Minsthorpe Community College

Knowledge Organiser
Year 7 – Spring Term 1

Name:

P&A group:

Knowledge Assessment: Thursday 12th February 2026 – Period 1

Vision

Minsthorpe Community College: A place where everyone plays a part in strengthening our learning community through motivation, commitment and care.

Motivation • Commitment • Care

Look

Look at the information carefully.
Read it three times.
It may help to **say** it as you read it.

Cover

Cover it with your hand or a piece of paper.

Write

Write it out from memory.

Check

Check what you have written matches the information exactly.
Have you got it correct?
If so, tick your work to show it is correct.

Correct

If it **doesn't match exactly,** use **a different coloured pen to correct it.**
Repeat.
When you get it 100% correct, move on to the **next** piece of information.

Subject: English	KPOW: How can we create convincing characters?	Year 7: Spring Term 1

Week 1 & Week 2: Context of Lord of the Flies.

Heroes and Villains

Key Word Definitions:

Hero: a person who is admired for their courage, qualities, or achievements.

Villain: a character whose evil actions or motives are important to the plot.

Civilisation: the most advanced way of life for a group of people living together.

Society: a group of people living together in the same community.

Patriarchy: A society ruled by men.

Iambic Pentameter: A line of verse composed of ten syllables arranged in five metrical feet (iambs), each of which consists of an unstressed syllable followed by a stressed syllable.

Key Learning Points:

World War Two: the war between the Axis (Germany, Italy, and Japan) and the Allies, (Britain, France, Soviet Union) beginning on September 1, 1939, with the German invasion of Poland and ending with the surrender of Germany on May 8th, 1945, and of Japan on August 14th, 1945.

William Golding was horrified by what war revealed about people's capacity to harm their fellow humans.

Eg: Nazi Concentration camps and their persecution of Jewish people and other minorities.

Japanese mistreatment of their Prisoners of War.

British and American mass bombing of civilians.

Cold War: The state of hostility that existed between the USSR (Russia) and the Western powers (America) from 1945 to 1990, where nuclear war was a threat, but never materialised.

Week 3 & Week 4: Conflict and Villainy.

Key word Definitions:

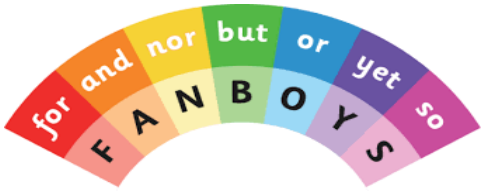
Propaganda: information, especially of a biased or misleading nature, used to promote a political cause or point of view.

Dictator: a ruler with total power over a country, typically one who has obtained control by force.

Key Skills: Sentences

Simple Sentence: A simple sentence contains one independent clause. It contains a subject and a verb.

Compound sentence: A compound sentence consists of two independent clauses joined together by a semicolon or co-ordinating conjunction. (FANBOYS)



Complex Sentence: A complex sentence consists of an independent clause plus one or more dependent clauses and a subordinating conjunction.

Week 5 & Week 6: Writing Skills

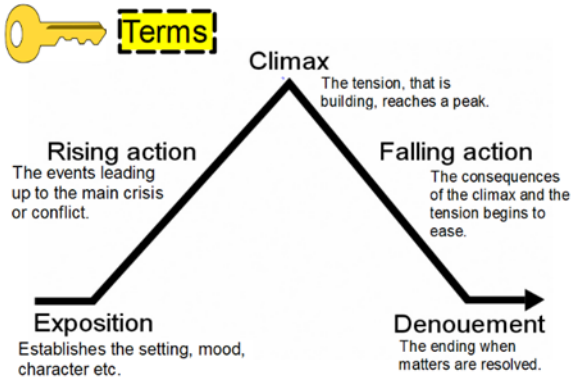
Key Word Definitions:

Soliloquy: an act of speaking one's thoughts aloud when by oneself or regardless of any hearers, especially by a character in a play.

Inner conflict: an internal conflict is the struggle occurring within a character's mind.

Key Skills: Writing

STRUC: Plan your ideas and structure them appropriately paying particular attention to your intro and ending.



AV: use ambitious vocabulary.

CD: craft devices that are effective for purpose. Remember to avoid clichés.

OP: vary sentence openers for effect. Ly/ing/ed words.

SS: vary sentence structures for effect. simple/compound/complex

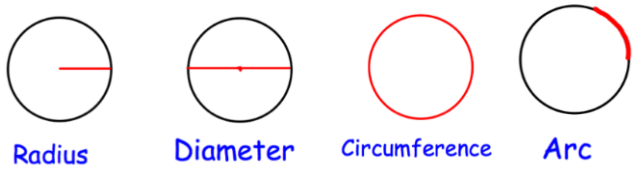
Maths

2D Geometry

Year 7: Spring Term 1

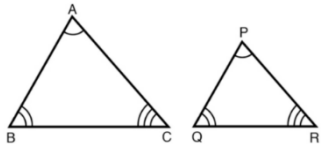
Week 1: Constructions

Parts of a circle



Similar triangles

Two shapes are similar when one has been enlarged.



Congruent triangles

Congruent shapes are shapes that are the same shape and size.

There are three conditions to accurately construct a triangle:

1. SSS: 3 side lengths
2. SAS: 2 side lengths and an angle
3. ASA: 2 angles and 2 sides

Keywords

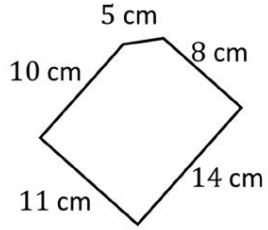
Perpendicular: Where two lines meet at a right angle.

Construction: To draw a shape, line or angle accurately using a ruler and a pair of compasses.

Week 2: Perimeter

Perimeter

The perimeter of a shape is the **distance** around the outside. We use the units mm, cm or m.



For example

The perimeter of this shape is

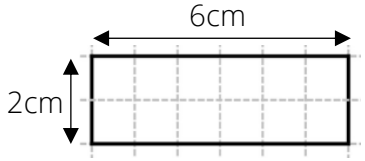
11cm + 10cm + 5cm + 8cm + 14cm = 48cm

Area

The area of a shape is a measure of the space inside the boundary. We use the units mm^2, cm^2 or m^2.

Rectangles

The area of a rectangle is $base \times height$.



For example

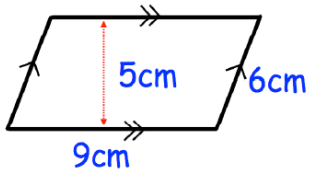
The area of this shape is $2cm \times 6cm = 12cm^2$.

Week 3 & Week 4: Area

Parallelograms

The area of a parallelogram is

$$base \times perpendicular\ height$$



For example

The area of this parallelogram is

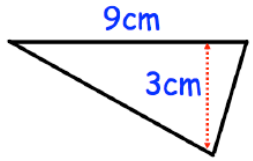
$$5cm \times 9cm = 45\text{cm}^2.$$

Triangles

The area of a triangle is

$$\frac{base \times perpendicular\ height}{2}$$

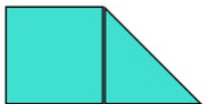
For example



The area of this triangle is

$\frac{3cm \times 9cm}{2} = \frac{27cm}{2} = 13.5\text{cm}^2$.

Compound shape: A shape made up of more than one geometric shape.



Maths	2D Geometry	Year 7: Spring Term 1

Week 5 & Week 6: Transformations

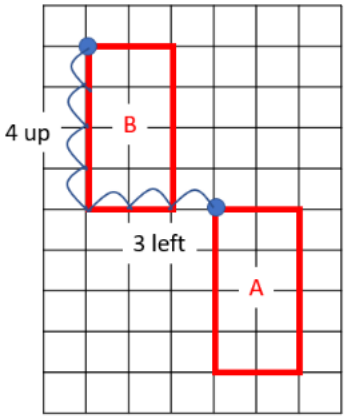
Translation

Translations are movements in a direction. To translate a shape, you need a column vector.

$$\begin{pmatrix} x \\ y \end{pmatrix}$$

A positive x value is a move of x spaces to the right.
A negative x value is a move of x spaces to the left.
A positive y value is a move of y spaces up.
A negative y value is a move of y spaces down.

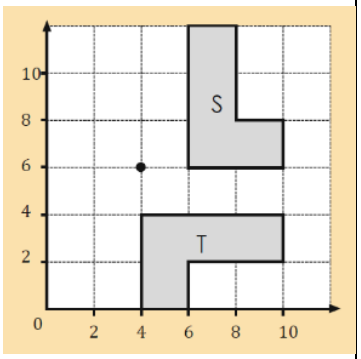
For example, the translation of vector $\begin{pmatrix} -3 \\ 4 \end{pmatrix}$ shows a move of 3 to the left and 4 up from the corresponding vertices.



Week 5 & Week 6: Transformations

Rotation

To rotate a shape means to turn a shape around a centre point. To carry out a rotation of a shape, we need a direction, degrees, and centre of rotation.

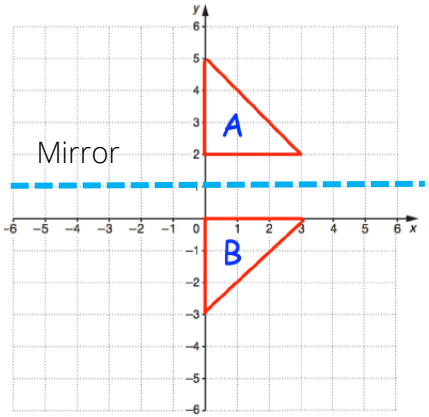


For example, S has been rotated 90° clockwise about the point (4, 6).

Reflection

We can reflect a shape in a mirror line. The points and their reflections will be equidistant from the mirror line. To reflect a shape, we need to know the mirror line.

For example, triangle A has been reflected in the line y = 1.



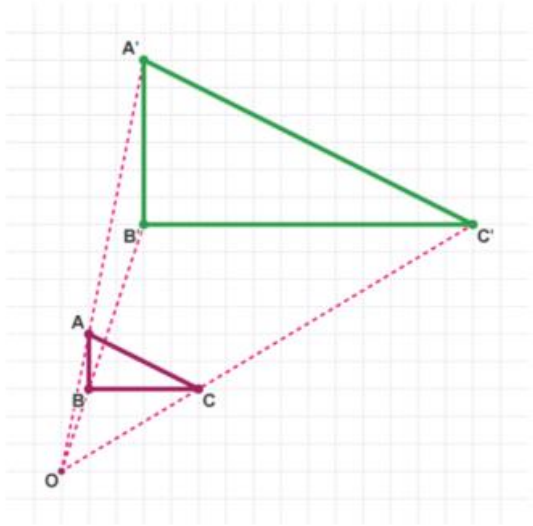
Week 5 & Week 6: Transformations

Enlargement

To change the size of a shape by multiplying by a scale factor. This creates similar shapes.

To enlarge a shape, we need a scale factor and centre of enlargement.

For example triangle ABC has been enlarged by scale factor 3 about the centre of enlargement O



A scale factor <1 causes the shape to get smaller. A negative scale factor inverts the shape.

Subject: Science – Physics

Assessment Week 2/3

Year 7: Spring Term 1

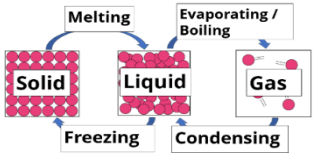
Week 1: Particle model

Keyword definitions

Particle: Everything in the universe is made up of particles.

Solid, liquid and gas: The three states of matter.

Bonds: These hold particles together in solids and loosen as the solid changes to liquid, and then a gas.



As a solid gets heated, it melts to a liquid and then **evaporates** to a gas.

As a gas cools, it condenses into a liquid and then **freezes** into a solid.

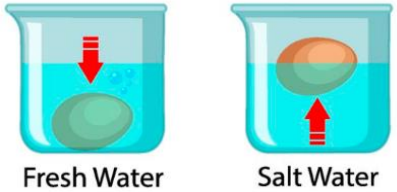
Week 2: Density

Keyword definitions

Density: The amount of mass per unit volume of an object.

Mass: A measure of how much there is of an object in kg.

Volume: A measure of the size of an object in cm^3 or m^3.



The egg is less dense than salt water, so it floats.

The egg is more dense than fresh water, so it sinks.

Week 3: Energy Stores and Transfers

Keyword Definitions

Energy: The ability of an object or objects to do work.

Joules: The unit that energy is measured in.

A moving object will have a store of **kinetic energy**.

An object that is up high will have a store of **gravitational potential energy.**

An object that is warm will have a store of **thermal energy.**

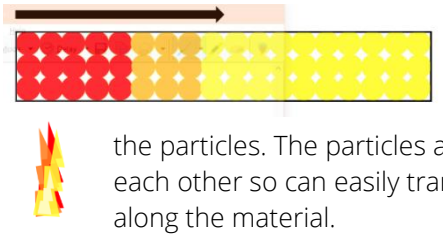
Week 4: Conduction and convection

Keyword Definitions

States of Matter: Solid, liquid and gas.

Conduction: The transfer of heat energy through a solid object.

Convection: The transfer of heat energy through a liquid or gas (fluid).



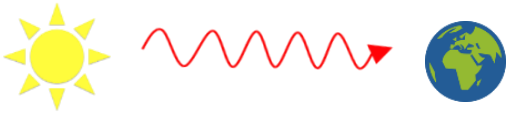
In a solid, heat travels through vibrations in the particles. The particles are very close to each other so can easily transfer the heat along the material.

Week 5: Radiation and Insulation

Keyword definitions

Radiation: The transfer of heat using waves.

Insulation: A material or object that reduces the transfer of heat.



The sun **radiates** heat to the earth in **waves**.

The polar bear has lots of fur for **insulation**. It stops lots of heat from escaping from its body into the cold environment.

Week 6: Energy in food

Keyword definitions

Chemical Energy – The store of energy in food, measured in Joules.

Calories – How energy levels are measured in food.

Typical Values (boiled)	Per 100g	Per 80g	Reference intake
Energy kJ	388	310	8400
Energy kcal	92	74	2000
Fat	1.6g	1.3g	70g
of which saturates	0.3g	0.2g	20g
Carbohydrate	10g	8.0g	260g
of which sugars	1.2g	1.0g	90g
Fibre	5.6g	4.5g	
Protein	6.7g	5.4g	50g
Salt	<0.01g	<0.01g	6g

Labels on the back of food packets show how many calories are in foods.

Subject: Science - Biology

Assessment Week 2/3

Year 7: Spring Term 1

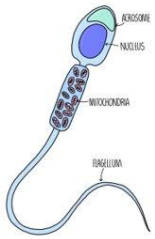
Week 1: Animal sexual reproduction

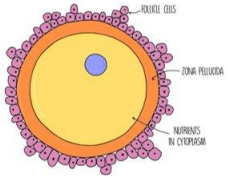
Keyword definitions

Reproduction: When living organisms make more living organisms (offspring).

Gametes: A name given to the two reproductive cells.

Sperm: This is the gamete that is produced by the **male**.



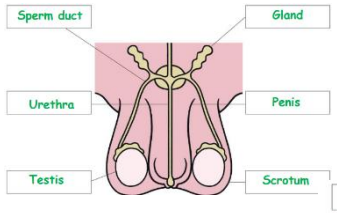


Egg cell: This is the gamete that is produced by the female.

Week 2: Reproductive organs

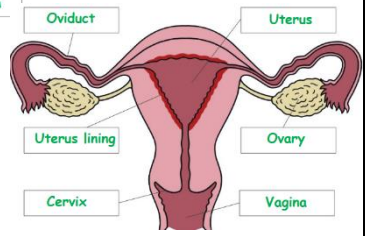
Keyword definitions

Fertilisation: Fertilisation is when a **sperm** cell enters an **egg** cell, and the two **nuclei** of the cells fuse **together** to become one.



The **male** reproductive organs.

The **female** reproductive organs.



Week 3: Pregnancy and birth

Key word definitions

Gestation: The period of time where a foetus develops inside the womb.

Placenta: The organ that grows into the wall of the uterus and is joined to the foetus by the umbilical cord.

When the sperm and egg cell fuse, they form a **zygote**. This then develops into an **embryo** which will then become a **foetus**.
The foetus is protected by a sac filled with **amniotic fluid** which acts like a cushion.

Week 4: Puberty

Keyword definitions

Puberty: Puberty is when the human reproductive system develops, preparing the body for reproduction.

Changes in males include:

- Voice deepens
- Shoulders widen
- Facial and chest hair grows
- Testes begin producing sperm
-

Changes in females include:

- Breasts develop
- Hips widen
- Menstrual cycle begins

Ovaries begin releasing eggs

Week 5: Skeleton and muscles

Keyword definitions

Ligaments – These link bones to bones.

Tendons – These link bones to muscles.

Muscles – They contract and expand to move bones.

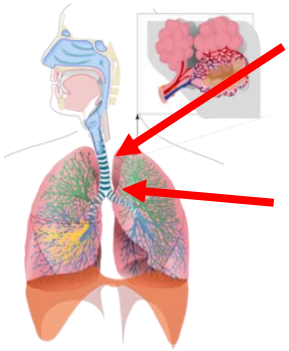
Antagonistic pairs – Muscles work in pairs, as one contracts the other relaxes.

On the arm, the biceps and triceps work as antagonistic pairs to move the fore-arm up and down.
The biceps contracts as the triceps relax to raise the fore-arm.

Week 6: Lungs and breathing

Keyword definitions

Breathing – The process of taking air into the lungs and then expelling it out of the lungs.



Trachea – The tube that connects the mouth and lungs and allows gas to flow in and out of the body.

Bronchi and Bronchioles – These carry the air to the small sacs in the lungs so that gas exchange can take place. .

Subject: French — KPOW: Hair & Eyes Reading KPOW — Year 7: Spring Term 1

Week 1: Nouns (pets)

un canard [a duck]
un chat [a cat]
un cheval [a horse]
un chien [a dog]
un cochon d'Inde [a guinea pig]
un hamster [a hamster]
un lapin [a rabbit]
un oiseau [a bird]
un perroquet [a parrot]
un poisson [a fish]
un serpent [a snake]
une araignée [a spider]
une perruche [a budgie]
une souris [a mouse]
une tortue [a turtle/tortoise]

Week 2: Verbs

À la maison, j'ai [At home I have]

Chez moi, j'ai [At home I have]

Je n'ai pas de [I don't have]

On a *[we have]*

Mon ami ***Denis*** a [My friend *Denis* has]

Mon amie ***Sarah*** a [My friend *Sarah* has]

Je voudrais avoir [I would like to have]

Je ne voudrais pas avoir [I wouldn't like to have]

Week 3: Adjectives

Masculine	Feminine
petit [small]	petite [small]
grand [big]	grande [big]
jaune [yellow]	jaune [yellow]
bleu [blue]	bleue [blue]
blanc [white]	blanche [white]
orange [orange]	orange [orange]
noir [black]	noire [black]
rouge [red]	rouge [red]
vert [green]	verte [green]
barbant [boring]	barbante [boring]
joli [pretty]	jolie [pretty]
amusant [fun]	amusante [fun]
moche [ugly]	moche [ugly]
rigolo [funny]	rigolote [funny]
intelligent [clever]	intelligente [clever]

Week 4: Hair

J'ai les cheveux _____ *[I have _____ hair]*
Il a les cheveux _____ *[he has _____ hair]*
Elle a les cheveux _____ *[she has _____ hair]*
On a les cheveux _____ *[we have _____ hair]*
blonds *[blond]*
bruns *[brown]*
châtains *[light brown]*
noirs *[black]*
roux *[red]*
courts [short]
en épis [spiky]
frisés [curly]
longs [long]
mi-longs [mid-length]
ondulés [wavy]
raides [straight] *rasés [shaved]*

Week 5: Eyes & other physical features

J'ai les yeux _____ *[I have _____ eyes]*
Il a les yeux _____ *[he has _____ eyes]*
Elle a les yeux _____ *[she has _____ eyes]*
On a les yeux _____ *[we have _____ eyes]*
bleus *[blue]*
marron *[brown]*
noisette *[hazel]*
verts *[green]*
je porte *[I wear]*
il porte *[he wears]*
elle porte *[she wears]*
on porte *[we wear]* — des lunettes *[glasses]*
j'ai *[I have]* — une moustache *[a moustache]*
il a *[he has]* — une barbe *[a beard]*
elle a *[she has]* — un tatouage *[a tattoo]*
on a *[we have]* — un piercing *[a piercing]*

Week 6: Revision

Revise all of the vocabulary and structures from weeks 1-5.

Subject: Geography | KPOW: UK Rivers | Year 7: Spring Term 1

Week 1: Drainage Basin

Drainage basin = the catchment area of land drained by a river.
Catchment area = land that precipitation falls on that will end up in a given river.

Features of a drainage basin
Watershed - the land forming the edge of a river basin.
Source - where a river **starts**.
Mouth - where a river meets the sea.
Confluence - the point at which two rivers meet.
Tributary - a small river/stream that joins a larger river.
Channel - this is where the river flows.

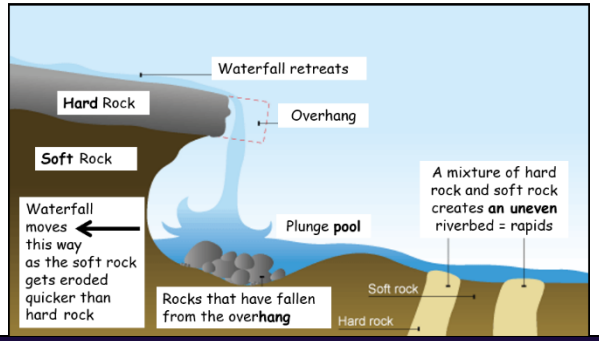
Rivers of Yorkshire
All but one river with their source in Yorkshire flow into the North Sea. The **River Don** is our **closest** main river.

Week 2: Erosional Landforms

Erosion is the **wearing** away of the land by water, ice, or wind. There are 4 types of fluvial (river) **erosion**:

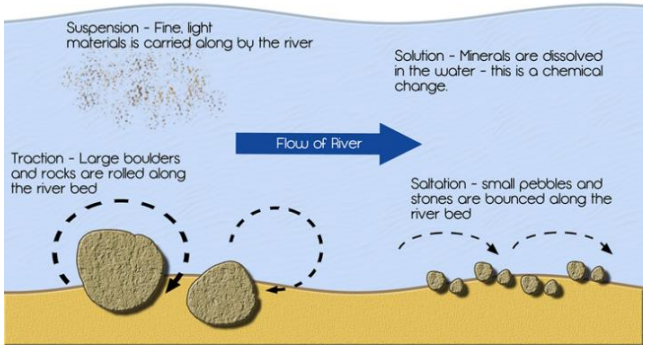
- **Hydraulic action** – the force of the water
- **Abrasion** – scraping of sediment.
- **Attrition** – material in the river collides.
- **Solution** – the dissolving of the land by the water

Formation of a waterfall – Upper course



Week 3: Transportation & Deposition

Transportation – the **moving of sediment**/material along the course of a river.
Deposition – the **dropping of sediment** due to a loss of energy.



Meanders and **floodplains** are created by deposition.

Week 4: Why Do Rivers Flood?

There are both **human** and **physical** causes of flooding. Human causes include creating more **impermeable surfaces** (where **water cannot pass through**) whereas physical causes are created by the natural world, such as prolonged (over a long time) rainfall and steep slopes.



Examples of the **effects** that flooding causes.

Social	Economic	Environmental
- **Homes flooded** - Homelessness - Loss of possessions - Death	- Businesses ruined - **Insurance costs go up** - People cannot work	- Trees knocked down - **Drowned habitats**

Week 5: Managing River Flooding

Management is the controlling of something. In the UK, we use various **strategies** to control river flooding. Humans manage rivers to try and **reduce the effects** of flooding.

Strategy	Methods
Control the water level	You can build a **dam** or put a **pumping station** in.
Building barriers	Build **embankments** at the side of the river or build **flood walls**.
Alter the river channel	You could **straighten** the river to move water away from towns and cities quicker.
Control land use around the river	One way to do this is to **stop** people **building near to rivers**.

Week 6: KPOW – UK Rivers

KPOW – Key Term Recap

Evaporation – liquid to a gas.

Drainage – the flowing of water out of an area.

Landform – a natural feature of the Earth's surface.

Load – the amount of material transported (carried) by a river.

Saturated – completely wet or full of water.

Strategy – a plan or action to achieve something.

Subject: History | KPOW: Did life change under Norman rule? | Year 7: Spring Term 1

Week 1: Religion

Role of the Church:

- Praying
- Baptising a child, marriage, and funerals
- Sharing news, holidays, games, and plays

Role of Religion:

Everyone was **religious and the majority of people were Catholic.** The head of the Church was the Pope in Rome. Services were in Latin and Doom Paintings were used to show Heaven and Hell. The Church was a major landowner, and **everyone paid a tax called a tithe to the Church.**

Monks and Nuns:

They played an **important role in communities** by helping the poor, providing care for the sick and providing rooms to travellers.

Week 2: Medieval Towns and Villages

How did villages change?

- Before 1066 most people lived in the countryside.
- Farm work was hard all year round for the peasants.
- Saxon thegns were replaced by Norman knights.
- **Forest laws** stopped peasants hunting for food in the new royal forests by making it illegal.

How did towns grow?

King William encouraged the growth of towns to increase trade and taxes to the crown, as goods were sold in markets.

Towns started to **grow around castles and churches.** Between 1066 and 1100, 21 new towns were created. Trade e.g. **salt and wool** played an important role in the growth of towns.

Week 3: Law and Order

The Rise of Islam:

For hundreds of years the Roman and Persian Empires were fighting. **Eventually the constant fighting weakened them.** Muslim leaders conquered the old Roman and Persian Empires creating an Islamic Caliphate. **Baghdad became its capital**. The city was very developed with parks, markets, bathhouses, Mosques, schools, and hospitals.

The Silk Roads:

These **were a network of trading routes** between the Eastern and Western worlds (mainly Asia and Europe). Goods were bought and sold.

The House of Wisdom:

Baghdad represented a high point in Islamic civilisation. The time of the Abbasid Caliphates between 750 and 1258 is often called a 'Golden Age'.

As well as goods, **wisdom and ideas travelled along the Silk Roads** to Baghdad.

The books that were brought to Baghdad were stored in the House of Wisdom. **The building was mainly used as a library.**

This was a time that saw **major breakthroughs in science, mathematics, medicine and astronomy and literature.** Baghdad was one of the most developed civilisations in the world until it was destroyed by the Mongols in 1258. They threw all the books from the House of Wisdom into the river.

Week 4: Law and Order

Watchmen – Made people stick to a curfew.

Hue and Cry – People shouted to alert the village that they had seen a **crime had taken place.**

Courts: In addition to the existing courts the Norman's introduced the **Lord's Court.**

Ordeals and Punishments

Ordeal by fire – The accused would carry a hot metal bar. **If the wound healed, they were innocent.**

Ordeal by water – The accused was pushed into water. **If they sank, they were innocent!**

Ordeal by combat – A **new trial** introduced by the Normans. The accused had a battle, if they won, they were innocent. **The Murdrum Fine** was also new. It encouraged the Anglo-Saxon villagers not to attack Normans. If a corpse found near their village was, in fact, a Norman they would receive a heavy fine!

Week 5 and 6: KPOW

Did life significantly change for ordinary people under Norman Rule?

Explain = To make an idea or situation clear to someone by describing it in more detail or revealing extra facts.

Change = To make something different.

Significantly = In a great or important way such as something largely changing.

Life **changed** under the Normans. The Church became more important and played a large part in everyday life. Villages grew and towns developed with markets. **Law and order remained similar to Anglo-Saxon times** though some new laws and ordeals were introduced to give the Normans greater control.

Subject: DT - Food

Week 1 & Week 2

Key terms in cooking:

Simmering- cooking a product then reducing the heat to low, e.g. curry.
Boiling- cooking a product in bubbling water, e.g. pasta.
Frying- cooking something in a small amount of fat, e.g. onions.
Chopping- using a knife to cut a product into small chunks, e.g. peppers.
Peeling- taking the skin off a product, e.g. apple.

Knife safety

Bridge method- when the hand is curled and shaped like a bridge for knife to go under- rounded products, like apple, strawberries, and onion.
Claw method- when a product is gripped by the fingertips in a claw shape and the fingertips are pulled back for safety before cutting- long products such as cucumber and leeks.

Practical planning

You will plan to make fruit kebabs that will be garnished by using the bridge and claw method.

Simple method

1. Wash and chop fruit into even pieces.
2. Slide onto skewer through the centre.
3. Melt chocolate in 30 second bursts in the microwave and drizzle over.
4. Present on a plate.

KPOW: Healthy Eating

Week 3 & Week 4

Practical Planning

You will make a hot sandwich by showcasing skills in knife safety, time management, using a sequence of work and health and safety as well as using a hob and managing pan handles safely to the side.

Simple method

1. Put pan on heat and add a small amount of oil.
2. Add bacon or sausage and cook until crispy and brown.
3. While meat is cooking buter bread & place on serving plate.
4. Add cooked bacon/sausage to bottom slice of bread and place another slice on top.
5. Add sauce and cut in half.
6. Present and enjoy!

Nutrients and Eatwell

Nutrient	Function	Where from?
Carbohydrate Fast release- sugars Slow release- starches	Gives us energy	Starches- cereal, potatoes, pasta, rice Sugars- white sugar, sweets, honey
Fat Saturated- bad *Unsaturated- good*	Keeps us warm and insulated	Processed meat- meatballs, burgers, fried food-chips, junk food-biscuits, cakes *Avocado, coconut, plant oils, olives, nuts*
Vitamins and Minerals	Prevent illness	Any fruit, vegetable or salad item
Protein	Helps bodies to grow and repair	Lean meat- chicken, steak, fish, eggs, milk
Fibre	Helps our digestion	Brown bread, brown rice, brown pasta ie wholewheat items- cereals such as Weetabix, bran flakes

Year 7: Spring Term 1

Week 5 & Week 6

Practical Planning

You will plan to make Spaghetti Bolognese, this will showcase you using a hob as well as following a plan of making, using time management, and following health and safety rules.

Half of the group will make Spaghetti Bolognese and the other half will be the sous chef (helper).

Simple method

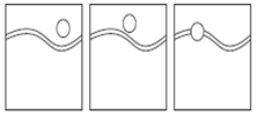
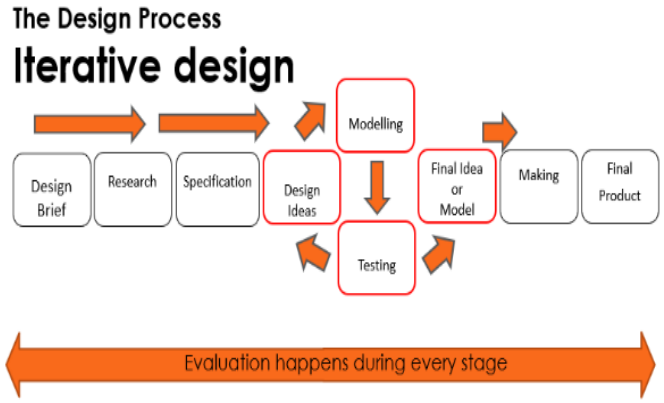
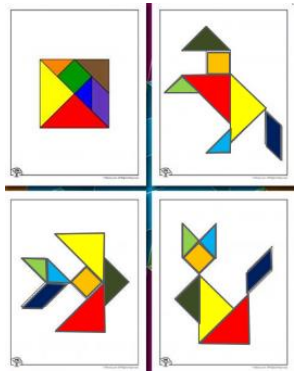
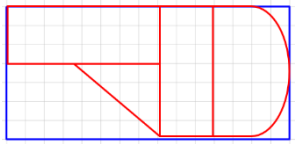
1. Put water in a saucepan up-to the half-way mark and get onto boil.
2. Chop up onion and crush garlic- use bridge or claw method.
3. Fry off in a wok pan until soft.
4. Add mince and cook until brown.
5. Add tomatoes, herbs, spices and leave to simmer for 10 minutes.
6. Drain pasta and plate up pasta on the base and meat sauce on top.

Food provenance and seasonality

You will learn where food comes from and where in the world fruit and vegetables grow.

Food provenance- where food is grown raised or reared.

Seasonality- when food is harvested and grown at specific times of the year, e.g., strawberries in the UK in June/July.

Subject: DT – Product Design	KPOW: Design & Workshop	Year 7: Spring Term 1
Week 1 & Week 2	Week 3 & Week 4	Week 5 & Week 6
Use the Landscape strategy to create 3 designs for your wooden key ring. This strategy helps you understand how a piece of acrylic can be inlayed (stuck) between two pieces of wood. These designs are to be colour rendered (to look realistic), with the inlayed acrylic having a bright contrasting colour Tools and machinery used to create the wooden keyring: Tenon saw – for cutting straight lines Band facer – for hard sanding Sandpaper – for light sanding Files – for chamfering (removing) the edges of the timber. Pillar Drill – to drill the key ring hole Workshop Health and Safety. • Goggles must be worn on all workshop machinery. • Long hair must be tied back on machinery. • Aprons must be worn during all practical lessons.   	Iterative design process is where the designer will test the success of a product throughout, rather than just at the end. This iterative process will help to produce a design for a wooden children's toy that is themed on transport. Woods. Natural wood comes from trees, synthetic wood is man-made. Softwoods grow faster than hardwoods, and therefore are less expensive. Coniferous trees – Softwood – Scots pine, parana pine, spruce, cedar. Deciduous trees (grows leaves that are lost in Autumn) - Hardwood – Beech, elm, ash, mahogany, oak. 	The tangram strategy helps you to create simple ideas using geometric shapes. Tangrams originated in China as a puzzle. Designs produced are in grids of 7cm by 15cm. 15cm = 150mm 7cm = 70mm Man-made boards: MDF (Medium density fibreboard), chipboard, hardboard, blockboard, plywood. Man-made boards are made in factories and generally use the leftovers, such as sawdust and wood chippings. They are less expensive than natural wood but can be more stable.  

Subject: DT - Textiles

Week 1 & Week 2

Sketching – quick, initial ideas drawn in pencil.
Key Word: **CULTURE –** ideas, customs and social behaviour of a group/society.
Theme – *British Culture*
Cuisine – typical British food, fish & chips, English breakfast, cream tea.
Iconic images – (iconic =Very famous/widely recognised) e.g. Houses of Parliament, London Bus, Union Jack Flag.

Symbolism (use of symbols, in this case pictures, to represent ideas) – **umbrella** because that's what British businessmen carry because it rains a lot; a **crown** for the royal family; a **football** to show a love of sport.

Surface decoration techniques – how you can decorate fabric to enhance (improve) its appearance (how it looks).

Key Word: RESIST – coating/method applied to prevent dye being absorbed (soaked up) by the fabric.

Techniques:

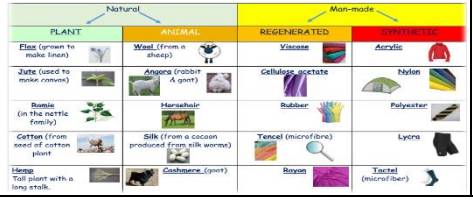
Batik – is a resist method, the resist is the dried wax. Tool used is Tjanting (see pic below).

Tie dye – is a resist method, the resist is the elastic band tied tightly around the material (see pic below).

Stencil – Is NOT a resist method. Cut shape out of card, that becomes your stencil which is a template (see pic below). Dabbing paste on using a sponge.

Theory: **Fibres** - Thin strands are joined together to make a yarn.
Key Word: **FIBRES**
Fibre: hair like structure. **Yarn:** lots of fibres twisted together.
Woven: yarns placed over and under each other to create a fabric.

Table showing **SOURCES** (where they come from) of fibres



KPOW: Design & Make a Cushion Cover

Week 3 & Week 4

Sewing machine introduction – threading a machine (top thread and bottom thread [spool]).

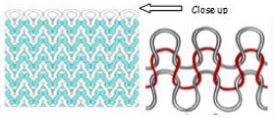
Key Word: DISRUPT – prevent a system or process from continuing as usual (DO NOT DISRUPT OTHERS). The sewing machine & the skills to sew around to help develop control (directing the machine) and accuracy (precise and where the stitch should be).

Health and Safety:

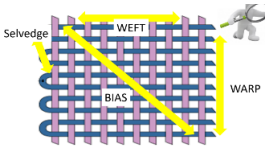
Surface decoration technique Applique
Key Word & Technique: APPLIQUE – stitching a small piece of fabric onto a larger piece to make a pattern or design.
Materials & Method: Bondaweb – double sided fabric glue.

1. Iron rough side of bondaweb to the back of the small piece of fabric.
2. Draw image onto tracing paper side.
3. Steps 3,4 & 5 see image below:

Theory: Fabric Construction methods Woven & Knitted – How yarn is made into fabric.
Key Word: CONSTRUCTION – The process of building something i.e. how it is made.
Knitted = Loops of yarn that interlock.



Woven = Straight yarns that go



Properties: - the characteristics of either a fibre, yarn or fabric:

Properties of knitted Fabric = stretchy, doesn't fray, unravels if damaged, drops creases easily **Common knitted products** = woolly hats, gloves, scarves, tights, socks, t-shirts. **Properties of woven Fabric** = strong, frays, creases easily, doesn't stretch. **Common woven products** = trousers, shirts, bedding, curtains.	**Weft** = thread that goes from left to right, right to left & over and under the warp thread. **Warp** = threads that are vertical and which are set on the loom (machine you weave on). **Selvedge** = the finished edge of the fabric that does not fray. **Bias** = is positioned diagonally across the fabric (at 45 degrees), so the fabric is stretchy and then hangs differently.

Year 7: Spring Term 1

Week 5 & Week 6

Final Idea – a development of the cushion design which evolves from the sketches page ideas, selecting the most suitable images/ideas for each surface decoration technique (Batik, tie dye, stencil, applique).

Key word: SUITABLE – right or appropriate.
Successful colour shading – even use of the pencil to get clear colouring in.

Tonal shading – to add deeper colour on parts of the design by pressing harder to add a more realistic finish.
Representing batik – double line your design so it remains white, add colour either side of it (see image above).
Annotation of Final Idea - a note of explanation or comment added to a diagram / drawing.
Key Word: CONCISE – giving a lot of information clearly in a few words
Areas to explain:

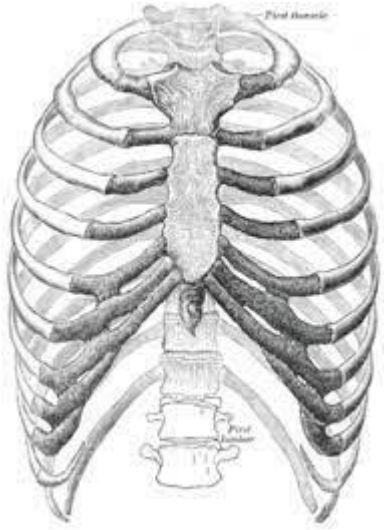
1. How images link to British Culture –

Reflecting – shows what it is like / Common – Found or done often / Iconic – famous or popular / Symbolises – to represent something / Monarchy – country with a king or queen / Popular - liked by many / Recognisable – capable of being identified / Represents – sign or symbol of something / National – of a country & its people / Famous – known and recognised by many / Historical – used to describe something from the past

2. The challenges are:

Curves / fiddly processes / difficult area of … / complicated … / complex process of … / being able to … / Symmetry of … / ensuring the accuracy of …

Theory: **Fabric construction methods, Laminated and Bonded & Microfibres**
Key words: COMPRESSED - flattened by pressure. **MICRO -**ancient Greek word meaning small.
Laminated Fabric (*layers of fabric glued and bonded together).*
Bonded Fabric *(fibres that are compressed [PRESSURE PRESSED] together using heat, pressure and an adhesive [GLUE]).*
Microfibre – less than 1 denier thick which is equivalent to 60/100 times finer than a human hair.
Look like: shaped like a star (snowflake or flower describes them too).
How they work: they trap dust and dirt in their grooves.
Made from: synthetic fibres, normally polyester or nylon.
Common products made from microfibre: sportswear, dusters, sports & dog towels and underwear.
Properties: ultra fine, Washable, high strength, comfortable, high absorption, breathable.

Subject: Core PE	KPOW: Bones	Year 7: Spring Term 1
Week 1 & Week 2: Ribs	Week 3 & Week 4: Femur	Week 5 & Week 6: Tarsals
Ribs Located in the upper trunk. Bone type – FLAT (protective) The ribs protect the heart and the lungs. When a player is getting tackled in rugby their ribs protect their heart and their lungs from getting damaged. Ribs – Flat bones = protection  	**Femur** Located in the upper leg. Bone type – LONG (movement) Long bone – longer than it is wide Movement available at the hip is flexion (bending), extension (straightening), abduction (taking away from the middle of the body), adduction (bringing back to the middle of the body) and rotation (circles). The hip joint is a ball and socket joint. Femur – Long bone = movement 	**Tarsals** Located in the ankles. Bone type – SHORT (weight bearing) Short bones – Same height, width & length The tarsals bear the weight of the body and absorb impact when landing. When a player lands from jumping up to head the ball, the tarsals absorb the shock when landing and when stood up bear the weight of the body. Tarsals – Short bones = weight bearing 

Subject: Computing & Digital Media

Week 1 & Week 2:

Keywords:
Denary: also known as decimal, a base 10 number system.
Binary: a base 2 number system using two digits: 1 and 0.
Transistors: device used to switch electronic flow in a circuit.

Computers use the binary number system since the CPU is made up of billions of **transistors**. These are like switches which turn on and off (1 and 0).

Humans use the denary number system; this is our standard counting numbers. We need to convert between binary & denary.

A binary number is written as a pattern of 8 digits, each digit is either a 0 or a 1. We use **placeholders** to help us read and write binary numbers.

The pattern 00001001 when written out under the placeholders would be the number 9 as shown below: (8 +1 = 9)

128	64	32	16	8	4	2	1
0	0	0	0	1	0	0	1

- **Converting denary into binary:**
  66 = 01000010 (0+64+0+0+0+0+2+0).

- **Converting binary into denary:**
  01010001 = 81 (0+64+0+16+0+0+0+1).

KPOW: Number Systems

Week 3 & Week 4:

Keywords:
Addition: adding two 8-bit binary numbers together.
Binary Overflow: 8-bit binary has a maximum value of 11111111 (255). Anything over this value, for example 278 will produce an overflow error.

Binary numbers can be added together. For example, to work out the following:

01010011 + 01110110

Work from the right and use these four rules, carry under to the left as required:

Rule One:	0 + 0 = 0
Rule Two:	1 + 0 =1
Rule Three:	1 + 1 = 10 (binary for 2)
Rule Four:	1 + 1 + 1 = 11 (binary for 3)

01010011
01110110 **+**
11001001

Add up the following binary numbers:

01110010 01000110	00000000 00010000
01111010 01011110	11111111 11111111

Year 7: Spring Term 1

Week 5 & Week 6:

Keywords:
Storage: Something that holds data.
Capacity: The maximum amount a storage device such as a hard drive can hold.

Primary storage: is directly accessed by the CPU and is normally the fastest memory in the computer. Primary storage is RAM, ROM and cache (memory inside the CPU).

Secondary storage: this is where you can permanently save your files.
Secondary storage is split into three different categories. See below:

Magnetic	Solid State	Optical
Hard disk drive Tape drive	USB Flash drive SD Card	CD DVD Blu ray

Storage is measured in **Bytes** and speed, such as the CPU, is measured in **Hertz**.

Order	Hertz	Bytes
Smallest		Bit
↑	Hz	Byte
	KHz	KB
	MHz	MB
↓	GHz	GB
Largest		TB

Subject: Art

Week 1 & Week 2:

Keywords and definitions

Blend: Moving from one tone or colour to the next smoothly.

Colour: Colour *is the element of art that is produced when light, striking an object, is reflected back to the eye*

Complimentary: Combined in such a way that something is enhanced or emphasised.

Mood: The feelings or atmosphere that a piece of Artwork creates.

Observational drawing (colour)

To record a subject as accurately as possible.

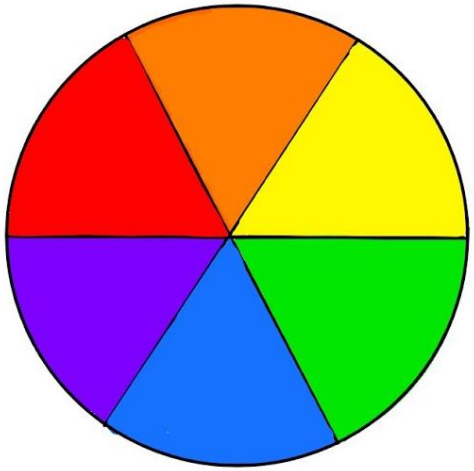
KPOW: Observational drawing

Week 3 & Week 4:

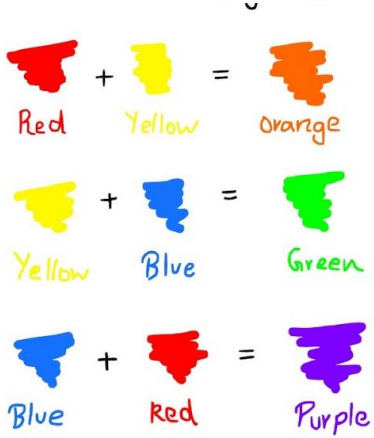
The Colour Wheel

Primary Colours: Red, Blue and Yellow

Secondary Colours: Orange, Green and Purple



How are secondary colours mixed?



Year 7: Spring Term 1

Week 5 & Week 6

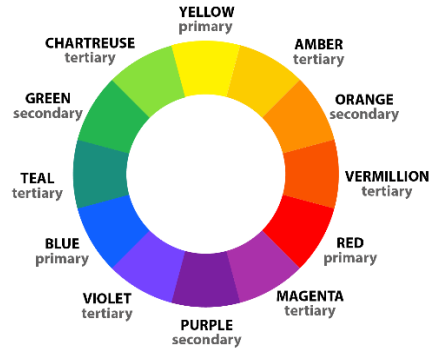
Types of Colours

Complimentary Colours: Colours such as red/green, Blue/orange and yellow/purple.

Warm colours: Red, orange, yellow. These colours help to give a warm feeling or mood.

Cool colours: Blue, green, purple. These colours help to give a cold feeling or mood.

Tertiary colours: Colours that are formed by mixing a secondary colour with a primary colour.



Subject: Drama

Week 1 & Week 2: WW2 and Anne Franks' Diary

Conflict- An active disagreement between people with opposing opinions or principles.

The Guernica - 1937 – is an oil painting by Pablo Picasso. The painting symbolises the tragedies of war.

'World War Two 1939- 1945'

Anne Frank– Was a Jewish girl born 12th June 1929; she wrote a famous Diary about how her family were in hiding during WW2.

Otto Frank – Born 12th May 1889. Is Anne Frank's 'Father; he was a German businessman and the only member of the Frank Family to survive the holocaust.

Freeze Frame – is achieved by freezing the action on stage usually at a key moment to create tension.

KPOW: Anne Frank

Week 3 & Week 4: Themes

Discrimination – treating a person or a particular group of people differently.

Hope - to want something to happen and think that it is possible.

Margot Frank – Was a Jewish girl born 16th February 1926 and is the elder sister of Anne Frank.

'Where there's hope, there's life' (Anne Frank)

Edith Frank – Born 16th January 1900 is the mother of Anne Frank.

Mind Map – involves writing down a central theme and thinking of new and related ideas.

Tableaux– A tableaux is a set of frozen images performed on stage.

Year 7: Spring Term 1

Week 5 & Week 6: Practical Exploration

The Secret Annex – The hiding place of the Frank Family located in Amsterdam during WW2.

Tableaux– A tableaux is a set of frozen images performed on stage.

Hot seating –This technique helps to deepen understanding of character. An actor sits in the hot-seat and is questioned in role answering questions.

'In July 1942, the Frank Family went into hiding.'

Thought Tracking- is when an actor steps out of the scene to speak the thoughts of their character to the audience.

Exploring the Voice
Vocal expression
Pitch
Projection
Tone & Emotion

Subject: Learning 4 Life

Year 7: Spring Term 1

Week 1 & Week 2: Key Words

Please learn the definitions of the following 11 words:

Motivation	A reason for acting/behaving in a certain way.
Aspirations	A hope or ambition to achieve something.
Work Experience	A short-term period of employment.
Skills	The ability to do something well.
Career	An occupation undertaken for a good period of time, with the opportunity to progress.
Further Education	Education below degree level for people above school age.
Higher Education	Education at university or a similar education establishment.
A Levels	A UK subject-based qualification for students aged 16 and over.
Apprenticeship	When you learn a trade. 20% of the time is theory, 80% is practical training.
Vocational	Education or training for a particular occupation.
Determination	The ability to keep trying to do something, even if it is difficult.

Week 3 & Week 4: James Dyson

An Entrepreneur (a person who sets up a business)

Please learn these facts about James Dyson:

A British entrepreneur Born in 1947 in Norfolk.

Talking about long distance running at school:

"I was quite good at it, not because I was physically good, but because I had more determination. I learnt determination from it."

His inventions:

The Ballbarrow

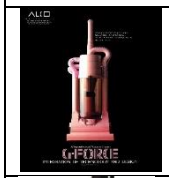
A wheelbarrow but instead of a wheel, a ball is used.

Released in the UK in 1974.

The Trolleyball Boat Launcher

Using the same idea as the Ballbarrow but this was used to launch boats.

Released in the UK in 1978.



The G Force Vacuum Cleaner

This was the first vacuum that did not need a dust bag.

Released in Japan in 1986.

The Dyson Ball Vacuum Cleaner

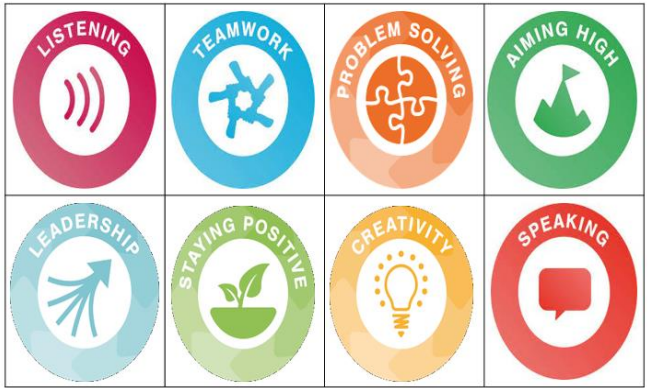
This vacuum incorporated his idea from the Ballbarrow.

Released in the UK in 2005.

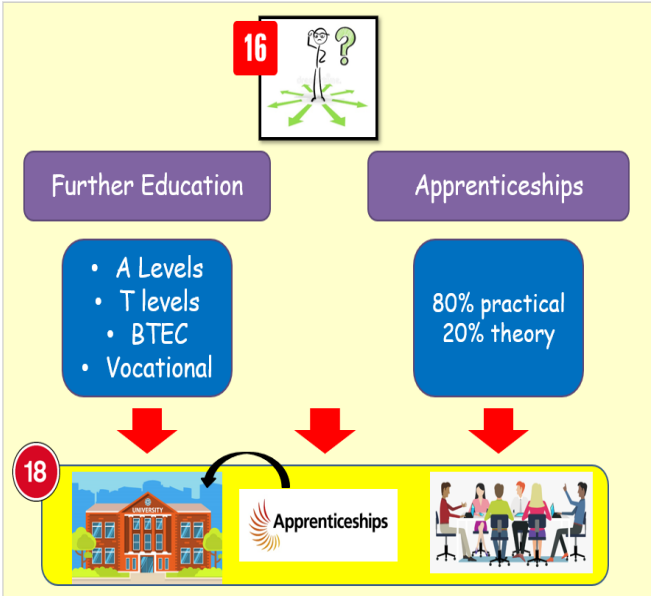
Week 5 & Week 6: Careers

Skills

There are 8 key skills which future employers look for:



Routes to the future you want



Home Learning Schedule

Day	Subject to Learn
Monday	English and Learning 4 Life
Tuesday	Maths and Computing & Digital Media
Wednesday	Science
Thursday	French, History and Geography
Friday	Design Technology, PE & Creative

Home Learning is set, on Satchel:One, every **Monday** and will be submitted in **P&A Time** every **Monday**.

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