

Year 8 Knowledge Organiser

Autumn Term



How do I complete Knowledge Organiser Homework?

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



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 selfquizzing 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 selfquizzing 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 8 - AUTUMN TERM



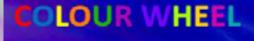
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Art - Colour



COLOUR

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 communication, colour is form of irreplaceable.

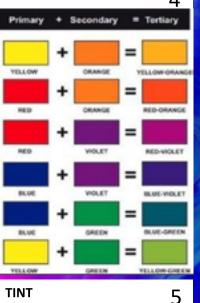




Cool colours painting







is adding white to a colour



TONE is adding grey to a colour



SHADE is adding black to a colour



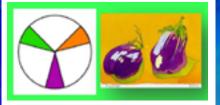
ADJECTIVES TO DESCRIBE COLOURS

Light Bright Vivid Glowing Vibrant Brilliant Intense Dazzling Subdued Diluted Gloomy Depressing Pale Dull Murky Muted Monotonous Fluorescent 3 Saturated Opaque Transparent

PRIMARY

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

SECONDARY



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

TERTIARY



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

COMPLEMENTARY

6

COLOUR SCHEMES



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

HARMONIOUS



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

MONOCHROMATIC

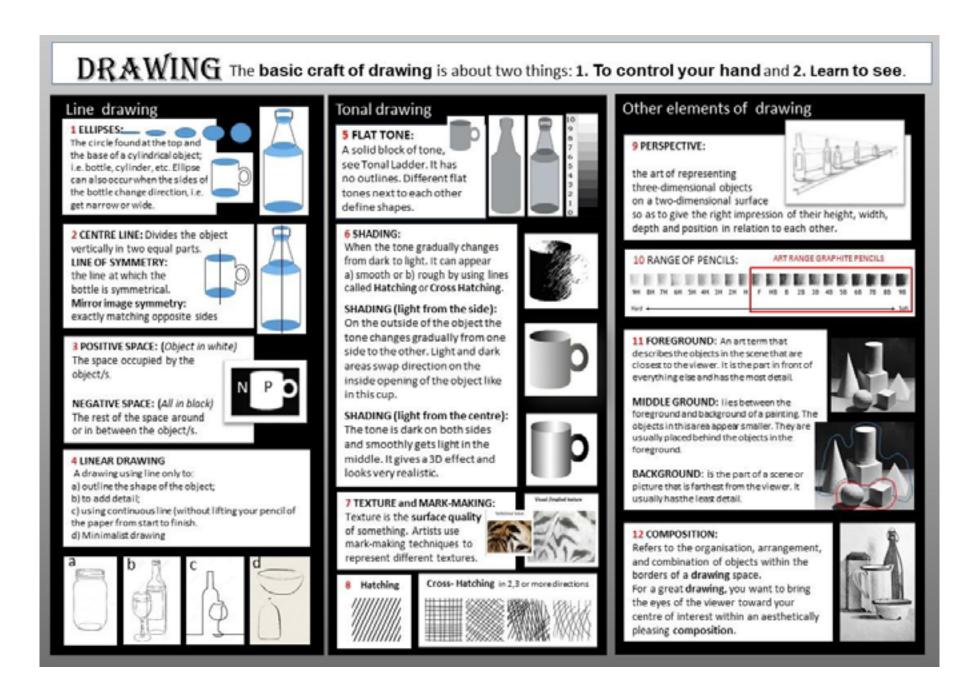


Uses Tints, Tones & Shades of one colour. The word MONO means ONE and the word CHROMA means INTENSITY OF COLOUR.

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Art - Drawing





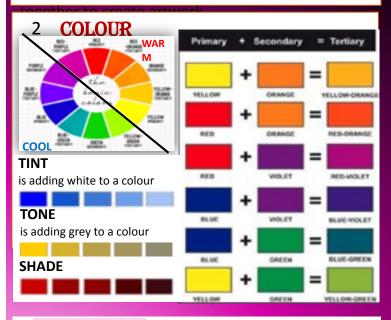
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Art - Formal Elements



FORMAL ELEMENTS

The Formal Elements are: line, shape, form, tone, texture, pattern and colour. They are used



3 PATTERN

1

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.

is a symbol or shape that is



LINE Δ

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



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 GEOWETRIC SHAPES around it. The space between the shapes is called 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.

TONE

is the lightness or 10 7 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.

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.



8

7

6

5

4

з

2

1





9

is the size of one object in relation to the other objects in a design

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.



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.

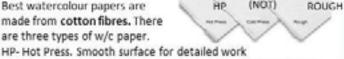


CP (NOT)

b)

WATERCOLOUR PAPER:

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



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.

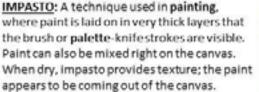
ACRYLIC PAINTING BRUSHES: A good selection of round and flat stiff synthetic brushes. Palette knives.

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.

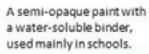
b) A Tonal Under-Painting A layer of paint applied first that acts as a foundation for the painting with some built in contrast and tonal values.







7 POSTERPAINT:





8 OIL PAINTS: is a type of slowdrying paint that consists of pigment suspended in a drying oll, 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:

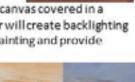
This is an art form which involves combining different materials with paint to create a whole New artwork.



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 8 KNOWLEDGE ORGANISER - AUTUMN TERM



Art - Photography & Critique





Still Life -Inanimate objects -Simple background such as fabrics, wood & plain surfaces lighting usually from the side, usually natural



Types of Photography

Landscape

-Shows space within the world- think 'land' to remember, but can include sea -Can make use of water for reflections -Often symmetrical -Usually all in focus

Portraiture -Photo of a person or a group of people

-Plain background -Face fills the frame -Focus usually on the

eves -Controlled lighting -Can be posed or natural

Critiquing artwork You need a specific vocabulary to comment on all the elements of art. Here are some to get you started.

Colour

Colour is very important. No matter what type of artwork colour helps define the piece and the artist. A lot of artwork can be determined on who did the work jut by looking at the colours.

- Bold
- Vibrant
- Subtle
- Pale
- Earthy
- Naturalistic
- Harmonious
- Complementary

Shape

Art comes in various shapes whether it is a painting or a sculpture. All will contain shapes.

- Organic
- Curvaceous

- Elongated

Texture can be actual (it exists) or visual (made to look like it exists). It is often used when referring to clothing, furniture and hair.

- Rough
- Fine
- Smooth
- Coarse
- Uneven

Movement

Movement is seen in every piece of art. Movement helps to create or define a piece of art.

- Swirling
- Flowing
- Dramatic
- Still

Tone

•

This will describe the light and dark areas in a piece of art.

- ٠ Subtle
 - Contrasting
 - Muted
- Dramatic

Contrast

This relates to the differences of the elements in an artwork.

- Dramatic
- Subtle
- Strong

Scale

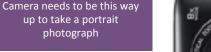
This relates to the size of the work and the size of the objects in relation to each other.

- Large
- Small
- Intimate
- Miniature
- Monumental
- Distorted

Line

Line is art is similar to how a musician follows lines and creates expression using notes played for different lengths of time.

- Flowing
- Delicate
- Simple
- Bold Thick
- Thin



2. How to use the camera

Shutter

Portrait mode

photograph

The large round button. Hold half way down to focus, listen for the beep, then hold all the way down to take.

On/off button

Strap ALWAYS on wrist



3. Tips

-Do not use flash (especially indoors)

-Make sure your lighting is even -Be still when you take your

shake

-Make sure your image is focused before you take it

- -Use simple backgrounds; plain walls

-Get closer. DO NOT use zoom -Don't rush

-Take more than one photo

 Geometric Angular

Texture

Subject Contents

YEAR 8 KNOWLEDGE ORGANISER - AUTUMN TERM

8



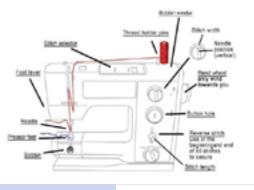
Art - Textiles and Clay



TEXTILES

1.SEWING MACHINE

A machine with a mechanically driven needle for sewing or stitching cloth.



2. HEAT PRESS	Straight stretch stitch		
	Lightning bolt stitch	111111	
	Three-step giggag stitch	~~~~~	
	Elgzeg stitch	~~~~~	

A machine which uses heat and pressure, to transfer a design or a graphic on another surface, and to heat and fuse man-made materials.



3. BATIK

A method (originally used in Java) of producing coloured designs on textiles by dyeing them, having first applied wax to the parts to be left undyed.



Key Stage 3

Do not use ANY equipment before training

4. TAKE CARE

Electrical equipment Tuck in ties Tie hair back No water near equipment Be aware of sharp/hot objects Electrical machines, take care with wires

Handstitching

Needles/Pins - Use a pin cushion Pick fabric scraps off the floor Scissors – pass safely

Clay

No eating/drinking whilst using clay ALL equipment to be wiped with damp cloth Wear an apron Pass knives safely Clear clay from floor

Applique

5. Couching



Stitching by hand









CLAY MAKING

6. Clay Equipment + Process

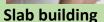
Fire = method of heating clay Kiln = oven in which clay is fired **Bisgue ware** = clay that has been fired to 1000oC Greenware = clay that has not been fired Board, guide sticks, rolling pin for rolling out clay to an even level **Tools** = for joining **Slip** = clay glue **Knives** = for cutting only

Pinch pot 7. Greenware



Bisqueware









Coil pot







Subject Contents

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Art - Surrealism



1.

Α. Β.

С.

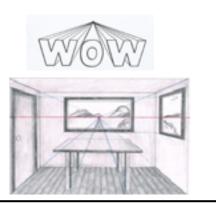
D.

Ε.

One Point perspective

A drawing method that shows how things appear to get smaller as they get further away, converging towards a single 'vanishing point' on the horizon line. It is a way of drawing objects upon a flat piece of paper (or other drawing surface) so that they look three-dimensional and realistic.

Year 8 Project 1 SURREALISM





https://www.tate.org.uk/kids/explo re/who-is/who-rene-magritte

Е

3.

Artist focus **Rene Magritte**



The shape and outline of something visible against a contrasting background (c) **Distorted scale** An unfamiliar scale on a familiar object or image (d) A dominant or recurring idea in an artistic work В С D



Literacy Focus

Metamorphosis

Juxtaposition

Silhouette

Motif

A.





The transformation of one thing into a completely different one (a)

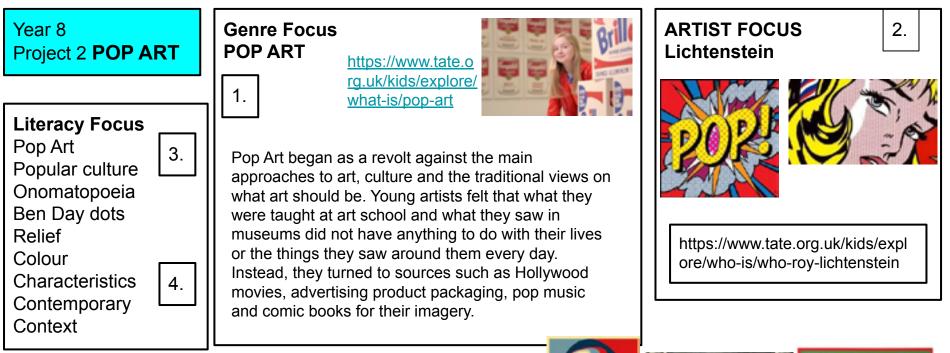
Two things positioned close together with contrasting effect (b)



5.

Art - Pop Art





Pop Art is: **Popular** (designed for a mass audience) **Transient** (short-term solution) **Expendable** (easily forgotten) **Low cost, Mass produced Young** (aimed at youth) **Witty, Sexy, Gimmicky, Glamorous, Big business**



Shepard Fairey James Rosenquist Peter Blake

D&T - Apron Project 1

Year 8 Design and Technology TEXTILES / APRON Knowledge Organiser

Smart Materials

Smart materials

A smart material has a property that can change depending upon its environment. This change can be reversed if the environment changes again. For example, in some sunglasses the lenses get darker when the light gets brighter; when the light dims, the lenses become clear again.

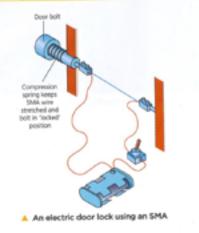
Examples of smart materials

Smart material	Smart property	Examples of use	
Thermochromic pigments	Change colour with temperature	Plastic strip thermometers Hugs or spoons that change colour when he Test strips on betteries (a printed resistor under the film generates heat when current flows through it)	
Photochromic pigments	Change colour with light	Lenses in sunglasses that get darker as the light gets brighter Security markers that can only be seen in ultraviolet light	
Shape-memory alloys (SMA)	If bent, will return to their original shape when heated (either directly or when an electric current is passed through them)	Spectacle frames Sensors in fire sprinkler systems (heat causes the change in shape) Electric door locks	

Interactive textiles

Conductive threads

Conductive fibres and threads made from corbon, steel and silver can be waven into testile fabrics and made into clothing. Conductive threads can also be seen into a product to connect a circuit. Common uses include performance monitors for athletes, GPS tracking systems and heating elements, or well os communication devices, such as mobile phones.



Environmental Factors

When a product is designed, the designer doesn't just think about how it will work. They may have to alter the design due to the effect it has on the environment, our society or the economy.

Environmental challenges

Products can affect the environment in many ways:

- The materials that are needed to make them might use up natural resources.
- The processes used to make them may need energy.
- The way they are used may affect the environment, for example electrical items need energy.
- When they are no longer needed, disposit them may cause pollution.

Designers must consider the impact that the products will have on the environment. One method of doing this is to apply the 6 Rs of sustainability when designing a product.

The 6 Rs of sustainability



The recycle logo shows that a product can be recycled

Refuse	Is the product necessary?
Rethink	Are there alternative materials or design options that are more sustainable?
Reduce	Can the product be made from fewer materials? Can the amount of unsustainable materials be reduced?
Reuse	Can parts of the product be reused in a different product?
Recycle	Can the materials used be recycled? Is the product made from recycled materials?
Repair	Can the product be repaired rather than being thrown away if it breaks?

A Designers must products will ha method of doin sustainability v

YEAR 8 KNOWLEDGE ORGANISER - AUTUMN TERM

D&T - Apron Project 2

Year 8 Design and Technology TEXTILES / APRON Knowledge Organiser

Composites

materials it is made from.

buildings and bridges.

A reinforced concrete bridge

A composite material is made up of two or more

that they are made from are combined. If you

look at the structure of the composite material

concrete. This contains cement, which has very

good tensile strength. It is widely used to build

good compressive strength but poor tensile

under a microscope, you can still see the separate

One of the most common composites is reinforced

strength, with steel reinforcement bors, which have

different materials. The properties of the materials

New Materials

The development of new materials can offer improved properties or combinations of properties that were not previously possible. In turn, this allows the development of improved or completely new products. This section outlines some of the recent developments in materials.

Graphene

Graphene was discovered in 2004 and is a form of the chemical element carbon. It is harder than diamond, about 300 times stronger than steel and conducts electricity better than copper. It is also extremely flexible, which is unusual for such a tough, strong material.

Graphene flakes are already being used to moke ink that conducts electricity, and sheet graphene is used in some soke cells that make electricity from sunlight. Although graphene is still in the early stages of development, manufacturers are investigating its use for touchacreems. This could lead to folidable phone scorens and televisions.



A sheet of graphene

Glass-reinforced polymer (GRP, also called fibreglass) reinforces a polymer with strands of glass fibres. The polymer is flexible and the glass fibres are strong but brittle. Together they make a composite that is tough and strong. GRP is used to make hulls for boats.

Similarly, carbon-reinforced polymer (CRP) reinforces a polymer with carbon fibres. This is even stronger than GRP. CRP is used to make crash helmets and the frames for high-performance racing bikes.



Social and Moral Issues

Social challenges

Products can have both positive and negative effects on people. For example, the ability to play music from a phone or MP3 player gives people entertainment no matter where they are. However, if the music is too loud, it could also damage the user's hearing. Further, the noise from the earphones can irritate other people, for example fellow passengers on public transport. The designer has to consider both the wants of the user and how the design will affect other people.

Another social issue is the working conditions and safety of the people who manufacture products.



 Listening to music while on public transport may irritate other passengers

In the UK there are very strict laws regarding this. However, not all countries have these rules in place. For example, in some countries child labour is used to make products, with children working long days in harsh conditions. Some customers may not buy products if they have been made in ways they do not agree with.

Economic challenges

The economy is the way money is made, organised and used by a society. Successful designs can have a really positive impact on the economy. If a product sells well, the company producing it can open new factories, creating more jobs and paying more workers. The more **profit** a company makes, the more tax it pays, which helps to fund public services such as healthcare and education. However, if an economy is not performing well and people are less well-off, it might be difficult for a designer to get the money needed to develop a product.



sustainability - the level to which resources can be used without them becoming unavailable in the future.

reusing - using the parts of a product in a new product, without reprocessing the materials.

recycling - the reprocessing of materials for use in new products.

social issue - an issue that has an impact on a community or group of people.

economy - how money is made, organised and used in a society.

profit - the money that a company makes after all of its costs have been paid.

Year 8 Design and Technology Knowledge Organiser Board Game

Branding

You can consider a brand as the idea or image people have in mind when thinking about specific products, services, and activities of a company, both in a practical (e.g. "the shoe is lightweight") and emotional way (e.g. "the shoe makes me feel powerful").

Logos with meaning



The yellow arrow in their logo starts at the letter 'a' and ends at the letter 'z', implying that they sell everything from a to z. The arrow also represents a smile, with the arrowhead being a stylized dimple or smile line. The smile indicates the happiness

Key terms

Branding	A logo or image associated by the public
Cooperate image	The branding of a company
Corporate identity	The qualities or values a company wishes to be associated with and recognised by and its

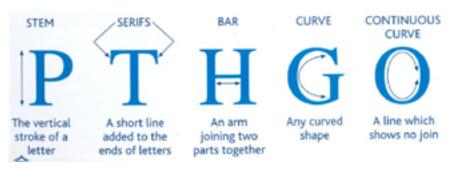
Typography

In essence, typography is the art of arranging letters and text in a way that makes the copy legible, clear, and visually appealing to the reader. Typography involves font style, appearance, and structure, which aims to elicit certain emotions and convey specific messages. In short, typography is what brings the text to life.

<u>Key terms</u>

Typography	The art form of letter style and design
Font	A specific letter type consisting of upper and lower case letters. You can change the style of
Type face	The style of the text you can use, for example
Kerning	Adjusting letter space to achieve the best visual

The parts of a letter.



HIWCS

Year 8 Design and Technology Knowledge Organiser Board Game

Common print processes

Because there are so many variations in printing surfaces, the quantity of prints required, the quality of the print and the costs involved, a range of different print processes have been invented.

Print process	Common use	Advantages	Disadvantages	Cost (10 = high)	Print quality (10 = high)
Offset lithography	Newspapers Magazines Books	Most common method High quality Fast Prints onto paper extremely well	Expensive set-up costs	5	9
Flexography	Packaging Corrugated boxes Shopping bags 3D surfaces like bottles	Very fast	Expensive set-up costs	6	8
Screen printing	Short print runs T-shirts Big posters	Good for short print runs Can print on absorbent surfaces	Not as good quality as the other processes Slow	4	6
Gravure	Expensive high-quality magazines Stamps	Best quality print process Very fast	Very expensive setup costs	8	10
Laser	One-off items	Immediate printing No set-up costs	Very expensive individual print	10	7





Paper and boards

Why are there so many different types of paper?

We all use many types of paper and board in graphics. They are made from the vegetable fibres found in wood, which are carefully extracted through the process of crushing wood to make a 95 per cent waterbased pulp. This looks a bit like milk. It is then refined by being passed through a series of dryers and rollers to achieve the basic quality that paper-makers need for board or paper.





Weight and thickness

Paper is sold by weight in grams per square metre (gsm) up to 220 gsm, when it is called board. Board is sold and measured for thickness in units called microns, represented by the symbol μ m. There are 1000 microns in 1 mm and a typical birthday card is around 300 microns thick, compared with the paper this book is printed on which is about 90 microns thick and 90 gsm in weight.

Recycling

Virgin paper makes up 90 per cent of all paper, and the remaining 10 per cent of paper has some recycled content. Compared with recycled paper, virgin paper tends to be stronger and easier to make whiter. Virgin paper is used generally for food containers because it reduces the contamination risk to the food products.

It is also possible to make paper from all sorts of materials other than wood pulp, such as corn, straw, cotton and hemp, and each of these materials gives the paper different properties. It is important that we try to recycle as much as possible in order to try to save our planet from additional global warming.

D&T - LED Desk Tidy 1



Year 8 Design and Technology Knowledge Organiser LED Desk Tidy

Electronics components—input, output and passive

Input devices

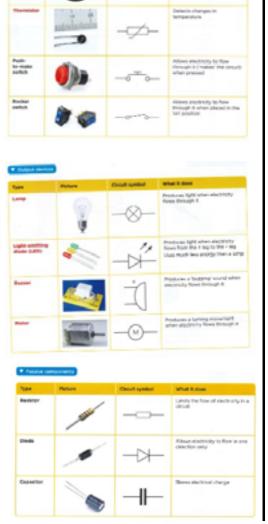
An input device is usually a sensor or switch. It detects a signal from the environment around it, such as light, temperature or movement (for example, when a switch is pressed). The input device normally transforms this signal into an electronic signal.

Output devices

An autput device transforms the electronic signals from the process blocks in a system into signals that we can understand in the 'real world', such as light, sound or movement.

Passive components

If a component is not an input, process or output device, or a power supply, then it is usually a possive component. Passive components are needed to allow the input, process and output devices to work properly. They do not add energy into a circuit and do not use electrical power to carry out their function.



What it does Detects changes in light

Microcontrollers

Microcontrollers are quickly replacing computers when it comes to programming robotic devices. These microcontrollers are small and can be programmed to carry out a number of tasks and are ideal for school and industrial projects. A simple program is written using a computer, it is then downloaded to a microcontroller which in turn can control a robotic device.

PIC MICROCONTROLLERS A GENE INC MICEOCONTROLLER CIRCUIT WIZARD SOFTWARE USED TO PROGRAM THE PROGRAMMABLE CIRCUI GENE IPC MICROCONTROLLER Advantages They can be programmed to perform many different tasks such as timing, counting and reading sensors. Can be reprogrammed many times, allowing circuits to be used • for different things. Makes circuits smaller, one of them can replace many nonprogrammable components saving many and reducing the amount of waste produced. Disadvantages • They can cost more than most non programmable components. This means they may not be the best option for simple circuits. Access to a computer and software is needed to program them.

It the system doesn't work, then checks need to be made on both the electronic circuit and the program. This can take time.

D&T - LED Desk Tidy 2

Year 8 Design and Technology Knowledge Organiser LED Desk Tidy

Flow charts

Programming flow charts

This is a flow chart representing the making of tea. It starts with filling the kettle with water all the way through every possible stage. Imagine a robot had to be programmed to perform this basic task. The programmer would have to give the robot every instruction. Remember - computers will only do what we instruct then to do. They cannot not decide anything for themselves.

Manufacturing flow charts.

Planning the manufacture of a design, is an important aspect of the design process. Plain flowcharts are often associated with planning a mass production line, so that thousands of a product can be manufactured efficiently in a factory. At the beginning of the century, the first mass production line was set up in the USA. The Ford Motor Company set up a 'line' of workers who put together each 'Model T' car. The production line was composed of hundreds of people, each doing only one job. When you plan your production line, you need to keep each stage of manufacture very simple. This is planning for 'mass production'

Common flowchart symbols

vmbol	Name of symbol	Typical use in a flowchart program
\frown	Start/end	Marks the start or end point of a program
\bigcirc	Decision/compare	Checks whether a digital input is 'en' or 'off', or whether a sensor value is within a certain range
	Process	Performs various processing functions, such as counting and timing
	Ingest/output	Turns an output device 'an' or 'aff
	Sub-coutine	Activates a separate flowchart, then returns to the original flowchart

Computer-aided manufacture (CAM)

Computer-aided manufacture (CAM) is about the manufacturing process linked to a computer system. There are also lots of advantages when using CAM, for example it ensures that each product is produced exactly the same as the previous one. CAD and CAM can be linked together by converting the numerical data of a design into machine data that can be used to drive the machine.



Examples of computer-aided design machines



Laser Cutting is a non-contact process which utilises a laser to cut materials, resulting in high quality, dimensionally accurate cuts. The process works by directing the laser beam through a nozzle to the work piece. A combination of heat and pressure creates the cutting action



3D printing, also known as additive manufacturing, is a method of creating a three dimensional object layer-by-layer using a computer created design. 3D printing is an additive process whereby layers of material are built up to create a 3D part

D&T Food Technology - Special Diets



Knowledge Organiser – Year 8 Food Special Diets

Food Allergy	Food Intolerance
Symptoms come on within seconds and include an itchy, red rash. Swelling of the lips, tongue, eyes and face Stomach pains, diarrhoea and vomiting .	Symptoms come on more slowly, are long- lasting and include bloating, stomach cramps and diarrhoea.
It is easily diagnosed with tests.	It's difficult to diagnose as there are only a few reliable tests and you may be intolerant to a number of different foods.
Even a tiny trace of the food can cause a reaction.	A reasonable portion of food is usually needed to cause a reaction
In extreme cases it can be life threatening.	It's never life threatening, symptoms are often bloating and stomach cramps
Most allergic reactions to food are to peanuts, milk, soya, nuts from trees, eggs and wheat.	Most common ones are wheat, gluten, dairy, yeast and alcohol.

Diabetes

There are two types of Diabetes:

Type 1 occurs in children and young adults



Type 2 occurs in adults and is linked to a poor diet and not exercising enough.

Diabetes is a condition that causes a person's blood sugar level to become too high.

When you eat food, it releases glucose into your bloodstream.

Insulin (hormone) then moves the glucose from your blood to your cells, where it is then used to produce energy. If you have diabetes your body can't break the glucose down into energy.

BRITISH FOOD

British food is reared, grown and produced under strict guidelines and is some of the best quality world wide

Lactose Intolerance

- Lactose intolerance is the inability to absorb lactose the sugar in milk - into the digestive system.
- If lactose is not absorbed properly, it ferments (goes off) inside your stomach
- Symptoms include:

Stomach rumbling, increased wind, Diarrhoea, abdominal color nausea.

- You can get a test to see for sure from your doctor
- Cut back on certain food products like:
- · Cows milk, butter, cheese, certain breads and chocolate.

Diet

- There are many reasons why people choose to or even have to follow a special diet.
- There are also many other factors which affect what a person eats.
 - The food available to them
 - Time
 - Whether they can cook
 Their likes and dislikes
 - Culture and religion

Vegans eats no animal products at ALL! This includes red and white meats, fish, eggs and dairy. They also can't eat anything that comes from or is made by animals such as honey and beef stock.

A Vegetarian doesn't eat red and white meats, fish and who also avoids slaughter by-products such as gelatine (made from horns, hooves, bones etc).

There are many reasons why people chose a vegetarian diet:

- HEALTH-Reduce fat intake, decreases risk of heart disease, high cholesterol, no growth hormones etc.
- Religious reasons-Buddhism, Hinduism
- · Texture They don't like the way it tastes or feels in their mouth
- Animal Cruelty- Do not like the way animals are treated before they get to our plates



A vegetarian diet is considered healthy because of the emphasis....

on fresh fruit and vegetables. Protein is obtained mainly from bears, lentils, peas, nuts, tofu and wholegrain cereals, which are also rich in vitamins and minerals.

Coeliac's Disease



- Base your meals on starchy foods
- · Eat lots of fruit and vegetables
- · Eat more fish (1 portion of oily fish a week)
- Cut down on saturated fat and sugar
- Try to eat less salt
- · Get active and try to be a healthy weight
- Drink plenty of water
- Don't skip breakfast

Coeliac disease is a digestive disease that damages the small intestine. You struggle to digest and absorb gluten.

Gluten is a protein found in wheat.

Gluten is like a glue which holds food together. In bread dough it is what makes it stretchy when we knead it.

People with coeliac disease cannot eat cereals, pasta, grains and most processed foods.

Most food in supermarkets are now labelled to say if they are made with wheat or grain products because of people with Coeliac's.

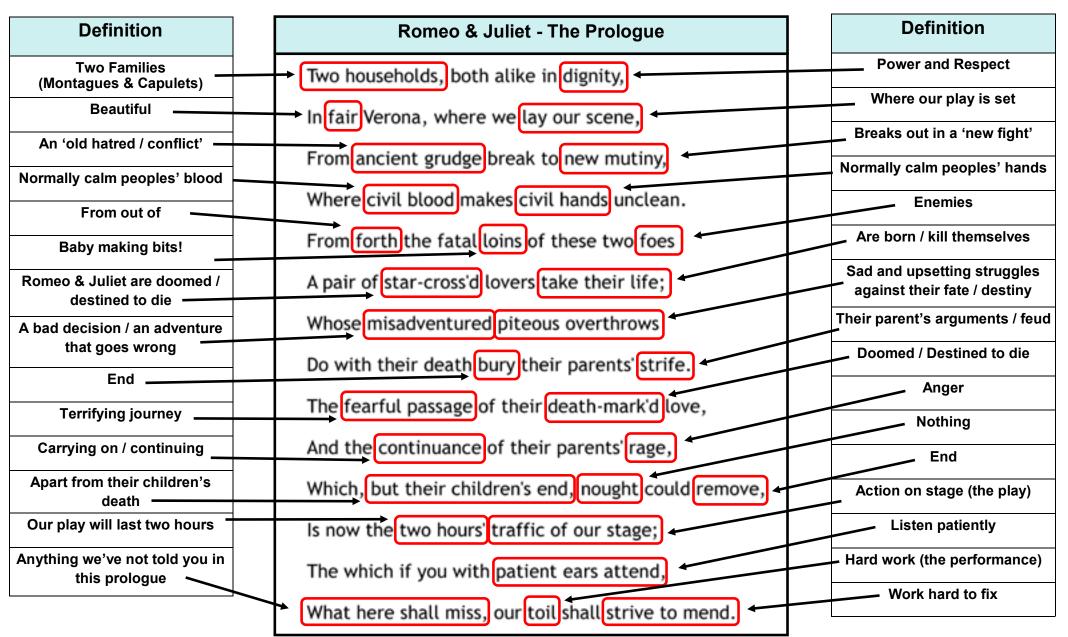
Subject Contents

ty foods Coeliac disease is a digestive dis

Drama 1







YEAR 8 KNOWLEDGE ORGANISER - AUTUMN TERM

Drama 2

Performance Style



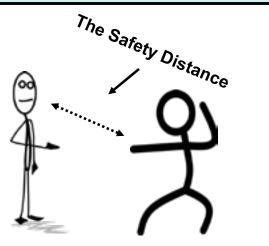
		Year 8 - Drama - Teri	m	
	Stage fights ar They have a be	e like stories. ginning, a middle and an end.		
	Term	Definition		
g	Masking	The way you hide the safety distance from the audience.		
tin	Safety Distance	The distance between your partner's face and your fist.		
Fighting	Eye Contact	How you check your partner is ready to do the next fight move.		
	Action	The movement of the attacker.		
Stage	Reaction	The movement of the target.		
S	Vocal Nap	The sound you make with your voice to show the impact.		
	Physical Nap	The sound you make with your body to show the impact.		
	Recovery	The reaction both the attacker and target have to the impact i.e. the attacker might shake their fist, as if it hurts, and the		

+

The Reduced Shakespeare Company's Performance of Romeo & Juliet has a specific style:

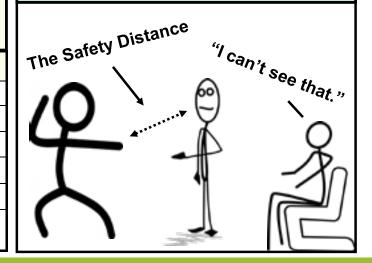
		Term	Definition
		Energy	The actors perform with lots of energy
		Choral Speech	The actors speak the same words at the same time.
ł		Choral Movement	The actors' gestures are in time with each other.
		Pace	The actors speak and move quickly.
		Sharp & Accurate	The actors' movements are precise and clear.
		Actions link to Words	The actors' gestures / movements link to the key words in the prologue. This is to help the audience understand the story.





Masking a Move

How to hide your safety distance.



English



DESCRIBING WORDS

There are three types of describing word: adjectives, verbs, and adverbs.

ADJECTIVES describe the attributes or features of a noun, e.g. the suspicious cat.

VERBS describe actions, e.g. the suspicious cat crept towards me

ADVERBS give more information on how or when an action happened, e.g the suspicious cat crept towards me menacingly.

NOUNS

Nouns are words for 'things', i.e. objects, concepts, people or places. There are three different types of noun.

CONCRETE NOUN – A word for an object we can see and touch, e.g. pencil, lamp, table, apple, school, phone, house.

ABSTRACT NOUN - A word for a concept or idea something that does not exist as a physical object, e.g. happiness, anger, honesty, courage, excitement, democracy.

PROPER NOUN – A word for a person place. These always start with a capital letter, e.g. Josie, Andover, Hampshire.

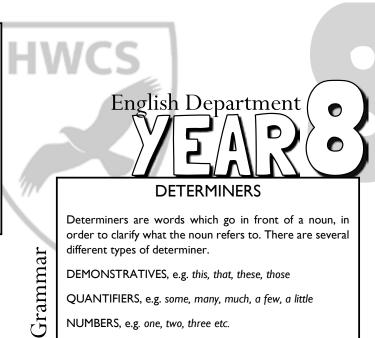
PREPOSITIONS

Prepositions are words that show us the relationship between things in a sentence.

They can tell us about the **location** of something, e.g. the cat sat **on** the cushion

They can tell us about the **time** that things happen, e.g. the cat sat on the cushion after she ate her food.

They can tell us about the **manner** in which things happen, e.g. the cat played with her toy mouse.



NUMBERS, e.g. one, two, three etc.

DISTRIBUTIVES, e.g. all, both, half, neither, each, every

DIFFERENCE WORDS, e.g. other, another

PRONOUNS are a special type of determiner. A pronoun is a word that stands in place of a noun, e.g. he, she, they,

his, her, their, our, my, your, this, that.

Term

Autumn

OBJECTS AND COMPLEMENTS

Subjects and objects are always things (nouns or noun phrases), but some clauses contain another element called a complement. A complement gives more information about the subject or object.

SUBJECT COMPLEMENTS give more information about the subject of a sentence, e.g. the cat looked happy and relaxed.

OBJECT COMPLEMENTS give us more information about the object of a sentence, e.g. the cat made losie laugh hysterically.

CLAUSE STRUCTURE

Sentences are built out of smaller units called **clauses** and **phrases**. The most basic type of sentence is called a simple sentence and consists of only one clause.

A clause must contain two elements: a subject and a verb.

The subject of a clause must be a noun or noun phrase.

Here is an example of a basic clause:



A clause can also contain a third element, called the object, which must also be a **noun** or **noun phrase**.

You can think of the subject as the 'thing' which does the action indicated by the verb. In the example above, Josie is the one laughing, which is why she is the subject of the sentence.

The object is the 'thing' which receives the action indicated by the verb. Here is an example of a clause with an object:



Here, Selma is the one being laughed at - she is not the one doing the laughing. Therefore, she is the object in the clause.

Most clauses in English follow the order subject, verb, object.

PUNCTUATION

Punctuation adds structure, order and clarity to sentences.

Commas are used to separate clauses in a sentence. This essentially means that they neatly divide up the different meanings and ideas in sentences. They can also be used to separate items in a list. Without commas, writing becomes a continuous flow of information that quickly becomes meaningless.

Apostrophes are used for two reasons: to show ownership, e.g. Josie's friend Selma, or to indicate where letters have been removed in contractions, e.g. didn't, don't, can't.

Colons are used before an explanation, or when you are about to add further information to a point. In this way, they work a bit like the word 'because'. Colons can also be used to introduce a list.

Semicolons are used to divide two closely related sentences.

French - Core Language



VERB INFINITIVES	PRESENT TENSE VERBS WITH "JE"	PAST TENSE VERBS WITH "JE"	
1-ETRE = to be6. REGARDER = to watch2- AVOIR = to have7. ECOUTER = to listen3- FAIRE = to do8. AIMER = to like4- ALLER = to go9. MANGER = to eat5- JOUER = to play	1- je suis = I am6. Je regarde = I watch2- j'ai = I have7. J'écoute = I listen3- Je fais = I do8- Je mange = I eat4- je vais = I go5- je joue = I play	1- je suis allé(e) = I went 2- j'ai joué = I played 3- j'ai regardé = I watched 4- J'ai mangé = I ate	
FUTURE TENSE VERBS WITH "JE" 1- je vais aller = I'm going to go 2- je vais jouer = I am going to play 3- je vais regarder = I am going to watch 4- je vais manger = I am going to eat	French y8 Core Language	TIME MARKERSPRESENTPAST 1- hier = yesterday 3- la semaine dernière = last week1- quelquefois = sometimes 2- tous les jours = everyday 3- une fois par semaine = once a week 4- souvent = often 5- soir = evening 6- matin = morning 7 – d'habitude = usually	y
OTHER VERY IMPORTANT PHRASES 1- nepas = not 2- ne jamais = never 3- il y a = there is / il n'y a pas de = there isn't 4- dans = in	CONNECTIVES AND INTENSIFIERS 1- d'abord = firstly 2- puis / ensuite = then 3- enfin = finally 4- et = and / ou = or 5- mais = but 6- cependant = however 7- si = if 8- quand = when	OPINIONS 1- j'aime = I like j'ai horreur de = I really hate 2- je n'aime pas = I don't like 3- j'adore = I love 4- Je déteste = I hate 5- je trouve ça = I find it 6- parce-que / car c'est= because it is	ng

YEAR 8 KNOWLEDGE ORGANISER - AUTUMN TERM

French - Ou J'Habite



Là où j'habite • Where I live

What is there ?
There is
a café
a shopping centre
a leisure centre
a castle
a cinema
a church
a hotel
a market
a park
a restaurant
a stadium
an ice rink
a swimming pool
shops
museums
There isn't a /
There are no

Les directions • Directions

Pardon	Excuse me
Où est?	Where is ?
Où sont ?	Where are ?
C'est	It's
à gauche	left
à droite	right
tout droit	straight on
au carrefour	at the crossroads
entre	between
derrière	behind
devant	in front of

Les domiciles • Homes					
j'habite	1 live				
la maison	house				
l'appartement (m)	flat				
la rue	street/road				
à la campagne	in the country				
dans un village	in a village				
dans une ville	in a town				

Qu'est-ce qu'on peut faire à ...? • What can you do at/in ... ?

je peux

tu peux

Ican you can (singular, il/elle/on peut nous pouvons wecan vous pouvez ils/elles peuvent aller au concert faire du bowling faire du roller faire du skate faire du vélo faire une promenade en barque jouer au babyfoot et au flipper au café manger au restaurant visiter les jardins/ les monuments/

informal) he/she can/we can you can (plural/formal) they can go to a concert go bowling go roller-skating go skateboarding go cycling go on a boat trip play table football and pinball at the café

eat at a restaurant visit gardens/ monuments/ museums

Adjectives

les musées

Most adjectives come after the noun they describe. But some common adjectives come before: joli gros VIEUX* nouveau* beau* pet/t grand Thabite dans une jolie petite maison blanche. These adjectives have a special form in front of a masculine noun that begins with a vowel or a ilent 'h': vieil, nouvel, bel

un vieil immeuble, un nouvel ami, un bel appart'

FRENCH Y8- TOPIC 1 - OU J'HABITE

Les pièces • Rooms Chez moi, il y a ... In my home, there is/ la chambre (de mes parents/de ma sœur ma chambre la cuisine le jardin la salle à manger la salle de bains le salon les toilettes

Les meubles et les appareils

Il n'y a pas de ...

l'armoire (f)

le canapé/la chaise

la machine à laver

la télé (satellite)

le bureau

la douche

la fenêtre

le frigo

le lit

le lavabo

	are	
	(my parents'/my	
0	sister's) bedroom	
	my bedroom	
	kitchen	
	garden	
	dining room	
	bathroom	
	living room	
	toilet	
	There isn't a/There	
	aren't any	

Furniture and appliances

wardrobe

sofa/chair

shower

window

wash basin

(satellite) TV

washing machine

fridge

bed

desk

ALLE	R
Je	vais
Tu	vas
II / elle / on	va
Nous	allons
Vous	allez
lls / elles	vont



Les prépositions •	Prepositions
dans/devant	in/in front of
derrière	behind
entre	between
sous	under(neath)
sur	on
à côté de	next to
à droite de/à gauche de	on the right of/on the
	left of

Les adjectifs • Adjectives

_	-
petit	small
grand	big
beau/belle	beautiful
joli(e)	pretty
vieux/vieille	old
nouveau/nouvelle	new
neuf/neuve	brandnew
moderne	modern
confortable	comfortable
gros(se)	big (for animals and
	objects)/fat

French - Mes Loisirs



À la télé • On TV	a ng a ng a ng ang ang ang ang ang ang a			FRENCH	1 Y8- TOPI	C 2 - MES LC	ISIRS
je regarde les dessins animés les documentaires les émissions de sport les émissions de télé-réalité les émissions musicales les infos les jeux télévisés la météo les séries les séries policières les séries américaines Mon émission préférée, c'est j'adore j'aime bien je n'aime pas je ne regarde jamais	I watch cartoons documentaries sports program reality TV shows music shows the news game shows the weather series police series American series My favourite programme is Hove Hike I don't fike I never watch	 je ne suis pas fan de I'm ne j'ai une passion pour les I how j'ai horreur des I reali je déteste I hote les comédies come les films d'action actio les films d'action actio les films d'arts martiaux mart les films d'aventure adve les films d'aventure adve les films de scien science-fiction 	a fan of not a fan of ve a passion for lly dislike e edies on films antic films tial-arts films enture films asy films or films nce-fiction films 'avourite actor is	Je fais beaucoup de I do l choses. Je fais des recherches I do r pour mes devoirs. ho Je fais des achats. I buy Je fais des quiz. I do o Je joue à des jeux en ligne. I play Je mets à jour ma page I upd perso. Je vais sur mes sites I go o préférés. sit Je vais sur des blogs. I go o Je vais sur des blogs. I go o	d emails. lots of thing_ research for my omework. r things. quizzes.	II e Elle e One Nousez	ent of - <u>er</u>
je ne rate jamais	I never miss			er soir • Last night		PAST of -ER verbs	
	je lis une BD un livre	-ce que tu lis? • What are you reading? I'm reading a comic book sur les animaux d book on animals	u J'ai J'ai J'ai J'ai	discuté. I discussed/c écouté la radio. I listened to t envoyé des SMS. I sent text me joué à des jeux I played gam en ligne. posté des photos. I posted phoi regardé la télé/des I watched TV	the radio. essages. nes online. tos.	To form the past of <u>er</u> verbs, 1- we use AVOIR J'ai Tu as Il a Elle a	J'ai regardé Tu as regard Il a regardé Ella a regardé

clips vidéo.

J'ai surfé sur Internet.

J'ai tchatté sur MSN.

J'ai téléchargé des

chansons.

clips.

songs.

I surfed the net.

I chatted on MSN.

I downloaded some

un livre d'épouvante

les célébrités

un roman fantastique

un roman policier

un roman d'amour

un magazine sur

un manga

a horror story

a magazine about

celebrities

a fantasy novel

a manga

a thriller

a love story

Subject Contents

Elle a regardé

On a regardé

Nous avons regardé

Vous avez regardé

Elles ont regardé

Ils ont regardé

Ona

Nous ovens

Vous avez

Ils ont

verb.

Elles ont

2- We chop off the ER and

write a "é" at the end of the

Geography - Weather & Climate



Year 8 Geography Knowledge Autumn 1: Wild Weather

Weather	Climate		UK Weather	Extreme Weather
 Weather: Day to day atmospheric conditions. Pressure drives the global circulation system and ultimately our weather. Meteorologists record and monitor the weather through weather stations and satellite images. The MET office are the main weather reporting organisation in the UK. 	Climate is the change in average weather over time. The UK's climate can be described as temperate maritime. Due to global warming many climates are changing rapidly. The most significant changes are being seen at the poles.		The UK weather changes day to day due to the many air masses battling over head.	 Extreme Weather Significantly different from the average weather. Causes damage to life and property. Three ways weather can be extreme. Temperature (heat waves, drought, blizzards) Wind (Tornadoes, Tropical Storms) Precipitation (Flooding, Hailstorms) Tropical storms are spiralling storms of wind and precipitation.
Case Studies	Tier 1 Vocabulary	Tier 2 Vocabulary		Skills
Beast from the East Cold and wintry conditions in the UK Caused by polar continental air mass. March 2018 Heavy snow, 10 people died, flights grounded, schools closed, millions in damage to the UK economy. Hurricane Irma Category 5 hurricane Widespread destruction across the Caribbean September 2017. Killed 129 people, millions were evacuated Billions \$ in damages recorded.	ExtremePrecipitationWeather,CauseTropicalEffectStorms,ImpactTyphoon,ResponseCyclone,MitigateHurricane,Saffir-SimpsonAtmosphere,ScaleRain, Sleet,ClimateSnow, HailChangeHigh PressureLow Pressure		Saffir-Simpson scale Vind speeds (for 1-mixte maximum surfatived winds) m/s kmots (un) mph km/h Pive a 70 m/s a 137 km a 157 mph a 252 km/h Four 58-70 m/s 113-136 km 130-156 mph 209-251 km/h Three 53-58 m/s 96-112 km 111-129 mph 178-208 km/h Three 43-49 m/s 83-65 km 96-110 mph 154-177 km/h One 33-42 m/s 64-42 km 74-95 mph 119-163 km/h	An line graph is often used to show a trend over time. Advantages: It's better for seeing the rate clearly. Simple to read and understand. Disadvantages: It's harder to compare. It can be difficult to make out exact values for data

Geography - Remarkable Resources



Year 8 Autumn 2-Geography Knowledge Organiser : Remarkable Resources

	1	1	
Earth's Natural Resources	Location and Distribution	Humans' Use of Resources	Types of Energy
A resource is something of use. The main resources are; Food Energy Minerals water.	Resources are not evenly spread around the world e.g. oil shown in dark orange. Demand and supply drives international trade and it is worth billions of dollars.	HICs have become very dependent on resources and have often depleted their own supplies. They therefore depend on links with NEEs and LIC's to supply them with resources.	Fossil fuels Coal, oil and natural gas take millions of years to form. Cheap to produce, Release a lot of energy when burnt However, produce a lot of
Tani Barti Molone Pig Bargy Romalin Diring ware Diring ware Diring ware and the Construction Diring ware and the Construction Diring		Humans have over exploited many resources having a negative impact on the environment e.g. deforestation.	pollution. Renewable energy Source will not run out including; Solar, Geothermal Hydropower, wind and biomass. They are expensive to set up Generate less energy but release minimal pollutants.
The Middle East	Tier 1 Vocabulary	Tier 2 Vocabulary	Skills
The Middle East is south east of the UK, in Asia. It is rich in oil (fossil fuel) and therefore exports to many HICs like the UK. There have been many conflicts in oil rich countries.	Natural Resources Fossil Fuels Non-Renewable,,, Environment Mining Deforestation Water Crisis, Commercial Fishing,	Consumption Mechanisation Fracking Food Security Sustainability Demand and Supply	A pie chart shows how data sets relate to one another. <u>Advantages</u> : Summarized dataset in visual form Visually simpler than other types of graphs. <u>Disadvantages</u> : Too many pieces of data make a pie chart becomes less effective.

YEAR 8 KNOWLEDGE ORGANISER - AUTUMN TERM



Year 8 History: Autumn Term		The Industrial Re	: 1. The Industrial volution in Britain brou had a big impact on pe	ught huge technological	Empire		of territories one single tate	The British Empire ruled approximately
Keyt	time periods:		nanges were positive.	opie s intest flowever,				25% of the world
			Key Words		Colony	A group	of people	Britain had
Neolithic	9000 BC -3000 BC	Chronological	arranged in the arranged			build a se	country who ettlement in erritory, or	colonies in India and Africa
Bronze Age	3000 BC -1200 BC		order in which they happened	order		land		
Iron Age	1200 BC -600 AD	Migrate	To move from one place to another with the intention of settling	Lots of people choose to migrate to find better places to live.	Entrepreneur	Someone to create business	who decides or run a	Entrepreneur 's see a need for something and start a business to
Roman Britain	43 AD -410 AD	Trade	Buying and selling goods and services	People often trade things they have made for money	Philanthropist	A person	who gives	fill it Philanthropists
Anglo Saxons	410 AD -1066 AD	Economy	To do with trade and money	War changes a country's economy		generous other peo	ly to help ople	often give a lot money to charity
Medieval	1066 AD -1500 AD	Industry A group of businesses that make or sell similar	The coal industry were popular in the Northern parts of Britain.		Topic s	pecific words		
Early Modern	1500 AD -1750 AD		products or perform similar services		Urbanisatio	on		becoming cities and Il towns or farmland.
Industrial	1750 AD - 1900 AD	Agriculture	The practice of farming	Due to the growth of industry people moved away from agriculture.	Britain used to work,		from a focus on	
20th Century	1900 AD - 2000 AD	Revolution	A rapid or drastic change	Moving from an agricultural economy to one base on industry is a revolution			re very poor people in o work, in the past, in or food and shelter.	



Part 1. Why did Britain become the Workshop of the World?

Notable InventorsJames Hargreaves -
Spinning JennyImage: ColspanseIsambard Kingdom Brunel
StreagesImage: ColspanseJames Watt - factoriesImage: ColspanseGeorge Stephenson -
canalsImage: ColspanseSir Humphry Davy -
miners safety JampsImage: Colspanse

Raw materials

The British isles was home to huge supplies of raw materials such as **iron ore, lead, tin and coal**. These could be used to provide materials for factories, iron for trains and engines. Surplus raw materials could be sold abroad for profit

Trade & empire Britain had a vast global empire. The colonies of the empire (such as Canada, India & South Africa) provided both raw materials and a market for British produced goods. Some products such as cotton and sugar were produced via slavery. Transport Improved transport via toll roads, canals and railways allowed goods and raw materials to be quickly and easily moved.

Rising population Between 1750 and 1900 the population rose by 260%. More people meant more workers for factories and mines as well as customers for goods.

Part 2: Rural to Urban Migration

Reasons to stay in rural areas

- Less pollution from mines and factories.
- Easier access to food.
- Smaller communities- everyone knows everyone.
- Cities were often troubled by crime, disease and overcrowding.

Reasons to move to urban areas

- More job opportunities offered by factories and the development of new industries.
- Chances to earn higher

wages.

- Farming areas can suffer
- from seasonal unemployment.



Part 3: Life in Industrial Britain

Changes in transport

Canals and railways allowed heavy goods to be transported. By 1855 there were over 8,000 miles of railway. Much of this was built at a high cost in human life.

Poverty & the Workhouse

The 1834 Poor Law Amendment Act said that "able-bodied" poor could only receive help inside a Workhouse. The poor lived in these buildings and worked for food.

Mining

As the country needed more coal to fuel its factories so more people were sent underground to mine coal. This was a dangerous occupation due to the threat of- flooding, explosions, Roof collapse, breathing in coal dust (Black lung). **1842 Mines Act** attempted to improve working conditions for miners.

Living conditions in the East End of London

The murder of five women in the East End in 1888 caused people to pay more attention to living conditions in the Whitechapel area. The areas was a terrible place to live due to:

- Overcrowding and completion for jobs.
- Low paid, casual work (employment
- might be day by day)
- Disease such as typhus and chc
- Availability of cheap alcohol (especially gin).





Part 1: Who was the greatest architect of **Empire**?

Main people involved in building the British empire:

- 1. Cecil Rhodes- Controlled South African diamond trade. Ruled Rhodesia (Zimbabwe).
- John Locke- Head of the East India Company. Trade company 2. with its own private army.
- Queen Victoria- Empress of India. Ruled British empire. 3.
- 4. David Livingstone: Explorer- tried to spread

Christianity to the interior of Africa. 5. 5. James Cook- mapped southern hemisphere. Claimed New South Wales and New Zealand for

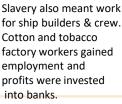
Britain.

Topic specific words				
Empire	A group of countries ruled by a single person, government, or country.			
Middle passage	The forced voyage of enslaved Africans across the Atlantic Ocean from Africa to the New World.			
Slavery	The practice. of people owning other people. Enslaved people have to work for the owners, doing whatever the owners ask them to do.			

Part 2: How did Britain benefit from the slave trade?

The trade triangle.

Goods from British factories (guns, metal goods, glass, beer etc.) were traded with West African tribes in return for slaves. Slaves were taken to the Americans (Middle Passage) and sold at auction. Money made from sale of slaves was used to buy goods produced by slave plantations (cotton, sugar, tobacco). These were then sold to buyers in Britain.





Part 3: What was life like on plantations?

Slaves who survived the voyage across the Atlantic were sold at auction. Families could be spilt up permanently. Slaves were branded to identify their new "owners".

Field slaves worked to produce cotton, sugar & tobacco. House slaves worked in kitchens, cleaned and did laundry. None were paid. Housing varied depending upon the owner.

Some "free" time allowed from socialising, music and dance.

Escape attempts, poor work or "disobedience" were often harshly punished by whipping and even murder.



	Source analysis
Provenance	Nature (what it it?) Origin (who? Where? where?) Purpose (why?)
Utility	How useful is the source?
Content	What does the source say/show?
Knowledge	What do you know about the topic?



Part 4: Was abolition just down to "white fellas in wigs"?

slave trade was abolished in the British empire in **1807.** Ownership was abolished in **1833.** Reasons:

- 1. Economics- slavery was making less profit.
- 2. Abolitionists such as Wilberforce, Sharpe & Equiano publicised the horrors of slavery. Made speeches in Parliament and organised petitions.
- 3. Slave rebellions- Slave rebellions on Haiti showed that it was possible to successfully overthrown slave owners.

4. Protest from white working class campaignerssome feared slavery in Britain would lead to job losses.



Part 5 :Should we be proud of the Empire?

Positives

- Abolished Hottentot law in South Africa which required black people to carry ID cards.
- Hong Kong provided a safe haven for Chinese fleeing the Taiping Rebellion
- Introduced Parliamentary democracy to Australia & New Zealand.
- In India- ended suti (practise of killing wives once husbands died). Introduced post, railways and cricket.

Negatives

- Slave trade saw over 13 million Africans kidnapped.
- Cloth trade in India was destroyed in order to help factories in Lancashire make money.
- Colonisation led to wars such as the Boer, Zulu & Opium Wars.
- Indigenous Australians were hunted for sport.

	Key Words	
Chronological	Events or dates arranged in the order in which they happened	Timelines have dates arranged in chronological order
Migrate	To move from one place to another with the intention of settling	Lots of people choose to migrate to find better places to live.
Trade	Buying and selling goods and services	People often trade things they have made for money
Economy	To do with trade and money	War changes a country's economy
Government	The group of people with the authority to govern a country	The government introduce new laws
Democracy	A government run by the people. Each citizen has a say (or vote) in how the government is run.	Britain is a democracy
Investment	The act of putting out money in order to gain a profit	People invest in businesses to gain profit



Year 8 ICT Knowledge Organiser

Computational thinking allows us to take a complex problem, understand what it is and develop solutions. These can be presented in a way that a computer, a human, or both, can understand.

<u>There are four key techniques (cornerstones) to</u> <u>computational thinking:</u>

- 1. **Decomposition** breaking down a complex problem or system into smaller, more manageable parts
- 2. Pattern recognition looking for similarities among and within problems
- **3. Abstraction** focusing on the important information only, ignoring irrelevant detail
- **4. Algorithms** developing a step-by-step solution to the problem, or the rules to follow to solve the problem

Key Vocabulary

Personal Data – data that can be used to identify an individual. This could be Name, date of birth or home address.

Digital Footprint

Is the information about a particular person that exists on the internet as a result of their online activity.

	Key vocabulary
Programming	The process of writing computer programs
Code	The instructions that a program users
Algorithm	A set of rules/instructions to be followed by a computer system
Variable	A value that will change whilst the program is executed
Sequencing	Performing one instruction after another
Selection	The program makes a decision (If Statement)
Iteration	The program repeating, looping infinitely or for a set m=number of times (For and While loops)

Who to contact if you have any concerns

Parent or Guardian
 ChildLine





- Teacher
- Another adult you trust (Aunt or Uncle, Grandparent, dinner lady etc.)

Maths - Autumn 1

Mathematics A	utumn Term 1	Year 8
Topic: RoundingRounding means making a number simpler but keevalue close to what it was.An integer is a whole number (it has no decimal place)We have three main methods of rounding:to a set place value (nearest 10, 100, 1000)to a set number of Decimal Places,to a set number of Significant FiguresVideo Links: Decimal PlacesSignificant Figures	Simplify:to multiply, di or subtracting to make0, etc.)Expand:to multiply outFactorise:to insert bra factors.	ivide or collecting like terms by adding an expression as 'simple' as possible t a bracket ackets by taking out all the common
Topic: Angles in PolygonsA polygon is a 2D shape with straight sides.A regular polygon has all sides equal and all angleAngle Sum of a polygon = $(n - 2) \times 180^{\circ}$ For a regular polygon:Exterior angle = $\frac{360^{\circ}}{n}$ Interior angle = $\frac{(an_{end})^{\circ}}{n}$ (where $n = number of sides$)Video Link: Angles in Polygons	es equal.order. Each element of Linear sequences incr each time.gle sum)Geometric sequences one term to the next.nThe Fibonacci sequent two terms together to r	things (usually numbers) that are in f a sequence is called a term . rease or decrease by the same amount multiply by a fixed amount to go from nee is continued by adding the previous make the next. 1, 1, 2, 3, 5, 8, 13,)

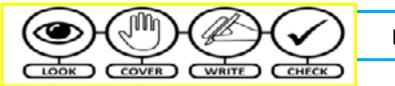
Maths - Equations 2



Mathematics Autumn ⁻	Ferm 2Year 8
 Topic: <u>Percentages</u> Percentages can also be written as decimals and fractions. To convert a percentage to a decimal, divide by 100. To convert a percentage to a fraction, write it over 100. (Percentages are fractions with a denominator of 100) We use a multiplier to calculate percentages with a calculator. 	Topic: <u>3D Shapes and Volume</u> Plans and elevations are scale drawings, showing a 3D shape from three different angles:Plan View (from above), Front Elevation and Side Elevation.Volume: the amount of space inside a 3D shape. Volume of a cuboid = Length × Width × Height
A multiplier is the percentage written as a decimal. Video Links: Using a percentage multiplier Percentage Increase/Decrease Reverse Percentages Topic: Equations An equation shows that two things are equal. It will have an equals sign.	Volume of a Prism = (Area of the face) × Length Video Links: Volume of a Cuboid Volume of a Prism Plans & Elevations
 Each letter in an equation is called a variable. Solve: When a question asks you to solve, you must calculate the value of the variable in the equation. Coefficient: the coefficient is the number touching the variable. 	
Video Links (solving equations): <u>Solving Basic Equations</u> Equations with the letter on both sides <u>Solving with Brackets</u>	

Music - Blues / Rock 'n' Roll



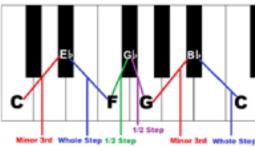


The 12-bar blues is	
made up of the three	1
PRIMARY chords (I, IV	
and V) in a key. In	
the key of C	
Chord I = C (C+E+G)	
Chord IV = $F(F+A+C)$	
Chord V - G (G+B+D)	
They follow the	
pattern shown here.	

					Th	e 12-	Bar B	lues in C	Маје	ж				
с с+1			′	с 6+Е+			'	с с+с			'	с с+с	'	1
F F + A			′	F F + д +			′	с с+с			′	с с+с		'
G 6 + 6	+0	1	1	F			1	с С+Е			1	с с+е	,	1

The Blues

Blues Scale Formula



The Blues scale is made up of a flattened third and seventh. The flattened fifth is also a sharpened fourth so can appear as an $F^{\#}$ or G^{b} (they are the same note).

This scale is used to improvise over the 12-bar blues using swung rhythms.

The blues emerged towards the end of the 19th century. This early style of blues was known as **country blues** and was usually a solo singer accompanied on guitar or piano sometimes with added harmonica or drums. Well-known country blues musicians include Lead Belly, Blind Lemon Jefferson and Robert Johnson.

Keyword	Definition
Chord	Two or more notes playing simultaneously
Walking Bass	A bassline that moves by step using some of the notes of the primary chords and blues scale
Swung rhythms	A rhythm that emphasizes the first set of quavers (like a slow heartbeat)
Improvisation	Making something up on the spot

KNOWLEDGE ORGANISER – Year 8 – Blues / Rock 'n' Roll

Rock 'n' Roll

- World War 2 ended in 1945, this led to a large baby and economic boom.
- This meant that there were lots of teenagers in the 1950s with lots of pocket money either from jobs or parents.
- Rock 'n' Roll was a genre of music **largely influenced by The Blues** and was aimed at Teenage listeners.
- In the 1950s there was still a large amount of segregation between black and white people but both audiences would listen to and attend Rock 'n' Roll concerts.
- Most parents were not pleased with this genre of music and saw it as an act of rebellion against them and society.

Instrumentation in Rock 'n' Roll



Typically a 1950s Rock 'n' Roll band would consist of:

- Piano
- Vocals
- Drum
- Bass
- Electric Guitar
- Saxophone

Tick when done	Listen to the following Rock 'n' Roll songs and list any similarities they have to The Blues:
	Chuck Berry - Johnny B Goode https://www.youtube.com/watch?v=T38v3-SSGcM
	Bill Haley & The Comets - Rock Around The Clock https://www.youtube.com/watch?v=xbYiGR0YAAk
	Elvis Presley - Jailhouse Rock https://www.youtube.com/watch?v=gj0Rz-uP4Mk

YEAR 8 KNOWLEDGE ORGANISER - AUTUMN TERM

PE - Hockey



HOCKEY

THEORY IN ACTION



Coordination may be advantageous to hockey player in producing an effective dribble, coordinating footwork and arm action.

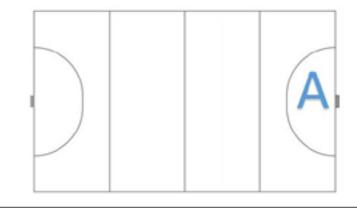
DEFINE THIS

"Co-ordination is the ability to move two or more body parts under control, smoothly and efficiently."

Overview of the rules

The rules of hockey are very similar to the rules of football except that players must use sticks instead of their feet to play the ball. There are 11 players on a team made up of a goalkeeper, defenders, midfielders and attackers.

- 1. Use the "front" (flat) side of the stick.
- 2. Cannot use feet.
- At re-starts or free hits, the defending team must stand 5m from the ball.
- 4. Can only score from inside the "D" (A).
- From a re-start a players is allowed to move the ball to themselves. Known as a self-pass.



PE - Basketball



BASKETBALL

Rules for Offence

When a player has the basketball (offence) there are certain rules they must follow:

 The player must bounce the ball with one hand while moving both feet. If both hands touch the ball or the player stops dribbling, the player must only move one foot.

Once a player has stopped dribbling they cannot start another dribble. A player who starts dribbling again is called for double-dribble.

A player can only start another dribble after another player from either team touches or gains control of the basketball.

 Back court violation. Once you advance beyond the half way line you cannot return to your half in possession of the ball.

Defensive Rules

The team on defence is the team without the basketball.

 The main rule for the defensive player is not to foul. This means the defensive player may not touch the offensive player in a way that causes the offensive player to lose the ball or miss a shot.

Rules for everyone

 Although the foul rule is described as a defensive rule, it applies exactly the same to all players on the court.

2. Basketball players cannot kick the ball or hit it with their fist.

The positions in basketball are just for basketball strategy and there are no positions in the rules.

THEORY IN ACTION

Power is important in explosive movements like jumping.

DEFINE THIS

"Power is the ability to exert maximum muscular contractions in an explosive burst."



PE - Netball



NETBALL

Overview of rules

1. 3 seconds on the ball – Players are only allowed to have the ball in possession for 3 seconds.

 Start of a game – a game starts with a pass that must be received in the centre third. This is also how a game re-starts.

3. Shooting -Players can only shoot form inside the "D".

 Footwork – Players cannot more their landing foot (first foot to hit the floor) when they have the ball.

5. Contact - contact is not allowed in netball

6. Penalty pass - Awarded for major fouls: Contact and obstruction.

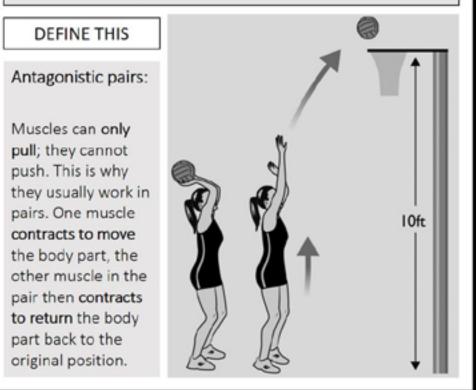
 Distance – Defending players must be 0.9m away from the ball before putting up their arms to defend. 2.

8. Replaying the ball: You must not pick the ball up or bounce the ball if you have dropped it



THEORY IN ACTION

To generate the **power** to shoot the ball toward the hoop, the **triceps** must **contract** to **extend** the arm at the **elbow**. The **biceps relax**.



PE - Badminton



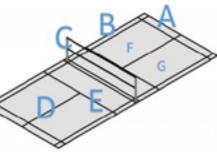
BADMINTON

Overview of the rules

Badminton is a net game and played as singles (two opposing players) or doubles (two opposing pairs). The aim of the game is to win points by hitting a shuttlecock across the net and into your opponent's court forcing your opponent to make an error and be unable to return the shuttlecock back.

The basic rules

- 1. You must serve underarm.
- 2. A serve must reach the front service line.
- 3. If the shuttle lands on the edge line of the court, this is IN.
- 4. If you win a rally, you get a point added to your score and you serve next.
- 5. You can only hit the shuttle once in a row.
- 6. In a full game, the game is the first player to 21 points.
- If your score is "even" (0,2,4,6...) you serve from the right-side service box (F).
- If your score is "odd" (1,3,5,7...) you serve from the left-side service box (G).
- A: Baseline: the end of the court
- B: Side line: the side edge of the court C: The net
- D: Centre line: the middle of the court
- E: Service line: where a rally is started
- F: Right-side service box
- G: Left-side service box



THEORY IN ACTION

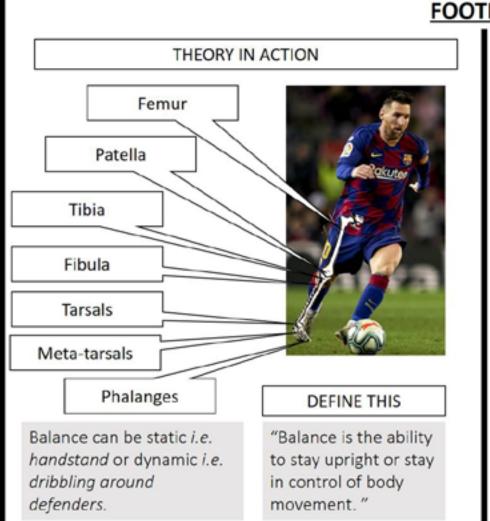


Athletes with good Agility keep their entire body under control throughout. Agility is especially important in sports that require a sharp movement or turn. i.e. returning a shuttle in badminton.

DEFINE THIS

"Agility is the ability to change the position of the body quickly and with control."





FOOTBALL

Overview of the rules

- A football match is played by two teams, with each allowed no more than 11 players on the field.
- All players must use their feet head or chest to play the ball. Only the goalkeeper is allowed to use their hands, and only within their <u>designated goal area (box A)</u>.
- The aim of the game is to outscore the opposition. A goal (score) is achieved by kicking or heading the ball into the <u>opposition team's goal (B)</u>.
- If the ball touches or crosses the <u>side line (C)</u>, it is thrown back in by the team that was not the last to touch the ball.
- The game is controlled by a central referee. They award free kicks and penalties when rules are broken.
- A player is in an offside position if, when the ball is played by a team-mate, they are nearer to the opposition's goal line than the ball and the second last opponent.



PE - Rugby



RUGBY

Overview of the general rules

Rugby has may variations but the aim of the game is very simple - use the ball to score more points than the other team.

 Scoring a "try". A try is scored when the ball is placed down on the playing surface with pressure in the in goal area by the attacking team.

Moving the ball. To move the ball toward the line you can run with it, kick it and pass it. However, passing or knocking the ball *forwards* (unless kicked) is not allowed.

Kicking . Kicking is allowed but must kicked from the hands and not while the ball is on the floor.

Offside. Players are not allowed to receive the ball if they were in front of the ball when it was passed or kicked.

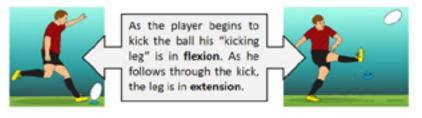
5. Penalties. A penalty can be awarded by the referee if any player breaks the laws of the game, this will lead to a turnover of possession. The opposition can choose to tap and run, tap and pass or kick to resume the game.

6. Starts and re-starts. If the ball goes out of play the ball is passed back in by the opposition. The ball is kicked from the half way line forward at the start of the match and after each try.

1. Tackling rules:

- The tackler must grasp/ wrap the ball carrier below the armpits, on the shirt, shorts or around the legs. The grasp must be simultaneous with, or prior to, shoulder contact.
- 3. The tackler must not shoulder barge their opponent.
- When a tackle is called the player can pass the ball to team mate or present the ball on the ground for a team mate.
- If the ball is presented or loose, then a defending player may make an attempt to claim (turn over) the ball.
- TOUCH VERSION use two hands to touch the player at the waist. They then have 2-3 seconds to pass or present the ball.

THEORY IN ACTION



DEFINE

THIS

Flexion - a decrease in the angle at the joint.

Extension - an increase in the angle at the joint.

PE - Theory 1



		Nut	rition an	Balanced Diet	
Carbohydrates	Provides quick energy, 60% of our diet should comprise 'carbs'.	Running, Athletes in training will eat more 'carbo'. Morathon runners will 'oad' (build up stores of fuel in the muscles by resting and eating lots of pasta etc.) for three days before the event.	Pasta coreals and potatoes	• •	A Balanced Diet is one that contains the correct
Fats	Provides slow energy, 25% of our det should be fat.	Walking and low impact exercise - it produces energy too slowly to be used when working hard.	Oils, dairy products, nuts and fish	Balanced Weight	proportions of nutrients necessary to maintain good
Protein	Builds and repairs muscle. We only need 15% of our cliet to be protein.	When training hand and recovering from injury. Power' athletes such as weight lifters will eat more protein.	Meet, pulses and fish	Care Care	health".
Vitamins	Helps the body work. Helps concentration.	Staying calm, making quick decisions.	Fresh fruit and vegetables	Weight Gain	
Minerals	Helps release energy from food Helps decision making.	When training hand and competing	Fruit, vegetables and fish	Comment	
Fibre	Can't be digested. Fills you up and keeps you 'regular'.	Healthy digestion, (no constipation) helps in sport. Also helps with weight control.	Fresh truit, vegetables and wholegrain cereals	Weight Loss	
Water	Mointains fluid levels.	Whenever you sweat. It prevents dehydration.	The topl It's all you need most of the time.		

Health, Fitness and Wellbeing

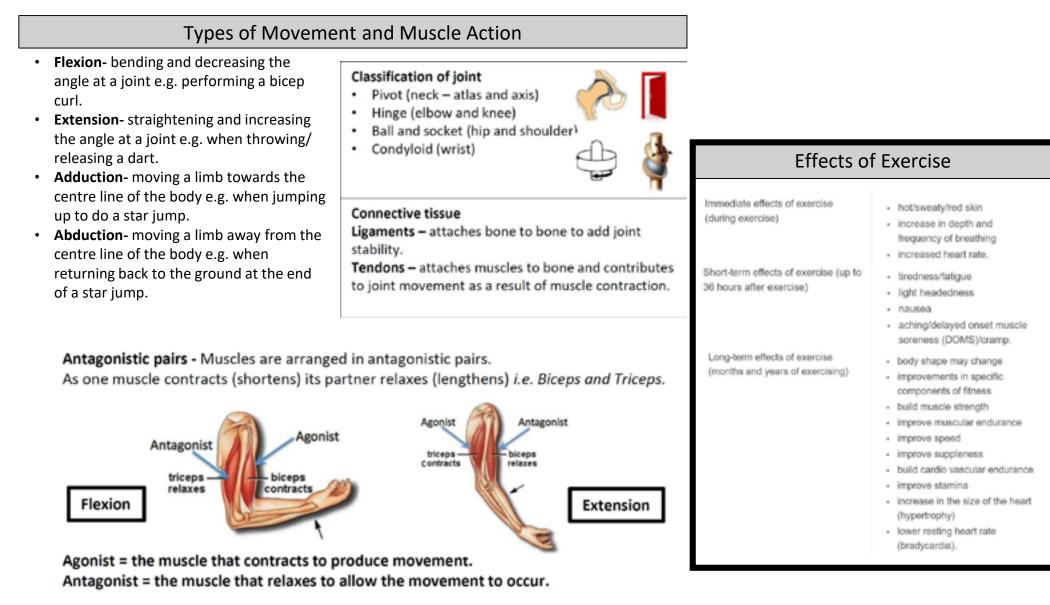
Physical Health	Emotional Health	Social Health		
Cardiovascular Fitness: your ability to	Feeling Good: doing exercise produces serotonin, a 'feel good'	Cooperation: working in groups helps		
exercise your whole body for long periods of	chemical in the body	to improve teamwork and		
time, sometimes called stamina or aerobic	Relieving Stress & Tension: provide a distraction from the	communication		
endurance	problems of daily life	Developing Friendships & Social		
Body Composition: the percentage of body	Increasing Self Esteem & Confidence: overcoming a challenge	Mixing: you get to know more people,		
weight that is muscle, bone or fat	in sport gives a sense of achievement	make new friends and develop lasting		
Muscular Strength: the amount of force a	Enjoyment: most people who exercise and play sport do so	friendships		
muscle can exert against a resistance	because they enjoy it	Gaining a Good Attitude to		
Muscular Endurance: the ability to use	Emotional/Psychological Challenge: challenging yourself can	Competing: to compete well in sport		
voluntary muscles many times without	boost your confidence	you need to have a strong sense of		
getting tired	Aesthetic Appreciation: enjoying something because it is	self; and learn to respect your		
Flexibility: the total range of motion possible	pleasing to look at	opponent		
at a joint.				
Health, Fitness and Wellbeing				
	Fitness: the ability to meet the demands of the environment			
Wellbeing: being comfor	table, healthy & happy so impacting on emotional/psychological h	ealth and happiness		
Health: a complete state of physical, mental and social wellbeing, not merely the absence of disease or infirmity.				

YEAR 8 KNOWLEDGE ORGANISER - AUTUMN TERM

41

PE - Theory 2





Examples in the body:

- Biceps & Triceps
- Quadriceps & Hamstring

PSHE - Human Rights and Bullying



Define: Human Rights

Human rights are the basic rights and freedoms that belong to every person in the world, from birth until death. They apply regardless of where you are from, what you believe or how you choose to live your life.

Define:

Prejudice Making a pre judgment which is not based on reason or experience. Prejudices are usually based on stereotypes.

Define: **Discrimination** Discrimination is when people act upon their own prejudices.

Define: **UNICEF**

The United Nations International Children's Fund is a United Nations agency responsible for providing humanitarian and developmental aid to children worldwide

DECEMBER 10

INTERNATIONAL HUMAN RIGHTS DAY



	1
Needs/Rights	Wants
-Decent shelter -Nutritious food -Protection from abuse and neglect -Education -Fair treatment and non- discrimination -Clean air -Opportunities to share opinions -Playgrounds and recreation -Clean water -Opportunities to practise your own culture, language and religion	-Clothes in the latest style -A bicycle -Holiday trips -Your own bedroom -A personal computer or tablet -A television -Bluetooth speakers -Money to spend as you like -Fast food

Immigrants, asylum seeker and refugees

-An **immigrant** is someone who wants to move to a different country for a better standard of living. Factors that could pull someone to a different country are; Economic prospects (job, business opportunities), education, living conditions, weather, human rights.

-A **refugee** is a person who is pushed or forced out of their own country due to fear or persecution, or war and they may be in fear of their life. Refugees usually take long dangerous journeys to get to safety.

-An **asylum seeker** is an individual who is a refugee who has to apply for asylum (safety) in the country that they travel to. They often have to stay in special centres before they are granted asylum and are allowed to move freely within that country.

	Common Characteristics that are discriminated against -Gender -Age -Race	Prejudice and discrimination in the world - <u>The Holocaust</u> Millions of Jewish people were murdered because of their religion. Other minorities were also killed. Gay men and women, travellars, black people, disabled and
or Du	-Religion -Ethnicity -Politics -Sexuality -Wealth -Language -Birthplace -Weight -Hair colour	travellers, black people, disabled and mentally ill people, political figures and many others. <u>-Islamophobia</u> Muslims across the world are continuously discriminated against and treated poorly because of peoples assumptions that they are a terrorist. Islamic terrorists make up a very small number of Muslims.
	-Nationality -Opinions -Traditions -Clothes -Differences	<u>-Sexism</u> Women in the UK were not allowed to vote until 1917, but only if they were over 30 and married to a homeowner. Women were able to vote the same as men in 1928

PSHE - British Values and Prevent



rever

Define:

British Values Fundamental British Values to reflect life in modern Britain. These 4 fundamental British values are:

Democracy Rule of Law **Respect & Tolerance** Individual Liberty

Define:

Terrorist

A person who uses unlawful violence and intimidation, especially against civilians, often in the pursuit of political aims.

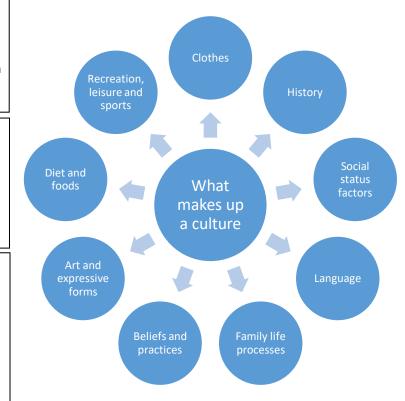
Define: Prevent

A strategy to prevent young people from being radicalised and drawn into terrorist activities.

Define: Extremism

Literally means driving (something) to the limit, or to the extreme. Today, the term is mostly used to refer to extreme political or religious matters.





What does a terrorist look like?



ounes Tsouli ound online and

Neil Lewington Right-wing white Developed a actory at his flat in Reading with carrying out acts

Mark Colborne attack; also to kill

Felt victimised for his ginger hair. He d a cyan

bombs in the

Hasib Hussain

7/7 suicide **Right-wing white**

made and nail bomb in Soh

Prince Charles and

Aged 18, the

From Yateley in

David Copeland

What does a terrorist look like?

A terrorist can look like anyone, often due to the media we have a very narrow view of what a terrorist looks like and often assume they are Muslim. In fact, many terrorist are not Muslim and they are born in the country they attack. There are many reasons why people commit terrorist attacks and not all of them are not motivated by religion.

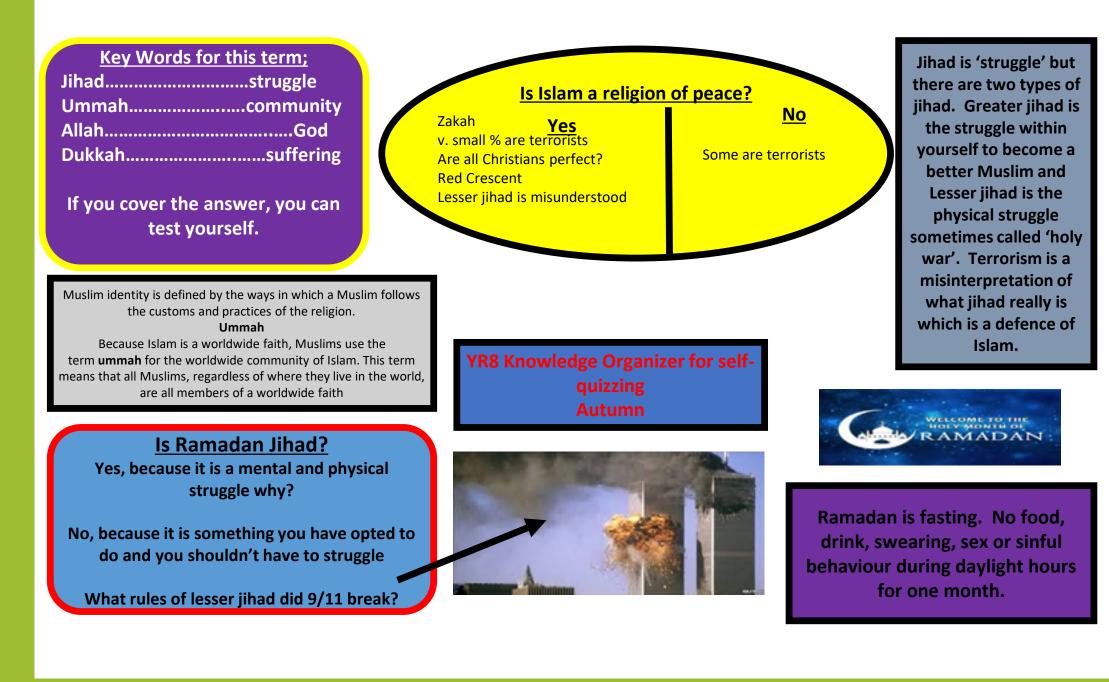
Why do people commit acts of terrorism?

- -Because they don't agree with specific Laws
- -Out of retaliation for attacks on their members/people
- -Because they want to change the government
- -As revenge for perceived or real injustice
- -Because they want religious freedom
- -Because they want to be independent from the rest of the nation



RE - Part 1





YEAR 8 KNOWLEDGE ORGANISER - AUTUMN TERM

RE - Part 2

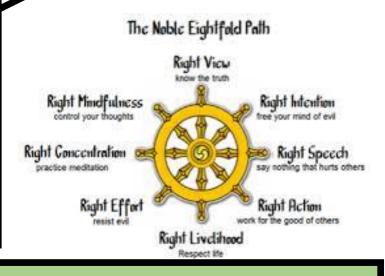


If Christianity, Islam and Judaism are monotheistic religions which believe in one God, the only God, Buddhism is different in that there is no mention of god at all, it is more of a philosophy and a way to lead your life giving everyone the best outcome.

- Suffering, pain and misery exist. Accept jt
- 2. Suffering is caused by selfish craving and personal desire.
- 3. Selfish craving and personal desire can be <u>overcome</u>.
- 4. The way to overcome this misery is through the Eightfold Path.

Key Word

Dukkha; suffering (it's a mistake to think we can rid ourselves of suffering). We have to know how to deal with it.



YR8 Knowledge Organizer for selfquizzing Autumn

The Buddha was born a privileged prince and never knew any form of hardship because he had never left his palace. When he did eventually leave what did he see? Why was it a shock?

Sights – Sick, Old, Dead, Holy man





A man traveling along a path came to a great expanse of water. As he stood on the shore, he realized there were dangers and discomforts all about. But the other shore appeared safe and inviting.

The man looked for a boat or a bridge and found neither. But with great effort he gathered grass, twigs and branches and tied them all together to make a simple raft. Relying on the raft to keep himself afloat, the man paddled with his hands and feet and reached the safety of the other shore. He could continue his journey on dry land.

Now, what would he do with his makeshift raft? Would he drag it along with him or leave it behind? He would leave it, the Buddha said. Then the Buddha explained that the dharma is like a raft. It is useful for crossing over but not for holding onto.

Science - Biology - Digestion



Section 1 Definitions		Section 2	The digestive system	
Keyword	Definition	Food has to be broken down into smaller substances that our bodies can use.	Organ	Function
Digestion	The breakdown of large insoluble food molecules into smaller soluble ones.	This is called <u>digestion</u>	Oesophagus	Also known as the gullet. Connects the mouth to the stomach. Food is pushed down using contractions of muscles.
			Uver	Production of bile.
Digestive	Organ system involved in breaking food down	Musto Selectry	Stomach	Churns and mixes the food with hydrochloric acid and enzymes.
System	so that it can be absorbed into the bloodstream.	Georghagen	Pancreas	Produces biological catalysts called enzymes which speeds up the digestive reactions.
Absorbed	When a substance is taken in by something or moved across a barrier such as a cell membrane.	Cat Nation	Small Intestine	Absorption of digested food into the bloodstream, production of enzymes to aid digestion.
Amylase	An enzyme that can break down starch into		Large Intestine	Absorption of excess water.
	simple sugars.	Appandix	Rectum	Storage of faeces (undigested material) before excretion.
Lipase	Enzyme that breaks down lipids (fats & oils).	The second secon	Anus	Where faeces are excreted (removed from the body).
Carbohydrase	Enzyme that breaks down carbohydrates.	Section 3 Enzymes		
Protease Enzyme Surface Area Villi	Enzyme that breaks down proteins. A protein which catalyses or speeds up a chemical reaction. The area of the surface of an organism or membrane. Finger-like projections in the small intestine	Enzymes are not living things. They are special proteins that can break large molecules into smaller molecules.	Systems - digestion	Section 4 Adaptations of the small intestine. The small intestine is adapted for efficient absorption of digested food into the blood stream by: - Having a very large surface area. - Surrounded by lots of blood capitaries.
Capillary	that provide a large surface area for the absorption of food. Tiny blood vessels with walls one-cell thick	O O O O O O O O O O O O O O O O O		- Thin walls (1 cell thick for faster absorption.
	where exchange of materials occurs.	Terry mids		
Bile	Substance produced in the liver. It emulsifies fats to prepare them for digestion.	Starch Test Drop iodine	Mix Ben	edict's with Protein test
Pancreas	Produces biological catalysts called enzymes which speeds up the digestive reactions.	Section 5		Glucose Test
Excretion	Process by which waste products from chemical reactions in an organism are removed.	<u>Food tests</u>	up food 🍆	hot water chopped up food

YEAR 8 KNOWLEDGE ORGANISER - AUTUMN TERM

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Science - Biology - Interdependence & Photosynthesis



	Sect	ion 1 Definitions	Interdep
1	Habitat	A place where an organism lives	Section 2 Food
2	Adaptation	A structure or a function that allows a living organism to survive in a given habitat	Every living plant on the soil, water well as other ani
3	Ecosystem		In an ecosystem,
4	Food chain	Part of a food web, starting with a producer, ending with a top predator.	Scientists someti food web.
5	Food web	Shows how food chains in an ecosystem are linked.	A food chain shows the path c
6	Predator	An animal that hunts and eats another animal for food	energy from one living thing to another
7	Prey	An animal that is eaten for food	
8	Population	Group of the same species living in an area.	A food web
9	Competition	When two or more living things struggle against each other to get the same resource.	shows the transfer of energy within
10	Producer	Green plant or algae that makes its own food using sunlight.	the whole ecosystem
11	consumer	Animal that eats other animals or plants.	
12	Photosynthesis	A process where plants and algae turn carbon dioxide and water into glucose and release oxygen.	Section 3 Ada
13	Mineral	A chemical needed by an organism as	Predator adaptati
15	Winteral	an essential nutrient for healthy living.	Good eyesight / e head
14	Fertilizer	Chemicals containing minerals that plants need to build new tissues	Strong muscles – s speed
15	Pollutant	A substance or condition that	Sharp beaks / claw
		contaminates air, water, or soil.	camouflage
			Poisonous venom

nterdependence and photosynthesis

tion 2 Food chains and webs

very living plant and animal must have energy to survive. Plants rely in the soil, water, and the sun for energy. Animals rely on plants as vell as other animals for energy. in an ecosystem, plants and animals all rely on each other to live.

cientists sometimes describe this dependence using a food chain or a





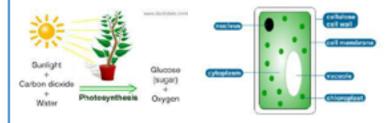


Section 3 Adaptations				
Predator adaptation	Prey adaptation			
Good eyesight / eyes at front of head	Good eyesight (eyes on side of head for wide vision)			
Strong muscles – strength and speed	Speed			
Sharp beaks / claws / talons	Good senses eg hearing			
camouflage	Camouflage and mimicry			
Poisonous venom	Warning colours and patterns			

Section 4 Producers and photosynthesis

Green plants and algae do not need to eat food to gain energy. Instead they make their own food by a process called photosynthesis.

Photosynthesis takes place inside plant cells in organelles called chloroplasts. Chloroplasts contain a green pigment called chlorophyll. This absorbs the light energy from the sun needed for photosynthesis



Plants use raw materials from the environment: carbon dioxide from the air , water from the soil and light energy from the sun.

The raw materials are converted to glucose (food) and oxygen (waste gas)

Plants also need healthy growth	d essential minerals for	If plants do not get the correct minerals they become <u>deficient.</u> This affects their growth		
Nitrates Contain nitrogen for proteins needed for growth and repair				
Phosphates	Contains phosphorus for healthy roots	M52	1023	
Potassium	Potassium for healthy leaves and flowers	Interpretation and the set	tating to a pairs land	
magnesium To make chlorophyll for photosynthesis		1	X	
		15	<u> </u>	

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Science - Chemistry - Mixtures



Elements, Compounds and Mixtures Recap	Definition	Атом		Mixtures and separating
1. Element	Made up of the same type of atoms		MOLECULE MOLECULE	techniques
2. Compound	2 or more DIFFERENT atoms chemically bonded together	a company		13. Evaporation
3. Mixture	2 or more different substances NOT chemically bonded together		ND .	
4. Molecule	2 or more atoms chemically bonded together			Shyshys were
				Micture - Evaporating dish
Pure and Impure Substances	Definition		MIXTURE	(soft and water)
5. Pure	Made up of one substance has a sharp melting point		•	
6. Impure	Made up of different substances has a gradual melting point	How temperature changes in a pure substan an impure substance as they are head	7. Filtration	Butsen burner
Separation Techniques	Definition	Impure substance	1 Equid and insol	due solid
7. Filtration	Separates an insoluble solid from a solvent	2 pure substance	titter paper	
8. Soluble	Dissolves in water		ther funnel	timered solid
9. Insoluble	Will not dissolve in water	10)	19. Fractional
10. Solvent	Liquid part of solution	Time (seconds)	- Elizade	Distillation
11. Solute	What dissolves in the solvent usually a solid e.g. salt, sand, sug	gar	14. [Distillation
12. Solution	Solvent + Solute make a solution			TALL AND A DECEMBER OF A DECEM
13. Evaporation	Water is evaporated from a soluble solution e.g. salt water lea	ives salt	The second secon	
14. Distillation	A mixture of liquids with 2 different boiling points are heated to condenses and is collected first.	until the lower boiling point		
15. Chromatography	Soluble mixture is separated out into different heights on the	filter paper 20. Methane	15. Chroma	tography
16. Hydrocarbon	Molecules made of hydrogen and carbon only	0	15. Cillonia	
17. Fractions	Different chain lengths of hydrocarbons with different boiling	points	in the second se	
18. Crude oil	A mixture of hydrocarbons fractions with different boiling poir	nts	paper	
19. Fractional Distillation	Separates crude oil into different fractions in a fractionated co	lumn	ink upot	
20. MEPB	Monkeys (Methane, CH_4) eat (Ethane, C_2H_6) peeled (Propane,	C_3H_8) bananas (Butane, C_4H_{10}) ***** -[- 	A water

Science - Physics - Motion

Motion

Section 1 – Calculating speed				
1 Speed	How far something travels in a particular time. Measured in metres per second (m/s)			
2 Calculating speed	Speed (m/s) = distance travelled (m) / time taken (s)			
DiSTa	nce			
	Section 2 - Motion graphs			

2. Gradient	distance on the y axis, time on the x axis The gradient on a distance time graph shows you the speed it was travelling. Horizontal = stationary,	Speed =
3. Acceleration	steeper = faster. Shown on a distance – time graph as a curved line	2m/s
4. Finding speed	Can be calculated from a distance – time graph by finding the gradient of the line. (y ÷ x)	

Section 3 – Gas Pressur	e		Droccur	$a(N/m^2) = Faraa(N)$
1 Pressure	Force exerted over a given	xerted over a given area		$e (N/m^2) = \frac{Force (N)}{Area (m^2)}$
2 Volume	Quantity of space an object	ty of space an object fills up		
3. Temperature	Measure of average heat	t energy	Low pressu	ire High pressure
			Large area	Small area
	Sectio	on 4 – Levers and Mom	ents	
	Lever	Used to make thing Consists of a pivot, Ioad		
eed	Pivot	The point around w something can rota		
stationary	Effort	The force used to m	nove the load	
Speed = 8/4 =	Load	The force exerted b being moved	y the object	
2m/s	Moment	The turning effect c	of a force	
steady speed returning to start	Calculating a moment	Moment (Nm) = Fo Distance (m)	rce (N) x	
increase the the		 Increase the dist the pivot Increase the force 		nonet : 1(n) = 2000 Text Interest : 2(+1) = 2000

YEAR 8 KNOWLEDGE ORGANISER - AUTUMN TERM

Spanish - Mis Vacaciones



Spanish Y8- Mis Vacaciones		¿Qué hiciste?	What did you do?	Palabras m	uy frecuentes	High frequency words	
De vacaciones	On holiday	Bailé	I danced	En	In	Todos los días	Everyday
				Con	With	A veces	Sometimes
¿Adónde fuiste de vacaciones?	Where did you go on holiday?	Compré una camiesta	l bought a t- shirt	Mi/mis	Му	Fue	lt was
En año pasado	Last year	Descancé en	I relaxed on	Pero	But	Es	lt is
El verano pasado	Last month	la playa	the beach	Siempre	always	Nunca	never
Fui a	l went to	Mandé SMS	l sent texts	ćCóm	o te fue?	How	was it?
¿Con quién fuiste?	Who did you go with?	Monté en bici	l rode my bike	Fue	lt was fun	Fue raro	It was stange
Fui con	l went with	Nadé en el	I swam in the	divertido			
Mis amigos	My friends	mar	sea Fue	Fue estupendo	It was amazing	Me gustó	l liked it
Mi clase	My class	Saqué fotos	I took photos	Fue	lt was	Me encantó	l loved it
Mis padres	My parents	Tomé el sol	I sunbathed	fenomenal	fenomenal		
Fui en	l went by	Visité	l visited	Fue flipante	It was great	¿Por qué?	Why?
Fuimos en	We went by	monumentos	monuments	Fue genial	It was great	Porque	Because
Autocar	, Coach	No nadé	l did not swim	Fue guay	It was cool	Hizo buen tiempo	lt was good weather
Avión	Plane	Bebí una limonada	l drank a lemonade	Fue regular	It was alright	vomité	l vomited
Barco	Boat	Comí paella	l ate paella	Fue un	It was a	Comí algo mal	I am something
Coche	Car	Conocí a la	I met people	desastre	disaster		bad
Tren	Train	gente		Fue horrible	It was horrid	Llovió	It rained
No fui en vacaciones	I did not go on holiday	Salí	l went out	Fue horroroso	lt was horrendous	Perdí mi móvil	I lost my phone

YEAR 8 KNOWLEDGE ORGANISER - AUTUMN TERM

Spanish - Todo Sabre Mi Vida- Part 1



Spanish Y8- Todo sobre mi Vida (1)		¿Con qué	How often?	Opiniones	Opinions	Me gustan	l like
•		necuencia:		Me gusta	l like	las comedias	comedies
¿Qué haces con tu	What do you do	Todos los días	Everyday	Me gusta	I really like	Un programa	A music
móvil?	with your phone?	De vez en cuando	From time to time	mucho		de música	programme
Chateo con mis amigos	I chat with my friends	A veces	Sometimes	Me encanta	l love	Un programa de deportes	A sports
Comparto vídeos	I share videos	nunca	Never	No me gusta	I don't like	Un concurso	programme Competition
Descargo melodías	I download melodies			No me gusta nada	I really don't like	Un	Documentary
Descargo canciones	I download songs	¿Qué tipo de música te	What type of music do you	Odio	l hate	documental	Documentary
Hablo por Skype	I talk on Skype	gusta?	like?	Detesto	l detest	Un reality	Reality TV
Juego a los videojuegos	I play videogames	El rap	Rap	La letra	The lyrics	Una comedia	Comedy
Leo mis SMS	I read my texts	El R'n'B	R'n'B	La melodía	The melody	Una serie	Police tv
Mando SMS	I send texts	El rock	Rock	El ritmo	The rhythm	policíaca	show
		La música clásica	Classical music	Porque es	Because it is	Una telenovela	Soap opera
Escribo SMS	l write texts	La música	Elctronic music	guay	cool	El telediario	The news
Veo vídeos	I watch videos	electrónica		Porque es	Because it is	Más que	More than
Veo películas	I watch films	La música pop	Pop music	triste	sad	Menos que	Less than
Escucho música	I listen to music	¿Qué tipo de	What music do	Porque es	Because it is	Divertido/a	Fun
Navego por internet	I surf the net	música escuchas?	you listen to?	horrible	horrid	Informativo/a	Informative
Busco información	I look for information	Escucho	l listen	Mi canción favorita	My favourite song	Interesante	Interesting
Hago mis deberes	I do my homework	Escucho la música de	l listen to the music of	Mi grupo	My favourite	Aburrido	Boring
	i do ing nomework	Escucho de todo	l listen to	favorito	group	Emocionante	Exciting
			r listen to			Creations In	F

YEAR 8 KNOWLEDGE ORGANISER - AUTUMN TERM

everything

En mi opinión

In my opinion

Subject Contents

Fun

Gracioso/a

Spanish - Todo Sobre Mi Vida - Part 2



Spanish Y8- Todo sobre mi Vida (2)

¿Qué hiciste ayer?	What did you do yesterday?
Bailé en mi cuarto	I danced in my room
Fui al cine	I went to the cinema
Hablé por Skype	I talked on Skype
Hice gimnasia	I did gymnastics
Hice mis deberes	I did my homework
Hice kárate	I did karate
Jugué en línea con mis amigos	I played online with my friends
Jugué tres horas	I played for 3 hours
Monté en bici	I rode my bike
Vi una película	I watched a film
Salí con mis amigos	I went out with my friends
No hice los deberes	I did not do homework
Ayer	Yesterday
Luego	Later/then
Por la mañana	In the morning
Por la tarde	In the afternoon

Palabras muy frecuentes		High frequency words	
Así que	So (that)	No	No/not
Más que	More than	Nunca	Never
Menos que	Less than	0	Or
Mi/mis	my	Porque	Because
Su/sus	His/her	También	Also
Normalmente	Normally	у	And

Estrategia 2 The gender of nouns

You can often work out whether a noun is masculine or feminine by looking at the ending of the word:

Most nouns ending in -o, -or and -ón are masculine.

Most nouns ending in -a, -dad, -ión and -ción are feminine.

But be careful! There are exceptions, for example:

el problema, la foto

To check, use a dictionary: look for the abbreviations nm (masculine noun) and nf (feminine noun).

Can you work out the gender of these nouns from Module 2 without using a dictionary?

- actividad
- canción
- concurso televisión
- ٠ música
- amigo
- aplicación
- millón

Spanish - Tenses - El Presente

Spanish Y8- El Presente

Verbos Claves	Key Verbs
Me llamo	My name is
Soy	l am
Es	He/she is
Somos	We are
Son	They are
Tengo	I have
Tiene	He/she has
Tienen	They have
Hago	I do
Juego	I play
Está	It is (location)
Voy	l go
Me gusta	l like
Me encanta	l love
Odio	I hate
Vivo	l live

Los verbos -AR		AR Verbs
Yo	1	0
Tú	You	As
Él/ella	He/she	А
Nosotros	We	Amos
Vosotros	You (pl)	Áis
Ellos/ellas	They	an

Los verbos -ER		ER Verbs
Yo	T	0
Tú	You	Es
Él/ella	He/she	Es
Nosotros	We	Emos
Vosotros	You (pl)	Éis
Ellos/ellas	They	En

Los verbos -IR		IR Verbs
Yo	I	0
Tú	You	Es
Él/ella	He/she	Е
Nosotros	We	Imos
Vosotros	You (pl)	Ís
Ellos/ellas	They	En

Spanish - Tenses - El Preterito

Spanish Y8- El preterito

Verbos Claves	Key Verbs
Fui	l went
Fue	It was
Comí	l ate
Bebí	I drank
Estuve	I was (location)
Tuve	l had
Hizo buen tiempo	It was good weather
Hizo mal tiempo	It was bad weather
vi	l saw
Jugué	I played
Jugó	He/she played
Nadé	l swam
Bailé	I danced
Conocí	l met
Visité	I visited
compré	I bought



Los verbos -AR		AR Verbs
Yo	1	É
Tú	You	Aste
Él/ella	He/she	Ó
Nosotros	We	Amos
Vosotros	You (pl)	Asteis
Ellos/ellas	They	Aron

Los verbos -ER		ER Verbs
Yo	T	Í
Tú	You	Iste
Él/ella	He/she	ló
Nosotros	We	Imos
Vosotros	You (pl)	Isteis
Ellos/ellas	They	leron

Los verbos -IR		IR Verbs
Yo	1	Í
Tú	You	Iste
Él/ella	He/she	ló
Nosotros	We	Imos
Vosotros	You (pl)	Isteis
Ellos/ellas	They	leron

YEAR 8 KNOWLEDGE ORGANISER - AUTUMN TERM

Spanish - Tenses - Near Future

Spanish Y8- Near future

The steps		
Use the verb 'ir' and decide who is going to be speak	I – voy	
Followed by the Word 'a'	а	
Followed by the infinitive	Comer	

	IR	IR
Yo	T	Voy
Tú	You	Vas
Él/ella	He/she	Va
Nosotros	We	Vamos
Vosotros	You (pl)	Vais
Ellos/ellas	They	Van

Voy a comer – I am going to eat Va a visitar – he/she is going to visit

Los infinitivos	Infinitives
Comer	To eat
Beber	To drink
Jugar	To play
Ir	То до
Mandar	To send
Ver	To watch
Visitar	To visit
Aprender	To learn
Hablar	To speak
Salir	To go out
Tener	To have
Ser	To be
Estar	To be (location)
Nadar	To swim
Bailar	To dance
vivir	To live

+ @ +





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