

## **Knowledge Organiser Year 8 – Summer Term 1**



Name:

P&A group:

Knowledge Assessment: Thursday 23<sup>rd</sup> May 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: People	e in power are corrupt and irresponsible	Year 8: Summer Term 1	
Week 1 & 2: Power & Rheto	oric	Week 3 & 4: Context and Animal Farm Ch 1	Week 5, 6 & 7: Animal Farm Chs 1 to 4	
Key words and definitions:		Key words and definitions:	Key words and definitions:	
Power – The capability or abil	ity to influence the	Duplicitous – Deceitful.	Ideology – A system of ideas which forms the basis of	
behaviour of others.		Context – The circumstances that allow us to	a political theory and policy.	
Rhetoric – Effective persuasive speaking or writing.		understand a text.	Revolution – A forcible overthrow of a system or	
De jure – Who holds power according to law.		Capitalism – An economic system where private owners	government, in favour of a new system.	
De facto – Who hold power in reality.		control trade to make profit.	Commandment – A divine/religious rule.	
Democracy – A system of government where the		Communism - An economic system where all property	Utopia – An imagined place where everything is	
people elect their representa	tives.	is owned by the community and distributed equally.	perfect.	
<b>Dictatorship</b> – A country gove	rned by a dictator.	Socialism – A political theory which advocates for the	Satire – The use of humour, irony, exaggeration, or	
Irresponsible – Not showing p	proper responsibility.	community to own the means of production.	ridicule to expose or criticise people's stupidity or	
Corruption – Being dishonest	or fraudulent.	Anthropomorphic – Giving animals human	vices.	
<b>Hypocrisy</b> – Claiming to have	higher standards than is	characteristics.	Indoctrination – The process of teaching a person or	
the case.		Allegory – A story, poem or picture that can be	group to accept a set of beliefs uncritically.	
<b>Exploitation</b> – Treating somed	one unfairly to gain a	interpreted to reveal a political idea.	Strategy – The art of planning and directing a military	
benefit from their work.		Marxism – Karl Marx's political theory which is	attack.	
Impunity – Exemption from p	unishment or	developed to form the basis of communism.	Vengeance – Punishment inflicted, or retribution	
consequences.		Comrade – A colleague. exacted for an injury or wrong.		
Avarice – Extreme greed for v	vealth or material gain.		Key skills: Reading and writing analytically.	
		Key learning points:	<b>CF</b> – Clear focus which links to the question (point).	
		1. Orwell's novel Animal Farm is allegorical as the	PIN – Pin down by saying who says the quotation,	
Key skills: Creative writing		characters and events represent real people and	when and what is happening.	
<b>CD</b> – Craft devices for effect.		events in Soviet Russia.	QU – Include a relevant quotation from the text.	
AV – Use ambitious vocabular		2. Orwell believed in socialism.	<b>EX</b> - Explain what it shows about a character and why.	
SS – Structure a range of sentences for effect.		3. The character of Mr Jones is an allegory for the Tsar	T - Include terminology e.g. word classes, sentence	
POV – Develop a clear point o		of Russia who was overthrown.	structures or language devices.	
OP – Vary sentence openers for effect.		4. The character of Napoleon is an allegory for Stalin,	<b>Z</b> - Zoom in on a key word using the two-step method.	
		who was a Russian dictator.	<b>DEV</b> - Develop your answer by including another	
		5. The character of Snowball is an allegory for Trotsky,	interpretation.	
		who was the leader of the Bolsheviks and was	<b>WM</b> - What is the writer's message?	
		driven out of Russia by Stalin.	CON – Link to relevant social or historical context.	

#### Subject: Maths

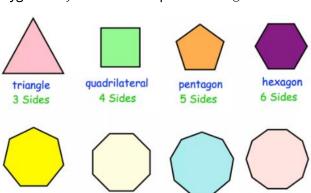
#### **KPOW: Angles**

#### Year 8: Summer Term 1

#### Week 1 & 2: Angles in polygons

#### Naming polygons

Polygon: Fully closed 2D shape with straight sides



nonagon 9 Sides

#### Interior angles

heptagon

7 Sides

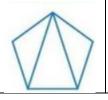
Here is the interior angle of a **regular** pentagon. A pentagon has 5 interior angles.

You can use the fact that the interior angles of a triangle add to 180° to calculate the **total interior** angles of any polygon.

octagon

8 Sides

For example 3 triangles fit into a pentagon.  $3 \times 180 = 540^{\circ}$  so all angles in a pentagon add to  $540^{\circ}$ .



decagon

10 Sides

#### Week 3: Angles in polygons

Shape	Number of sides	Number of triangles	Total interior angles
Triangle	3	1	1 x 180 = <b>180°</b>
Quadrilateral	4	2	2 x 180 = <b>360°</b>
Pentagon	5	3	3 x 180 = <b>540°</b>
Hexagon	6	4	4 x 180 = <b>720°</b>
Heptagon	7	5	5 x 180 = <b>900</b> °
Octagon	8	6	6 x 180 = <b>1080°</b>
Nonagon	9	7	7 x 180 = <b>1260°</b>
Decagon	10	8	8 x 180 = <b>1440°</b>

#### Naming angles

Name an angle using the angle symbol (∠) following the three letters, with the vertex in the middle.

This angle would be called ∠ABC or ∠CBA

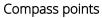
#### Exterior angles

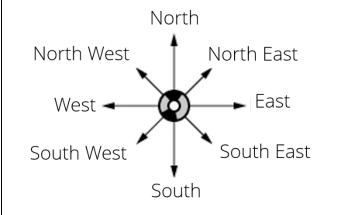
Here is the exterior angle of a **regular** pentagon.

A pentagon has 5 exterior angles.

The exterior angles of any polygon add to **360°**.

#### Week 4: Bearings





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

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

#### Bearings

B (vertex)

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.



#### Subject: Maths

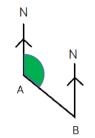
#### **KPOW: Angles**

#### Year 8: Summer Term 1

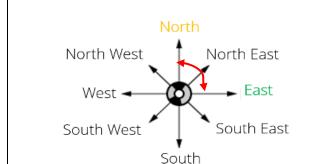
#### Week 5: Bearings

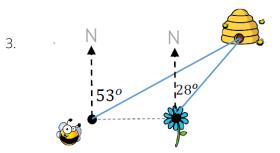
Examples

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°

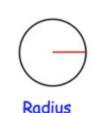


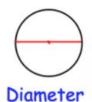


The bearing of the hive from the bee is 053°.

#### Week 6: Circles and composite shapes

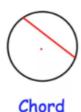
Parts of a circle

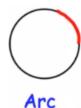














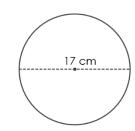
Sector

#### Circumference

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

Circumference =  $\pi \times \text{diameter}$ 

For example



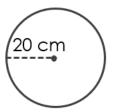
Circumference =  $\pi \times 17$ = 53.407cm

#### Area

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

Week 7: Circles and composite shapes

Area of a circle =  $\pi \times radius^2$ 



For example

Area =  $\pi \times 20^2$ 

 $= \pi \times 400$ 

 $= 1256.637 \text{cm}^2$ .

When we don't have a calculator, we write the answer in terms of pi, such as:

Area =  $\pi \times 20^{2}$ 

 $= \pi \times 400$ 

 $= 400 \text{ } \pi \text{ } \text{cm}^2.$ 

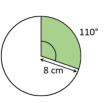
#### Sectors

If we are asked to calculate an **arc length** or **area of a sector**, multiply the answer by the fraction of the circle you want.

For example, the area of this sector is

Area =  $\pi \times 8^2 \times \frac{110}{360}$ 

 $= 61.436 \text{cm}^2$ 



#### Subject: Physics

takes place.

#### **KPOW: Hybrid Assessment**

#### Year 8: Summer Term 1

#### Week 1 & Week 2: Biology review

#### **Keyword definitions Lungs -** The organ in the body where gas exchange

Trachea – The windpipe that takes air to and from the lungs.

Alveoli – Small air sacs in the lungs that allow gas to be exchanged.



When we breathe, air enters the lungs via the **trachea.** It travels to the alveoli where oxygen is exchanged for Carbon Dioxide.

#### Week 3: Biology review

#### **Keyword definitions Exercise** – The process of completing an activity that

requires a physical effort. Health - A state of complete physical, mental, and

social well being and not merely the absence of disease

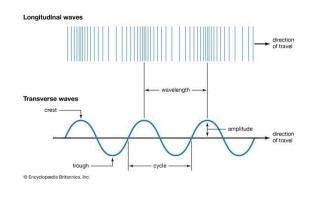
It is important to exercise to improve your brain health, help manage weight, reduce the risk of disease, strengthen bones and muscles, and improve your ability to do everyday activities,

#### **Keyword definitions**

Week 4: Wave types

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

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



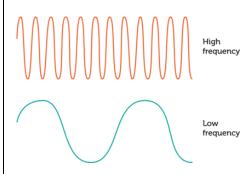
#### Week 5: Sound waves

#### **Keyword definitions**

Amplitude - The height of a wave from its rest point.

Frequency – How many waves per second.

Wavelength - How long a wave is.



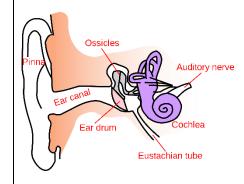
A high frequency wave will sound higher in pitch.

#### Week 6: Ear and auditory range

#### Keyword definitions

**Pinna** – The scientific name for the ear lobe.

Ear canal - Sound waves travel along the ear canal to the ear drum which vibrates due to the sound.



The cochlea converts these vibrations into electrical signals which are sent to the brain via the auditory nerve.

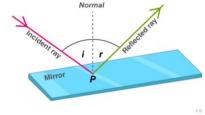
#### Week 7: Reflection

#### **Keyword definitions**

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

**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.

#### Subject: Working Scientifically

#### Week 1 & Week 2: Chemistry review

Human activities **cause** an increase in the greenhouse effect. This causes global warming,

- activities
- Burning fossil fuels
- Deforestation (cutting down trees)
- Cattle farming (cows produce methane)
- Landfills (break down of waste)
- Global
- Greenhouse effect accelerated
- Earths average temperature increases

- Ice caps melting
- Sea levels rising
- Extremes of weather
- Ocen warming and acidification

#### Week 3: Chemistry review

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.

Adaptations

- Large SA:V



Composites

are a combination

Thick waxy

Large stem

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

#### Year 8: Summer Term 1

#### Week 4: Chemistry review

#### **Keyword definitions**

Metal ore – Metal bonded to another element (usually oxygen) and attached to rock.

Mining and quarrying – Methods of extracting useful materials from the Earth.

**Recycling** – Converting used products into other useful products.

Metal ores are obtained by mining / quarrying. The process has advantages and disadvantages.

Advantages	Disadvantages
Jobs	Noise pollution
Income for local economy	Pollution from waste
Land can be reused	Habitat destruction

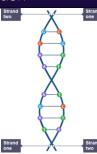


The 6 Rs of sustainability – a guide to follow to reduce waste. Rethink, Refuse, Repair, Reduce, Reuse, Recycle

#### Week 5: Structure of DNA and variation

**DNA** – Store of genetic information for living things passed from parents to offspring.

DNA is made of two strands arranged in a spiral called a double helix. Each strand is made of 4 bases; A, T, C and G which pair up (A-T, C-G).



**Variation** – Difference in characteristics within a species.

Variation can be genetic (caused by genes), environmental (caused by outside influence) or both. Discontinuous variation has a limited number of options e.g. eye colour. Continuous variation can change gradually e.g. height/weight.

#### Week 6: Adaptations, habitats, and competition

Habitat - A place where an organism lives.

To survive in a habitat, organisms need resources. Animals need food, water, space, shelter, and a mate to reproduce. Plants need light, water, minerals, and space (for roots).

Long thick eyelashes

Adaptations -

features that help an organism survive in their habitat.

Adaptations can be physical (a change in

structure or appearance) behavioural (a change in how they act) or physiological (a change in a body process). **Competition** occurs when organisms require the same resources. Organisms which are better adapted to their habitat will have a better chance of survival.

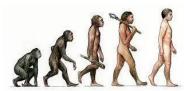
#### Week 7: Evolution and selective breeding

**Evolution** – The process by which small changes in organisms occur over long periods of time and new species are formed.

**Inheritance –** Passing on characteristics determined by genes from parents to offspring.

Natural selection - Variation in populations leads to some organisms having adaptations that make them more likely to survive.

These adaptations are passed on to offspring eventually leading to the formation of new species by evolution.



**Selective breeding –** When organisms are deliberately bred so their offspring will have desirable characteristics. Also known as artificial selection.





Subject: French	KPOW: Technology Writing	Year 8: Summer Term 1
Week 1: Key verbs & time phrases	Week 2: Types of technology and adjectives	Week 3: Opinions & infinitive verbs
En ce moment [at the moment]	un portable [a phone]	j'aime [I like] j'aime beaucoup [I really like]
Chez moi [at home]	un smartphone [a smartphone]	j'adore [I love]
Dans le passé [in the past]	un ordinateur [a computer]	<b>je préfère</b> [l prefer]
Quand j'étais petit(e) [when I was younger]	un ordinateur portable [a laptop]	je n'aime pas [I don't like]
<b>L'année dernière</b> [last year]	une console de jeux [a games console]	je déteste [I hate]
L'année prochaine [next year]	une tablette [a tablet]	je ne supporte pas [l can't stand]
Dans le future [in the future]	un smartwatch [a smartwatch]	tchatter [to chat]
À l'avenir [in the future]	moderne [modern]	parler [to talk]
	utile [useful]	communiquer [to communicate]
j'ai [I have]	vieux / vieille [old]	partager [to share]
je n'ai pas de [I don't have]	rapide [fast]	regarder [to watch]
j'avais [I had]	lent / lente [slow]	télécharger [to download]
je n'avais pas de [I didn't have]	à la mode [fashionable]	<b>écouter</b> [to listen]
je voudrais avoir [I would like to have]	nouveau / nouvelle [new]	garder le contact [to stay in touch]
je vais avoir [I am going to have]	le plus récent / la plus récente [the most up to date]	utiliser [to use]
	facile à utiliser [easy to use]	envoyer [to send]
Week 4: Technology activity vocabulary	Week 5: Time phrases & present tense verbs	Weeks 6 & 7: Reasons connectives
avec mon copain/mon ami [with my male friend]	<b>D'habitude</b> [usually]	<b>c'est</b> [it's]
avec ma copine/mon amie [with my female friend]	Tous les jours [every day]	ce n'est pas [it isn't]
avec mes copains/mes amis [with my friends]	Tous les soirs [every evening]	relaxant [relaxing]
avec ma famille [with my family]	Chaque jour [each day]	amusant [fun]
dans un forum [in a chat] en ligne[online]	Tout le temps [all the time]	génial [brilliant]
mes / beaucoup de photos [my/lots of photos]	De temps en temps [from time to time]	utile [useful]
des vidéos [videos]	je tchatte [I chat]	pratique [practical]
des clips [clips]	je parle [I talk]	plus facile [easier]
de la musique [music]	je communique [I communicate]	nécessaire [necessary]
des films [films]	je partage [I share]	divertissant [entertaining]
des textos [texts]	je regarde [l watch]	barbant / ennuyeux [boring]
des messages [messages]	je télécharge [I download]	nul [rubbish]
des emails [emails]	j'écoute [l listen]	inutile [useless]
mon portable / smartphone[my phone/smartphone]	je garde le contact [I stay in touch]	dangereux [dangerous]
mon ordinateur [my computer]	j'utilise [l use]	difficile [difficult]
ma tablette [my tablet]	j'envoie [I send]	une perte de temps [a waste of time]

#### Subject: Geography

#### Week 1 & 2: KPOW & NEW TOPIC: Intro to India

Week one: Our Restless Earth KPOW

Week two: Investigation of India

**India** is a country located in the **continent of Asia**.



Its capital city is called **New Delhi** and in 2023 their population was over 1.4 billion people.

The **climate** of India is very different in the south compared to the north. In some places it rains for 4 months of the year. This is called the **Monsoon season**.

Additionally, the landscapes are very contrasting, in the north it is very mountainous; here you will find the Himalayas, whereas in the south it is very flat.

#### **KPOW: India and China**

#### Week 3: India through time

India was one of the largest and richest of all the countries in Britain's empire.

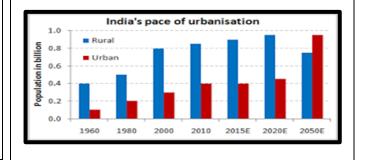
In the past, many people **justified** the British Empire in India by listing all the 'benefits' that the colonists brought. However, there have been many **negative impacts** of colonial rule in India.

Economic	Social
The British built roads,	25 million people died in
railways, and canals to	India under British rule.
make trade easier.	
	British customs were
Raw materials were	forced on people.
taken from India and	
used to make Britain	There were widespread
Rich.	famines in India under
	British rule

#### Year 8: Summer Term 1

#### Week 4: India's population

Urbanisation means increase in the percentage of the population living in urban areas (towns and cities). Poverty, drought, and lack of employment in rural areas (countryside) are leading causes of urbanisation. Urbanisation sometimes means there is not enough housing for everyone, and people have to live in slums where disease is common due to lack of sanitation.



#### Week 5: Monsoon Climate

The monsoon is a seasonal wind that effects SE Asia. There is a wet season from November to May and a dry season June to October.

In lots of **rural** (countryside) villages in India and Bangladesh, they farm **rice** which is a staple (main) food for their diet. Rice requires heavy seasonal rainfall to grow so without the rains, the crops would fail and people would starve.

#### Some effects of the wet season are:

- -Homes are washed away so people become homeless
- -Rice plants grow in flooded fields called paddies so rice farmers can earn some money

#### Some effects of the dry season are:

- -Crops dry out so farmers lose income
- -Water shortages happen so farmers struggle to irrigate (water) their crops

#### Week 6: Indian Ocean Tsunami

A tsunami is a secondary effect of an earthquake, caused by an underwater eruption, earthquake, or landslide. A ripple is sent out but as the wave reaches land it increases in height and crashes into the land. The Indian Ocean tsunami happened on 26<sup>th</sup> December 2004 (Boxing Day) and killed 227,000 people. It affected 14 countries across Asia and Africa. Cause

- The Indo-Australian Plate and Eurasian Plate slipped, and one side jumped up 10m releasing a 9.2 magnitude earthquake and a tsunami wave. Effects

#### -650,000 seriously were injured.

- -2 million were left homeless.
- -Drinking water was contaminated.
- -Coral reefs were destroyed.

#### Week 7: Intro to China

China is located 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. China's population is currently 1.3 billion. The most densely populated part of China is the south-east, particularly Shanghai.

There are lots of job opportunities in China for example, **Bam Bam men** are **manual labourers** who use a bamboo pole over their shoulders to carry things. They work **12-hour shifts** and send most of their earnings back home to rural areas.

**Yangshan** is the busiest island port in the world. It supports the economic development of China.

#### Subject: History

#### KPOW: Interpretations of the impact of Empire

#### Year 8: Summer Term 1

#### Weeks 1 & 2: The Fight for rights

#### Why were the working class angry?

- The **new machinery** led to less jobs.
- At a peaceful meeting eleven people were killed by the authorities!



#### Things start to change:

1800s = high food prices and poor working conditions. Ordinary people could not vote. By 1830, thousands of people all over Britain were demonstrating.



The **1832 Great Reform Act** gave the vote to more people, but the working class could still not vote.

#### What happened next?

The Chartists campaigned for more rights including **all** men being able to vote.

They did not succeed at the time, but 5 out of their 6 aims were eventually achieved.

#### Week 3: India: Resentment and Mutiny

The Sepoys – Indian soldiers working for the British
The Sepoys felt that they weren't treated very well.
In 1857, a new gun was delivered to the troops. The
gun had new cartridges which the Sepoys had to bite.
They were coated in grease (pork and beef fat). Many

of the Sepoys were Muslim or Hindu so this went against their religion.

often looked like the rebels would win.

#### Rebellion:

85 Sepoys refused to use the cartridges.

They were arrested and sent to jail for ten years.

Days later, other Sepoys rioted in support of their imprisoned comrades. This led to major battles and it

The rebellions had shocked the British and after the Mutiny, the British were a lot more careful about how they governed India.

#### Week 4: The impact of the empire on India

**Divided opinions:** In the past, some have tried to portray colonisation in positive terms, but this ignores the views of the colonised Indians.

#### Impact on Britain:

- Boosted British industry and wealth.
- Provided soldiers to fight for Britain.

#### Impact on India:

- 80,000km of roads built but this was to make trade quicker, not for the Indian people.
- Schools built but only for the rich.
- British customs were forced on the local people.
- Indian workers were exploited and valuable raw materials were taken back to Britain.
- 25million people died in India under British rule.

#### Week 5: Independence and partition

1885 – the **Indian National Congress** 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.

1920s – the indpendence movement was led by **Gandhi**, who believed in non-violent protest.

1935 – Government of India Act gave some self-government to India.

**2.5 million Indian soldiers** fought alongside the British in the Second World War.

1946 – the British government agreed to independence and in

1947 British india was partitioned

**into India and Pakistan**. However, this led to violence and fighting for decades.

#### Week 6: The impact of Colonisation on Australia

Australia was first used by the British as a penal colony – 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. Transportation ended in 1868.

The Indigenous Australians resisted the arrival of the colonists leading to the Frontier Wars.

Between the 1790s and 1920s, there were hundreds of massacres of Indigenous Australians including at Myall Creek in 1838 where 28 people were murdered. Diseases such as smallpox and measles also killed large numbers of Indigenous Australians.

The 'Stolen Generations': From the late 1800s, thousands of indigenous children were taken from their families to assimilate into white Australian culture

#### Week 7: An independent Australia

**1778:** First colony built at Sydney Cove. The Frontier Wars begin.

1803: New colony set up for convicts in Tasmania.

**1840:** About half the white population were now born there. The Frontier Wars continue.

**1851:** Gold is discovered. More settlers arrive.

**1855:** Four of the five Australian colonies granted 'self-government', but they are still a part of the British Empire.

**1891**: Over 80 percent of the white population of Australia were born there.

**1901:** The 'Commonwealth of Australia' is created. They have their own parliament, but the British monarch remains as Head of State.

The population of Indigenous Australians has declined to 90,000.



#### 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, 4 & 5: 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



#### Method for making bread

7. Knead on a floured surface

for 8 minutes until stretchy

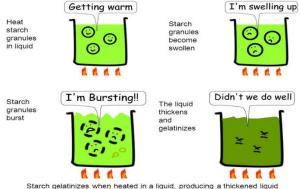


8. Shape into desired shape and 9. Bake at 220 degrees for 15 place on a baking tray to prove 20 minutes

#### Year 8: Summer Term 1

#### Week 6 & Week 7: 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)

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

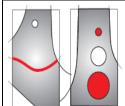
1 tin tomatoes and ½ tube tomato puree OR 1 tin of tomato pasta sauce

Extra cheese for the topping



#### 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, 6 & 7: 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

**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.

Keynote 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

#### Taping wood together:



Tape around the wood with masking tape to hold it firmly so that you can then accurately drill all 4 pieces together.

#### Measuring & Marking the wood before drilling it:



The blue template that is used to help you achieve accuracy is called a 'JIG' (something that guides you to achieve the same again and again therefore consistent and accurate).

Design theme: Pop Art – Art movement of 1950s & 60. 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.



#### **KPOW: Storage Product**

#### Week 3 & Week 4

#### Creating a block print



Place template on foam, draw round, cut out, stick on block with doublesided tape

#### Creating patterns using a block:



THEORY: 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 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.

Thermo chromic = dyes that change colour in response to changes in TEMPERATURE.

Photo chromic = dyes that change colour in response to ULTRAVIOLET LIGHT (UV).

#### Year 8: Summer Term 1

#### Week 5, 6 & 7

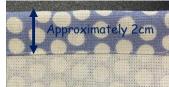
#### **Product Analysis**

Investigating similar products to those you wish to design and make. Gathering useful information such as what materials they are made from, the cost, the function, what is successful about them and what, in your opinion would make them even better.

A Hem – the finish made to the bottom of clothes such as trousers and skirts. The edge is turned up to create a neat finish (overlocked and turned, or turned twice so no raw edge).

**Plain Seam** – how most clothing is joined, it's the most common joining seam. Two pieces of the garment are laid together and sewn on the Seam Allowance (normally 1.5cm).

Casing – this is like a hem, but the fold is larger which creates a space between the stitch and the top that something like elastic or a drawstring could be pulled through. For this project, the space will need to be big enough to push the dowel through.



THEORY: modern materials that have been created through technological development. Examples of such are Kevlar (V strong, bullet proof vests), Super hydrophobic (repels water), Nomex (fire resistant), Carbon Fibre (light, rigid – racing cars) and Rhovyl (long lasting antibacterial).

Subject: Core PE

Week 1&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&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, 6 & 7: 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.

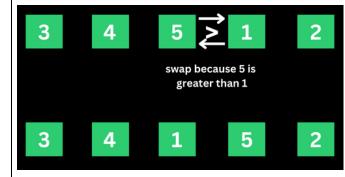
# Find 8 Index: 0 1 2 3 4 5 6 7 8 3 7 8 9 14 16 17 22 24 low mid high

#### **KPOW: Algorithms**

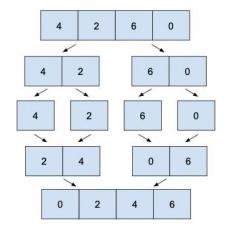
#### Week 3 & Week 4: Sorting Algorithms

#### 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 & Week 7: 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.:

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

#### Subject: Music

#### Week 1 & Week 2: Chords / Harmony

#### Chords / Harmony:

Accompanying notes that play underneath.



#### Tonality:

Major (Happy) Minor (Sad).



#### Hookline:

Bassline:

A memorable and catchy musical phrase which are often repeated throughout the composition.

**KPOW: Song Writing** 

A melodic line played by a low-

the chord progression.

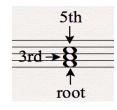
pitched instrument which follows

Week 3 & 4 & 5: Bassline / Hookline



#### Triad:

Three notes created from the root, third and fifth.



#### Composer:

Someone who writes music.



#### Structure:

The plan of the music (Verse, Chorus, Bridge, Intro, Outro).





#### Year 8: Summer Term 1

#### Week 6 & 7: Melody / Lyrics

#### Melody:

The tune. The main recognisable line in a song or piece of music.



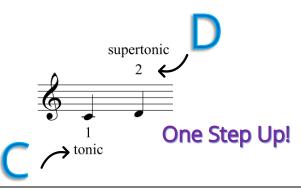
#### Lyrics:

The words which are sung to accompany a song's melody.



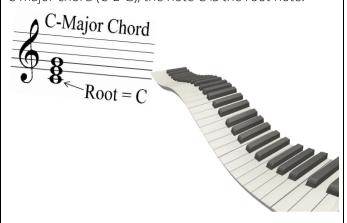
#### Supertonic:

The note that is a whole step above the tonic. For example, in the key of C major, the supertonic is D.





A note that gives the chord its name. For example, in a C major chord (C-E-G), the note C is the root note.



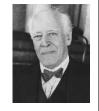
Subject: Art Year 8: Summer Term 1 KPOW: Culture - Pop Art 3D Week 1 & Week 2: Baseline Week 3 & Week 4: Artist page Week 5, 6 & 7: Development Keywords and definitions Research - 3D Artists. Artist page and development. THREE DIMENSIONAL - Something that has height, During this topic you will learn about 3D Pop artists. Create a page all about the 3D Pop Artists. Think about width and depth. It can be viewed from all angles the **layout** carefully. This page is very important as it and sides. Monami Ohno – A Japanese 3D sculptor who first will form the basis of the next stage of your project. CONSTRUCTION – the practice of breaking trained as an animator. She creates 3D sculptures Change the size of images, overlap and add pencil complex objects down into basic shapes in order colour using your knowledge of colour blending to of everyday objects as well as film or game to build complex structures. characters. She uses very simple materials show your understanding of the artist. FORM- Something that is three dimensional and including cardboard boxes. encloses volume. It has length, breadth and height. Claus Oldenburgh – an American sculptor best Explore 3D construction techniques: known for his public installations of everyday 3D shapes – are defined by having length, width and Observational drawing - to record a subject as objects. He also created soft sculptures of objects height. Examples include cubes, cones and cylinders. accurately as possible using biro pen and the such as burgers and ice creams. Cardboard – the generic term used for heavy papercrosshatching technique. KAWS – An American artist and designer whose based products. Some cardboard is made from work features the repeated use of a cast of a multiple layers to add strength. figurative character. His work is inspired by graffiti and skateboard culture

#### Subject: Drama

#### Week 1 & 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 tecqhniues -



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 & 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, 6 & 7: 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.



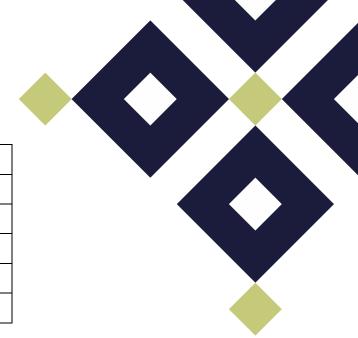
Key Vocabulary:

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

Subject: Learning 4 Life				Year 8: Summer Term 1		
	eek 2: Key Words	Week 3 & Week 4: Lazarus & the Rich Man		<b>Week 5, 6 &amp; 7:</b> The		•
Please learn t Post- humous	he definitions of the following 12 words:  Something which occurs, is awarded or appears after death.	Please read and learr Cain and Abel (Book o	,	Please learn these k  The death penalty is sentence for the crir	when a perso	n is given a death
Death Row	A prison block or section for those who are sentenced to death.		Cain and Abel were brothers. Abel looked after the animals,	Sentence for the chi	1	inger has the death
Right	A moral or legal entitlement to have something.		Cain the crops.		penalty, it wa 1964. One r	as abolished in eason for this were
Donor	A person who donates something, in this case an organ or tissue.		Both Cain and Abel gave	the wrongful deaths of peo- like Timothy Evans. He was executed for killing his daug but given a post-humous pardon 16 years later wher was proved he was innocer		Evans. He was killing his daughter,
Organ donation	To remove an organ from a living person and placing it in another's body.		offerings to God.			ears later when it
Execution	To carry out a sentence of death on a condemned person.		Cain gave God poor offerings, they weren't the best crops,	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.		
Addiction	To be physically and mentally dependent on a substance.		whilst Abel made sure he offered God the best animals.			
Disability	A physical or mental condition that limits a person.	洙	God favoured Abel because he			The second secon
Genesis	The first book in the Bible.	1181118111	God, and so Cain got jealous and killed his brother.			
Consequ- ence	A result or effect, generally seen to be negative.		When God realises what Cain	()		any people and s who believe the
Lethal	Something that is so destructive it causes death.		has done, he punishes him not by killing him, but by banishing him from Eden and ensuring		death penalt at all. One o	y should not exist rganisation that
Abolish	To formally put an end to something.	<b>F</b> 1111	his crops never grow.	fights tirelessly for its abolition 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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