



Minsthorpe Community College

Knowledge Organiser Year 7 – Spring Term 2

Name:

P&A group:

Knowledge Assessment: Friday 22nd March 2024 – 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 do writers create characters?	Year 7: Spring Term 2
Week 1 & Week 2: Lord of the Flies		Week 3 & Week 4: Lord of the Flies	Week 5: Reading, Speaking & Listening
<p>Chapters 7 - 8</p> <p>'The Tempest' extract, Protagonists and Antagonists</p> <p>Key Word Definitions:</p> <p>Usurp: to take a position of power illegally or by force.</p> <p>Tension: a feeling of unease, stress, or strain.</p> <p>Tyrant: a cruel and oppressive ruler.</p> <p>Context: the time period in which the text was written.</p> <p>Protagonist: the leading character in a play, novel, film etc.</p> <p>Antagonist: the character in a text who causes problems for the protagonist.</p> <p>Key learning points:</p> <p>CON/WM Golding fought in World War Two and was horrified by the cruelty and violence he witnessed. He was shocked that it was not only the enemy who were cruel, but also the British soldiers. He came away believing that all people have the capacity to be evil, in fact, it is only society that stops us from doing this. It is important to understand the context of a text so we understand what the writer may be trying to show about society.</p> <p>Grammar:</p> <p>Subject: the subject of a sentence is the person or thing (noun or pronoun) which is doing the (action/ process) verb.</p> <p>Object: the object of a sentence is the person or thing (noun or pronoun) which is having the verb done to it.</p>		<p>Chapters 9 - 12</p> <p>Key word Definitions:</p> <p>Propaganda: information of a biased or misleading nature used to promote a political viewpoint.</p> <p>Dictator: a ruler with total power over a country, typically one who has obtained control by force.</p> <p>Vulnerable: exposed to the possibility of attack, whether physically or mentally.</p> <p>Hierarchy: a system in which members of a group or organisation are ranked according to their status and authority.</p> <p>Ostracised: to be excluded from a society or group.</p> <p>Key skills: Reading and essay writing</p> <p>CF Write a sentence which answers the question.</p> <p>PIN Say who said the quotation and when.</p> <p>QU Include a quotation from the text.</p> <p>EX Explain what it shows about a character & why.</p> <p>T Include terminology e.g. word classes.</p> <p>Z Zoom in on a key word.</p> <p>WM What is the writer's message?</p>	<p>Key Word Definitions:</p> <p>Brutal: excessively cruel and harsh.</p> <p>Intimidate: to frighten someone, usually in order to make them do what you want.</p> <p>Permeate: to spread throughout something.</p> <p>Zeitgeist: from German, literally 'the spirit of the age', the defining mood of a certain historical period.</p> <p>Anomaly: the odd one out in a set of results; something considered different to what is expected.</p> <p>Contentious: something likely to cause an argument, controversial.</p> <p>Key skills: Debating</p> <ul style="list-style-type: none"> • A debate is a structured discussion between two people with opposing views. • Both partners need to have a range of ideas and examples to back up their perspective. • The discussion needs to be fairly balanced between partners. • Both partners need to listen and respond to each other's views. • Both partners need to speak clearly. • Both partners need to speak in full sentences with effective vocabulary.

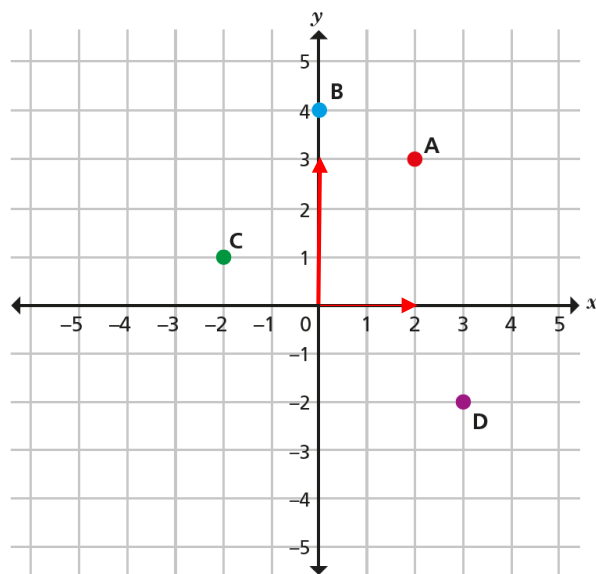


Subject: Maths

Week 1: Coordinates

Coordinates

Coordinates are used to describe the **position** of a point.



To read or plot a coordinate, read the x-coordinate first and then the y-coordinate.

For example, the point **A** is written as (2, 3).

Keywords:

Equidistant: The same distance.

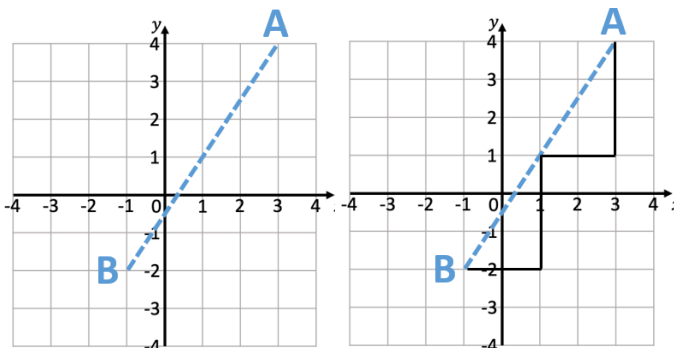
Midpoint: Divides a line segment into two equal parts.

KPOW: The Cartesian Plane

Week 2: Coordinates

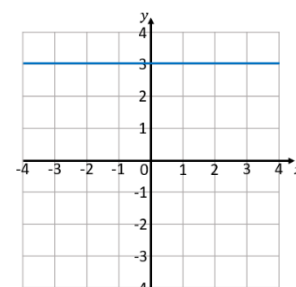
Midpoints

The midpoint of line segment can be found by drawing identical triangles.

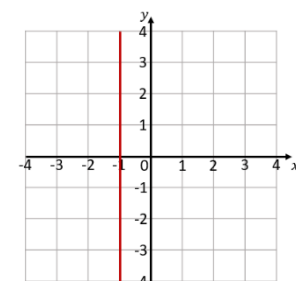


For example, the midpoint of AB = (1, 1).

Equation of straight lines



The equation of this line is
 $y = 3$
because all the y-coordinates
on this line are 3.



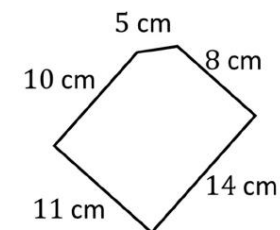
The equation of this line is
 $x = -1$
because all the x-coordinates
on this line are -1.

Year 7: Spring Term 2

Week 3: Classifying 2D shapes

Perimeter

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



For example

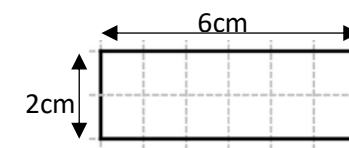
The perimeter of this shape is
 $11\text{cm} + 10\text{cm} + 5\text{cm} + 8\text{cm} + 14\text{cm} = 48\text{cm}$

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 $2\text{cm} \times 6\text{cm} = 12\text{cm}^2$.



Subject: Maths

Week 4: Transformations

Keywords

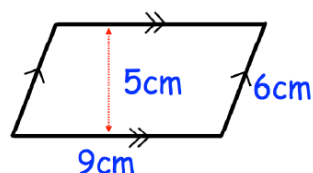
Perpendicular: Lines that meet at a right angle (90°).

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

Parallelograms

The area of a parallelogram is

$$\text{base} \times \text{perpendicular height}$$



For example

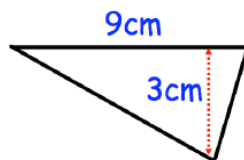
The area of this parallelogram is

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

Triangles

The area of a triangle is

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



For example

The area of this triangle is:

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

KPOW: The Cartesian Plane

Translation

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

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

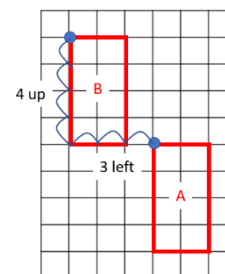
A **positive** x value is a move of x spaces to the **right**.

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**.

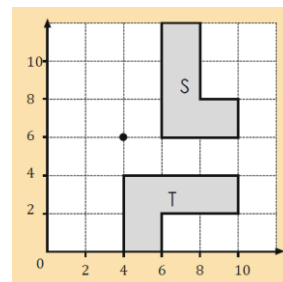


Rotation

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



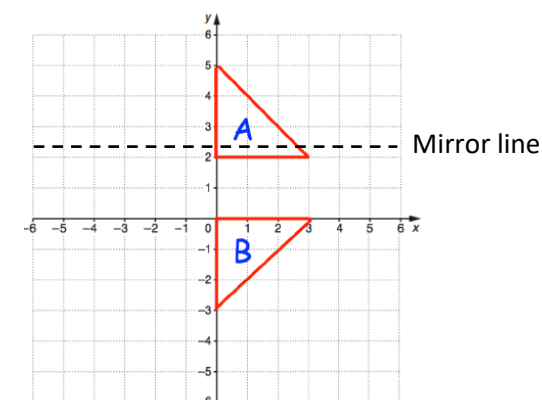
Year 7: Spring Term 2

Week 5: Transformations

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 where the mirror line is.

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





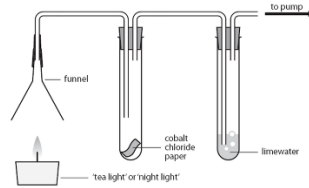

Keywords:

Isometry: Transformations that don't change the shape or size of an object. This creates **congruent** shapes.

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.





Subject: Chemistry		KPOW: Neutralisation	Year 7: Spring Term 2						
Week 1: Metal oxides		Week 2: Reactions of metals	Week 5: Incomplete combustion						
<p>Keyword definitions</p> <p>Oxide – A substance formed when something reacts with oxygen.</p> <p>Oxidation – The process of a substance reacting with oxygen.</p> <p>Reactants – Substances that react together in a chemical reaction.</p> <p>Products – Substances that are produced (made) in a chemical reaction.</p> <p>Conservation of mass – Mass cannot be created or destroyed so the mass of reactants is always equal to the mass of the products.</p> <p>Examples of oxidation</p> <p>Magnesium + oxygen → magnesium oxide.</p> <p>Copper + oxygen → copper oxide.</p>		<p>Reactions of metals with acids</p> <p>Metals react with acids to produce a salt and hydrogen.</p> <p>Metal + acid → salt + hydrogen</p> <p>Sodium + hydrochloric acid → sodium chloride + hydrogen</p> <div><div><div>Na</div><div>H</div><div>Cl</div></div><div><div>Na</div><div>Cl</div></div><div><div>H</div><div>H</div></div></div> <p>Reactions of metal carbonates with acids</p> <p>Metal carbonates react with acids to produce a salt, water, and carbon dioxide.</p> <p>Metal carbonate + acid → salt + water + carbon dioxide</p> <div><div><div>Ca</div><div>O</div><div>C</div><div>O</div><div>O</div></div><div><div>H</div><div>Cl</div></div><div><div>Mg</div><div>Cl</div></div><div><div>H</div><div>O</div><div>H</div></div><div><div>O</div><div>C</div><div>O</div></div></div>							
<p>Week 3: Investigation planning – antacids</p> <p>Testing the effectiveness of antacids.</p> <p>Indigestion is caused by excess stomach acid. Antacid tablets neutralise this excess acid.</p> <p>Independent variable (the thing that is changed) - the brand of antacid used.</p> <p>Dependent variable (the thing that is measured) -the volume of acid needed to neutralise the antacid.</p> <p>Control variables (what we keep the same) – the mass of antacid used.</p> <p>Equipment needed –</p> <div><div><p>Balance – to weigh out a specific mass of antacid.</p><p>Measuring cylinder – to measure a specific volume of acid.</p></div><div></div></div>		<p>Week 4: Complete combustion</p> <p>Keyword definitions:</p> <p>Combustion – The rapid reaction of a substance with oxygen, producing heat and light.</p> <p>There are three things needed for combustion to occur; a fuel, oxygen and heat.</p> <p>The equation for the combustion of a fuel is:</p> <p>Fuel + Oxygen → carbon dioxide + water</p> <p>You can test for these products using the experiment below:</p> <div><div></div><div><p>Cobalt chloride paper turns from pink to blue if water is present.</p><p>Limewater turns cloudy if carbon dioxide is present.</p></div></div>							
		<div><div>Complete →</div><div></div><div>← Incomplete</div></div> <p>The blue (roaring) flame on a Bunsen burner (left) is an example of complete combustion. The safety flame is an example of incomplete combustion (right)</p> <p>The products of incomplete combustion can be harmful.</p> <table><tr><th>Product</th><th>Harmful effect</th></tr><tr><td>Carbon monoxide</td><td>Toxic</td></tr><tr><td>Carbon (soot)</td><td>Respiratory problems Global dimming</td></tr></table> <p>Respiratory problems – Cause airways to become inflamed, restricting breathing.</p> <p>Global dimming – Carbon particles form a layer around the atmosphere, reducing the amount of sunlight passing through.</p>		Product	Harmful effect	Carbon monoxide	Toxic	Carbon (soot)	Respiratory problems Global dimming
Product	Harmful effect								
Carbon monoxide	Toxic								
Carbon (soot)	Respiratory problems Global dimming								





Subject: Biology

Week 1: Muscular System

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.



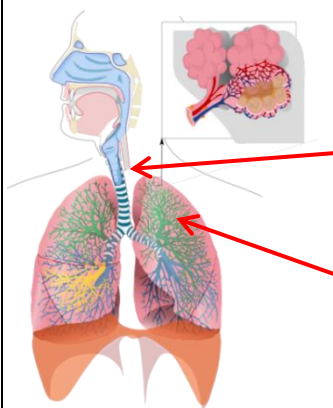
On the arm, the biceps and triceps work as antagonistic pairs to move the fore-arm up and down. The biceps contracts as the triceps relax to raise the forearm.

KPOW: Biology

Week 2: The Lungs

Keyword definitions

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



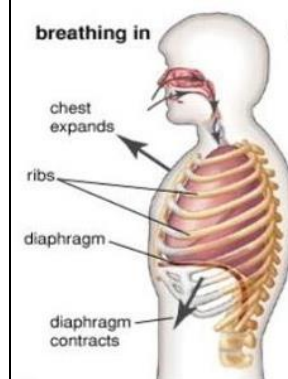
Trachea – The tube that connects the mouth and lungs and allows gas to flow in and out of the body.

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

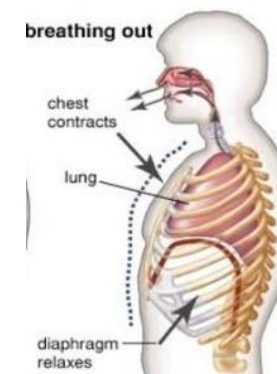
Year 7: Spring Term 2

Week 5: Review Lesson

Keyword definitions:



During breathing we **inhale** when the rib muscles contract, the **ribcage** lifts up and out, and the **diaphragm** contracts and **moves down**.



When we **exhale**, the rib muscles relax, the **ribcage** moves down and in, and the **diaphragm** relaxes and moves up.

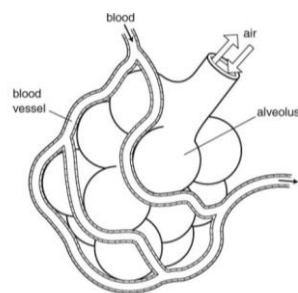
Week 3: Exchange Surfaces

Keyword definitions

Diffusion – Particles moving from an area of high concentration to an area of low concentration.

Exchange surfaces - Where substances are swapped between the inside and outsides of an organism.

Alveoli – Small air sacs where gas exchange takes place in the lungs.



The lungs have lots of tiny alveoli that increase the **surface area** of the lungs. This allows **oxygen** to diffuse into the body and **carbon dioxide** to diffuse out of the body.

Week 4: Lung Disease

Keyword definitions

Nicotine – The addictive substance in a cigarette.

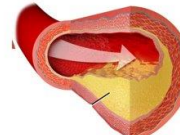
Tar – A sticky brown substance that sticks to the surface of the lungs.

Healthy Person

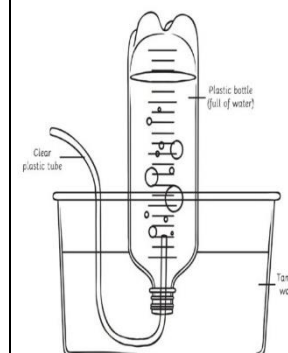
Arteries, including coronary artery



Smoker





The arteries of a smoker may become blocked with fatty materials. This reduces the flow of blood around the body and may lead to a heart attack.



If you blow into an upturned bottle of water that is submerged in a bowl of water, you can measure your **lung capacity**. Your lung capacity is a measure of the **volume** of air your lungs can hold.





Subject: French		KPOW: Descriptions Writing		Year 7: Spring Term 2	
Week 1: Verbs for describing people		Week 2: Masculine and feminine adjectives		Week 3: Language for talking about relationships	
<p>Je suis [I am]</p> <p>Je ne suis pas [I am not]</p> <p>Il est [He is]</p> <p>Elle est [She is]</p> <p>Mon frère est [My brother is]</p> <p>Ma sœur est [My sister is]</p> <p>Ma mère est [My mother is]</p> <p>Mon père est [My father is]</p> <p>Quand j'étais petit(e), j'étais [When I was young I was]</p> <p>est [is]</p>		<p>beau [beautiful]</p> <p>fort [strong]</p> <p>grand [tall]</p> <p>petit [small/short]</p> <p>musclé [muscular]</p> <p>actif [active]</p> <p>sportif [sportive]</p> <p>méchant [nasty/mean]</p> <p>ennuyeux [boring]</p> <p>généreux [generous]</p> <p>marrant [funny]</p> <p>rigolo [funny]</p> <p>sympa [nice]</p> <p>têtu [stubborn]</p> <p>timide [shy]</p> <p>honnête [honest]</p> 		<p>belle [beautiful]</p> <p>forte [strong]</p> <p>grande [tall]</p> <p>petite small/short]</p> <p>musclée [muscular]</p> <p>active [active]</p> <p>sportive [sportive]</p> <p>méchante [nasty/mean]</p> <p>ennuyeuse [boring]</p> <p>généreuse [generous]</p> <p>marrante [funny]</p> <p>rigolote [funny]</p> <p>sympa [nice]</p> <p>têtue [stubborn]</p> <p>timide [shy]</p> <p>honnête [honest]</p> 	
				<p>Dans ma famille, j'ai... [in my family, I have..]</p> <p>Dans ma famille il y a <u>quatre</u> personnes: [In my family there are 4 people:]</p> <p>Je m'entends bien avec [I get along well with]</p> <p>Je m'entends mal avec [I get along badly with]</p> <p>J'aime [I like]</p> <p>Je n'aime pas [I don't like]</p> <p>car [because]</p> <p>et [and]</p> <p>cependant [however]</p> <p>J'adore [I love]</p> <p>Je déteste [I hate]</p> <p>parce que [because]</p> <p>aussi [also]</p> <p>mais [but]</p>	
Week 4: Family members		Week 5: Time phrases & intensifiers for describing			
<p>mon père [my father]</p> <p>mon grand-père [my grandad]</p> <p>mon beau-père [my step-dad]</p> <p>mon oncle [my uncle]</p> <p>mon petit frère [my little brother]</p> <p>mon grand frère [my big brother]</p> <p>mon demi-frère [my half brother]</p> <p>mon cousin [my cousin]</p> <p>ma mère [my mother]</p> <p>ma grand mère [my grandma]</p> <p>ma belle mère [my step-mother]</p> <p>ma tante [my aunt]</p> <p>ma petite sœur [my little sister]</p> <p>ma grande sœur [my big sister]</p> <p>ma demi sœur [my half sister]</p> <p>ma cousine [my cousin]</p>		<p>je suis quelquefois [I am sometimes]</p> <p>il est quelquefois [he is sometimes]</p> <p>elle est quelquefois [she is sometimes]</p> <p>je ne suis pas [I am not]</p> <p>il n'est pas [he is not]</p> <p>elle n'est pas [she is not]</p> <p>je ne suis jamais [I am never]</p> <p>il n'est jamais [he is never]</p> <p>elle n'est jamais [she is never]</p> <p>très [very]</p> <p>assez [quite]</p> <p>trop [too]</p> <p>un peu [a bit]</p>			





Subject: Geography

Week 1& 2: Glaciers Erosion and Deposition

The World of Work

The types of jobs people do in the UK have changed over time. In the past, many men did manual labour while women often worked in factories or offices. People often remained in the same job for all of their lives.

Today things are very different. Men and women work in a huge variety of different workplaces. There are four different work sectors in the UK.

Primary Sector	People work with or get raw materials from the land or sea. E.g., Farmers, miners, forestry workers.
Secondary Sector	People make things out of raw materials- this is also known as manufacturing. E.g., clothes making, baking and car manufacturing.
Tertiary Sector	People provide a service for others. E.g., Doctors, cleaners, teachers, and shop assistants.
Quaternary Sector	People are highly qualified and use their knowledge to research and invent things.



KPOW: World of Work

Week 3&4: Changing employment

The UK's **employment structure** has changed over time. Some sectors have massively decreased, like the primary sector, and some have increased, such as the tertiary sector.

One type of employment that has massively grown in the tertiary sector is **tourism**.

Tourism accounts for 10% of the UK's wealth. There are many advantages to tourism, such as providing employment opportunities, but there are also many disadvantages, such as, work is often only available seasonally. This means you are only employed for some of the year.



Week 4: Communications and Transport

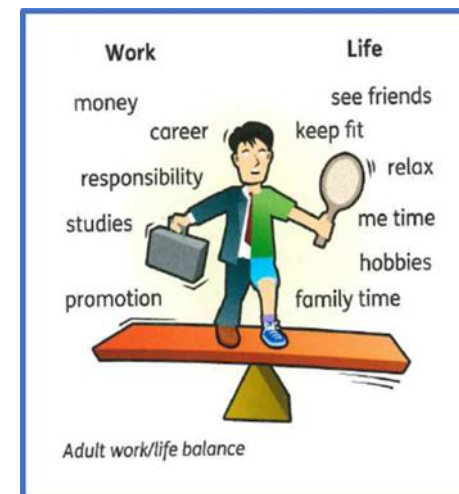
Communications are the transfer of information. They have changed over time and today almost all communications are sent electronically with the help of modern technologies, such as submarine communication cables and satellites.

Transport has also changed over time from the traditional horse drawn stagecoaches to the modern high-speed railways and smart motorways of today. One improvement in transport **infrastructure** has been the bypass. A **bypass** is a road that goes around a town or village so that traffic, which is passing that town, does not have to go through the town centre.

Year 7: Spring Term 2

Week 5: How do we spend our free time?

Striking a **healthy work / life balance** is important. This is the amount of time you spend doing your job (or schoolwork) compared with the amount of time you spend with your family and doing other things that you enjoy.






Leisure means the use of time when you are not working. The UK offers a range of outdoor leisure activities. Leisure and recreation outdoors bring both advantages and disadvantages for the places people visit.

Advantages include local people may be employed as shop assistants or guides. Disadvantages include attractions becoming overcrowded. These are called **honeypot sites** – attracting people like bees to a honeypot!





Subject: History		KPOW: Did life change under Norman rule?	Year 7: Spring Term 2
Week 1: Thomas Becket		Week 2: Murder in the Cathedral	Week 5: Black Death and Peasants' Revolt
<p>Early Life: Thomas Becket was born in London in the early 12th century to a middle-class family. He had a good education in London and Paris. He worked for Theobald of Bec, the Archbishop of Canterbury.</p> <p>Role as Archbishop: After Theobald died, Thomas became Archbishop of Canterbury, but his relationship with King Henry II began to deteriorate. Thomas pushed for laws which made the Church independent from the monarchy.</p> <p>Constitution of Clarendon and Exile: Henry passed a new set of rules (16) called the Constitution of Clarendon. This gave him absolute power and said the Church was not independent of his rule. Thomas refused to accept this. Realising he may be in danger, he fled to France. After a 6-year stand-off, Thomas returned on the condition he kept his power.</p>		<p>After years of disagreements between Becket and King Henry II, things were about to take a nasty turn:</p> <p>When: 1170 Where: Canterbury Cathedral. Who: Four of Henry's knights and Thomas were in the Cathedral. What: They murdered him, all taking a turn to strike him with their sword. Why: They were acting after hearing Henry say: "Who will rid me of this troublesome priest?"</p> <p>Key term: Debate - This means to argue (using evidence) over a particular issue. <u>Historians have often debated</u> whether the King intended for Thomas to be killed or if he was just careless with his words.</p> 	<p>The Black Death arrived in Britain in June 1348. The Bubonic Plague caused swelling in the armpits and groin, fever and vomiting- 50% died. The Pneumonic Plague caused fever, cough, headaches and breathlessness – 100% died.</p> <p>People blamed the plague on miasma (bad smells), being poisoned, God punishing them and the planets. To cure the plague people prayed, punished themselves or drilled holes in people's heads to let out bad spirits.</p> <p>Short Term Consequences: Between 2-3 million died. The people left moved around looking for better wages and jobs.</p> <p>Long Term Consequences: The King passed the Statute of Labourers 1351, which meant workers could not demand wages higher than before the Black Death. This angered the peasants.</p> <p><u>Peasants' Revolt</u></p> <p>When: 1381 Where: Essex, Kent, London (Mile End and Smithfield). Who: Peasants rebelled against King Richard II. Why: Poll Tax, work service and Statute of Labourers. What: The peasants demanded the King made changes. John Ball preached about the end of the Feudal System and criticised the Church. After a rampage through London the King met the peasants at Smithfield. Wat Tyler, the peasant's leader was killed.</p> <p>Short Term Consequences: King Richard II promised the peasants a royal pardon only to go back on his promise. Many of the leaders were killed. However, the Poll Tax ended which was a success.</p> <p>Long Term Consequences: Peasants gained more freedom. The revolt served as a reminder to future Kings of what the peasants could do.</p> 
Week 3: Magna Carta		Week 4: The Baron's Revolt	
<p>In 1214, the barons rebelled against King John because they felt he was ruling unfairly. They presented him with a list of demands, known as the Magna Carta, meaning Great Charter.</p> <p>King John signed the Magna Carta in 1215. It was a set of rules that the King had to obey and included:</p> <ul style="list-style-type: none"> The Church shall be free to pick its own bishops and Archbishops. No freeman can be imprisoned without a fair trial. London cannot be forced to pay higher taxes than other parts of the county. <p>This was the first time an English king had been expected to obey rules.</p> 		<p>In 1264, the barons challenged the King's power for a second time. This time they were led by a baron called Simon de Montfort.</p> <p>Simon and the barons defeated and captured King Henry III and his son Edward at the Battle of Lewes. They were put in prison, and for a short time Simon de Montfort became the ruler of England. However, he soon lost support from the barons. Simon invited commoners from towns that were friendly to him to sit on the Great Council – this was the first-time ordinary people, other than the barons had been invited to give advice at the Great Council. This is often seen as the beginning of the House of Commons in our parliament, so...</p> <p>Simon de Montfort has become known as the 'Father of Parliament'.</p>	





Subject: DT - Food

Week 1 & Week 2

Practical planning

You will plan to make FRUIT CRUMBLE, this will showcase you using an oven as well as following a plan of making, using time management, and following health and safety rules.

Simple method

1. Peel, core and chop apples.
2. Add the peeled and chopped fruit to base of baking dish and sprinkle with sugar.
3. In a bowl add flour, sugar and butter and use rubbing in method to combine into breadcrumb texture.
4. Cover fruit with crumble topping and sprinkle with a handful of sugar.
5. Place in a pre-heated oven for 20 minutes or until golden brown.



KPOW: Healthy Eating

Week 3 & Week 4

Practical planning



- Food can be described in many ways
- What you think is tasty other people may not share the same view
- There are certain words we DON'T ALLOW to use like- nice, ok, awful, gorgeous etc as these are opinion words and not giving any description
- When describing you need to think about using words for- shape, colour, feel, look, smell etc
- Some words may crossover and work for 2 categories for example a cake could taste and smell sweet

Year 7: Spring Term 2

Week 5

Year 7- revision for test

HEALTH AND SAFETY RULES OF THE KITCHEN

- HAIR TIED UP
- APRON ON
- HANDS WASHED WITH HOT SOAPY WATER TO KILL GERMS
- SIDES WIPED DOWN
- PLAN, INGREDIENTS AND EQUIPMENT OUT AND READY TO USE

HAZARDS AND PREVENTION

A HAZARD IS SOMETHING THAT COULD CAUSE ILLNESS OR INJURY

Nutrient	Function- what it does for us?	Where do we get it 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

SEASON	FOOD THAT GROWS
SPRING	PEAS, CARROTS, STRAWBERRY
SUMMER	LETTUCE, AUBERGINE, CUCUMBER, BLUBERRIES
AUTUMN	PUMPKIN, APPLES, MUSHROOMS, PEARS, POTATO, BEETROOT
WINTER	SPROUTS, PARSNIPS, CLEMENTINE, BROCCOLI, CAULIFLOWER


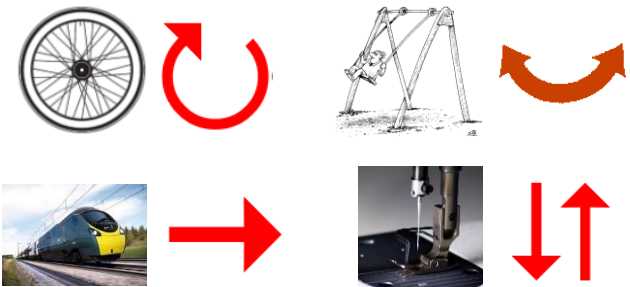
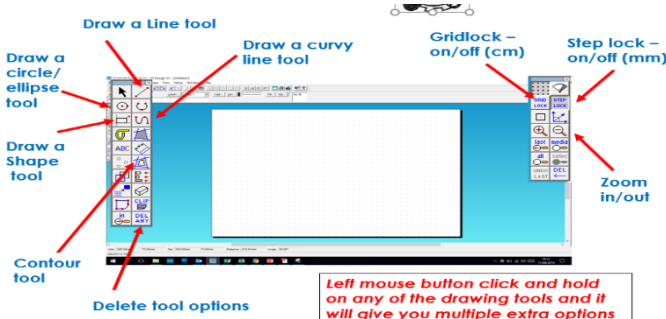
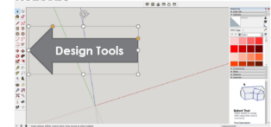
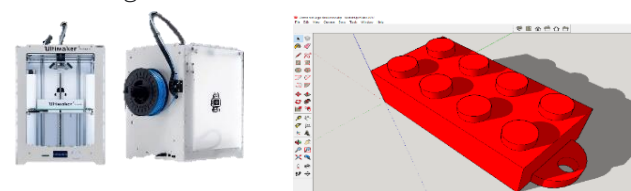
FOOD PROVENANCE IS WHERE YOUR FOOD COMES FROM, IT'S IMPORTANT TO BUY AND EAT LOCALLY GROWN FOOD TO HELP THE LOCAL COMMUNITY TO PLOUGH MONEY BACK INTO FARMING

Spellings Test:

Fibre	Carbohydrate	Protein
Vitamin	Sensory	Ingredient
Delicious	Appealing	Safety
Guide	Modification	Recipe
Evaluation	Product	Hazard





Subject: DT – Product Design	KPOW: Design & Workshop	Year 7: Spring Term 2															
Week 1 & Week 2	Week 3 & Week 4	Week 5															
<p>Workshop skills used to shape the body of the wooden children's toy:</p> <p>Cutting – Use of tenon saw for cutting straight lines and coping saw for cutting curved lines.</p> <p>Scroll saw – complex cuts. Workshop machinery so goggles are required.</p> <p>Pillar drill – drilling holes for wheels and decoration. Different sized drill bits.</p> <p>To finish a product, you need to use sandpaper, a rasp (similar to a file, but has large teeth like a cheese grater) and/or a file in order to remove waste material and smooth the timber.</p> <p>Wood joining methods – Nails/pins, screws, nuts and bolts, adhesives (glues), knock down fixtures, wood joints.</p> <p>Wood working tools – Hammer, pincers, screwdriver, spanner, pliers, wooden mallet, chisel.</p> <p>Wood finishes – Varnish, paint, stain, wax, polish, oil, decoupage, laser engraving.</p> 	<p>Laser cutter – CAM Precise cutting of the additional pieces and wheels.</p> <p>Wood tools – Bench hook, G clamp, bench vice, machine vice, pencil, metal rule, tri square, tenon saw, coping saw, file.</p> <p>Wood working machines – Scroll saw, pillar drill, bobbin sander, band facer.</p> <p>Mechanisms – A system of parts working together in a machine. Levers, linkages, cams, gears, and pulleys.</p> <p>Motion</p> <ul style="list-style-type: none"> • Rotating - in a circular path around a fixed point • Linear - in a straight line in one direction • Reciprocating - repetitive movement left to right, up and down • Oscillating - Swinging movement to and fro, from a fixed point. 	<p>Techsoft 2D Design – CAD software that is used to create designs which will be cut using a laser cutter.</p> <p>CAD – Computer aided design</p> <p>CAM – Computer aided manufacture</p>  <p>Google SketchUp – CAD software that is used to create 3D designs which can be 3D printed.</p>  <p>Ultimaker 2 3D Printer – Builds up the structure of the design using tiny layers of PLA (Polylactic acid) which is a thermoplastic (able to be reheated and reshaped) derived from renewable, organic sources such as corn starch or sugar cane.</p>  <p>Spellings Test:</p> <table> <tbody> <tr> <td>Creative</td><td>Template</td><td>Design</td></tr> <tr> <td>Machine</td><td>Colour</td><td>Sketch</td></tr> <tr> <td>Safety</td><td>Folding</td><td>Scoring</td></tr> <tr> <td>Material</td><td>Knowledge</td><td>Hazard</td></tr> <tr> <td>Analysis</td><td>Planning</td><td>Rendering</td></tr> </tbody> </table>	Creative	Template	Design	Machine	Colour	Sketch	Safety	Folding	Scoring	Material	Knowledge	Hazard	Analysis	Planning	Rendering
Creative	Template	Design															
Machine	Colour	Sketch															
Safety	Folding	Scoring															
Material	Knowledge	Hazard															
Analysis	Planning	Rendering															





Subject: DT - Textiles

Week 1 & Week 2

Practical – produce the Applique section using the sewing machine

Key Word: ACCURACY - quality of being true or correct.

Reviewing the technique considering Success and EBI.

Sewing machines – Threading up correctly is very important. Key information:

- Following the arrows embossed (printed on) the machine to thread the top is essential.
- Thread through the eye (the small hole) of the needle from front to back then pull through the split in the presser foot.
- The spool (or bobbin) holds the thread for the bottom of the sewing machine.
- You must always have the presser foot DOWN before you sew.
- When you take your sewing off the machine you must leave the thread long so that it doesn't unthread when you sew again.

Theory: Information for poster and presentation

Key Word: COLLABORATIVE - working jointly or together on a project

FIBRES		
Type & Category	Properties	Common Products
Cotton (plant-natural)	Absorbent, creases easily, soft	Dresses, jeans, t-shirts
Wool (animal – natural)	Warm to wear (insulates)	Jumpers, scarves, gloves
Silk (animal – natural)	Shiny, drapes well (means hangs nicely), strong, expensive	Nightwear, underwear, wedding and bridesmaid dresses, ties
Polyester (manmade – synthetic)	Doesn't crease, strong and hardwearing, easy to wash	Office work wear, ties, bags
Elastane (manmade – synthetic)	Lightweight, usually mixed with other fibres to make fabric stretchy and comfortable to wear	Sportswear, gym wear, swimwear, leggings
Viscose (manmade – regenerated)	Soft, drapes well, smooth, inexpensive	Clothing, scarves

KPOW: Design & Make a Cushion Cover

Week 3 & Week 4

Practical – Sewing all 4 sections together.

Key Word: ALLOWANCE - Seam Allowance which is 1.5cm, an allowance is amount of something that is permitted, especially within a set of regulations.

Seam Allowance (SA) – this is set at 1.5cm, it is the distance from the fabric edge to the line where you sew. The purpose of a SA is so that the stitch is more durable because there is a section of fabric between it and the edge, making it stronger.

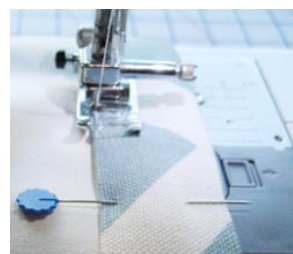
Not sewing on the SA – means the seam (stitching joining two pieces of fabric) comes apart when put it under pressure as the fabric may fray and is not strong enough.

Practical – Hemming the two back pieces for cushion.

Key Word: HEM - a hem in sewing is a finishing method. The edge of the fabric is folded over twice and sewn to prevent fraying and to finish it neatly.

A successful hem is:

1. Folded evenly so it is the same width all the way across.
2. The stitching is right on the edge of the folded-up edge and is straight and even.
3. The stitch used is a straight stitch (length 2, Width 0 setting on the sewing machine).



Year 7: Spring Term 2

Week 5

Practical – Sewing the front and two back sections all together to create the cushion cover.

A successfully completed cushion cover will:

- Have an even + (cross) where the four quarters of the front have been joined.
- The hems on the two back pieces will be neatly sewn in a straight line.
- The two back pieces will be even sizes with the opening in the centre of the back.
- Before the cushion is turned the right way out the stitching around all four edges will be straight and even and on the seam allowance line.
- When the cushion cover is turned inside out the cover will look square.
- The cushion cover will have no loose threads hanging off

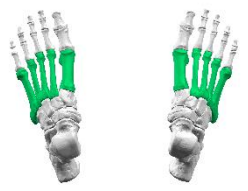

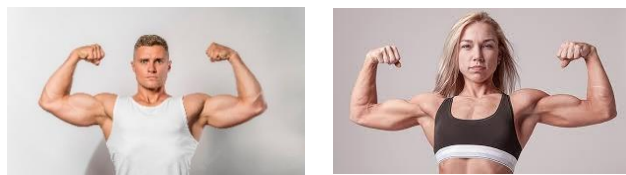


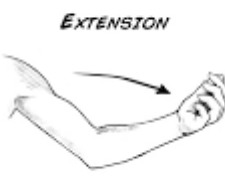
Design challenge - BIOMIMICRY – imitating nature in man-made system. Examples are a film like the coating on a moth's eyeballs that minimizes screen glare.



Spellings Test:

Textiles	Applique	Design
Sew	Stitch	Machine
Batik	Thread	Colour
Sketch	Tjanting	Seam allowance
Scissors	Dimension	Stencilling



Subject: Core PE	KPOW: Bones & Muscles	Year 7: Spring Term 2
Week 1 & Week 2: Metatarsals	Week 3 & Week 4: Biceps	Week 5 & Week 6: Triceps
 <p>Located between the tarsals (ankle) and phalanges (toes).</p> <p>Bone type – Long (longer than it is wide)</p> <p>Metatarsals give the foot its arch and allow movement in the foot.</p> <p>When a rugby player is running, the metatarsals shares the load of the body and move position to cope with an uneven ground.</p> <p>There are 5 metatarsal bones 1-5 Number 1 goes to the big toe and number 5 to the little toe.</p> 	 <p>Located in the front of the upper arm.</p> <p>The bicep (bi) has 2 heads – Long & short head</p> <p>The bicep allows flexion at the elbow (flexion = decreasing the angle at a joint).</p> <p>The distal attachment of the bicep is located on the radius (upper lower arm).</p> <p>When performing a bicep curl, the bicep contracts resulting in flexion of the arm (at the elbow).</p> 	 <p>Located in the back of the upper arm.</p> <p>The triceps (tri) has 3 heads (long, short & medial head).</p> <p>The triceps allow extension at the elbow (extension = increasing the angle at joint).</p>  <p>When the triceps contracts, they straighten the arm.</p> <p>When performing a bicep curl the triceps contract during the downward phase.</p>



Subject: Computing & Digital Media

Week 1 & Week 2

Denary or decimal is our standard number system, it allows humans to count. It is a base 10 system with 10 digits (0,1,2,3,4,5,6,7,8,9). **Binary** is a base 2 number system and is the language of computers.

Placeholders: 8-bit structure

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

Converting denary into binary:

198 = 11000110 (128+64+0+0+0+4+2+0).

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

Converting binary into denary:

Add the placeholder numbers together when you see a 1.
01010001 = 81 (0+64+0+16+0+0+0+1).

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

Binary numbers can be added together. 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

KPOW: Number Systems

Week 3 & Week 4

Keywords:

Algorithm: An algorithm is a process to solve a problem using a fixed number of steps.

Decision: The action or process of deciding something.

We use **algorithms** so the computer understands how to do something. The computer needs to be given a list of instructions so it can follow them. We call this a **sequence**.

A **flow chart** shows the **sequence** of an algorithm in a graphical way. Here are some of the symbols we use to make a flowchart.

Shape & Function	Name	Symbol
A rectangle represents a start or end point.	Terminator Start/End	
An arrow is a connector that shows the direction of information through the flow chart	Connector	
A parallelogram represents an input or output.	Input/output	
A rectangle represents a process.	Process	
A diamond is used to show a decision that needs to be made.	Decision	

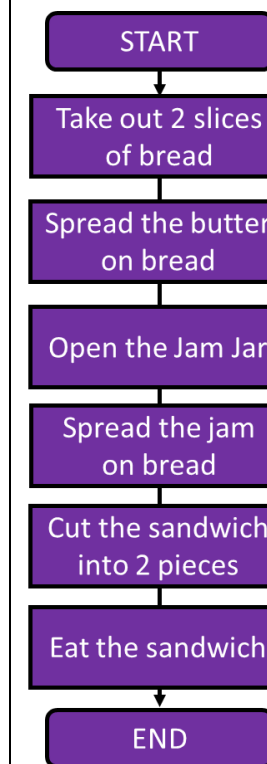
Year 7: Spring Term 2

Week 5:

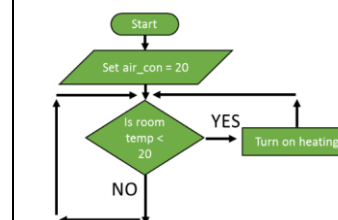
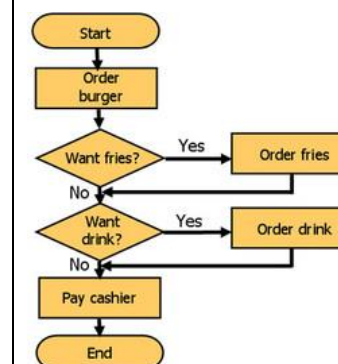
Keywords:

Sequence: A set of events, movements or items that follow each other in a particular order.






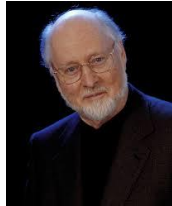
Basic flow chart showing a **sequence** of instructions.



Flow chart showing when a **decision** is made.








Subject: Music		Year 7: Spring Term 2
Week 1 & Week 2: Intro to Ensemble	Week 3 & Week 4: Selecting an Instrument	Week 5: Performance
<p>Ensemble: A group of instrumentalists/ singers playing music together. E.g. a band/ orchestra.</p> <p>Ukulele: The ukulele belongs to the string family of instruments and has 4 strings: G, C, E and A.</p>  <p>Shotgun: Shotgun is a song by British Musician George Ezra, released in 2018. The song reached number 1 in the UK singles charts.</p> 	<p>Glockenspiel: The Glockenspiel belongs to the percussion family of instruments. It is a tuned percussion instrument meaning that each bar has a different note. The glockenspiel is like a xylophone, except it has metal bars instead of wooden ones.</p>  <p>Vocals: When the voice is used to create music. The voice is also considered to be a musical instrument.</p> <p>Vocal Warm Up: An exercise performed by vocalists to ensure that their voices are prepared for performance.</p> 	<p>Instrumentalists: The following are the correct terms for someone who plays a particular instrument. Pianist: Piano Drummer: Drums Flautist: Flute Guitarist: Guitar</p>  <p>Composer: Someone who writes music, a songwriter. E.g., the composer of the song Shotgun is George Ezra. The music in the background of films is also written by a composer e.g., the theme to Star Wars was written (composed) by John Williams.</p> <p>Session Musician: A musician who is hired to perform backing music either as part of a live performance or for a recording.</p> 




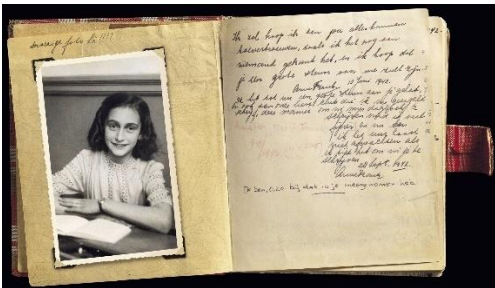





Subject: Art	KPOW: Final Outcome- Design	Year 7: Spring Term 2
Week 1 & Week 2:	Week 3 & Week 4:	Week 5:
<p>Hundertwasser – Artist Page development</p> <p>Hundertwasser (1958-2000) was a painter, architect, ecological activist, and philosopher.</p> <p>He was born in Vienna, Austria.</p> <p>He believed human architecture should be in harmony with nature. He also believed there were far too many straight lines surrounding us.</p> <p>Hundertwasser is known for colourful, organic, irregular forms.</p> <p>Hundertwasser prefers intense, radiant colours and loved to place complimentary colours next to each other to emphasise shapes, patterns and details.</p> 	<p>Landscapes</p> <p>Natural – Made naturally. Fields, hills, animals and vegetation such as trees.</p> <p>Manmade - Made by man. Buildings, roads power supplies and waste.</p> <p>Architecture – The art or practice of designing and constructing buildings.</p> <p>Perspective – The representation of 3D objects in a 2D outcome. Perspective creates depth.</p> <p>Scale – How big or small something is in relation to us.</p> 	<p>Development of personal outcome</p> <p>Personal outcomes use the skills you have developed along with the artist's influence. Our outcome shows our response to the work of others.</p> <p>Your outcome will consider</p> <p>Colour theory – your outcome will demonstrate understanding of colour mixing.</p> <p>Your outcome will include materials such as:</p> <p>Watercolour Paint – Solid pigments that become fluid with added water.</p> <p>Paintbrush – Different thicknesses and materials such as synthetic and natural bristles.</p> 





Subject: Drama	KPOW: Monologue	Year 7: Spring Term 2
Week 1 & Week 2	Week 3 & Week 4	Week 5:
<p>Introduction to WW2 and Anne Franks' Diary</p> <p>Conflict- An active disagreement between people with opposing opinions or principles.</p> <p>The Guernica - 1937 – is an oil painting by Pablo Picasso. The painting symbolises the tragedies of war.</p>  <p><i>'World War Two 1939- 1945'</i></p>  <p>Anne Frank– was a Jewish girl born 2nd June 1929, she wrote a famous Diary about how her family were in hiding during WW2. She named her diary 'Kitty'.</p> <p>Otto Frank – Born 12th May 1889. Anne Frank's Father; he was a German businessman and the only member of the Frank Family to survive the holocaust.</p>  <p>Freeze Frame – A freeze-frame is achieved by freezing the action on stage usually at a key moment to create tension.</p>	<p>Creating a Monologue</p> <p>Monologue – a <i>monologue</i> is a speech presented by a single character, most often to express their thoughts aloud, and directly address the audience. An actor may find a focal point when delivering their monologue.</p> <p>Emphasis – to state or show that something is especially important or deserves special attention.</p> <p>Dramatic Pause – is when a pause happens during dialogue to create tension.</p> <p><i>'Anne Frank Called her Diary Kitty'</i></p>  <p>Skills and techniques:</p> <ul style="list-style-type: none"> ➤ Vocal Expression ➤ Audience Awareness ➤ Body Language ➤ Levels 	<p>Performance</p> <p>Direct Address – breaking the fourth wall and speaking to the audience.</p> <p>Vocal Projection – voice projection is the ability to use your voice loudly, powerfully, and clearly while acting.</p> <p>Articulation - is having clear vocal expression. You articulate sounds with your lips, teeth, tongue, and use your mouth to vary those sounds.</p> <p><i>Top Tip! Find a focal point when delivering your monologue</i></p>  <p>Peer Feedback – enables the performer to improve their work, based on feedback of strength and weaknesses.</p>





Subject: Learning 4 Life

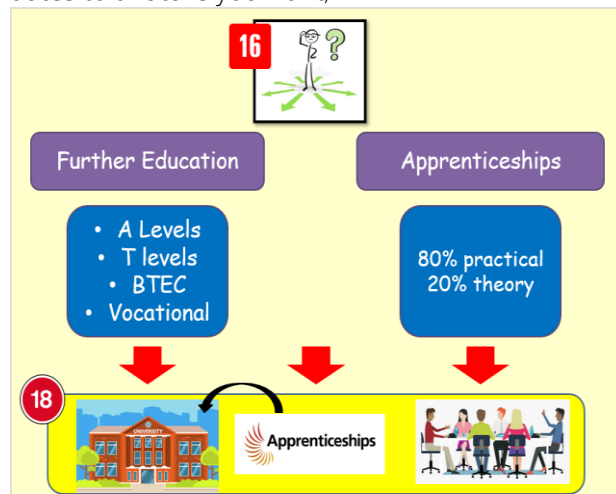
Week 1 & Week 2: Key Words

Key Words

Please continue to learn the following 5 words:

Work Experience	A short-term period of employment.
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.
Determination	To have a goal and do all you can to achieve it.

Routes to a future you want;



Week 3 & Week 4: James Dyson

Careers at Minsthorpe;

Please learn these facts about Careers at Minsthorpe;

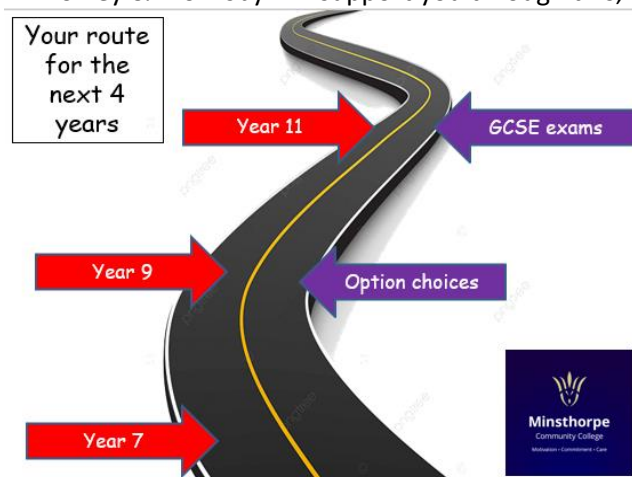


Mr Dowey
He is the careers lead in College.
His office is in the Post 16 block.
His email is tdowey@minsthorpe.cc



Morrisby
The online careers platform used in College.
It is found on the student sharepoint.
Your log in details will be emailed to you.
You answer a set of questions about your likes/dislikes.
It suggests careers which match the answers you give.

Mr Dowey & Morrisby will support you through this;



Year 7: Spring Term 2

Week 5: Careers

Hany El Bana – an example of determination

Please learn the information below;



Hany El Bana was born in Cairo, 1950.
He trained as a doctor and moved to the UK. He was so successful that he won prizes for his work with cancer patients.



In 1983, there was a famine in Ethiopia & Sudan, Hany flew to East Africa to help. When he got there, he went to talk to those affected by the famine.



When he got home, he was telling his family about his experience and his nephew gave him 20p he had been saving, saying: 'I don't need chocolate'. This gave Hany an idea.



He began standing outside mosques, first in Birmingham, then in other towns and cities, with a collection bucket. Within a few months he had raised over £5,000.



This was the start of Islamic Relief as we know it today. It started off with a 20p donation and in 2021 it raised over £149 million.

Hany El Bana is an excellent example of someone who showed determination as well as leadership and problem solving skills.





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 every **Monday** and will be submitted in P&A Time every **Monday**.

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