CAN PLAY IT - ADD EXPRESSION!
- Add dynamics
- Play with the tempo
- Think about articulation & phrasing

RECORD YOURSELF AGAIN
- Compare this to the recording you did earlier – it should be better!

Rehearsal Evaluation Structure

1. **WHAT** is the skill you need to improve?
2. **HOW** do you know you that this skill is a **weakness**?
3. **WHY** is this skill important from a musician's perspective?
4. **IMPROVEMENT** - strategy for improvement – warm ups/repertoire/rehearsal plan.
5. **EVALUATE** did you improve that skill? How? Why not? What will you do next time to improve?

Bass Warm Ups:
https://www.youtube.com/watch?v=eEcFUZUEkcc

Vocal Warm Ups:
https://www.youtube.com/watch?v=Q5hS7eukUbQ

Guitar Warm Ups:
https://www.youtube.com/watch?v=nKjuftVhqko

Drum Warm Ups?
https://www.youtube.com/watch?v=wPKuYU93KIE

Piano Warm Ups
https://www.youtube.com/watch?v=99j9mOIKQEs

Training Programme

Methods of Training

Interval - alternating between periods of hard exercise and periods of rest/recovery. Intervals can be short such as a 10 second sprint and very intense for speed, or longer such as 10 minutes for muscular endurance / cardiovascular endurance.

Circuits -uses a variety of different exercises or activities that are commonly known as 'stations' with rest periods in between. Can be used to develop strength, muscular endurance, power and cardiovascular (aerobic) endurance depending on type of exercise / duration of exercise and rest .

Continuous - involves working at a steady pace without resting in order to keep the heart rate high over a sustained period of time (usually at least 30 minutes). Can be cycling, running etc. Develops cardiovascular endurance.

Fartlek - this is continuous with no rest period – however, the intensity of the training is varied by working at different speeds or on different terrain. Develops cardiovascular endurance**.**

Resistance - also referred to as weight training . This is any form of exercise that involves lifting or pulling against resistance (for example, using dumbbells, weight machines, kettlebells etc). Develops strength, or muscular endurance or power

Body Weight – resistance from own body weight eg-plank, press ups, pull ups etc. Develops strength, or muscular endurance or power

Optimising Training

Repetitions – For example, one shoulder lift = one repetition. For strength = 5-8 reps heavy weights , Power 3-4 reps heavy weigh , for muscular endurance = 12-20 reps light weight

Sets – For example, every time you complete a series of 8 shoulder lifts, this is one set. For strength and Muscular Endurance – 2-6 sets.

HR Zones

For cardiovascular (aerobic) training it is 60-80% of MHR

For strength, power and muscular endurance it is 80-100% MHR

Health Related Components of Fitness	Skill Related Components of Fitness
Cardiovascular Endurance	Agility
Muscular Strength	Speed
Muscular Strength	Coordination
Muscular Endurance	Power
Body Composition	Balance
Flexibility	Reaction Time

Principles of Training (SPORT)

Specificity - This is all about making sure that training needs are relevant to an individual's sport, activity or fitness goals. For example, a marathon runner would make sure that their training helped to increase levels of cardiovascular endurance, while a weightlifter is more likely to will

Progression- This principle can be closely linked to overload and it is all about gradually increasing the level of overload that you include in a fitness programme. This avoids 'plateaus' where performance stays the same.

Overload - challenge your body beyond its current capacity when training. This is gained by increasing (FITT). When this happens, the body must adapt in response to this

Reversibility- This is the opposite to progression. Basically, if you reduce training levels too much or stop training altogether, then all of the positive effects that you have achieved can be lost This is sometimes referred to as 'detraining'.

Tedium - Tedium means boredom and the focus of this principle is to incorporate a variety of training methods to prevent boredom and lack of motivation in training

Principles of Overload (FITT)

Frequency - How often you train over a set period of time

Intensity - How hard you work during a training session. It's important to get the level right. If you don't work hard enough, no significant adaptations will occur;

Time -How long you train for/the duration of each training session

Type - This is all about using the right method of training to achieve the desired fitness goals. The chosen method should also suit individual needs, type of fitness to be developed, equipment available etc.

Structrure of a Session in your Program

Warm up - **Benefits** are that it gradually increases heart rate, mobilises joints, increases blood flow to the muscle and prevents injury.

Three Phases of a Warm up are mobilisation, pulse raiser, static and dynamic Stretches (10 seconds)

Main Activity – Choose your method of training , exercises very carefully in relation to clients levels of fitness from the tests, Component of fitness to be developed and likes / dislikes, medical history. Make sure you increase the overload using (FITT) each session.

Cool Down –**Benefits** are that it gradually decrease breathing rate, heart rate and body temperature all back to normal. It also removes waste products from the muscles

Three Phases – Static stretching (30 seconds), pulse lowering activity such as a gentle jog, loosen muscles with muscle shake outs.

Body Systems

The Skeletal System – Joint Actions
Abduction: this is movement away from the mid-line of the body.
Adduction: this is movement towards the mid-line of the body.
Extension: this is when we straighten the limbs (arms/legs) at a joint.
Flexion: this is when we bend the limbs (arms/legs) at a joint.
Rotation: this is a circular movement around a fixed point, either inward or outward.

Types of Synovial Joint
Hinge - Located at elbow and knee. Allows flexion and extension
Ball and Socket – Located at the hip and shoulder. Allows rotation, abduction and adduction.

The Cardiovascular (CV) System
The main functions of the CV system during exercise are -

1. **Transport oxygen** and nutrients to fuel vital organs and muscles in the body.
2. **Transport carbon** dioxide and waste products away from organs & muscles.
3. **Regulate** body temperature.
4. Redistribution of Blood during Exercise (**vascular shunt)** during exercise . Here blood is diverted away from areas of the body with low demand, in order to increase blood flow to the muscles with greater demand eg – to the biceps when performing a bicep curl and away from the quadriceps in the leg

CV Measurements
Heart Rate (HR) - the number of times your heart beats in a minute. A normal resting heart rate is 70 to 100 beats per minute.
Cardiac output (CO) = Heart rate (HR) x Stroke volume (SV)
Maximum Heart Rate (MHR) = 220 minus your age

Energy Systems
Aerobic – produces the large amount of energy and needs oxygen in order to be able to do this (it makes energy by burning fuel with oxygen). Can be sustained for long periods of time in activities such as longer distance running. Carbon dioxide and water are waste products . Uses slow twitch muscle fibres
Anaerobic –used for activities that involve short, fast, powerful bursts of energy (such as sprinting, powerlifting, throwing), but only for around 10 seconds. Lactic acid is a by-product of this system . Uses fast twitch fibres

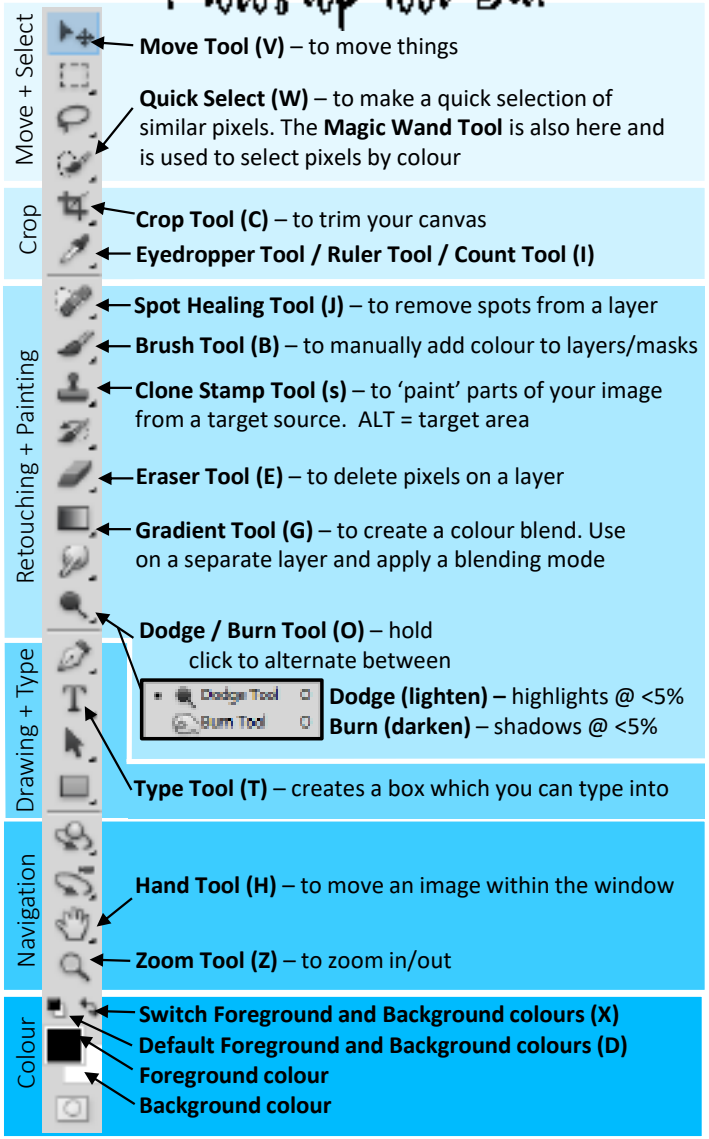
The Muscular System –Agonist
Location and Movement Functions of Key Muscles
Biceps – Found in Upper front Arm and allow flexion of the elbow
Triceps –Found in upper rear arm and allow extension of the elbow
Hip Flexor- – Found in hip and allow flexion of the hip
Gluteus Maximus – Found in rear of lower torso and allow extension of legs at hip
Abdominals – Found in lower front torso and allow flexion of the spine
Quadriceps – Found in upper front leg and allow extension of the knee
Hamstring - Found in upper rear leg and allow flexion of the knee
Pectorals – Found in upper torso and allow adduction of the arm
Deltoids - Founds in the neck and allow abduction of the deltoid

Antagonist Pairs
Each pair of muscles has an agonist (the muscles that pull, produce the movement and shorten) and antagonist (the muscle that relaxes and lengthens). An example of an Antagonist Pair is the biceps and triceps. When the elbow flexes the bicep is the agonist and tricep is the antagonist .
Isotonic Muscle Contractions – This is when a muscle contracts to create movement. These are either **Concentric** which causes the muscle to shorten as it contracts eg during a bicep curl the bicep shortens, pulls the lower arm up and flexes the elbow.
Or Eccentric where the fibres contract as the muscle lengthens. Eg when the weight is lowered after performing a bicep curl. Here it continues to contract (and lengthen) in order to allow the weight to be lowered back down with control.
Isometric Muscle Contractions - The muscle contracts but there is no resulting movement of either the limb or the joint. The muscles are working and contracting to keep the joint stable. Eg plank.

Muscles Fibre Types
Type 1 - Slow twitch – used in low intensity long duration aerobic activities eg – marathon. Developed during CV and muscular endurance training.
Type 2 – Fast Twitch – used in high intensity low duration anaerobic activities eg sprinting. Developed during speed, strength and power training.

Photography - Photoshop

Photoshop Tool Bar



Move + Select

Move Tool (V) – to move things

Quick Select (W) – to make a quick selection of similar pixels. The **Magic Wand Tool** is also here and is used to select pixels by colour

Crop

Crop Tool (C) – to trim your canvas

Eyedropper Tool / Ruler Tool / Count Tool (I)

Retouching + Painting

Spot Healing Tool (J) – to remove spots from a layer

Brush Tool (B) – to manually add colour to layers/masks

Clone Stamp Tool (s) – to 'paint' parts of your image from a target source. ALT = target area

Eraser Tool (E) – to delete pixels on a layer

Gradient Tool (G) – to create a colour blend. Use on a separate layer and apply a blending mode

Dodge / Burn Tool (O) – hold click to alternate between

Dodge (lighten) – highlights @ <5%
Burn (darken) – shadows @ <5%

Drawing + Type

Type Tool (T) – creates a box which you can type into

Navigation

Hand Tool (H) – to move an image within the window

Zoom Tool (Z) – to zoom in/out

Colour

Switch Foreground and Background colours (X)
Default Foreground and Background colours (D)
Foreground colour
Background colour

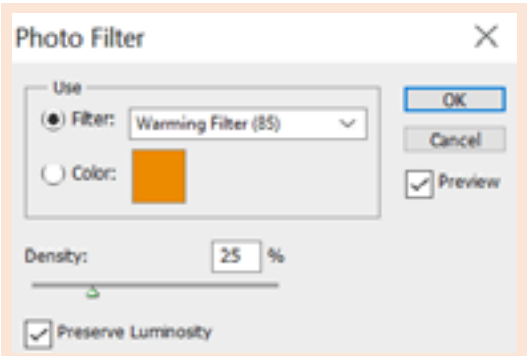
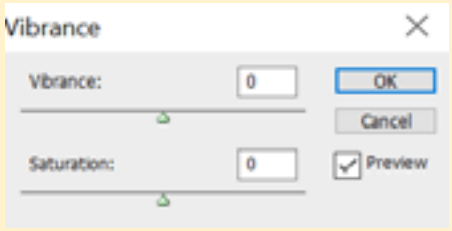
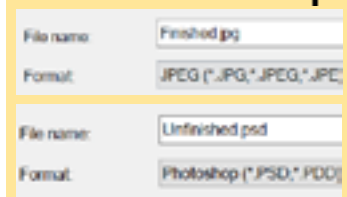


Photo Filter (*Image> Adjustments> Photo Filter*)
Use to mimic the effect of lighting gels



Vibrance (*Image> Adjustments> Vibrance)*
Saturation is the intensity, or richness of the colour/hue. **Vibrance** will only increase the intensity of the more muted hues and leaves already bright hues alone- this protects skin tones.

Gcse Photoshop



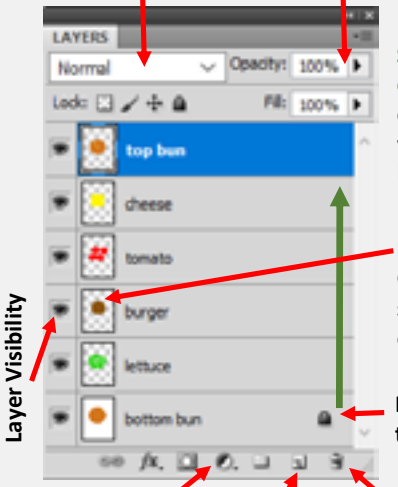
Saving Work
Finished work must be saved as a **JPEG** (not JPEG 2000).
Unfinished work needs to be saved as a Photoshop PSD file.

Useful Shortcuts

1. **CTRL+T –** Transform Tool- use to resize elements
   Hold down **shift** to keep your proportions
2. **CTRL+D** – Deselects your selection
3. **CTRL+ / CTRL—** – zoom in / out
4. **[/] (square brackets** when using a brush based tool)
   will make your brush size smaller / bigger
5. **CTRL+C** – copy a selected area
6. **CTRL+V** – paste a copied area
7. **Shift** (when using a brush based tool) – hold down shift to connect brush strokes to form a straight line
8. **Space** – hold space to pan around your screen
9. **ALT** – when using the Clone Stamp Tool, use ALT to define your source
10. **F7** – Layers- if you layers palette disappears
11. **CTRL+R** – rulers
12. **Filter> Blur> Gaussian Blur** – add a level of blur to a layer
13. **File> Automate> Merge to HRD Pro** – create a HRD image

Layers Palette

Blending modes **Layer Opacity** (0% = transparent)



Side view of your canvas – layers closer to the top will overlap lower layers

Layer Visibility

Layer Thumbnail- CTRL + CLICK to select everything on the layer

Double click + enter to unlock layer

Adjustment Layer Masks

New blank Layer- drag a layer here to duplicate

Delete Layer

Photography - Assessment Objectives

Assessment Objectives

AO1: Develop

- Find relevant artists/photographers to look at
- Find links between the work of others and your theme
- Produce research pages showing your understanding
- Make personal comments about their work
- Use this work to inspire your work- create your own version

AO2: Refine

- 'Evidence of exploration'
- Explore different media and materials
- Use different techniques and processes
- Use 'digital' manipulation
- Show a connection between experimentation and outcomes
- Show skill and achievement
- Show accuracy in content

AO3: Record

- 'Ability to reflect on work and progress'
- Quality in photography
- Directly support ideas, try things more than one way
- Show skill when using materials or alternative media
- Annotate your work, evaluate how successful it is

AO4: Present

- 'Realisation of intensions' – does your work show a journey?
- Includes every best piece of work
- Is your work presented well? Stuck in straight, mounted nicely, with readable handwriting?
- Ensure your work relates to the preparatory work and artists studied
- Remember 'quality' not 'quantity'

How your book should look

PHOTOGRAPHER / DESIGNERS NAME

Artist work

Name and date if known

Artist work

Name and date if known

Artist work

Name and date if known

- BRIEF background of the artist. "_____ takes photographs which feature/ show us the importance of/ about..." Do not copy and paste from Google.
- Explain why you have picked the contextual references that you have, what do you like most about the work?
- How does the artist relate to the theme? For example- if you looked at Titarenko, his TECHNICAL ability might be something you'd explore (long shutter speeds) or it might be the MESSAGE/ MOOD of his work (being a shadow/ loneliness...). Both could relate to your theme- but what's your link?
- Analyse ONE image in detail- can you pick it apart? How was the photo taken? What lighting? How has light been used? What set up? How was it edited? Informed guesses!

YOUR RESPONSE

Your work

Labelled with meta data (ISO, aperture and shutter speed)

Y11 EXAM ONLY

Try to come up with at 3 ways you could respond to the Artist AND the theme.

For example (Confectionery & Billy Kidd- decay work)

1. Still life sweets- same background and lighting setup
2. Sweets next to fruit rotting away (and the sweets not)
3. Sweet jars filled with photos of decayed teeth and overweight people (the effects of too much)

This could be a spider diagram, or a small list.

Try at least one of these ideas- experiment and refine!

Evaluate your response and include

- Technical details- What did you do? How did you set up your shoot? How did you edit your work? What lighting setup did you use? Why?
- What are your thoughts towards your work? Is your work successful? Why?
    - If you're going to say it's not- fine- do another shoot that works better
- Does your work fit the theme? How? What was your idea?

You could add before and after images that show how you edited your photo (definitely do this if you've combined more than one photograph). You can tie work in the middle.

Photography - Vocab & Words

Photography Vocabulary

Connectives	Form & Shape	Space	Texture	Mood	Technique	Colour	Light	Composition
However	2D / 3D	Above	Bumpy	Atmospheric	Animated	Bright	Balanced	Abstract
Although	Angular	Below	Cracked	Calm	Burnt	Clash	Bright	Background
On the other hand	Obscure	Between	Flat	Depressive	Collaged	Contrasting	Dull	Balanced
Whereas	Geometric	Illusion	Glossy	Emotive	Digital	Cool	Direct	Blurred
Similarly	Perspective	Negative	Grainy	Exciting	Edited	Dark	Dramatic	Bold
Furthermore	Proportion	Open	Hard	Fearful	Film	Dull	Fade	Centred
In addition	Simple	Positive	Matte	Humorous	Filmed	Highlight	Harsh	Depth /of field
Additionally	Silhouette	Shallow	Reflects	Joyful	Layers	Muted	High Key	Distance
It seems	Scale		Rough	Peaceful	Mixed media	Rich	Low Key	Empty
			Shiny	Provoking	Painted	Saturation	Limited	Foreground
			Smooth	Sad	Projected	Shadow	Natural	Horizon
			Spiky	Uplifting	Stop frame	Warm	Soft	Juxtaposed
					Sewn	Vibrant	Strong	Rule of Thirds
					Transfer	Black & White	Subtle	Perspective
							Tonal range	Strong
								Vanishing

Photography Key Words

1. **Exposure:** How light or dark an image is. Can be described hen too much or too little light is in your photo. The exposure is controlled by the aperture, shutter speed and ISO
2. **Aperture**: The size of the hole which controls how much light is allowed into the camera when taking a photograph. The higher the aperture the smaller the hole (less light): This is measured in f/stops, eg, f/16
3. **ISO**: ISO is a camera setting that will brighten or darken a photo. As you increase your ISO number, your photos will grow progressively brighter, but also grainier
4. **Shutter speed**: How long the cameras shutter is kept open . This is measured in seconds and fractions of seconds, eg, 1/125s
5. **Highlight/ shadow:** Light and shadow in your photo can be created and controlled with artificial light (lamps or flash) or natural light (sun)
6. **Contrast:** the difference between the darkest and lightest area in your photograph (high contrast = strong colours- punchy, Low contrast = grey/foggy)
7. **Focal Point:** The part of the photograph that the eye is immediately drawn to
8. **Subject matter:** What is represented in the photograph, a basic breakdown of what can be seen
9. **Composition:** To arrangement of the subject matter and how they relate to one another within the photograph
10. **Crop:** To select an area of an image and remove surrounding area
11. **Perspective:** The position or angle of the shot in relation to object being photographed- this is usually done looking through the viewfinder before you take your photo but can also be adjusted after using the crop feature of Photoshop
12. **Forced Perspective:** A technique that employs optical illusion to make an object appear bigger/smaller/closer/further away than it actually is
13. **Focus:** Areas of an image may be in focus (clear and sharp) and some areas may be out of focus (blurry and difficult to see or make out)
14. **Depth of field:** How much of the image is in focus. It can be described using a scale of two terms- shallow/small and deep/large
15. **Rule of thirds**: A technique used to create a successful composition. The rule states that the focal point should not be dead centre in the image but either one third from the top, bottom or from one side of the image ie, in one of the intersecting points. In landscapes, the horizon line should fall on one of the horizontal grid lines
16. **Leading lines:** A composition technique used to guide the audience to a specific area of your photo through the use of lines
17. **Bokeh:** the orbs created when light is out of focus in an image
18. **Collage:** an image that is created by using layers of other images and/or materials
19. **Mixed Media:** Using a variety of different media to create an artwork.

Photographer Bank

Landscape
Ansel Adams, Joe Cornish, Bill Brandt, Edward Weston, Guy Edwardes, Jem Southam, Adam Burton, Fay Godwin, Michael Kenna

Portrait
Martin Parr, Steve McCurry, Diane Arbus, Sally Mann, David Bailey, Richard Avedon, Nan Goldin, Jane Mown, Martin Schoeller, Alexander Rodchenko

Documentary
Henri Cartier-Bresson, Eve Arnold, Martin Marr, Steve McCurry, Robert Frank, Jan Grurup, John Hilliard,

Architecture
Alexander Rodchenko, Rob Watkins, Simon Doling, Ivan Baan

Fashion
Annie Leibovitz, Corrine Day, Mario Testino, Helmut Newton, Cecil Beaton, Richard Avedon, David Bailey, Lord Snowdon, Dani Carrig, Steven Meisel
Fashion/ Fairy-tale/Illustration
Annie Leibovitz, Tim Walker, Cindy Sherman, Zev Hoover, Slinkachu

Wildlife
Colin Varndell, Xavi Bou, Marina Cano, Nick Brandt

Photography - Lighting Setups

Camera techniques
Long exposures
Quick exposures
Panning
Tracking
Cinematic conventions
Panning with flash
Zoom during exposure
Experiment with depth of field (aperture)
Tilt shift
Macro /wide angle / fish eye
Home made cameras / pinhole / matchbox
Shoot from the Hip
Scanography
Moving image capture
Filters polarizing and neutral density
Microscopy
Blurring
Continuous sequence
Vignette
Low fi

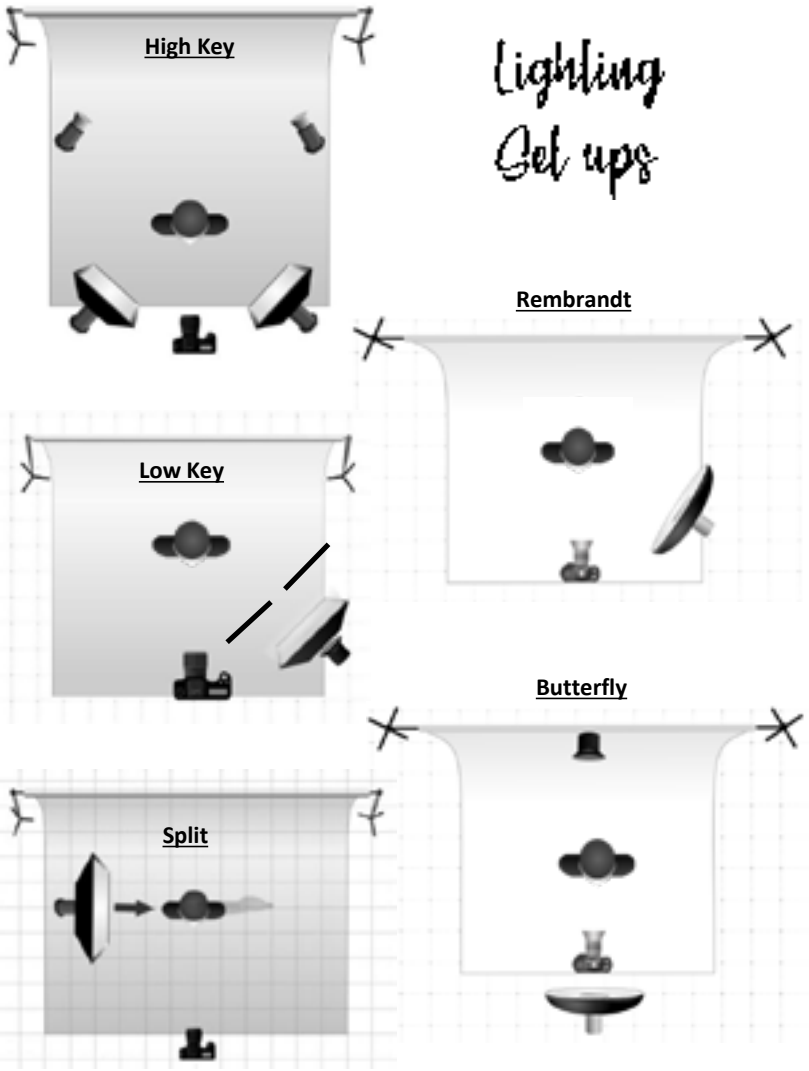
Photoshop
HDR
Panoramic stitching
Repetition and rotation kaleidoscopic
Pattern
Composite montage
Image manipulation
Colour correction
Merging images double exposure
Enhancing
Moving image (cinemographs / stop motion / time-lapse / film)
Over time
Infrared processing

Lighting
Portrait lighting Rembrandt,
Noir style
Hair lighting
Butterfly lighting
Levels of diffusion, (soft light hard light)
Background lighting
Natural
Silhouettes
Shadows
Jill Greenberg
Use of reflectors / mirrors
Use of key and fill lighting
Painting with light
Strobe lighting (Edgerton style)
Colour gels / acetates
Vignette

Further media / format
Sculpture
Sewing
Projection
Framing
Distressing printouts
Triptych
Narrative
Mobiles
Boxes
Books
Obscure formats
Printing on range of surfaces / tracing paper / acetate
Re-photography Combining secondary source
Combining image with text

Types of Photography
Abstract
Architecture
Black & White
Candid
Close-up
Children
Commercial
Cityscape
Composite
Documentary
Double Exposure
Editorial
Fashion
Fairy- Tale
Fine Art
Food
Golden Hour
Interior
Landscape
Long Exposure
Love
Macro
Photojournalism
Photo manipulation
Portraiture
Seascape
Sport
Still Life
Surreal
Street
Time-lapse
Wildlife
War

Ways to experiment



Knowledge Organizer 6 Summer

Pilgrimage

Walsingham, Norfolk, UK

Why here? *1061 wife of a lord had a dream the Virgin Mary asked her to build a shrine.*

What reason do people have? *helps Christians connect with God.*

What happens? *Services here and a national pilgrimage every year around Spring Bank Holiday.*

Taize, France.

Why here? *RC and Protestant focus on ecumenical matters (non partisan)*

What reason do people have? *Young people go and meet like minded. All over the world people meet, very global.*

What happens? *Pilgrims join in with the monastic community at the Church of Reconciliation.*

C…elebrates birth of JC
H…as a period of preparation (advent)
R…ehearsing the nativity in plays common
I…ncarnation of JC started
S…ervices called 'Christingle' with orange and candle
T…radition key with carols, presents etc.
M…idnight Mass service on Christmas Eve
A…ll Christmases involve non believers
S…aviour is how JC is regarded

E…aster preceded by Lent which is 40 days fasting
A…sh is made from palm crosses used previous Easter.
S…aviour is how Christians see JC. Died for sins.
T…hursday is Maundy, commemorates last supper
E…aster Sunday is when resurrection is happened
R…esurrection is central to message at Easter.

Knowledge Organizer 7 Summer

Christianity in Britain

- Stats from 2011 census
- Christianity is largest religion (59%)
- Islam is 2nd (4.8%)
- Increase in 'no religion' (25%)
- London most diverse
- Decrease in number of Christians, increase in number of Muslims.

Role of the church in the local community

- Baptisms, marriages, funerals etc.
- Fetes, cub/brownie groups
- Emergency shelters
- Polling stations
- Slimming classes or fitness classes

Church Growth; typical Protestant church attendance in **decline**. RC less so because of immigration (Eastern Europe, medical staff from Philippines)
Evangelical churches growing; lively, charismatic etc. ***'Fresh Expressions'*** movement within C of E to rejuvenate church attendance.

Numbers look poor but it isn't all bad for Christianity;

- Official religion for over 2000 years so it is embedded into the nation.
- Restricted shopping on Sunday, swear on Bible, marriage in church, etc.

Knowledge Organizer 8 Summer

Tearfund

What? Christian charity which works to end poverty.

What does it do? Work through local churches, help during disasters. They operate with 'love thy neighbour' in mind. Helping with education, food, training.

Why is it important? Raises awareness

Persecution of Christians Past and Present

- Martyrs were killed for their beliefs in the past. Still in some countries.
- Some will evangelise in dangerous situations (North Korea)
- Persecution comes in 3 main forms; Islamic militant countries, Communist countries and South American drug warlords.

Evangelism

- Sharing the '*good news*' with people
- Preaching to others
- Living a life of faith
- Giving out leaflets and encouraging others to join

(be careful not to confuse with 'evangelicalism')

The Ecumenical Movement; tries to unify Protestant churches around the world, led to the World Council of Churches, try to co-operate with each other and organize conferences.

The World Council of Churches (WCC); RC not official members, works in over 100 countries, holds a prayer each year for unity, brings together Christians.

Ecology

Section 1 – Communities

organism	single organism
population	all members of the same species
community	2 or more populations in the same habitat
ecosystem	interaction of community with non-living part of environment
habitat	where an organism lives
interdependence	each species depends on others for food, shelter, pollination and seed dispersal. Removal of a species affects the whole community
stable community	all species and environmental factors are in balance so population sizes remain fairly constant

Competition :

Plants	Animals
light, space, water and minerals from soil	food, mates and territory

Section 2 – Biotic and abiotic factors

Biotic (living) factors	Abiotic (non-living) factors
availability of food	light intensity
new predators	temperature
new pathogens	moisture levels
one species outcompeting another	soil pH and mineral content
	wind intensity and direction
	carbon dioxide levels (plants)
	oxygen levels (aquatic animals)

Section 3 – Adaptations

Plants and animals have adaptations to their environment.

structural	physical feature
behavioural	behaviour that gives an advantage
functional	process that allows the organism to compete

Extremophiles are organisms that live in very extreme conditions such as high temperature, high pressure or high salt concentrations conditions. Bacteria that live in deep sea vents are known as extremophiles.

Section 4 – Ecosystems

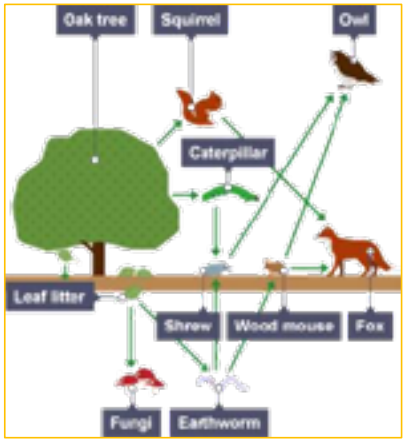
Photosynthetic organisms (normally green plant or alga) are the producers of all biomass on Earth.

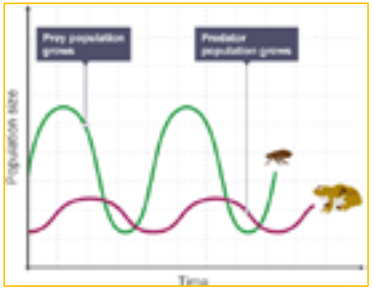
Feeding relationships are shown by food chains. Food chains can be linked to form food webs. The arrow shows the direction of energy flow.

- Producers are plants/alga
- Primary consumers eat producers
- Secondary consumers eat primary consumers
- Tertiary consumers eat secondary consumers

Animals that are eaten by other animals are called *prey* and the animals that kill and eat other animals are called *predators*.

In a stable community the numbers of prey and predators rise and fall in cycles.



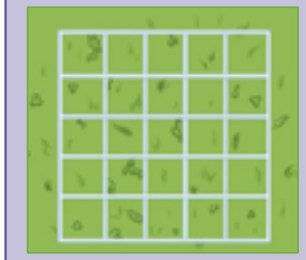


Ecology

Section 5 – Required Practical

Aim: To investigate the distribution of a species using a transect and quadrats.

Quadrat



- Randomly place the quadrat in the field.
- Count the number of squares with the chosen plant in it.
- Repeat several times ensuring the quadrat is placed randomly every time.
- Calculate the number of plants in the field

Transect

- Place tape measure down leading away from tree trunk.
- Place quadrat at 0 m. Count the number of squares with the chosen plant in it. record light intensity in quadrat.
- Repeat every 3 metres from tree.

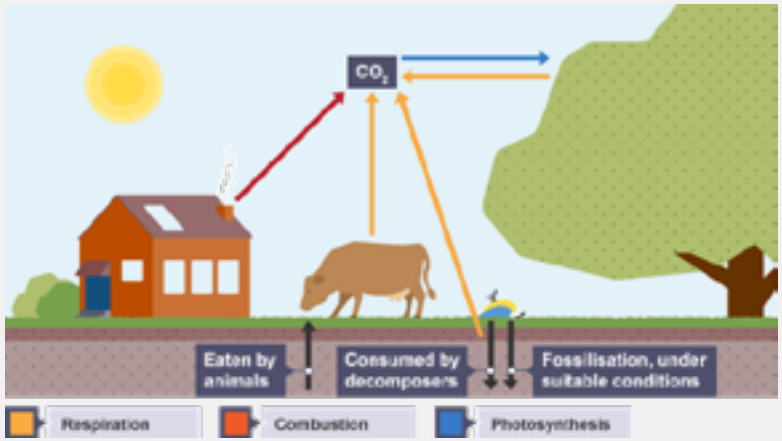
Mean – the average number

Mode – the most common number

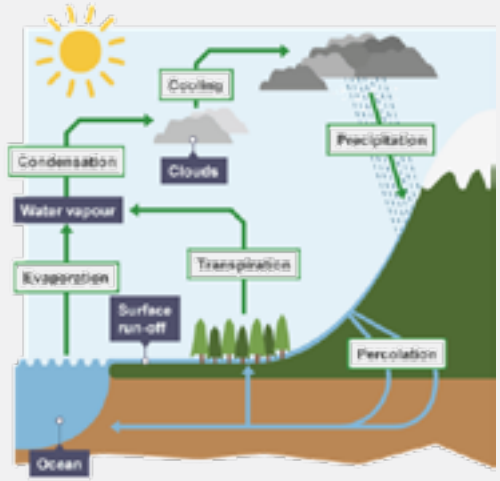
Median – the middle number

Section 6 – Material cycles

Carbon cycle



Water cycle



Section 7 – Biodiversity

Variety of all the different species of organisms on Earth or within an ecosystem. Great biodiversity ensures the stability of ecosystems by reducing the dependence of one species on one other.

Waste management	an increase in human population means more waste being produced (in land, air and water)
Land use	building, quarrying, farming and dumping waste reduces land space for animals to live destruction of peat bogs reduces habitats for animals while burning peat releases carbon dioxide
Deforestation	cutting down forests to make space for raising cattle, to grow rice fields and to grow crops for biofuels
Global warming	increasing levels of carbon dioxide and methane contribute to the greenhouse effect we are at risk of extreme weather, habitat destruction and extinction of species

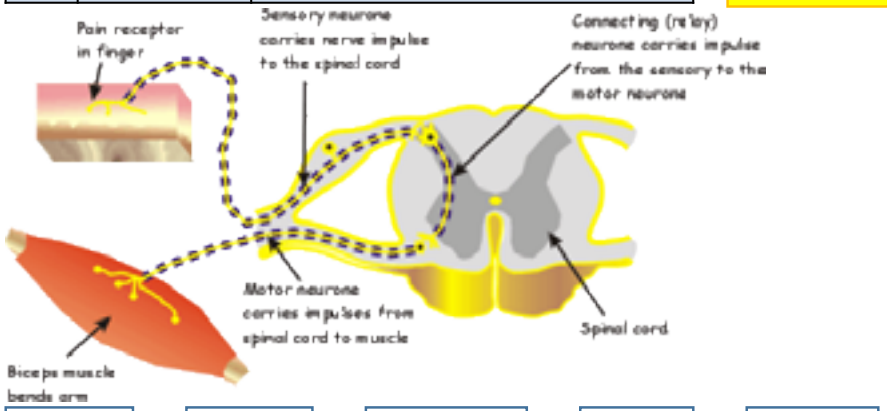
Initiatives are being put in place to reduce the negative effects of human on biodiversity:

- breeding programmes
- protection and regeneration of rare habitats
- reintroduction of field margins and hedgerows
- reduction of deforestation and carbon dioxide emissions
- recycling

Science - Biology - Homeostasis 1

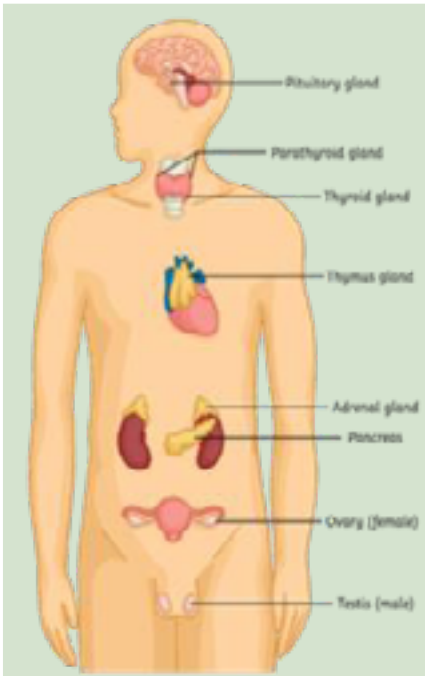
Section 1: Definitions

1	Homeostasis	maintains optimal conditions for enzyme action and all cell functions.
2	Receptor	Cells that detect stimuli (changes in the environment)
3	Coordination centres	Where the information is received and processed (brain, spinal cord, pancreas)
4	Effectors	Muscle or glands that bring about responses restoring to optimum level
5	Mutation	are changes in the DNA code
6	Reflex actions	Automatic and rapid reactions; they do not involve the conscious part of the brain.
7	Nervous system	Enables humans to react to their surroundings and coordinate behaviour.
8	CNS (central nervous system)	The CNS is the brain and spinal cord. The CNS coordinates the response of effectors which may be muscles contracting or glands secreting hormones.
9	Synaps	Junction between two neurones where chemicals diffuse across to pass on electrical signal



stimulus → Receptor → Coordinator → effector → Response

Section 2: Endocrine system



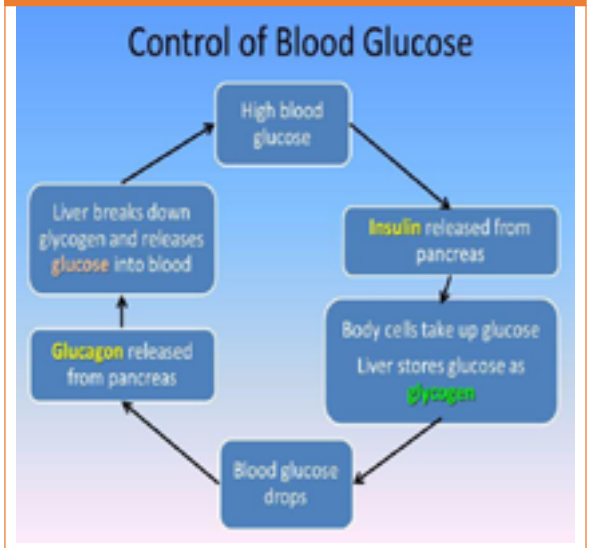
Endocrine System: Hormonal control of the body by glands secreting hormones into the blood for target organs

Pituitary gland in the brain is a 'master gland' which secretes several hormones into the blood in response to body conditions. These hormones in turn act on other glands to stimulate other hormones to be released to bring about effects.

Hormones: slow and longer lasting chemicals

Paper 2:Homeostasis and response

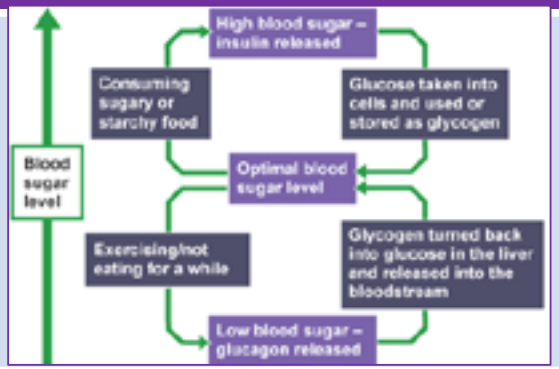
Section 3: Blood Glucose



Type 1 diabetes is a disorder in which the pancreas fails to produce sufficient insulin. It is characterised by uncontrolled high blood glucose levels and is normally treated with insulin injections

Type 2 diabetes the body cells no longer respond to insulin produced by the pancreas. A carbohydrate controlled diet and an exercise regime are common treatments. Obesity is a risk factor for Type 2 diabetes.

Section 3: HT : Negative feedback loop



Adrenaline is produced by the adrenal glands in times of fear or stress. It increases the heart rate and boosts the delivery of oxygen and glucose to the brain and muscles, preparing the body for 'flight or fight'.
Thyroxine from the thyroid gland stimulates the basal metabolic rate. It plays an important role in growth and development.

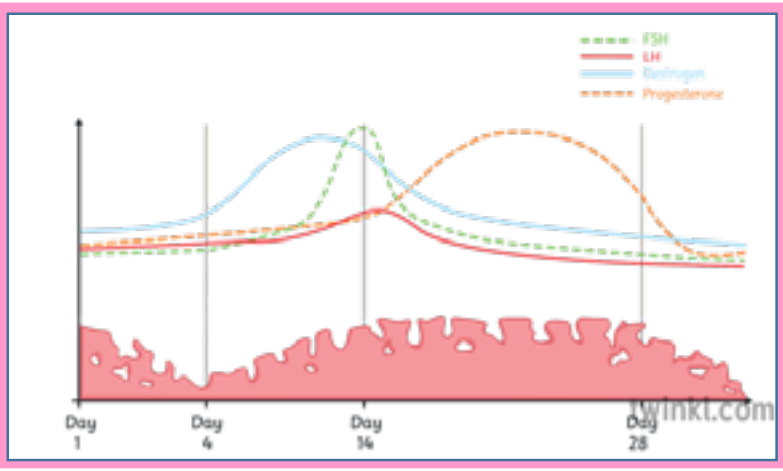
Science - Biology - Homeostasis 2

Section 4: Menstrual cycle

Oestrogen is the main female reproductive hormone produced in the ovary.
Testosterone is the main male reproductive hormone produced by the testes and it stimulates sperm production

Hormone	Produced	Role
FSH (follicle stimulating hormone)	Pituitary gland	Causes an egg to mature in an ovary. Stimulates the ovaries to release oestrogen
Oestrogen	Ovaries	Stops FSH being produced (so that only one egg matures in a cycle). Repairs, thickens and maintains the uterus lining. Stimulates the pituitary gland to release LH.
LH (luteinising hormone)	Pituitary gland	Triggers ovulation (the release of a mature egg)
Progesterone	Ovaries	Maintains the lining of the uterus during the middle part of the menstrual cycle and during pregnancy.

HT: Menstrual cycle graph



Section 6: Contraception

Contraceptive method	How it works	Advantages	Disadvantages
Mixed pill	Inhibits production of FSH. Stops uterus lining developing. (Hormonal)	Easy to use.	Raised blood pressure, risk of breast cancer.
Implant	Prevents eggs maturing. Stops uterus lining developing. (Hormonal)	Lasts for 3 years.	Affects menstrual cycle, requires surgical procedure.
Patch	Prevents eggs maturing. Stops uterus lining developing. (hormonal)	Lasts for 1 week.	May cause skin irritation, no protection against STIs.
Condom (barrier method)	Stops the sperm reaching the egg. (Non-hormonal)	Easily available.	They can split or burst
Diaphragm	Stops the sperm reaching the egg. Should use spermiciadl agent with it (Kills/disables sperm)	No serious health risks.	Can take time to learn how to use it.
Sterilisation	Surgical method that stops either sperm or egg reaching site of fertilisation	Permanent	Difficult to undo.

Section 6: Hormonal treatment

Hormonal Treatment for infertility: IVF
In Vitro Fertilisation (IVF) treatment.;
IVF involves giving a mother FSH and LH to stimulate the maturation of several eggs.
The eggs are collected from the mother and fertilised by sperm from the father in the laboratory.
The fertilised eggs develop into embryos.
At the stage when they are tiny balls of cells, one or two embryos are inserted into the mother's uterus (womb).

Although fertility treatment gives a woman the chance to have a baby of her own:
it is very emotionally and physically stressful
the success rates are not high
it can lead to multiple births which are a risk to both the babies and the mother.

Paper 2:Homeostasis and response

The rate and extent of chemical change (**Higher tier in bold**)

Section 1 – Calculating rate

The rate of a chemical reaction can be found by measuring the quantity of a reactant used or a product formed over a given time:

$$\text{mean rate} = \frac{\text{quantity of reactant used OR product formed}}{\text{time taken}}$$

Units: reactant or product can be measured in g for mass and volume is measured in cm^3. Units for rate may be given as g/s or cm^3/s.

Rate may also be measured in mol/s.

Tangents can be used next to the curves to show the rate of reaction.

The gradient calculated to determine the rate.

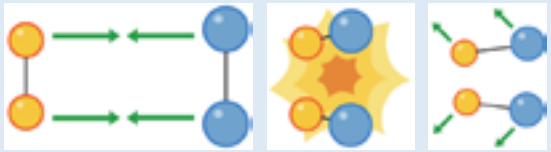
Section 2 – Factors affecting rate of reaction

Collision Theory states that chemical reactions can only occur when particles collide with sufficient energy. The minimum energy needed for a reaction to occur is called the *activation energy*.

Increasing concentration, pressure and surface area of reactants increases the number of collisions that can occur and so the rate increases.

Increasing temperature increases number of collisions and the energy of the collisions. This increases the rate.

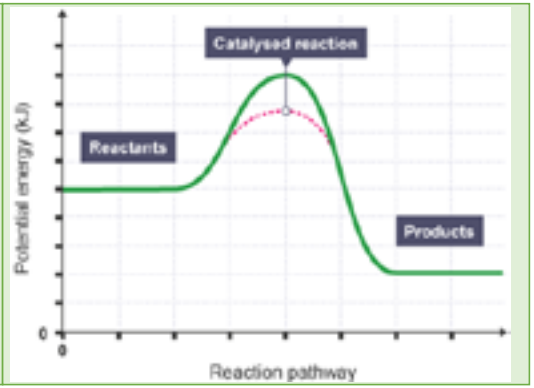
Adding a catalyst also increases the rate of reaction.



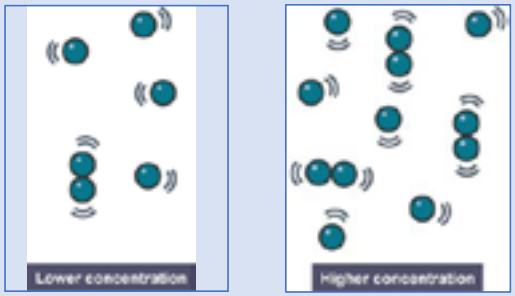
Section 3 – Catalysts

Catalysts speed up a chemical reaction without being used up itself. Catalysts are not included in the chemical equation. They provide a different pathway with a lower activation energy. Enzymes are biological catalysts.

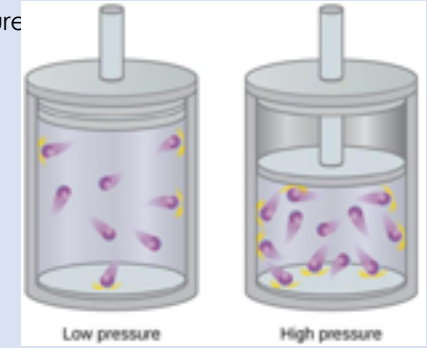
Reaction profiles can be drawn to show this.



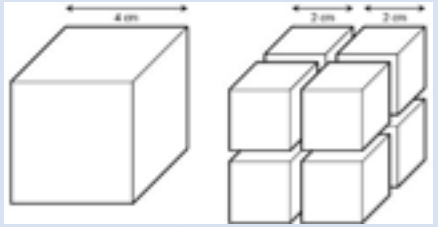
Concentration



Pressure

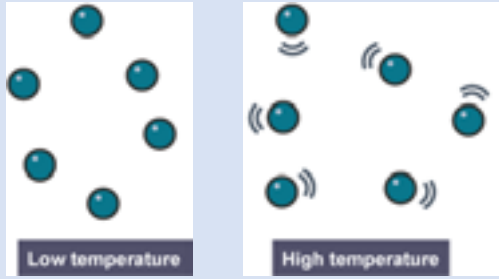


Surface Area



6x(4x4) = 96 cm^2 6x(2x2) = 24 cm^2

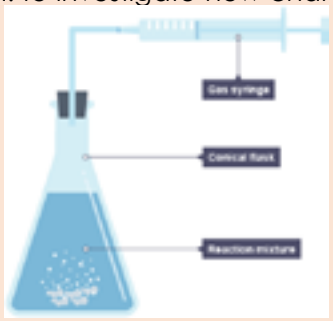
Temperature



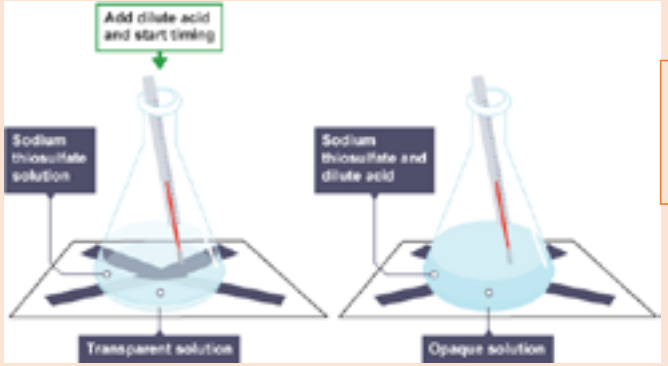
The rate and extent of chemical change (**Higher tier in bold**)

Section 4 – Required Practical

Aim: to investigate how changes in concentration affect reaction rate.



Change the concentration of hydrochloric acid and measure the volume of gas produced every 30 seconds for 5 minutes.



Change the concentration of the sodium thiosulfate solution and measure how long it takes for the cross to disappear.

Section 5 – Reversible reaction & equilibrium

Some reactions are reversible whereby the products can react together to reform the original reactants. A reversible reaction arrow is used to show this: ⇌

$$A + B \rightleftharpoons C + D$$

Reversible reactions that are exothermic in one direction must be endothermic in the opposite direction. The energy taken in or given out is the same in both reactions:

$$\text{hydrated } CuSO_4 \overset{\text{endothermic}}{\underset{\text{exothermic}}{\rightleftharpoons}} \text{anhydrous } CuSO_4 + \text{water}$$

If a reversible reaction occurs in a closed system (no reactants or products can escape) then equilibrium is reached.

The rate of the forward reaction is equal to the rate of the reverse reaction.

Section 6 – Effect of changing conditions on equilibrium (HT only)

If a reaction is at equilibrium and a change happens to the conditions, the system responds to counter the change. This can be predicted using Le Chatelier's Principle.

Changing concentration

Increasing concentration of a reactant	shifts right	product concentration increases
Decreasing concentration of product	shifts right	product concentration increases

Changing temperature

Increasing temperature	favours the endothermic reaction	system takes in energy
Decreasing temperature	favours the exothermic reaction	system releases energy

Changing pressure

This applies to reactions that involve gases (g).

Increasing pressure	favours reaction with fewer gas molecules
Decreasing pressure	favours reaction with more gas molecules

Forces (Part 2)

Speed

Speed (m/s) = Distance (m) ÷ time (s)

Acceleration

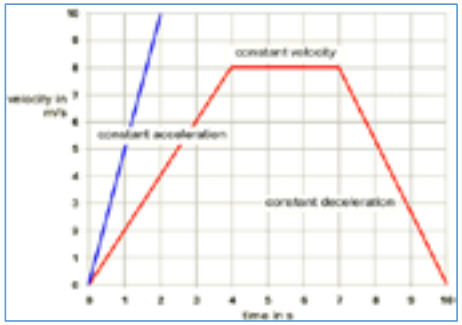
Acceleration (m/s^2) = Final Speed (m/s) – Initial Speed (m/s) / Time (s)

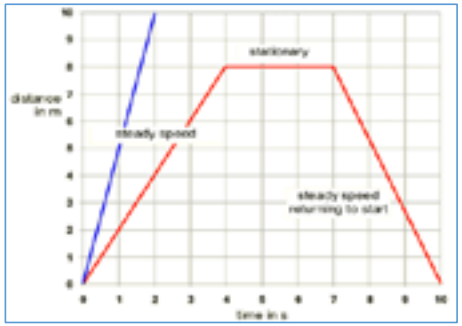
final velocity^2 (m/s) – initial velocity^2 (m/s)= 2 × acceleration (m/s^2) × distance (m)

Distance–Time & Velocity-Time Graphs

You should be able to understand what the features of the two types of graph can tell you about the motion of an object.

Graph Feature	Distance-Time Graph	Velocity-Time Graph
x-axis	time	time
y-axis	distance	velocity
gradient	speed	acceleration (or deceleration)
plateau	stationary (stopped)	constant speed
uphill straight line	steady speed moving away from start point	acceleration
downhill straight line	steady speed returning to the start point	deceleration
uphill curve	acceleration	increasing acceleration
downhill curve	deceleration	increasing deceleration
area below graph		distance travelled

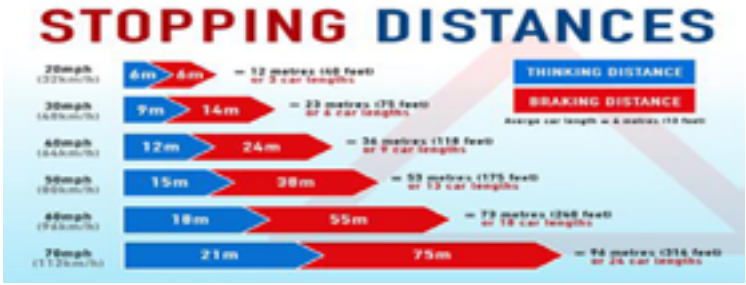




Stopping Distance

Thinking distance	The distance a car travels while the driver reacts. This can be effected by alcohol, drugs or using a mobile phone
Braking distance	The distance a car travels while the car is stopped by the brakes. This can be effected by the condition of tires, weather or condition of the road
Stopping distance	The sum of the thinking distance and braking distance

Stopping Distance = Thinking Distance + Breaking Distance



Forces (Part 2)

Newton's Laws of Motion

Newton's Laws of Motion: Newton's First Law

If the resultant force acting on an object is zero...

- a stationary object will remain stationary.
- a moving object will continue at a steady speed and in the same direction.

100N resistance (friction and air)

100N thrust

Inertia – the tendency of an object to continue in a state of rest or uniform motion (same speed and direction).

Newton's Laws of Motion: Newton's Second Law

The acceleration of an object is proportional to the resultant force acting on it and inversely proportional to the mass of the object

resultant force (N) = mass (kg) × acceleration (m/s^2)

Inertial mass – how difficult it is to change an objects velocity. It is defined as the ratio of force over acceleration.

Newton's Laws of Motion: Newton's Third Law

When two objects interact, the forces acting on one another are always equal and opposite.

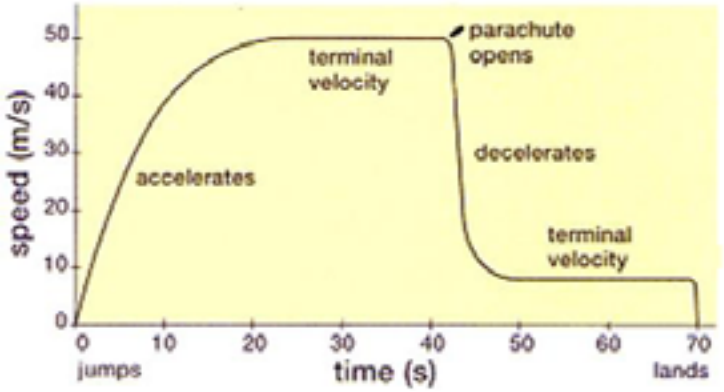
For example, a book laid on a table is being acted upon by at least two forces: the downward pull of gravity and the upward reaction force from the table surface. The forces are equal and opposite so the book does not move. We describe the forces as being balanced.

Momentum (H/T ONLY)

Momentum (Kg/m/s) = Mass (Kg) = Velocity (m/s)

The **law of conservation of momentum** states that the momentum at the end of a collision, or an explosion, is equal to the momentum at the beginning in a closed system

Falling and Terminal Velocity



Terminal Velocity

Terminal velocity is when the weight of a falling object is balanced by resistive forces. This results in it falling at a constant speed.

Spanish Y10 – De Costumbre (1)

Las Comidas		Meals	
El desayuno	Breakfast	El cola cao	Chocolate milk
La comida	Food	El marisco	Seafood
El almuerzo	Lunch	El pescado	Fish
La cena	Dinner	El pollo	Chicken
Desayunar	To have breakfast	El zumo de naranja	Orange juice
Comer	To eat	La carne	Meat
Almorzar	To have lunch	La ensalada	Salad
Merendar	To snack	La leche	Milk
Cenar	To have dinner	La tortilla	Omelette
Beber	To drink	Las galletas	Biscuits
Tomar	To have	Las tostadas	Toast
Entre semana	In the week	Las verduras	Vegetables
Los fines de semana	At the weekend	Algo dulce/ligero/ rápido	Something sweet/light/quick
Desayuno a las ocho	I eat breakfast at 8	Ser goloso	To be greedy
Un huevo	Egg	Tener hambre	To be hungry
Un pastel	Cake	Tener sed	To be thirsty
Un bocadillo	Sandwich	Tener prisa	To be in a rush

Los Alimentos		Food Products	
El aceite de oliva	Olive oil	Los melocotones	Peaches
El agua	Water	Los pepinos	Cucumber
El ajo	Garlic	Los pimientos	Peppers
El arroz	Rice	Los plátanos	Bananas
El atún	Tuna	Los pomelos	Grapfruit
El azúcar	Sugar	Los refrescos	Fizzy drinks
El maíz	Corn	Las cebollas	Onions
El pan	Bread	Las fresas	Strawberries
El queso	Cheese	Las judías	Beans
La cerveza	Beer	Las legumbres	Pulses
La carne de cerdo	Pork	Las manzanas	Apples
La carne de cordero	Lamb	Las piñas	Pineapple
La carne de ternera	Beef	Las uvas	Grapes
La harina	Flour	Las zanahorias	Carrots
La mantequilla	Butter	Es un tipo de…	It is a type of
Los albaricoques	Apricots	Bebida	Drink
Los guisantes	Peas	Comida	Food
Los lácteos	Dairy	Contiene…	It contains

Spanish Y10 – De Costumbre (2)

¿Qué le pasa?		What's the matter?	
No me encuentro bien	I don't feel good	Me duele	My… hurts
Me siento fatal	I feel bad	El brazo/la mano	Arm/hand
Estoy enfermo	I am ill	El pie/la pierna	Foot/leg
Estoy cansado	I am tired	El tobillo/la rodilla	Ankle/knee
Tengo calor	I am hot	La boca/la nariz	Mouth/nose
Tengo frío	I am cold	Las orejas/los ojos	Ears/eyes
Tengo catarro	I have a cold	La garganta/el cuello	Throat/neck
Tengo dolor de la cabeza	I have a headache	La cabeza/la espalda	Head/shoulders
Tengo mucho sueño	I am really sleepy	Los dientes/las muelas	Teeth
Tengo gripe	I have the flu	El estómago	Stomach
Tengo fiebre	I have a fever	Desde hace	Since
Tengo quemaduras del sol	I have sunburn	Un día/un mes/Una hora/una semana	A day/month/ hour/week
Tengo tos	I have a cough	Descansar	To relax
Tengo una insolación	I have sunstroke	Beber mucha agua	To drink lots of water
Tengo una picadura	I've been stung	Tomar aspirinas	To take aspirin

Las expresiones de cantidad	Expression of Quantity
Cien gramos de	100 grams of
Quinientos gramos de	500 grams of
Un bote de	A jar of
Un kilo de	A kilo of
Un litro de	A litre of
Un paquete de	A packet of
Una barra de	A loaf of
Una botella de	A bottle of
Una caja de	A box of
Una docena de	A dozen of
Una lata de	A tin/can of

Mi rutina diaria		My daily routine	
Me despierto	I wake up	Me acuesto	I go to bed
Me levanto	I get up	Salgo de casa	I leave home
Me ducho	I shower	Vuelvo a casa	I return home
Me peino	I brush my hair	Temprano	Early
Me afeito	I shave	Tarde	Late
Me visto	I get dressed	Enseguida	Straight away
Me lavo los dientes	I brush my teeth	Odio levantarme	I hate getting up

Spanish Y10 – De Costumbre (3)

Las Fiestas		Festivals	
La fiesta de	The festival of	Las casas/tumbas	houses/graves
Esta tradición antigua	This old traditon	Con flores	With flowers
Se caracteriza por	It is caracterised by	Con velas	With candles
Se celebra en	It is celebrated in	Comen manzanas de caramelo	They eat toffee apples
Se repite	Is repeated	Preparan altares	prepare alters
se queman figuras de madera	Wooden figures are burnt	Se disfrazan de brujas	Dress up as witches
Se construyen hogueras	Bonfires are built	Se disfrazan de fantasmas	Dress up as ghosts
Se disparan fuegos artificiales	Fireworks are set off	Ven desfiles	Wear costumes
Se lanzan huevos	Eggs are thrown	La Tomatina	The Tomatina
Las calles se llenan de	The streets are full of	La Corrida de Toros/ Sanfermines	The Running of the Bulls
Los niños	Children	Pasca	Easter
Los jóvenes	Young people	Navidad	Christmas
Las familiares	Relatives	Las Fallas	The Torches
Las familias	Families	La nochevieja	New Years Eve
Decoran	They decorare	La nochebuena	New Years Day

¿Qué festivales son?	What festivals are they?
La Tomatina	Tomato throwing festival held in Bunol in August
La Corrida de Toros/Sanfermines	Running of the Bulls in Pamplona – Bulls are released and people run away from them
La Nochevieja	New Years Eve – people eat 12 grapes (uvas) each chime of the clock to celebrate the new year
La Nochebuena	New years day
La Navidad	Christmas – remember most people in Spain open presents on 6th January and they believe the three kings bring the gifts.
La Semana Santa	Holy Week – the week leadng up to Easter

Un día especial	A special day
Abrimos los regalos	We open presents
Buscamos huevos de chocolate	We look for chocolate eggs
Cantamos villancicos	We sing Christmas carols
Comemos dulces	We eat sweets
Comemos doce uvas	We eat 12 grapes
Celebramos	We celebrate

Statistics - Index Numbers

Year 10 Statistics. Half term 5 Topic 11: Summary statistics (Index Numbers)

- An **index number** shows **the rate of change** in price, quantity or value over a period of time
- An index number is a percentage which is compared to a standard quantity called a base number
- The base number is always given as 100%

$$\text{Index number} = \frac{\text{New value}}{\text{Value in base year}} \times 100$$

$$\%\text{ change} = \frac{(\text{New value} - \text{Value in base year})}{\text{Value in base year}} \times 100$$

The price of a washing machine went up from £305 in 2009 to £320 in 2010. If 2009 is the base year, work out the index number and the % change for 2010.

$$\text{Index number} = \frac{320}{305} \times 100 = 104.9\ \%\ \text{(rounded to 1d.p.)}$$

$$\%\text{ change} = \frac{320 - 305}{305} \times 100 = \frac{15}{305} \times 100 = 4.9\ \%\ \text{(rounded to 1d.p.)}$$

The index number is always equal to (% change) + 100 %

Special Index Numbers

RPI – the retail prince index shows changes in the cost of living. It is a measure of prices in everyday life (food, housing, heating etc).
The RPI is calculated using 1987 as the base year with an index 100
CPI – the consumer price index. Also shows changes in the cost of living but excludes mortgage payments. It is calculated from a base year od 2015 with an index of 100.
GDP – the gross domestic product. The main measure of economic output based on the value of goods and services produced in a given time. An economy is in recession when its GDP falls for 2 or more successive quarters.

Weighted Index Numbers

Each item in set is assigned a weight.
CPI and RPI are weighted index numbers.
Calculated using the same formula as for a weighted mean.

Weighted mean = $\frac{\sum(value\ x\ weight)}{\sum weights}$ or $\bar{x} = \frac{\sum xw}{\sum w}$

Example A recipe uses flour and sugar in the ratio 80% to 20%. In 2015 the price of flour was 100p per kg and the price of sugar was 120p per kg. In 2016 the prices had gone up to 150p and 190p.
Weighted means 2015 = 0.8 x 100 + 0.2 x 120 = 104
2016 = 0.8 x 150 + 0.2 x 190 = 158
Weighted index number in 2016 (2015 base) = 158/104 x 100 = 152
So prices rose by 52%

Chain Base Index Numbers

Compare prices from each year to the previous year (or month on month). RPI and CPI are chain based index numbers.

Chain base index number = $\frac{price}{last\ year's\ price}$ **x 100**

Example

The table shows the cost of Hira's household insurance over the past few years.

Year	2002	2003	2004	2005	2006
Annual cost (£)	£281	£297	£291	£308	£320

Calculate the chain base index numbers.
2003 297/281 x 100 = 105.7
2004 291/297 x 100 = 97.8
2005 308/ 291 x 100 = 105.8
2006 320/308 x 100 = 103.9
Every year insurance went up by between 4 and 6% except in 2004, when it went down by 2%.
The geometric mean could be calculated to give the average over the four years.

Statistics - Rates of Change

Year 10 Statistics. Half term 5 Topic 12 : Rates of Change

Crude Rates generally tell you how many births, deaths, marriages or even unemployed there are in every 1000.

The crude birth rate is the number of births per thousand of the population.
The crude death rate is the number of deaths per thousand of the population.

Crude rate = $\frac{number\ of\ (births, deaths, people\ unemployed)}{total\ population}$ **x 1000**

Example A small town in Lincolnshire had a total population of 5845 in 2016. There were 127 babies born and 201 deaths that year.
Calculate the crude birth and death rate and comment on the stability of the population.

Crude birth rate = $\frac{127}{5845}$ x 1000 = 21.7 (1dp) births per 1000 of population

Crude Death rate = $\frac{201}{5845}$ x 1000 = 34.4 (1dp) deaths per 1000 of population

There is a falling population.

Standard Population is a hypothetical population of 1000 people, considered to represent the whole. It is used to make valid comparisons between populations of very different age profiles and sizes.

Standardised rate of change uses the standard population to compare the same age group in different populations.

Standard Population = $\frac{number\ in\ age\ group}{total\ population}$ x 1000

Standardised Rate = $\frac{crude\ rate}{1000}$ x standard population

Example Here is a breakdown of the ages of a town's population and the number of deaths in a year for each age category. Calculate and compare the standardised death rate for each age group.

Age Group	Number	Deaths
0-19	2647	57
20-35	12743	1002
36-65	18921	2273
>65	9284	4986
Total	43595	

Age Group	Crude death rates	Standard population	Standardised death rate
0-19	$\frac{57}{43595}$ x1000 = 1.31	$\frac{2647}{43595} x\ 1000 = 60.72$	$\frac{1.31}{1000}$ x 60.72 = 0.08
20-35	$\frac{1002}{43595}$ x1000 = 22.98	$\frac{12743}{43595} x\ 1000 = 292.3$	$\frac{22.98}{1000}$ x 292.3 = 6.72
36-65	$\frac{2273}{43595}$ x1000 = 52.14	$\frac{18921}{43595} x\ 1000 = 434.02$	$\frac{52.14}{1000}$ x 434.02= 22.63
>65	$\frac{4986}{43595}$ x1000 = 114.37	$\frac{9284}{43595} x\ 1000 =$ 212.96	$\frac{114.37}{1000}$ x 212.96 = 24.36

The over 65 age group has the highest death rate, although the 35-65 group is almost as high.

Year 10 Statistics. Half term 6 Topic 13 : Probability Distributions. The Binomial Distribution

The Binomial distribution occurs when there are only two possible outcomes, where one outcome can be considered to be a success and the other a *failure.* The two outcomes are mutually exclusive.
P(success) + P(failure) = 1
So if one probability is known, so is the other.

It is used for working out the overall outcome of successive events where there is a finite number of trials. The trials are independent events.

p is the probability of success and q is the probability of failure and we use the expansion of $(p + q)^n$ where n is the number of trials, to find x =, the probability of a combination of successes and failures.

$$X \sim B(n, p)$$

X is using the Binomial distribution. With n trials. And the chance of success is p

The mean of X is n x p

The **binomial expansion**

$(x+y)^0 = 1$

$(x+y)^1 = x+y$

$(x+y)^2 = x^2+2xy+y^2$

$(x+y)^3 = x^3+3x^2y+3xy^2+y^3$

$(x+y)^4 = x^4+4x^3y+6x^2y^2+4xy^3+y^4$

$(x+y)^n = x^n+nx^{n-1}y+\ldots+{}_nC_rx^{n-r}y^r+\ldots+nxy^{n-1}+y^n$

The number of ways of achieving a particular outcome can be calculated as: $\binom{n}{r} = {}^nC_r$

Where **n** is the number of trials and ***r*** is the number of required outcomes. This can be found using your calculator.

The Facts

- There is a fixed number of trials (n)
- Each trial has only two possible outcomes – a "success" or a "failure"
- The probability of a success (p) is constant from trial to trial
- Trials are independent

$$P(X = r) = \binom{n}{r} p^r q^{n-r}$$

Example The probability that a seed produces flowers is 75%. Four seeds are planted.

a) Can the binomial distribution be used?

Yes, two mutually exclusive outcomes, fixed number of trials and probability remains constant.

b) Calculate the probability that exactly 2 seeds will flower.

p = 0.75 q = 0.25
want the p^2q^2 term, the coefficient is 4C2 = 6
Probability 3 flowers = 6 x 0.75^2 x 0.25^2
= 0.2109 (4dp)

c) Probability of less than 2 flowers

want the q^4 and p^1q^3 terms, the coefficient of pq^3 is 4C1 = 4
= P(0 flowers) + P(1 flower)
= 0.25^4 + 4 x 0.75^1 x 0.25^3
= 0.0508 (4dp)

Statistics - Probability Distrobutions - Normal

Year 10 Statistics. Half term 6 Topic 14 : Probability Distributions. The Normal Distribution and Standardised scores

The **Normal Distribution** is a suitable model if these conditions are met:

- Data is continuous
- The distribution is symmetrical and bell-shaped
- The mode, median and the mean are approximately equal.

The mean, μ, is in the center. In general,

- 68% of data falls within one standard deviation
- 95% of data falls within two standard deviations
- 99.7% of data falls within three standard deviations

You need to learn these

The variance of a normal distribution is a measure of how spread out the data is.

Variance = (standard deviation)^2

The notation N(μ, σ^2) means a normal distribution with a mean μ and variance σ^2

The number of standard deviations from the mean can be worked out using

Number of standard deviations from mean = $\frac{value - mean}{standard\ deviation}$

To **sketch** a normal distribution, you need to work out 3 standard deviations either side of the mean and draw a symmetrical bell-shaped curve, centred on the mean.

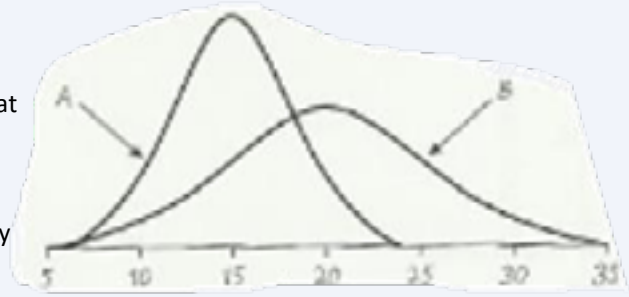
Example On the same axes sketch the normal distributions A and B

A $15 \pm 3 \times 3 = 6$ to 24

B $20 \pm 3 \times 5 = 5$ to 35

As the area under the curve has to represent 100%, the curve with the smaller range will have a smaller maximum height

	A	B
Mean	15	20
Standard Deviation	3	5



Example A long-life light bulb has a mean life of 12000 hours and a standard deviation of 300 hours.

Work out the probability that a light bulb chosen at random will

a) Last between 11400 and 12600 hours

b) Last less than 11400 hours

c) 5000 light bulbs are tested Estimate how many of them will last longer than 12600 hours

a) $\frac{12600 - 12000}{300} = 2$ $\frac{11400 - 12000}{300} = -2$ 2 sd means probability of 95%

b) (100 – 95)/2 = 2.5%

c) (100-95)/2 = 2.5% 2.5% of 5000 = 125 light bulbs

Standardised scores are used to compare two samples of data which are modelled by a normal distribution.

Standardised score = $\frac{score - mean}{standard\ deviation}$ You need to learn this

Example

Work out the standardised scores and comment.

V's English = 0.4167

V's Maths = 0

F's English = -0.3333

F's Maths = 0.375

V's English score is a lot better than F's but F did better in Maths. Overall V did better as she didn't get any negative standardised scores.

	F's mark	V's mark	Mean	Standard deviation
English	46	55	50	12
Maths	45	42	42	8

Statistics - Quality Control

Year 10 Statistics. Half term 6 Topic 15: Quality Assurance and Control Charts

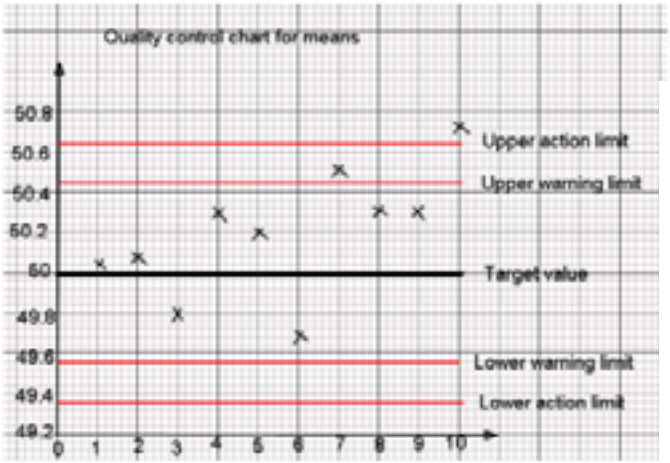
Quality Assurance involves checking samples to ensure that the product of a manufacturing process meets the required standards. The sampling method depends on the manufacturing process (could be random or systematic).

A **Control Chart** is a time series used for quality assurance. Samples are taken at regular intervals and the mean is calculated and plotted.

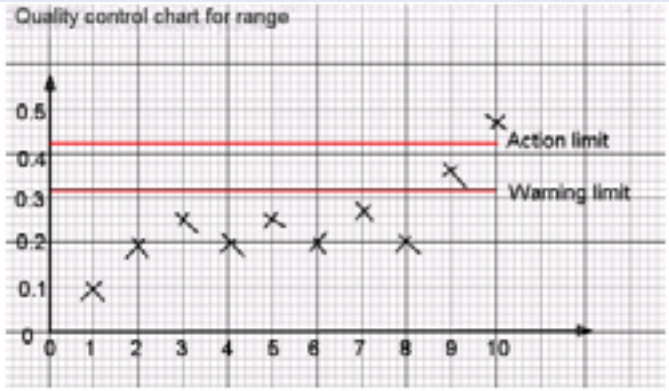
Warning limits are lines drawn on the control chart. These are set so that 95% of the data is included within the warning Mean ± 2 standard deviations $(\mu \pm 2\sigma)$.

If a mean falls between the warning limit and the action limit another set of samples must be taken immediately
Action limits are lines drawn on the control chart. These are set so that 98.7% of the data is included within the warning Mean ± 3 standard deviations $(\mu \pm 3\sigma)$.

If the sample mean is within the warning limits the manufacturing process is under control
If the sample mean falls between the warning limit and the action limit another sample must be taken immediately to check that nothing has gone wrong.
If the sample mean is outside the action limits the manufacturing process must be stopped at once and the machinery must be reset.

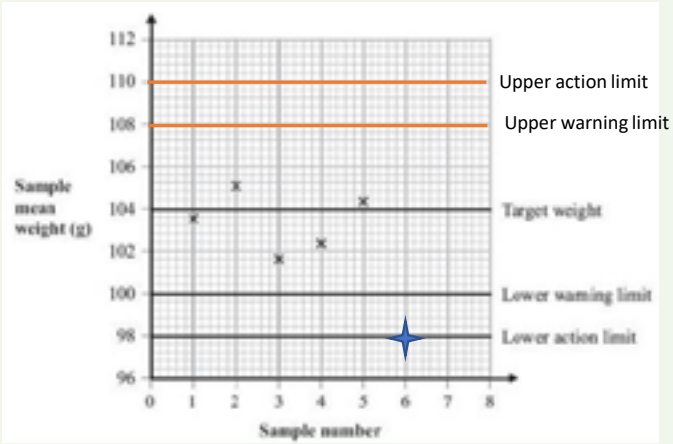


A control chart can also be drawn for the range.
Sometimes, there are no lower limits



Typical Question
A production line is set up to produce chocolate bars with a target weight of 104g. For quality control, random samples are taken to check the production line is working normally.
The chocolate bars in each sample should have a mean weight of 104g and a standard deviation of 2g. The sample mean weights have a normal distribution. A quality control chart is used to plot the sample mean weights.

a) Complete the graph –
Draw upper warning limit at mean + 2 sd = 104 + 2 x 2 = 108
Draw upper action limit at mean + 3 sd = 104 + 3x2 =110



b) What percentage of samples would you expect to be outside the warning limits
Normal distribution 95% within $\pm$ 2sd of mean , so 5% outside

c) Another sample is taken with a mean weight of 97.8g. Plot it and explain what action needs to be taken. It is outside the action limit. The machine needs to be stopped and reset.

d) Explain how warning limits are used. Sample means plotted between the warning limit and action limit need to be checked and another sample is taken.

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