



**Minsthorpe** Community College

# Knowledge Organiser Year 8 – Summer Term 1

Name:

P&A group:

Knowledge Assessment: Wednesday 20<sup>th</sup> May 2026 – Period 3

## 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.**


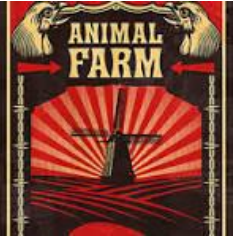

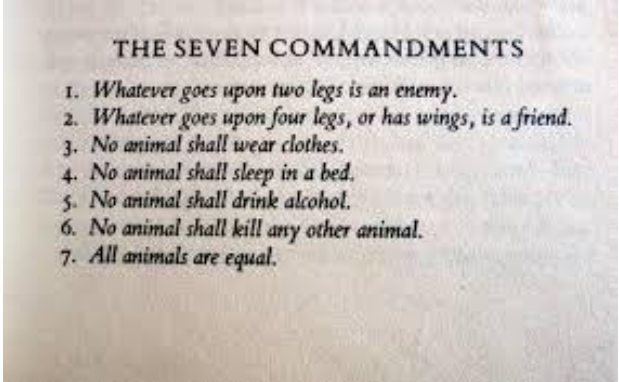


## Correct

**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: Using rhetorical devices to express opinions?	Year 8: Summer Term 1
Week 1 & 2: Power and Rhetoric	Week 3 & 4: Context and Animal Farm Chapter 1	Week 5 & Week 6: Animal Farm Chapters 2 to 4
<p>Key words and definitions:</p> <p><b>Power</b> – The capability or ability to influence the behaviour of others.</p> <p><b>Rhetoric</b> – Effective persuasive speaking or writing.</p> <p><b>De jure</b> – Who holds power according to law.</p> <p><b>De facto</b> – Who holds the power in reality.</p>  <p><b>Democracy</b> – A system of government where the people elect their representatives.</p> <p><b>Dictatorship</b> – A country governed by a dictator.</p> <p><b>Irresponsible</b> – Not showing proper responsibility.</p> <p><b>Corruption</b> – Being dishonest or fraudulent.</p> <p><b>Hypocrisy</b> – Claiming to have higher standards than is the case.</p> <p><b>Exploitation</b> – Treating someone unfairly to gain a benefit from their work.</p> <p><b>Impunity</b> – Exemption from punishment or consequences.</p> <p><b>Avarice</b> – Extreme greed for wealth or material gain.</p> 	<p>Key words and definitions:</p> <p><b>Duplicitous</b> – Deceitful/ two-faced.</p> <p><b>Context</b> – The circumstances that allow us to understand a text.</p> <p><b>Capitalism</b> – An economic system where private owners control trade to make profit.</p> <p><b>Communism</b> - An economic system where all property is owned by the community and distributed equally.</p> <p><b>Socialism</b> – A political theory which advocates for the community to own the means of production.</p>  <p><b>Anthropomorphic</b> – Giving animals human characteristics.</p> <p><b>Allegory</b> – A story, poem or picture that can be interpreted to reveal a political idea.</p> <p><b>Marxism</b> – Karl Marx’s political theory which is developed to form the basis of communism.</p> <p><b>Comrade</b> – A colleague.</p> <p><b>Key learning points:</b></p> <p>Orwell’s novel Animal Farm is allegorical as the characters and events represent real people and events in Soviet Russia.</p>	<p>Key words and definitions:</p> <p><b>Ideology</b> – A system of ideas which forms the basis of a political theory and policy.</p> <p><b>Revolution</b> – A forcible overthrow of a system or government, in favour of a new system.</p> <p><b>Commandment</b> – A divine/religious rule.</p>  <p><b>Utopia</b> – An imagined place where everything is perfect.</p> <p><b>Satire</b> – The use of humour, irony, exaggeration, or ridicule to expose or criticise people’s stupidity or vices.</p> <p><b>Indoctrination</b> – The process of teaching a person or group to accept a set of beliefs uncritically.</p> <p><b>Strategy</b> – The art of planning and directing a military attack.</p> <p><b>Vengeance</b> – Punishment inflicted, or retribution exacted for an injury or wrong.</p>





Subject: Maths

KPOW: Angles

Year 8: Summer Term 1

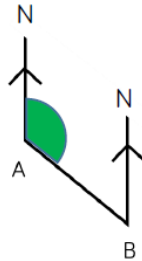
Week 1 & Week 2: Bearings

Week 3 & Week 4 & Week 5: Circles

Week 6: Ratio

Compass points

The **angle** from North to East is a right angle (90°).



The **angle** from North to Northeast is 45°.

Bearings

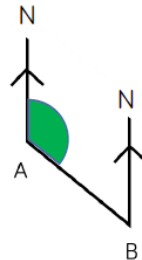
Bearings are an **angular** measurement that describe a direction.

Bearings follow 3 rules:

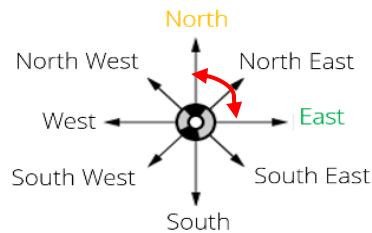
1. Start from **North**.
2. Measured in the **clockwise** direction.
3. State the bearing using **3 digits**.

Examples

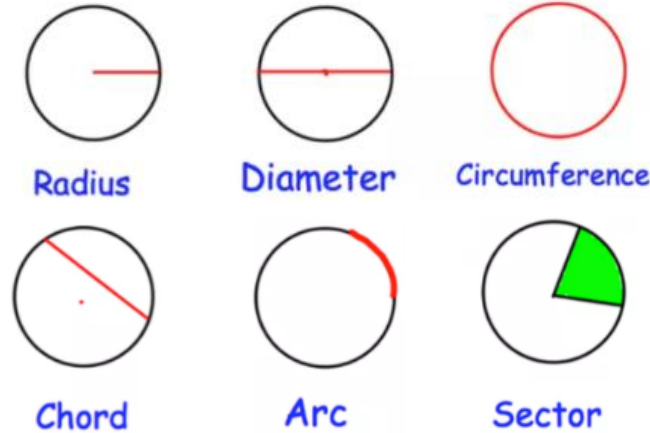
1. This diagram shows the bearing of **B** from **A**.



2. The **angle** from North to East is 90° so the **bearing** of **East** from **North** is **090°**.



Parts of a circle



Circumference

The **ratio** between the diameter of a circle and its circumference is always **3.14....** or **π (Pi)**.

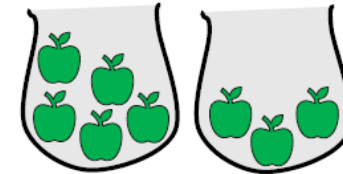
Circumference = π x diameter

Area

Area is the space **inside** the shape.

Area of a circle = π x radius<sup>2</sup>

We can describe the **relationship** between two **quantities** using a ratio notation.



For example

The ratio of apples in bag 1 to bag 2 is 5 : 3. This means for every 5 apples there are in bag 1 there are 3 in bag 2.

Equivalent ratios



The ratio of blue to red is 1 : 2.

The ratio of blue to red must be maintained, so if we continue the pattern we can see that 2 : 4 is equivalent. 2 : 4



Dividing into a ratio

To share a quantity into a ratio you must use a bar model.

Share £15 into the ratio 3 : 2.

15 shared equally between 5 parts is 3.

The ratio is **9 : 6**.

3	3	3	= 9
3	3	= 6	





Subject: Science - Physics

KPOW: Week 3/4

Year 8: Summer Term 1

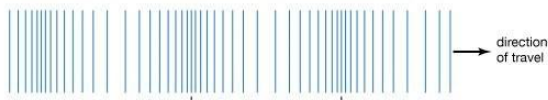
Week 1: Wave Types

Keyword definitions

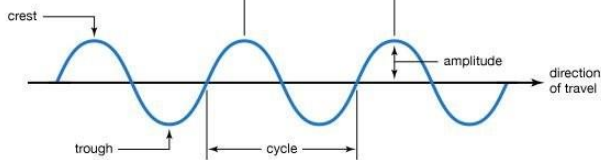
**Longitudinal wave** – A wave where the vibrations are parallel to the direction of travel.

**Transverse wave** – A wave where the vibrations are perpendicular to the direction of travel.

Longitudinal waves



Transverse waves



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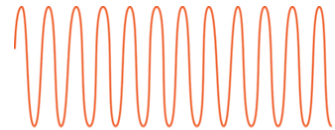
Week 2: Sound waves

Keyword definitions

**Amplitude** – The height of a wave from its rest point.

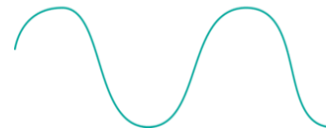
**Frequency** – How many waves per second.

**Wavelength** – How long a wave is.



High frequency

A high frequency wave will sound higher in pitch. A larger amplitude will lead to a louder wave.



Low frequency

Week 3: Refraction and reflection

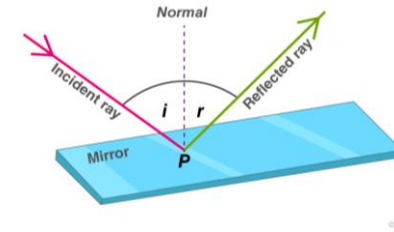
Keyword definitions

**Reflection** – When light hits a shiny surface it will be reflected.

**Refraction** – When a wave changes speed and direction of a wave when it enters a new medium.

**Incident ray** – The name given to the light ray that hits the surface.

**Reflected ray** – The name given to the ray that is reflected.



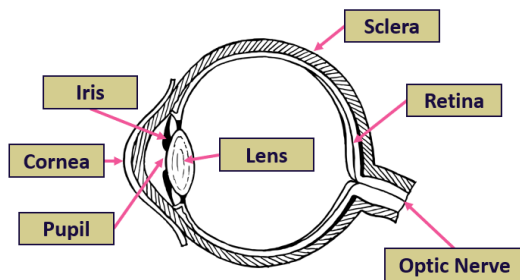
In reflection, the angle of **incidence** is always equal to the angle of **reflection**.

Week 4: Light and the eye

Keyword definitions

**Lens**: Positioned at the front of the eyeball, this focuses light onto the **retina** at the back of the eye.

**Focal point**: The point at which all light passing through a lens is focused.



**Pupil**: A hole in the front of the eye that allows light to enter.

Week 5: Moments

Keyword definitions

**Moment**: The turning effect of a force.

**Pivot**: The point about which a lever rotates, the **pivot** does not move, eg: the hinge on a door.



A screwdriver applies a bigger force than you could apply with your hand.

The force will be bigger because the distance between the pivot and the force is smaller.

Week 6: Work done

Keyword definitions

**Work done**: When you move an object with a **force** by a certain **distance** then we say that work has been done. It is an energy transfer so is measured in **Joules**.

A builder lifts 350N of bricks up 4.5m. How much work does he do?

**F**ormula  
**I**nsert values  
**F**ine-tune  
**A**nswer

**Work = force x distance**  
**Work = 350 x 4.5**  
**- No fine tuning**  
**Work = 1575(J).**

Here is an example of where we use the FIFA technique to answer the work done equation question.





Subject: Science - Chemistry

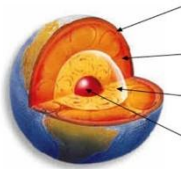
KPOW: Week 3/4

Year 8: Summer Term 1

Week 1: Earth Structure and igneous rocks

**Structure** – What something is made of and how it is arranged.

The Structure of the Earth



The Earth is made up of 4 layers. The centre is the **core** which is made up of the **inner core** and **outer core**. The next layer is the **mantle** then the outer layer is the **crust**.

The **inner core** is the **hottest** layer and is **solid** because of pressure from the other layers. The **outer core** and **mantle** are in **liquid** form. The **crust** is the **coolest** and **thinnest** layer and is also **solid**.

**Igneous rocks** – Rocks formed from cooling of molten material such as lava. *Example – granite.*

Week 2: Sedimentary and metamorphic rocks



**Sedimentary** – Rocks formed from compaction of layers of sediment.

*Examples* – limestone and sandstone.



**Metamorphic** – Rocks that have been changed by heat and pressure.

*Examples* – marble and slate.

Week 3: Crude Oil

**Fossil** – the preserved remains of an ancient organism.

**Fossil fuel** – a fuel formed from the remains of dead plants and animals. (coal, oil and natural gas)

**Hydrocarbon** – compound made of hydrogen and carbon only.

When organisms die the soft parts decompose but the hard parts (e.g. skeletons) remain.

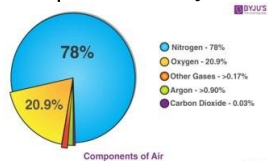
**Fossils** form when **rocks** form around the hard remains of organisms which then dissolve leaving an **imprint** in the rock.



**Crude oil** forms when **layers** of **sediment** build up on top of the remains of organisms. The **heat** and **pressure** caused by this build up convert the remains into crude oil. **Crude oil** is a mixture of **hydrocarbons**.

Week 4: Earth's atmosphere and the carbon cycle

**Atmosphere** – a layer of gases surrounding the planet.



The Earth's atmosphere is 78% **Nitrogen**, 21% **oxygen** and 1% other gases such as **carbon dioxide** and **noble gases**.

The early atmosphere contained mainly **carbon dioxide** and no **oxygen**.

When plants evolved and carried out **photosynthesis**, this reduced the carbon dioxide in the atmosphere and increased the oxygen.

Carbon dioxide is a **greenhouse gas**. (Along with methane and water vapour). These gases **absorb heat** in the atmosphere and reflect it back towards earth, causing the temperature to increase.

Week 5: Greenhouse effect and climate change

**Greenhouse effect** – natural process enabling Earth to maintain its heat.

**Greenhouse gases** – gases which absorb heat in the atmosphere and re-emit it back towards Earth. Examples are **carbon dioxide**, **water vapour**, and **methane**.

**Global warming** – An increase in the Earth's average temperature.

**Climate change** – A long term change in the Earth's average temperature or weather patterns.

**The Greenhouse Effect**

Radiation from the sun enters the atmosphere. Some is absorbed by the Earth's surface; some is re-emitted back towards space. Greenhouse gases absorb this radiation and re-emit some of it back towards Earth.

Week 6: Types of material

**Polymers** – Long chain molecules made from small repeating units called monomers.

Some polymers are naturally occurring such as DNA, proteins, and cellulose. Some polymers are synthetic (man-made) such as PVC, nylon, and polyester.

**Ceramics** are made from moulding a soft substance like clay then baking it to harden.



**Composites** are a combination of multiple different materials with different properties. They are made up of a matrix (base material) and a fibre for reinforcement.




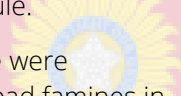


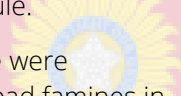



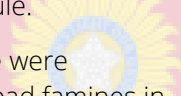








Subject: French	KPOW: Technology Writing	Year 8: Summer Term 1
<b>Week 1: Key verbs &amp; time phrases</b>	<b>Week 2: Types of technology &amp; adjectives</b>	<b>Week 3: Opinions &amp; infinitive verbs</b>
En ce moment [at the moment] Chez moi [at home] Dans le passé [in the past] Quand j'étais petit(e) [when I was younger] L'année dernière [last year] L'année prochaine [next year] Dans le futur [in the future] À l'avenir [in the future]  j'ai [I have] je n'ai pas de [I don't have] j'avais [I had] je n'avais pas de [I didn't have] je voudrais avoir [I would like to have] je vais avoir [I am going to have]	un portable [a phone] un smartphone [a smartphone] un ordinateur [a computer] un ordinateur portable [a laptop] une console de jeux [a games console] une tablette [a tablet] un smartwatch [a smartwatch] moderne [modern] utile [useful] vieux / vieille [old] rapide [fast]                      facile à utiliser [easy to use] lent / lente [slow] à la mode [fashionable] nouveau / nouvelle [new] le plus récent / la plus récente [the most up to date]	j'aime [I like]                      j'aime beaucoup [I really like] j'adore [I love] je préfère [I prefer] je n'aime pas [I don't like] je déteste [I hate] je ne supporte pas [I can't stand] tchatter [to chat] parler [to talk] communiquer [to communicate] partager [to share] regarder [to watch] télécharger [to download] écouter [to listen] garder le contact [to stay in touch] utiliser [to use]                      envoyer [to send]
<b>Week 4: Technology activity vocabulary</b>	<b>Week 5: Reasons &amp; connectives</b>	<b>Week 6: Time phrases &amp; present tense verbs</b>
avec mon copain/mon ami [with my male friend] avec ma copine/mon amie [with my female friend] avec mes copains/mes amis [with my friends] avec ma famille [with my family] dans un forum [in a chat]                      en ligne[online] mes / beaucoup de photos [my/lots of photos] des vidéos [videos] des clips [clips] de la musique [music] des films [films] des textos [texts] des messages [messages] des emails [emails] mon portable / smartphone[my phone/smartphone] mon ordinateur [my computer] ma tablette [my tablet]	c'est [it's] ce n'est pas [it isn't] relaxant [relaxing] amusant [fun] génial [brilliant] utile [useful] pratique [practical] plus facile [easier] nécessaire [necessary] divertissant [entertaining] barbant / ennuyeux [boring] nul [rubbish] inutile [useless] dangereux [dangerous] une perte de temps [a waste of time] difficile [difficult]	D'habitude [usually] Tous les jours [every day] Tous les soirs [every evening] Chaque jour [each day] Tout le temps [all the time] De temps en temps [from time to time] je chatte [I chat] je parle [I talk] je communique [I communicate] je partage [I share] je regarde [I watch] je télécharge [I download] j'écoute [I listen] je garde le contact [I stay in touch] j'utilise [I use] j'envoie [I send]








<p><b>Subject: Geography</b></p>	<p><b>KPOW: India and China</b></p>	<p><b>Year 8: Summer 1</b></p>						
<p><b>Week 1: Introduction to India</b></p>	<p><b>Week 2: India Through Time</b></p>	<p><b>Week 3: India's Population</b></p>						
<p>India is a country located in the <b>south of Asia</b>.</p> <p>Its <b>capital city is New Delhi</b> and in 2023 India's population was <b>over 1.4 billion people</b>.</p> <p>The <b>climate of India is vastly different</b> in the south compared to the north. In some places, it rains for 5 months of the year. This is called the <b>Monsoon Season</b>. Additionally, the <b>landscapes are very contrasting</b>, in the north it is very mountainous - here you will find the <b>Himalayas</b>. Whereas in the south, it is very flat.</p>  	<p>India was one of the <b>largest and richest</b> of all the countries in the <b>British Empire</b>.</p> <p>There have been many <b>negative impacts</b> and a few positives of colonial rule in India.</p> <table border="1" data-bbox="795 414 1444 798"> <tr> <td data-bbox="795 414 1120 462"> <p><b>Economic</b> \$</p> </td> <td data-bbox="1120 414 1444 462"> <p><b>Social</b> 👤</p> </td> </tr> <tr> <td data-bbox="795 462 1120 646"> <p>☺️ The British built roads, railways, and canals to make trade easier.</p>  </td> <td data-bbox="1120 462 1444 646"> <p>☹️ 25 million people died in India under British rule.</p>  </td> </tr> <tr> <td data-bbox="795 646 1120 798"> <p>☹️ Raw materials were taken from India and used to make Britain rich.</p> </td> <td data-bbox="1120 646 1444 798"></td> </tr> </table> 	<p><b>Economic</b> \$</p>	<p><b>Social</b> 👤</p>	<p>☺️ The British built roads, railways, and canals to make trade easier.</p> 	<p>☹️ 25 million people died in India under British rule.</p> 	<p>☹️ Raw materials were taken from India and used to make Britain rich.</p>		<p>Urbanisation means <b>increase in the percentage of the population living in urban areas</b> (towns and cities).</p> <p><b>Poverty, drought, and lack of employment in rural areas</b> (countryside) are leading causes of urbanisation.</p>  <p>Urbanisation sometimes means there is <b>not enough housing</b> for everyone, and people may have to live in illegal squatter settlements known as <b>slums</b>.</p>  <p>In slums disease is common due to <b>lack of sanitation</b> (cleanliness).</p>
<p><b>Economic</b> \$</p>	<p><b>Social</b> 👤</p>							
<p>☺️ The British built roads, railways, and canals to make trade easier.</p> 	<p>☹️ 25 million people died in India under British rule.</p> 							
<p>☹️ Raw materials were taken from India and used to make Britain rich.</p>								
<p><b>Week 4: Monsoon Climate</b></p>	<p><b>Week 5: Indian Ocean Tsunami</b></p>	<p><b>Week 6: Intro to China</b></p>						
<p>The <b>monsoon</b> is a seasonal wind that effects <b>SE Asia</b>. There is a <b>dry season</b> from <b>November to May</b> and a <b>wet season</b> June to October.</p>  <p>In lots of <b>rural</b> (countryside) villages in India and Bangladesh, they farm <b>rice</b> which is a <b>staple</b> (main) food for their diet. Rice requires heavy seasonal rainfall to grow so without the rains, the crops would fail and people would starve.</p>  <p><b>Some effects of the monsoon are:</b></p> <p><b>Wet season</b> - homes are washed away so people become <b>homeless</b>.</p> <p><b>Wet season</b> - <b>rice plants grow</b> in flooded fields called paddies, so rice farmers can <b>earn some money</b>.</p> <p><b>Dry season</b> - <b>crops dry out</b> so farmers lose income.</p>	<p>A <b>tsunami</b> is a <b>secondary effect</b> of an <b>earthquake</b>. A ripple is sent out, but as the wave reaches land it increases in height and crashes into the land.</p> <p>The <b>Indian Ocean Tsunami</b> happened on 26<sup>th</sup> December <b>2004</b> (Boxing Day) and <b>killed 227,000 people</b>. It affected 14 countries across Asia and Africa.</p>  <p><b>Causes of the tsunami</b></p> <p>The <b>Indo-Australian Plate</b> and <b>Eurasian Plate</b> slipped, and one side jumped up <b>10m</b> releasing a <b>9.2 magnitude earthquake</b> and a tsunami wave.</p> <p><b>Effects of the tsunami</b></p> <p>-650,000 seriously were <b>injured</b>.</p> <p>-2 million were left <b>homeless</b>.</p> <p>-Drinking water was contaminated.</p> <p>-<b>Coral reefs</b> were destroyed.</p> 	<p><b>China</b> is in south-east Asia, along the coastline of the Pacific Ocean. China borders 14 countries with Mongolia to the north and Pakistan to the north-west. <b>China's population is currently 1.4 billion</b>.</p> <p>There are lots of job opportunities in China, for example <b>Bang-Bang Men</b> are <b>manual labourers</b> (work by hand) who use a bamboo pole over their shoulders to carry things. They work <b>12-hour shifts</b> and send most of their earnings back home to rural areas.</p>  <p><b>Yangshan</b> is the busiest <b>container port</b> in the world, built on an island just off the coast of Shanghai. It supports the economic development of China.</p> 						





Subject: History	KPOW: Interpretations of the impact of Empire	Year 8: Summer Term 1
<p><b>Week 1: India: Resentment and Mutiny</b></p> <p>The Sepoys – Indian soldiers who fought for the British during WWII. The Sepoys felt that they weren't treated very well. In 1857, a new gun was delivered to the troops. The gun had <b>new cartridges which the Sepoys had to bite. They were coated in animal fat</b> (pork and beef). Many of the Sepoys were <b>Muslim or Hindu so this went against their religion, so they refused to use them.</b> <b>Rebellion:</b> 85 Sepoys refused to use the cartridges. They were arrested and <b>sent to jail for ten years.</b> Days later, other Sepoys rioted in support of their imprisoned comrades. This led to major battles, and it often looked like the rebels would win. The <b>rebellions had shocked the British</b> and after the Mutiny, the British were a lot <b>more careful about how they governed India.</b></p>	<p><b>Week 2: Impact of the empire on India +KPOW</b></p> <p><b>Divided opinions:</b> In the past some have tried to portray colonisation in positive terms, but this <b>ignores the views of the colonised Indians.</b> <b>Impact on Britain:</b></p> <ul style="list-style-type: none"> <li>• Boosted British industry and wealth.</li> <li>• Provided soldiers to fight for Britain.</li> </ul> <p><b>Impact on India:</b></p> <ul style="list-style-type: none"> <li>• 80,000km of roads built – but this was to make trade quicker, not for the Indian people.</li> <li>• Schools built – but only for the rich.</li> <li>• British customs were forced on the local people.</li> <li>• Indian workers were exploited, and valuable raw materials were taken back to Britain.</li> </ul> <p><b>25million people died in India under British rule.</b></p> 	<p><b>Weeks 5 and 6: Independent Australia</b></p> <p><b>Keyword:</b> independent = <b>free from outside control. Not subject to another's authority.</b></p> <p><b>1770:</b> Captain Cook arrives in Australia and claims it for the British. <b>1778:</b> First colony built at Sydney Cove. The Frontier Wars begin. <b>1790:</b> Free settlers begin to arrive in Australia. <b>1803:</b> New colony set up for convicts in Tasmania. <b>1840:</b> About half the white population were now born there. The Frontier Wars continue. <b>1851:</b> Gold is discovered. More settlers arrive and the new colony of Victoria is set up. <b>1855:</b> Four of the five Australian colonies granted 'self-government', but they are still a part of the British Empire. <b>1859:</b> Queensland, the last colony to be created, comes into existence. <b>1890:</b> All six colonies are now self-governing. <b>1891:</b> Over 80 percent of the white population of Australia were born there. <b>1901:</b> The 'Commonwealth of Australia' is created. They have their own parliament, but the British monarch remains as Head of State.</p>  <p><b>The population of Indigenous Australians has declined to 90,000.</b></p>
<p><b>Week 3: Independence and partition</b></p> <p><b>1885</b> – the <b>Indian National Congress</b> was formed. They wanted Indian independence. In the First World War, Indians fought alongside British soldiers. After this, changes were made to the way India was ruled, but it was not enough. <b>1920s</b> – the <b>independence movement was led by Gandhi</b>, who believed in non-violent protest. <b>1935</b> – Government of India Act gave some self-government to India. <b>2.5 million Indian soldiers</b> fought alongside the British in the Second World War. <b>1946</b> – the British government <b>agreed to independence</b> and in <b>1947</b> - British India was <b>partitioned into India and Pakistan.</b> However this led to violence and fighting for decades.</p> 	<p><b>Week 4: The impact of Colonisation on Australia</b></p> <p>Australia was first used by the British as a <b>penal colony</b> – this changed when convicts decided to stay at the end of their sentences. These 'free settlers' grew in number and had their own councils and governors. <b>Transportation ended in 1868.</b> The Indigenous Australians resisted the arrival of the colonists leading to the <b>Frontier Wars.</b> Between the 1790s and 1920s there were <b>hundreds of massacres of Indigenous Australians</b> including at Myall Creek in 1838 where 28 people were murdered. <b>Diseases</b> such as smallpox and measles <b>also killed large numbers of Indigenous Australians.</b> <b>The 'Stolen Generations':</b> From the late 1800s thousands of <b>indigenous children were taken from their families</b> to assimilate (adapt) into white Australian culture.</p>	





Subject: DT - Food

Week 1 & Week 2: Kitchen Health and Safety

- Aprons must be worn during all practical sessions to protect against burns and splashes.
- Long hair must be tied back.
- Hands must be washed regularly throughout but always at the start.
- Equipment must be washed, dried, and put back after use.



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.

The bridge and claw method can be used to produce fruit kebabs with a garnish.

**Weighing and measuring** ensures **accuracy** when making food during practical. Always measure in grams (g)



KPOW: End of Module

Week 3 & Week 4: Bread ingredients

- 500g Strong Plain flour, 1 sachet yeast, 1 teaspoon salt, 25g margarine, 1 teaspoon sugar, 1/2 pint warm water
- Extra ingredients e.g.: Cheese, tomato puree, pepperoni, cocoa/chocolate, berries

Function of ingredients

**So what is in bread? What do the ingredients do?**

Flour is the main ingredients and forms the framework of the bread.

**Dextrinization** (The effect of dry heat on starch) occurs when bread is cooked.

Yeast produces Carbon Dioxide (CO<sub>2</sub>) GAS, which makes the bread rise. **FOOD. WARMTH. MOISTURE. TIME** In order to multiply.

Water (H<sub>2</sub>O) is needed to **Bind** the ingredients together & help the gluten development. Water is needed for the yeast to ferment.

Salt and/or sugar, adds **Flavour** & aides the development of Gluten.

Fat & Oil **Weaken** The gluten and **Restrict** the action of the yeast. This gives it a close texture.

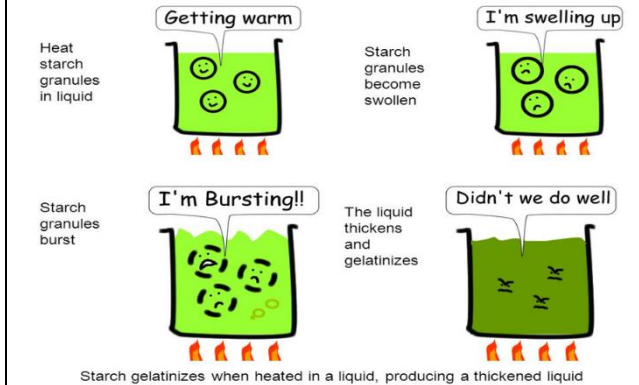
Method for making bread

1. Weigh out the ingredients
  2. Add bread flour, sugar and butter in a bowl
  3. Rub in until light and golden - add salt
  4. Make a well and add yeast and extra flavouring
  5. 150 ML of warm water A DROP AT A TIME
  6. Mix until it forms a dough - IF DRY ADD MORE WATER IF WET ADD MORE FLOUR
  7. Knead on a floured surface for 8 minutes until stretchy
  8. Shape into desired shape and place on a baking tray to prove
  9. Bake at 220 degrees for 15-20 minutes
- 

Year 8: Summer Term 1

Week 5 & Week 6: Gelatinisation

This is the process that occurs when making a sauce and it thickens. A plain sauce is called a ROUX sauce.



Dishes that use a ROUX sauce are:

**Macaroni Cheese / Carbonara Ingredients**

- 25g (40g for thicker sauce) Plain flour
- 25g (40g for thicker sauce) Margarine
- 1 pint milk, 200g cheese, 300g Pasta

**Topping** - 100g cheese and/or breadcrumbs (optional)

Extra ingredients that can be added - Bacon, cooked chicken, onions, mushrooms, garlic etc

**Lasagne**

- 50g Plain flour
- 50g Margarine
- 1 pint milk
- 200g cheese
- 1 pack lasagne
- 1 pack mince meat
- 1 onion (optional)

1 tin tomatoes and 1/2 tube tomato puree OR 1 tin of tomato pasta sauce

Extra cheese for the topping

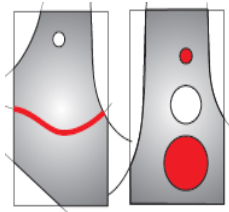
**Garnish** = a small amount of food used to decorate other food e.g. Parsley or herbs





Subject: DT – Product Design

Week 1 & Week 2: Dull to Dynamic Strategy



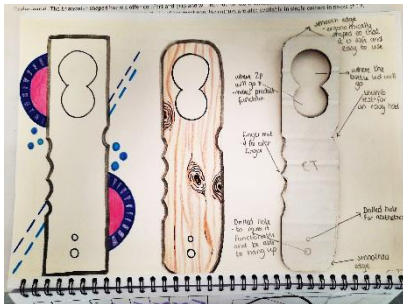
**Design rules** – Generating quick sketches to help develop unique designs.

**Dull to Dynamic** strategy helps create the final idea considering **anthropometric**

**measurements** (so the bottle opener fits in the

hand comfortably when using it).

Dull to dynamic means turning a basic (dull) idea, into a dynamic outcome.



**Key terms:**

**Ergonomics** - The study of people and their working environment, especially to improve effectiveness.

**Specification** – Precise description of the design and make details that the final product is required to achieve/ meet.

**Theory**

**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.

**Key terms:**

**PPE** – Personal Protective Equipment

KPOW: Design & Evaluation

Week 3 & Week 4: Wooden Bottle Opener



Workshop skills to cut and shape and smooth the bottle opener using a range of tools and equipment. Product should **reflect** the

design and match the **design specifications** given.

**Tools and equipment**

**Countersink drill bit** –Drills a cone like hole so the flat head screw sits flush against the wood.

**Chuck key** – Attaching drill bit to the pillar drill.

**Forstner drill bit** – Drill blind holes (the holes to attach the 2p and open your bottle).

**Chuck key** – Used to attach drill bit to the pillar drill.

**Evaluation**

You will evaluate your completed product and your skills in detail looking at **WWW** (what went well) and **EBI** (even better if). Testing for quality of finish.

**Theory**

**Ergonomics** = making products efficient to use.

Ergonomics considers issues such as:

- Shape
- Size
- Pressure
- Use
- Features

**Ergonomics** uses **anthropometrics** (size) to improve products and make them comfortable to use.

Year 8: Summer Term 1

Week 5 & Week 6: Storage Box



Workshop skills - measure, mark and cut **½ lap joints** and shape a **frame** for the **wooden storage box**

complete with **inserts**. **Decoupage** – gluing pictures to the surface and sealing with varnish.

**Key words:**

**Tenon saw** – Cuts straight lines.

**Tri square** – Used to mark and check 90\* angles.

**½ lap joint** – A joint between two timbers halved together so they overlap each other to create a flush surface.

**Metal file** – A tool to shape and smooth materials.

**Filler** – a mixture of PVA glue and sawdust to create a wood filler that is designed to fill holes and imperfections.

**Aesthetic** – Pleasing qualities of a product e.g., shape, design, colour, pattern.

**Keystone 10cm = 100mm (for every 1 cm = 10 mm)**

**Theory**

**Product Analysis** – looking at existing products and studying how well they do their job looking at

**ACCESS FM** – Aesthetics, cost, customer, environment, size, safety, function, materials.





Subject: DT - Textiles

Week 1 & Week 2:

DESIGN THEME: Pop Art – Art movement of 1950s & 60s. Challenged traditional fine art using images from popular culture like comic books and product labels – everyday life things. It uses bright colours. Famous artists of this movement include *Andy Warhol* and *Roy Lichtenstein*.

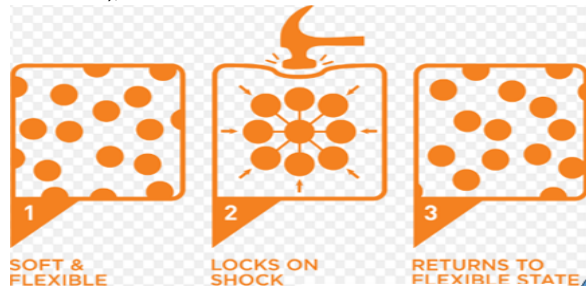


SMART MATERIALS - Respond Automatically to a Changing Environment (**RACE = acronym**)

Examples of change are temperature, light, electrical current, pressure and motion.

Microencapsulation: microscopic bubbles filled with a substance which is then sprayed onto fabric. Examples of substances are anti-bacterial, fragrance, antiallergic & mosquito repellent.

D30 = smart material that is like playdough until it is hit (blunt force), its molecules then lock solid.



KPOW: Storage Product

Week 3 & Week 4:

Thermo chromic = dyes that change colour in response to changes in TEMPERATURE. E.g. baby spoon.



Photo chromic = dyes that change colour in response to ULTRAVIOLET LIGHT (UV). E.g. image on t-shirt.

E-TEXTILES: Interactive fabric which incorporates electronics which are activated by a power source i.e. a battery.

Conductivity: The ability of a material to transmit energy or a charge. This is added to fabric by either:

- Microwires woven into fabric
- Conductive threads sewn onto fabric
- Conductive printing inks printed onto fabric

Examples of E-Textile products:

MEDICINE – a vest that records the patients' vitals like temperature, heart rate and blood pressure. Means it is quicker and easier to use.

SPORT – Running shoes which can share the runner's style as they run - information transmitted through Bluetooth so they can improve as they go.

MILITARY/ARMY – vest worn by soldiers, like a computer, stores and transmits information about surroundings. Makes soldier safer as can be warned about dangers.

FASHION & NOVELTY – Can light up clothing such as catwalk dresses and umbrellas. Can also be used for safety for cyclists at night.

Year 8: Summer Term 1

Week 5 & Week 6:

Hem – the finish made to the bottom of clothes such as trousers and skirts. The edge is turned up to create a neat finish and the fabric won't fray.

Casing – this is like a hem, but the fold is larger which creates a tunnel that something like elastic or a drawstring could be pulled through.

MODERN MATERIALS - materials that have been created through technological development.

Kevlar - very strong and durable, used to make bullet proof vests and cables for civil engineering.

Carbon Fibre – strong, rigid, lightweight, flameproof, used to make racing cars and crash helmets.

Nomex – Heat, flame and spark resistant, used to make racing drivers clothes and oven gloves.

Super Hydrophobic - Repels water, used to protect electronic circuits like in your phone and can coat clothing like shoes and other footwear. The Lotus effect!

Rhovyl – long lasting antibacterial capabilities i.e. can be washed numerous times and remains antibacterial. Used for bedding, underwear, and socks.

GEOTEXTILES – term used for materials used in civil engineering (i.e. industry term for buildings, roads, bridges, and canals).



SUSTAINABILITY – is not being harmful to the environment or using up natural resources to protect it for future generations.





**Subject: Core PE**

**Week 1 & Week 2: Flexibility**

**Definition-** The range of movement possible at a joint.

**Example-** A gymnast would need good flexibility, to be able to perform a straddle jump.

**Sports that need good flexibility:**

- Gymnast
- Football (Goalkeeper)
- Netball
- Diving
- High Jump
- Long Jump
- Trampolining



**KPOW: Key Words**

**Week 3 & Week 4: Cardiovascular Endurance**

**Definition-** The ability to exercise the entire body for long periods of time.

**Example-** A marathon runner would need good cardiovascular endurance to be able to run at a good speed for the entire race.

**Sports that need good cardiovascular endurance:**

- Running (long distance)
- Cycling (long distance)
- Swimming (long distance)
- Rowing (long distance)



**Year 8: Summer Term 1**

**Week 5 & Week 6: Muscular Strength**

**Definition-** The amount of force a muscle can exert against a resistance.

**Example-** A weightlifter would need good muscular strength, to be able to lift heavier weights.

**Sports that need good muscular strength:**

- Weightlifting
- Rugby
- Boxing
- Martial Arts





Subject: Computing & Digital Media

Week 1 & Week 2: Search Algorithms

Keywords:

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

**Linear:** Carrying out instructions that follow each other in order.

**Binary:** A number system that only has 2 values 0 & 1

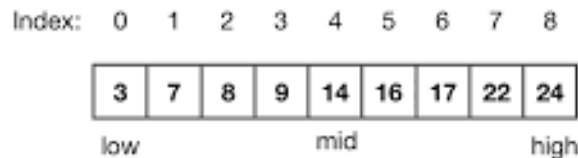
**Linear Search:**

- The most basic kind of search.
- The data does not need to be ordered.
- Starts with the first item and then moves to each item in turn, until either a match is found, or it reaches the end.

**Binary Search:**

- Faster method for searching for an item in larger lists of data.
- The data must be in order.
- The algorithm finds the midpoint of the data and divides it into two. This is repeated until it finds the item it is looking for.

Find 8

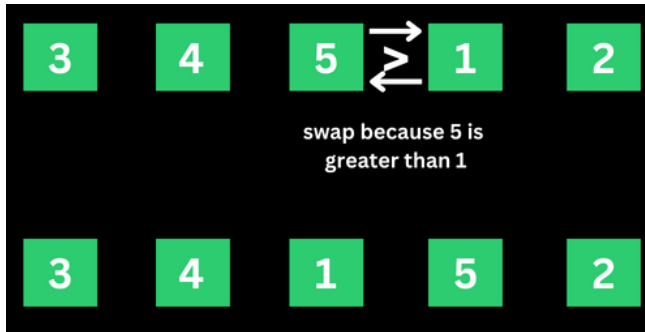


KPOW: Algorithms

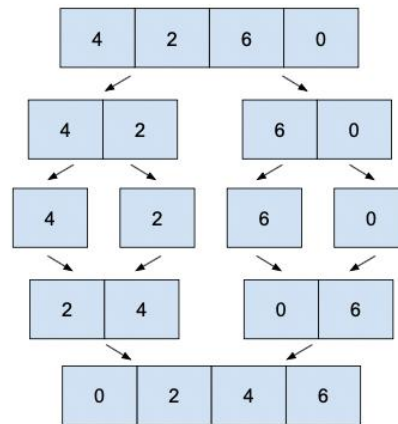
Week 3 & Week 4: Sorting Algorithms

Keywords:

**Bubble sort:** An algorithm that moves through a list of data a number of times, comparing two items that are side by side to see which is out of order.



**Merge sort:** The list is repeatedly divided into two until all the elements are separated individually. Then it's merged back together in the right order. A merge sort uses a technique called **divide and conquer**.



Year 8: Summer Term 1

Week 5 & Week 6: Recap

Keywords:

**Mid-point:** The midpoint is the middle value in a list.

**Ordered:** Items arranged in a methodical (sorted) way.

**Modified:** Having been changed slightly.

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 Rhombus is used to show a decision that needs to be made.	Decision	





Subject: Music

Week 1 & Week 2: Film music and genres

What Is Film Music?

- Film music is the **music** we hear in movies
- It is created by **Film Composers**
- It helps us feel **emotions**
- It helps tell the **story**



What Are Film Genres?

Film genres are **categories** of films that share similar styles, themes, and settings

Examples of Film Genres



**Action** – fast-paced, exciting music (e.g. explosions, chase scenes)



**Horror** – tense, creepy sounds to build fear



**Comedy** – light, playful music to match funny scenes



**Romance** – soft, emotional music for love stories

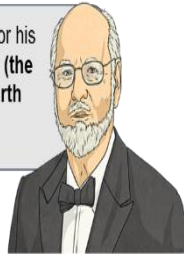


**Science Fiction** – futuristic sounds, often electronic or orchestral

What is a Leitmotif?

- It is a **recurring** musical theme associated with a **character**

John Williams is famous for his leitmotifs. **THINK... Jaws (the shark) or Star Wars (Darth Vader)**



KPOW: Film Music

Week 3 & Week 4: Composers and Scores

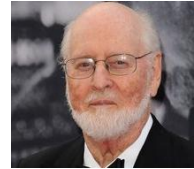
What is a Composer?

A person who **writes the music** like **John Williams** and **Hans Zimmer**



John Williams:

Composed the Film scores for Jaws, Harry Potter, Star Wars and Jurassic Park.



Hans Zimmer:

Composed the Film scores for Pirates of the Caribbean, The Dark Knight, The Lion King and Interstellar.



What is a Score?

The written piece of music



This is the Star Wars theme tune score...

For your KPOW you can choose either these two **SCORES**:

FILM MUSIC

**Titanic Theme Tune**

C C C F C C C F C

C C C C C C B B B C C C C C G

A# G F E C A# G F C C

C B G G A B D F E D C B C B B F E D C

Chords:

- C = C + E + G
- G = G + B + D
- F = F + A + C
- A# = A + C + E

Notes: - always flat or sharp for a good effect  
- Treble - high notes. Bass - low notes  
- Notes that repeat signs for the end of the line (like the last notes)

OR

FILM MUSIC

**Pirates of the Caribbean**

A C C D D F F F F G E D C A C C D D F F F F E D C

D A C C D D F F G G A B A G A D F F A D D F F E D C

Chords:

- D = D + F + A
- F = F + A + C
- B = B + D + F

Notes: - always flat or sharp for a good effect  
- Treble - high notes. Bass - low notes  
- Notes that repeat signs for the end of the line (like the last notes)

Year 8: Summer Term 1

Week 5 & Week 6: KPOW pieces

Titanic:

The main musical theme from the film 1997 film 'Titanic' was written by the composer **James Horner**

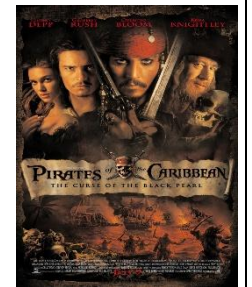


The **Titanic** theme is also the primary melody for multi-platinum selling "My Heart Will Go on", which was sung by **Celine Dion** on the film's soundtrack



Pirates of the Caribbean:

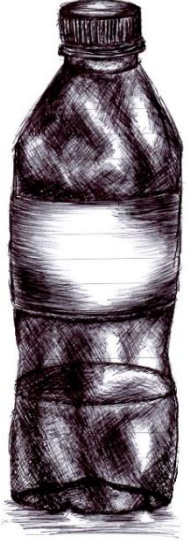


The main musical theme from the 2003 film 'Pirates of the Caribbean: The Curse of the Black Pearl' was written by **Hans Zimmer**



The recurring theme for the character **Jack Sparrow** throughout the film is one of the most recognisable **leitmotifs** in Film history





<p><b>Subject: Art</b></p>	<p><b>KPOW: Culture - Pop Art 3D</b></p>	<p><b>Year 8: Summer Term 1</b></p>
<p><b>Week 1 &amp; Week 2: Baseline</b></p>	<p><b>Week 3 &amp; Week 4: Artist page</b></p>	<p><b>Week 5 &amp; Week 6: Development</b></p>
<p><b>Keywords and definitions</b></p> <ul style="list-style-type: none"> <li>• <b>THREE DIMENSIONAL</b> – Something that has height, width and depth. It can be viewed from all angles and sides.</li> <li>• <b>CONSTRUCTION</b> – the practice of breaking complex objects down into basic shapes in order to build complex structures.</li> <li>• <b>FORM</b>– Something that is three dimensional and encloses volume. It has length, breadth and height.</li> </ul> <p><u>Observational drawing</u> - to record a subject as accurately as possible using biro pen and the crosshatching technique.</p> 	<p><b>Research – 3D Artists.</b></p> <p>During this topic you will learn about 3D Pop artists.</p> <ul style="list-style-type: none"> <li>• <b>Monami Ohno</b> – A Japanese 3D sculptor who first trained as an animator. She creates 3D sculptures of everyday objects as well as film or game characters. She uses very simple materials including cardboard boxes.</li> <li>• <b>Claus Oldenburgh</b> – an American sculptor best known for his public installations of everyday objects. He also created soft sculptures of objects such as burgers and ice creams.</li> <li>• <b>KAWS</b> – An American artist and designer whose work features the repeated use of a cast of a figurative character. His work is inspired by graffiti and skateboard culture.</li> </ul> 	<p><b>Artist page and development.</b></p> <p>Create a page all about the 3D Pop Artists. Think about the <b>layout</b> carefully. This page is very important as it will form the basis of the next stage of your project. Change the size of images, overlap and add pencil colour using your knowledge of colour blending to show your understanding of the artist.</p> <p>Explore 3D construction techniques:  <b>3D shapes</b> – are defined by having length, width and height. Examples include cubes, cones and cylinders.  <b>Cardboard</b> – the generic term used for heavy paper-based products. Some cardboard is made from multiple layers to add strength.</p> 





Subject: Drama

Week 1 & Week 2: Introduction to Stanislavski

Stanislavski – Konstantin Stanislavski was an actor and director working in Russia in the 19<sup>th</sup> Century.



Practitioner – A practitioner is someone who practices something, actively engaging in a certain subject/topic.

Naturalistic techniques -

WHAT IF... TWO WORDS WITH ENDLESS POSSIBILITIES.

Magic If – The Magic If answers the following question: "What would I do if I were in the same situation?" Take the imaginary situation and make real life decisions as to how you would behave.

Emotion memory – The technique of calling upon your own memories to understand a character's emotions.



Given Circumstance – The plot, the facts, the incidents, the period, the time and place of the action, the way of life.

Key vocabulary

Techniques - A skilful or efficient way of doing or achieving something.

KPOW: Scripted – Blood Brothers

Week 3 & Week 4: Planning and Production

Production roles – A great play is more than just having brilliant actors. Having the right team behind the scenes will ensure you put on a star performance.

Costume Design - Costume designers design, create and hire the costumes for the cast. They start by working with directors, lighting, sound, producers, writers, the production designer, and hair and makeup designer to contribute to the look and storytelling of the production. They research, sketch and draw mood boards of characters and clothes to communicate the style.



Understanding Character

Mrs Johnstone – A working class mother who is warm and caring, despite the struggles she faces supporting her 8 children.

Mrs Lyons – A middle class women, who has everything, apart from the child she longs for.



Key Vocabulary:

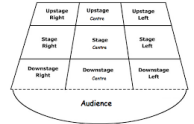
Duologue – A play or part of a play with speaking roles for only two actors.

Year 8: Summer Term 1

Week 5 & Week 6: Directing a Script

Line learning – Memorising the dialogue of a play; the words actors say in performance.

Stage Directions – An instruction in the text of a play indicating the movement, position, or tone of an actor, or how the sound effects and lighting should be.



Staging - The process of selecting, designing, adapting to, or modifying the performance space for a play.

Props – An object actors use on stage.



Character development

Role on the wall – A technique used to deepen character knowledge by visually mapping out a character's emotions and actions.

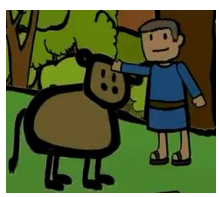





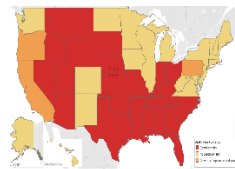
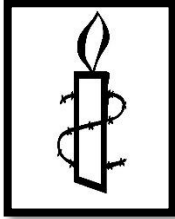


Key Vocabulary:

Directing – The art of leading dramatic performances on the stage.





Subject: Learning 4 Life		Year 8: Summer Term 1	
Week 1 & Week 2: Key Words		Week 3 & Week 4: Lazarus & the Rich Man	
Week 5 & Week 6: The Death Penalty			
Please learn the definitions of the following 12 words:		Please read and learn the story below: Cain and Abel (Book of Genesis)	
Post-humous	Something which occurs, is awarded or appears after death.		Cain and Abel were brothers. Abel looked after the animals, Cain the crops.
Death Row	A prison block or section for those who are sentenced to death.		Both Cain and Abel gave offerings to God.
Right	A moral or legal entitlement to have something.		Cain gave God poor offerings, they weren't the best crops, whilst Abel made sure he offered God the best animals.
Donor	A person who donates something, in this case an organ or tissue.		God favoured Abel because he cared about what he offered God, and so Cain got jealous and killed his brother.
Organ donation	To remove an organ from a living person and placing it in another's body.		When God realises what Cain has done, he punishes him not by killing him, but by banishing him from Eden and ensuring his crops never grow.
Execution	To carry out a sentence of death on a condemned person.		
Addiction	To be physically and mentally dependent on a substance.		
Disability	A physical or mental condition that limits a person.		
Genesis	The first book in the Bible.		
Consequence	A result or effect, generally seen to be negative.		
Lethal	Something that is so destructive it causes death.		
Abolish	To formally put an end to something.		
		Please learn these key facts below:	
		The death penalty is when a person is given a death sentence for the crime they committed.	
			The UK no longer has the death penalty, it was abolished in 1964. One reason for this were the wrongful deaths of people like Timothy Evans. He was executed for killing his daughter, but given a post-humous pardon 16 years later when it was proved he was innocent.
		In the USA, 27 states still have the death penalty, whether it is the electric chair or the lethal injection. It costs 20 times more for a death penalty trial than one for imprisonment, and the state of California has spent about \$4 billion on the death penalty since 1978.	
			There are many people and organisations who believe the death penalty should not exist at all. One organisation that fights tirelessly for its abolition is Amnesty International.





## Home Learning Schedule

Day	Subject to Learn	
Monday	English and Learning 4 Life	
Tuesday	Maths and Computing & Digital Media	Sparx Week B
Wednesday	Science	Educake Week A
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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