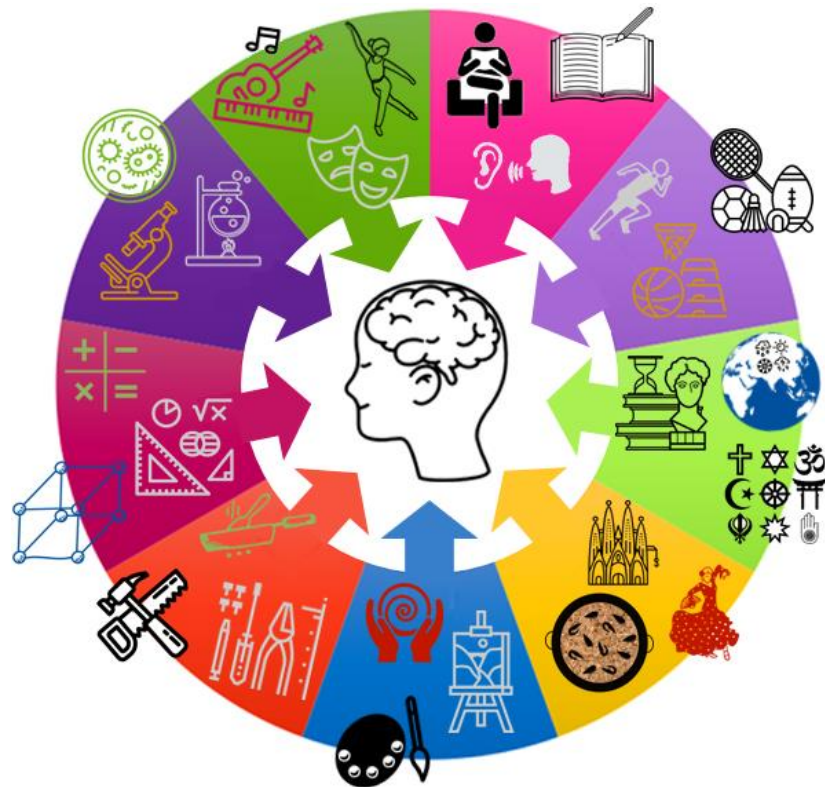


# 100% book - Year 8 Grammar

Aim to memorise 100% of the knowledge on these Knowledge Organisers



## Term 3

### Swindon Academy 2023-24

Name:	
Tutor Group:	
Tutor & Room:	

"If you are not willing to learn, no one can help you.

If you are determined to learn, no one can stop you."

# Using your Knowledge Organiser and Quizzable Knowledge Organiser

## Knowledge Organisers

**Year 7 Term 1 Science/Chemistry - Topic: TOP Particles**

**What are we learning this term:**  
 1. Particle model  
 2. Changing state  
 3. Mixtures  
 4. Separating techniques

**4 Key Words for this term:**  
 1. Matter  
 2. Particles  
 3. Gases  
 4. Freezing

**A. Describe the properties of the three states of matter.**  
 Solid: Particles are packed closely together in a regular pattern. They can vibrate in fixed positions.  
 Liquid: Particles are arranged randomly but are still touching each other. They can slide past each other and move around.  
 Gas: Particles are far apart and are arranged randomly. They carry a lot of energy and they move in all directions in a high speed.

**A. What is particle theory?**  
 The theory that all matter is made up of particles.

**A. What is the law of conservation of mass?**  
 The Law of Conservation of Mass states that mass cannot be created or destroyed.

**B. What are the different changes of state?**  
 Melting: change of state from solid to liquid  
 Freezing: change of state from liquid to solid  
 Evaporation: change of state from liquid to gas  
 Condensation: change of state from gas to liquid

**C. What is the difference between a pure and an impure substance?**  
 Pure: A material that is made up of only one type of particle.  
 Impure: A material that is made up of more than one type of particle.

## Quizzable Knowledge Organisers

**A. What is particle theory?**

**A. Describe the arrangement and movement of particles in the three states of matter.**

Solid

Liquid

Gas

**A. What is the law of conservation of mass?**

**B. What are the different changes of state?**

Melting

Freezing

Evaporation

Condensation

**C. What is the difference between a pure and an impure substance?**

Pure

Impure

Diagram showing particle arrangements for solid, liquid, and gas.

Diagram showing changes of state: solid to liquid (melting), liquid to solid (freezing), liquid to gas (evaporation), gas to liquid (condensation).

## Expectations for Prep and for using your Knowledge Organisers

1. Complete all prep work set in your subject prep book.
2. Bring your prep book to every lesson and ensure that you have completed all work by the deadline.
3. Take pride in your prep book – keep it neat and tidy.
4. Present work in your prep book to the same standard you are expected to do in class.
5. Ensure that your use of SPAG is accurate.
6. Write in blue or black pen and sketch in pencil.
7. Ensure every piece of work has a title and date.
8. Use a ruler for straight lines.
9. If you are unsure about the prep, speak to your teacher.
10. Review your prep work in green pen using the mark scheme.

Knowledge Organisers contain the essential knowledge that you **MUST** know in order to be successful this year and in all subsequent years.

They will help you learn, revise and retain what you have learnt in lessons in order to move the knowledge from your short-term memory to long-term memory.

These are designed to help you quiz yourself on the essential Knowledge.

Use them to test yourself or get someone else to test you, until you are confident you can recall the information from memory.

### Top Tip

Don't write on your Quizzable Knowledge Organisers! Quiz yourself by writing the missing words in your prep book. That way you can quiz yourself again and again!

# How do I complete Knowledge Organiser Prep?

## Step 1

Check Epraise and identify what words /definitions/facts you have been asked to learn. Find the Knowledge Organiser you need to use.

The screenshot shows the epraise website interface. On the left is a 'Planner' for the week of 10th May to 16th May 2020, with a grid for different subjects. On the right is a 'New Topic' knowledge organiser for 'What is particle theory?'. It includes sections for 'What is particle theory?', 'Describe the arrangement and movement of particles in the three states of matter', and 'What is the law of conservation of mass?'. There are also diagrams of particle arrangements for solid, liquid, and gas states.

## Step 2

Write today's date and the title from your Knowledge Organiser in your Prep Book.

The screenshot shows a student's prep book. The date '29th May 2020' and the title 'Particle theory' are written in the top right corner of the knowledge organiser template. The template includes sections for 'What is particle theory?', 'Describe the arrangement and movement of particles in the three states of matter', and 'What is the law of conservation of mass?'. There are also diagrams of particle arrangements for solid, liquid, and gas states.

## Step 3

Write out the keywords/definitions/facts from your Knowledge Organiser in FULL.

The screenshot shows a student's prep book with the keywords/definitions/facts from the knowledge organiser written out in full. The text includes: '29th May 2020', 'Properties of the states of matter', 'Particle theory = all matter is made of particles', 'Solid = regular pattern particles vibrate in fixed position', 'Liquid = particles are arranged randomly but are still touching each other. Particles can slide past each other and move around.', and 'Gas = Particles are far apart and are arranged randomly. Particles carry a lot of energy'.

## Step 4

Read the keywords/definitions/facts out loud to yourself again and again and write the keywords/definitions/facts at least 3 times.

The screenshot shows a student's prep book with the keywords/definitions/facts from the knowledge organiser written out three times. The text includes: 'Solid = regular pattern particles vibrate in fixed position', 'Solid = regular pattern particles vibrate in fixed position', and 'Solid = regular pattern particles vibrate in fixed position'.

## Step 5

Open your quizzable Knowledge Organiser. Write the missing words from your quizzable Knowledge organiser in your prep book.

The screenshot shows a student's prep book with the missing words from the quizzable knowledge organiser written in the prep book. The text includes: 'Self quizzing', 'Arrangement/movement of matter', 'Solid = regular pattern particles vibrate in fixed position', 'Liquid =', and 'Gas ='. There are also diagrams of particle arrangements for solid, liquid, and gas states.

## Step 6

Check your answers using your Knowledge Organiser. Repeat Steps 3 to 5 with any questions you got wrong until you are confident.

The screenshot shows a student's prep book with the keywords/definitions/facts from the knowledge organiser written out in full, with some corrections. The text includes: 'Particle theory = all matter is made of particles', 'Solid = regular pattern particles vibrate in fixed position', 'Liquid = particles are arranged randomly but are still touching each other. Particles can slide past each other and move around.', and 'Gas = Particles are far apart and are arranged randomly. Particles carry a lot of energy'.

Make sure you bring in your completed Prep notes to demonstrate that you have completed your prep.

# 'The Tempest' GS Knowledge Organiser

<b>Plot Summary</b>	<b>The End Act 4, Scene 1 and Act 5, Scene 1</b> A marriage for Ferdinand and Miranda is arranged and celebrated with a masque attended by spirits. It is interrupted when Prospero recalls the threat from Trinculo, Stephano and Caliban. Prospero and Ariel send spirit dogs to scare them away. King Alonso, Sebastian and Antonio meet Prospero. He explains what has been happening on the island. He shows them Ferdinand and Miranda who are now married. King Alonso is filled with regret and asks for forgiveness from Prospero which he grants.	<b>Vocabulary: Keywords</b>
<b>The Tempest Act 1, Scene 1</b> Alonso, the King of Naples, is on a ship with his son Ferdinand and his companions Sebastian, Antonio, Stephano and Trinculo. They are struck by a terrifying, howling storm. They abandon ship and swim to a nearby island but are washed ashore in different places. The island seems to be abandoned.	<b>Epilogue</b> Prospero declares that he will be giving up his magic. Ariel is released from his service. The party travel back to Milan. We do not know what has happened to Caliban.	<b>colonialism</b> – when one country establishes itself in another country. When someone <b>colonises</b> a new country, they are called a <b>coloniser</b> . The original inhabitants of the land are called <b>natives</b> .
<b>After the Storm Act 1, Scene 2</b> From a nearby island, Miranda watches the huge tempest. She lives with her father Prospero and has little memory of her life before the island. Prospero tells his daughter of their past: he was the Duke of Milan twelve years ago, but he was so involved with his books and secret studies that he did not realise his brother Antonio was stealing power from him. One night, Antonio ordered soldiers to take Prospero and Miranda and put them on a boat to their death. But they were washed ashore this island safely and have lived there ever since. Prospero has been ruler of the island. Prospero has created the storm to bring his brother to the island.	<b>Terminology: Keywords</b>	<b>imperialism</b> - a policy of extending a country's power and influence through colonization, use of military force, or other means.
<b>Ariel and Caliban Act 1, Scene 2 into Act 2, Scene 1</b> Prospero is a powerful magician who controls the spirit Ariel who completes tasks for him. Prospero has agreed to release Ariel after this last mission. Caliban is a deformed savage slave who is also under Prospero's control. He is the son of an old witch, Sycorax, and is a native of the island. Prospero taught Caliban how to speak but Caliban resents the control Prospero has over him.	<b>comedy</b> – a play that is funny. It has a happy ending.	<b>usurp</b> – to take control of someone else's power when you do not have the right to. Someone who usurps is called a <b>usurper</b> .
<b>Kind Alonso Act 2, Scene 1</b> King Alonso and his younger brother Sebastian, as well as Antonio (the usurping Duke of Milan), wander around the island. King Alonso weeps as he believes his son Ferdinand is dead. Sebastian and Antonio plot to kill Alonso so that Sebastian can be king. They are stopped by Ariel's magical intervention.	<b>soliloquy</b> – when a character is speaking alone on stage to himself/herself or to the audience.	<b>tempest</b> – a violent storm.
<b>Caliban, Stephano and Trinculo Act 2, Scene 2 and Act 3, Scene 2</b> The monster Caliban is found by Stephano and Trinculo. They give him alcohol to drink and he gets drunk. Caliban offers to serve Stephano because he believes he is a god because of the heavenly drink! Caliban explains to them how Prospero has treated him and that he will be their guide on the island if they overthrow him. The three drunks go to find and kill Prospero.	<b>Characters</b>	<b>treason</b> – a crime that harms your country or government. Someone who commits treason is a <b>traitor</b> .
<b>Ferdinand and Miranda Act 1, Scene 2 and Act 3, Scene 1</b> Ferdinand has survived the storm. He is safely on the island and is found by Miranda. They fall instantly in love. Prospero wants to test that the love is real. Ferdinand has to endure hard labour to prove his intentions are honourable. Miranda pities Ferdinand and wants to marry him. Prospero blesses their marriage.	Alonso – King of Naples	<b>callous</b> – when someone is cruel and does not care about other people.
	Sebastian – Alonso's brother	<b>pathos</b> – a situation that makes us feel sympathy or sorrow.
	Ferdinand – Alonso's son	<b>exploitation</b> – taking advantage of someone for your own benefit
	Antonio – Prospero's brother.	<b>nurture</b> – to encourage or support the development of someone or something.
	Antonio stole Prospero's title as Duke of Milan.	<b>dual nature</b> – having two sides.
	Gonzalo – the old counsellor to the King of Naples	<b>Background Information</b>
	Trinculo – a jester	Shakespeare was born in the Elizabethan era, named after Elizabeth I. After she died, James I became king. This period of history is called the <b>Jacobean</b> era, because Jacob is the Latin for James. Shakespeare lived and worked in both eras.
	Stephano – a drunken butler	Italian city states - A city-state is an area that is ruled by a major city. During the Elizabethan and Jacobean era, Italy wasn't one unified country, but a number of small independent city-states.
	Prospero – the rightful Duke of Milan	Sea exploration was booming in the Elizabethan era as people 'discovered' new parts of the world. Queen Elizabeth I was obsessed with their discoveries and was happy to pay for their travels. Led by her example, the rest of the country were also fascinated by their stories and goods. Colonialism has had a lasting impact on the world. Many natives were exploited and killed by the white European colonisers. Issues of colonialism; such as racism and slavery are important to the play.
	Miranda – Prospero's daughter	
	Ariel – an airy spirit; a slave of Prospero's who earns his freedom	
	Caliban – a savage and deformed slave of Prospero's; a native of the island	

# 'The Tempest' GS Knowledge Organiser

## The Tempest Plot Summary

### The Tempest Act 1, Scene 1

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### After the Storm Act 1, Scene 2

From a nearby \_\_\_\_\_, \_\_\_\_\_ watches the huge \_\_\_\_\_. She lives with her father \_\_\_\_\_ and has little \_\_\_\_\_ of her life before the \_\_\_\_\_. Prospero tells his daughter of their \_\_\_\_\_. He was the \_\_\_\_\_ twelve years ago, but he was so involved with his \_\_\_\_\_ and secret \_\_\_\_\_ that he did not realise his \_\_\_\_\_ was stealing power from him.

\_\_\_\_\_

\_\_\_\_\_

### Ariel and Caliban Act 1, Scene 2 into Act 2, Scene 1

Prospero is a powerful \_\_\_\_\_ who controls the spirit \_\_\_\_\_ who completes tasks for him.

\_\_\_\_\_ is a deformed savage \_\_\_\_\_ who is also under Prospero's \_\_\_\_\_.

\_\_\_\_\_

### Kind Alonso Act 2, Scene 1

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### Caliban, Stephano and Trinculo Act 2, Scene 2 and Act 3, Scene 2

The monster \_\_\_\_\_ is found by Stephano and Trinculo.

\_\_\_\_\_

\_\_\_\_\_

### Ferdinand and Miranda Act 1, Scene 2 and Act 3, Scene 1

\_\_\_\_\_ has \_\_\_\_\_ the storm. He is safely on the island and is found by \_\_\_\_\_.

\_\_\_\_\_

\_\_\_\_\_

### The End Act 4, Scene 1 and Act 5, Scene 1

A marriage \_\_\_\_\_ is arranged and celebrated with a masque attended by spirits. It is interrupted when Prospero recalls the threat from \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

\_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ meet Prospero.

\_\_\_\_\_

\_\_\_\_\_

### Epilogue

Prospero declares that he will \_\_\_\_\_

\_\_\_\_\_

## Terminology: Keywords

**comedy** - \_\_\_\_\_

**soliloquy** - \_\_\_\_\_

**sibilance** - \_\_\_\_\_

## Characters in *The Tempest*

Alonso - \_\_\_\_\_

Sebastian - \_\_\_\_\_

Ferdinand - \_\_\_\_\_

Antonio - \_\_\_\_\_

Gonzalo - \_\_\_\_\_

Trinculo - \_\_\_\_\_

Stephano - \_\_\_\_\_

Prospero - \_\_\_\_\_

Miranda - \_\_\_\_\_

Ariel - \_\_\_\_\_

Caliban - \_\_\_\_\_

## Vocabulary: Keywords

**colonialism** - \_\_\_\_\_

\_\_\_\_\_ The original inhabitants of the land are called \_\_\_\_\_.

**usurp** - \_\_\_\_\_

**imperialism** - \_\_\_\_\_

**tempest** - \_\_\_\_\_

**treason** - \_\_\_\_\_

**callous** - \_\_\_\_\_

**pathos** - \_\_\_\_\_

**exploitation** - \_\_\_\_\_

**nurture** - \_\_\_\_\_

**dual nature** - \_\_\_\_\_

## Historical Context of *The Tempest*

Shakespeare was born in the \_\_\_\_\_ era, named after Elizabeth I. \_\_\_\_\_

Italian city states - A \_\_\_\_\_ is an area that is \_\_\_\_\_ by a major \_\_\_\_\_.

Sea exploration was booming in the Elizabethan era as people 'discovered' new parts of the world. \_\_\_\_\_

Le \_\_\_\_\_ by her example, the rest of the country were also fascinated by their stories and goods. \_\_\_\_\_ has had a lasting \_\_\_\_\_ on the \_\_\_\_\_. Many \_\_\_\_\_ were \_\_\_\_\_ and killed by the white European colonisers. Issues of \_\_\_\_\_; such as \_\_\_\_\_ and \_\_\_\_\_ are important to the play.



<b>What we are learning this term:</b>
<ul style="list-style-type: none"> <li>A. Movement</li> <li>B. Breathing and Fitness</li> <li>C. Effect of drugs</li> <li>D. Aerobic and Anaerobic respiration</li> <li>E. Reproduction and Heredity</li> </ul>

<b>6 Key Words for this term</b>
<ul style="list-style-type: none"> <li>1. Chromosomes</li> <li>2. Exchange</li> <li>3. Anaerobic</li> <li>4. Respiration</li> <li>5. Aerobically</li> <li>6. Cilia</li> </ul>

<b>A.</b>	<b>What are the 4 functions of the Skeletal System?</b>
Movement, support, protection and making red blood cells	

<b>A</b>	<b>Support – what is the main function of the spine?</b>
The spine supports the upper body and allows us to stand upright.	

<b>Protection – what is the function of the following:</b>	
Ribcage	Protects the heart and lungs
Cranium (skull)	Protects the brain

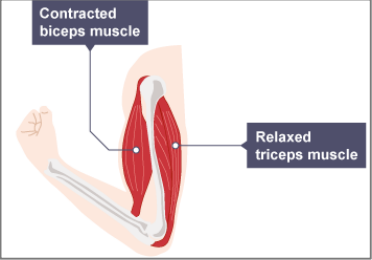
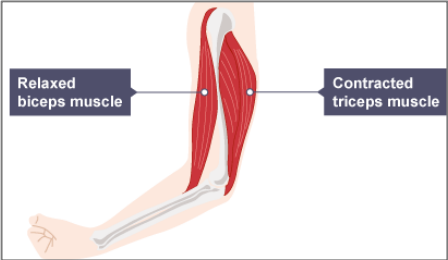
<b>A</b>	<b>Making blood cells – what part of the bone makes blood cells?</b>
Bone marrow produces: <ul style="list-style-type: none"> <li>1. <b>Red blood cells</b> (which transport O<sub>2</sub> and CO<sub>2</sub>)</li> <li>2. <b>White blood cells</b> (some of which fight disease)</li> <li>3. <b>Platelets</b> (which cause blood clotting e.g. when we cut ourselves)</li> </ul>	
<b>Why are bones hollow?</b>	
Long bones in the body are <b>hollow</b> – in the middle of the bone is a <b>marrow cavity</b> . The cavity contains <b>bone marrow</b> , from which blood is produced.	

<b>A.</b>	<b>Movement and muscles</b>
<b>What are the following:</b>	
<b>Ligaments</b>	Bones are attached to each other by <b>ligaments</b> .
<b>Muscles</b>	A collection of tissues which can contract and relax, causing other body parts (including bones) to move.
<b>Tendons</b>	Muscles are attached to bones by <b>tendons</b> . They are a strong, flexible tissue attaching a muscle to a bone.

<b>A.</b>	<b>How does the muscular system help us move?</b>
This system allows us to move by <b>contracting</b> and <b>relaxing</b> our muscles	

<b>A.</b>	<b>How do your muscles move your bones?</b>
Muscles exert a <b>force</b> on bones to move them.	

<b>A.</b>	<b>What is Biomechanics?</b>
Biomechanics is the working together of the skeletal system and the muscular system to help us move.	

<b>A</b>	<b>What are antagonistic muscles?</b>
In order to move bones in two directions (e.g. bending then stretching your arm), muscles are <b>paired antagonistically</b> (one moves the bone in one direction, the other in the opposite direction).	
<b>How do they work?</b>	 
<ul style="list-style-type: none"> <li>1. To <b>raise</b> the forearm, the biceps contracts and the triceps relaxes.</li> <li>2. To <b>lower</b> the forearm again, the triceps contracts and the biceps relaxes.</li> </ul>	

<b>A.</b>	<b>What is Osteoporosis</b>
<b>Osteoporosis</b> is a condition in which someone loses bone density, making their bones fragile so they are more likely to break bones.	
<b>What are rickets?</b>	
<b>Rickets</b> can be caused by a deficiency of <b>calcium</b> or <b>vitamin D</b> . Rickets causes bone pain, and soft bones which can deform.	

<b>A.</b>	<b>What happens if you overstretch a tendon?</b>
Over-stretching a tendon can cause it to snap. Tendons will <b>heal themselves</b> but become <b>shorter</b> in the process because the two severed ends <b>overlap</b> to heal, reducing flexibility	
<b>What is Tendonitis?</b>	
As the body tries to heal a tendon, it will swell and become painful. This is called <b>tendonitis</b> , and includes <b>tennis elbow</b> .	



<b>What we are learning this term:</b>
<ul style="list-style-type: none"> <li>A. Movement</li> <li>B. Breathing and Fitness</li> <li>C. Effect of drugs</li> <li>D. Aerobic and Anaerobic respiration</li> <li>E. Reproduction and Heredity</li> </ul>

<b>6 Key Words for this term</b>						
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1.</td> <td style="width: 50%;">4.</td> </tr> <tr> <td>2.</td> <td>5.</td> </tr> <tr> <td>3.</td> <td>6.</td> </tr> </table>	1.	4.	2.	5.	3.	6.
1.	4.					
2.	5.					
3.	6.					

<b>A.</b>	<b>Movement and muscles</b>
<b>What are the following:</b>	
<b>Ligaments</b>	
<b>Muscles</b>	
<b>Tendons</b>	

<b>A.</b>	<b>How does the muscular system help us move?</b>

<b>A.</b>	<b>How do your muscles move your bones?</b>

<b>A.</b>	<b>What are the 4 functions of the Skeletal System?</b>

<b>A.</b>	<b>What is Biomechanics?</b>

<b>A</b>	<b>Support – what is the main function of the spine?</b>

<b>A</b>	<b>What are antagonistic muscles?</b>

<b>Protection – what is the function of the following:</b>	
Ribcage	
Cranium (skull)	

<b>How do they work?</b>		
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<b>A</b>	<b>Making blood cells – what part of the bone makes blood cells?</b>

<b>A.</b>	<b>What is Osteoporosis</b>

<b>A.</b>	<b>What happens if you overstretch a tendon?</b>

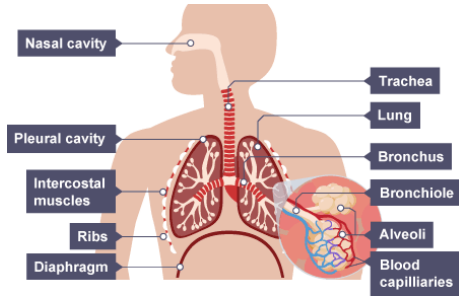
<b>Why are bones hollow?</b>

<b>What are rickets?</b>

<b>What is Tendonitis?</b>

**B. What is the Respiratory System?**

The organ system responsible for exchanging gases with the environment.



**How does the respiratory system work?**

- Air enters the body through the nasal cavity.
- Travels down the trachea, then one of two bronchi,
- Travels to one of many bronchioles and ends up in the alveoli.
- Oxygen diffuses into the blood stream.
- Carbon dioxide diffuses in the opposite direction,
- It then follows the reverse of the above journey, to leave the body.

**B. Measuring lung capacity: what do the following terms mean?**

<b>Vital capacity</b>	The volume of air you can breathe <b>out</b> after breathing <b>in</b> as much as you can.
<b>Residual volume</b>	Volume of air left in the lungs <b>after</b> breathing out as much as you can.
<b>Tidal volume</b>	Volume of air in a normal breath (in or out).

**What can you use to measure Lung Capacity?**

A spirometer

**What is the equation for lung capacity?**

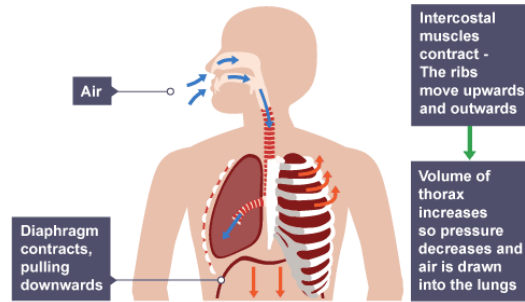
$$\text{Lung capacity} = \text{vital capacity} + \text{residual volume}$$

**B. What is Ventilation?**

**Ventilation** is the process of bringing gas in and expelling gas from the body.

**Why are ventilation and Respiration different?**

**Respiration** is a chemical reaction which happens in the body's cells and releases energy.  
**Ventilation** is the process of bringing gas in and expelling gas from the body.



**B. What is Asthma?**

**Asthma** is a disease where airways become inflamed. The muscles around the bronchioles **contract**, constricting the airways and making breathing difficult.

**What triggers Asthma?**

Asthma is **non-communicable** but can be **triggered** by environmental factors such as infections, allergies and exercise

**How can it be treated?**

Asthma is treated using **steroids**.

**B. What effects can smoking have on the gas exchange system?**

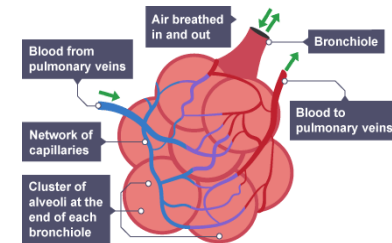
1. Destroys **cilia** in the airways so they are less able to sweep **mucus** containing pathogens out of the lungs, leading to **smoker's cough**
2. Irritates the **bronchi**, causing **bronchitis**
3. Destroys alveoli, reducing the surface area for gas exchange and causing **emphysema**
4. Cigarette smoke contains **carbon monoxide** (CO) which binds to red blood cells, so they can carry less oxygen to cells and the **heart has to work harder**
5. Increases the risk of lung, throat, mouth and oesophagus cancers

**B. Where does gas exchange happen?**

The lungs are the site of gas exchange between the body and the environment.  
 Oxygen for respiration diffuses into the bloodstream and waste carbon dioxide diffuses out of the blood into the alveoli, from where it is expelled in ventilation.

**What are Alveoli?**

Balloon-like structures which are responsible for exchanging oxygen and carbon dioxide between the blood and the lung cavity



**What adaptations do the alveoli have?**

1. **High surface area** thanks to their balloon-like shape
2. Many **capillaries** give a **good blood supply** for gas exchange
3. Walls only **one cell thick**
4. **Moist** walls pick up gases (gases dissolve in water)

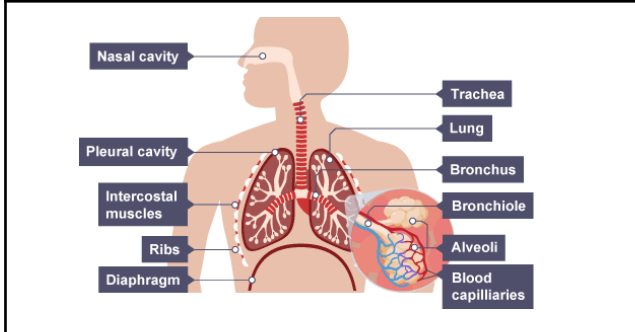
**What is Diffusion?**

Diffusion is the net movement of anything (for example, atom, ions, molecules) from a region of higher concentration to a region of lower concentration.





**B. What is the Respiratory System?**



**How does the respiratory system work?**

**B. Measuring lung capacity: what do the following terms mean?**

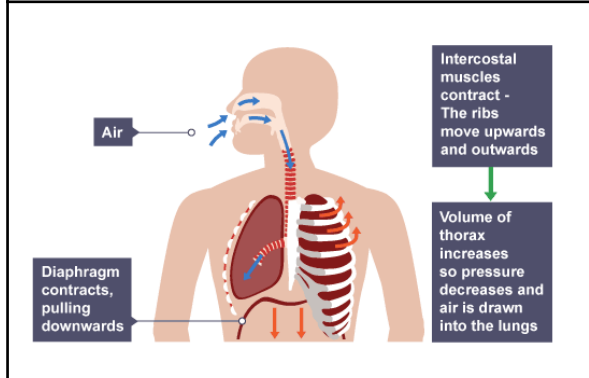
Vital capacity	
Residual volume	
Tidal volume	

**What can you use to measure Lung Capacity?**

**What is the equation for lung capacity?**

**B. What is Ventilation?**

**Why are ventilation and Respiration different?**



**B. What is Asthma?**

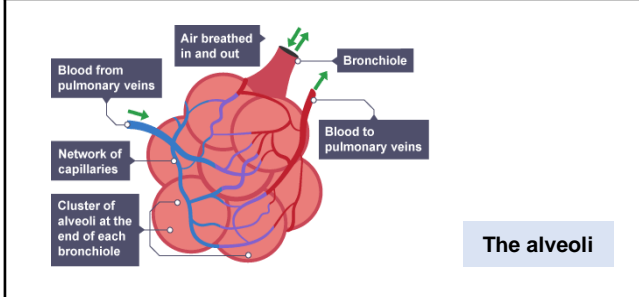
**What triggers Asthma?**

**How can it be treated?**

**B. What effects can smoking have on the gas exchange system?**

**B. Where does gas exchange happen?**

**What are Alveoli?**



**What adaptations do the alveoli have?**

**What is Diffusion?**



<b>B.</b>	<b>What benefits come from regular exercise?</b>
Regular training has the following effects:	
<ul style="list-style-type: none"> <li>Heart muscles are strengthened</li> <li><b>Cardiac output</b> increases</li> <li>Resting <b>heart rate</b> is lower (fewer beats needed because heart muscles are stronger)</li> <li>Recovery (returning to resting heart rate) happens more quickly after exercise</li> </ul>	
Why do you breathe quicker during exercise?	
More oxygen is required as body is working harder.	

<b>C.</b>	<b>What is a drug?</b>	
A drug is a substance that affects the way your body works		
<b>C.</b>	<b>What are the 2 types of recreational drugs, and what effect do they have on the body?</b>	
	<b>Stimulants</b>	<b>Depressants</b>
	<ul style="list-style-type: none"> <li>Stimulants cause the nervous system to carry nerve impulses faster</li> <li>They can increase reaction times</li> <li>But can also speed up heart rate, and put strain on the body</li> </ul> Examples include: Caffeine, Cocaine, Ecstasy	<ul style="list-style-type: none"> <li>Depressants cause the nervous system to slow down</li> <li>They can decrease reaction times</li> <li>They can stop vital organs working, and stop parts of the brain working</li> </ul> Examples include: Alcohol, Heroin, Solvents

<b>D.</b>	<b>What is Respiration?</b>	
Respiration is a chemical reaction that releases energy from food molecules.		
<b>Why is respiration important?</b>		
An organism can use the energy produced by respiration in several different ways including:		
<ol style="list-style-type: none"> <li>To build large molecules from smaller ones (grow)</li> <li>To move</li> <li>To keep warm</li> </ol>		
<b>What are the 2 types of respiration?</b>		
	Aerobic	Anaerobic
Main difference?	With Oxygen	Without Oxygen
Where does it take place?	Mitochondria	Cytoplasm
What is the equation?	glucose + oxygen → carbon dioxide + water	In animals: <b>glucose → lactic acid</b>  In plants/yeast: <b>glucose → ethanol and carbon dioxide</b>
Which produces the most energy?	Aerobic respiration produces more energy	Anaerobic produces less energy

<b>D.</b>	<b>What is fermentation?</b>
When plants/yeast respire anaerobically, they produce ethanol and carbon dioxide.	
<b>What are the uses of fermentation?</b>	
It is useful as the ethanol can be used to make alcoholic drinks and the carbon dioxide is what makes bread rise.	

<b>E.</b>	<b>Who discovered DNA?</b>
<b>Rosalind Franklin and Maurice Wilkins 1952</b>	
Using x-ray photography, Franklin and Wilkins produced high-resolution photographs of DNA fibres. They used these to deduce that DNA had a <b>helical</b> structure and that the outside of the molecule contained <b>phosphates</b>	
<b>James Watson and Francis Crick 1953</b>	
Using the x-ray data from Wilkins and Franklin, and using models, Watson and Crick managed to discover the double-helix structure of DNA. They and Wilkins were awarded the Nobel Prize in 1962.	

<b>D.</b>	<b>What happens when Lactic Acid builds up in muscles from anaerobic respiration?</b>
If lactic acid builds up in muscle cells it causes fatigue.	
<b>How does the body get rid of lactic acid?</b>	
We continue to have an elevated heart rate and breathing rate after exercise so that more oxygen enters the cells. This oxygen reacts with the lactic acid removing it from our muscles allowing them to work efficiently again.	

<b>E.</b>	<b>What is DNA?</b>
Deoxyribonucleic acid – the genetic material of all organisms	
<b>What is a double helix?</b>	
Two helical strands wound around each other	



<b>B.</b>	<b>What benefits come from regular exercise?</b>
Why do you breathe quicker during exercise?	

<b>C.</b>	<b>What is a drug?</b>
<b>C.</b>	<b>What are the 2 types of recreational drugs, and what effect do they have on the body?</b>

<b>D.</b>	<b>What is Respiration?</b>	
<b>Why is respiration important?</b>		
<b>What are the 2 types of respiration?</b>		
Main difference?		
Where does it take place?		
What is the equation?		
Which produces the most energy?		

<b>D.</b>	<b>What is fermentation?</b>
<b>What are the uses of fermentation?</b>	

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<b>E.</b>	<b>What is DNA?</b>
<b>What is a double helix?</b>	

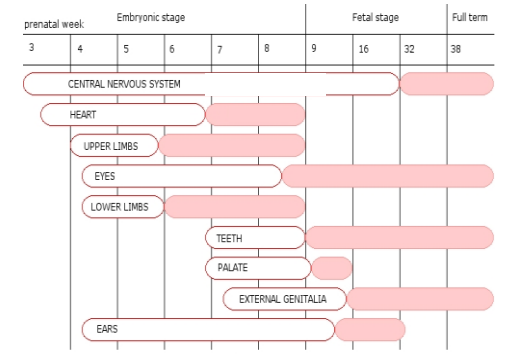


<b>E.</b>	<b>What makes up DNA?</b>
	<ul style="list-style-type: none"> <li>DNA has a <b>double helix</b> structure with two sugar-phosphate backbones wound around each other.</li> <li>Pairs of complementary <b>bases</b> connect the two backbones (strands)</li> </ul>
	<b>What are the 4 bases and how are they paired?</b>
	<ul style="list-style-type: none"> <li>The bases are <b>adenine, thymine, cytosine</b> and <b>guanine</b> (A, T, C, and G)</li> <li>A has a <b>complementary shape</b> to T</li> <li>C has a <b>complementary shape</b> to G</li> </ul>
	<b>What are Chromosomes?</b>
	DNA wound up tightly. There are 23 pairs in human cells (but a different number of pairs in other species)
	<b>What are Genes?</b>
	A short section of DNA which codes for characteristics

<b>E.</b>	<b>What are the different types of reproduction and how are they different?</b>									
	<table border="1"> <thead> <tr> <th></th> <th>Sexual reproduction</th> <th>Asexual reproduction</th> </tr> </thead> <tbody> <tr> <td>How many parents?</td> <td>2 parents</td> <td>1 parent</td> </tr> <tr> <td>Will offspring inherit features from parents?</td> <td>Offspring have features of both parents</td> <td>Offspring are clones of the 1 parent</td> </tr> </tbody> </table>		Sexual reproduction	Asexual reproduction	How many parents?	2 parents	1 parent	Will offspring inherit features from parents?	Offspring have features of both parents	Offspring are clones of the 1 parent
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<b>E.</b>	<b>What is Heredity?</b>
	Heredity is the process by which genetic information is transmitted from one generation to the next
	<b>What is a Genetic Disease?</b>
	Genetic diseases are passed on from parents to children through their genetic material. Children will be born with the disease

<b>E.</b>	<b>What is Gestation?</b>
	Gestation describes the development of a foetus in the womb.
	<b>What does a foetus need to develop?</b>
	In order to do all of this growing, the foetus needs to get <b>nutrients</b> and <b>oxygen</b> .
	<b>How does a foetus get what it needs to develop?</b>
	<p>Since they can't eat or breathe, they get this from the mother's blood.</p> <p>Nutrients and oxygen <b>diffuse</b> from the mother's blood into the baby's blood vessels, then <b>umbilical cord</b> in the <b>placenta</b>.</p>
	<b>What is the Placenta?</b>
	An organ which develops during pregnancy, and supplies the developing foetus with oxygen and nutrients, while also removing waste.
	<b>What is the Umbilical cord?</b>
	A tube which connects the baby to the placenta.



<b>E.</b>	<b>How can an expectant mother's behaviour affect her unborn baby?</b>								
	The mother's behaviour during gestation can affect the development of the unborn baby because of the transfer of substances across the placenta.								
	<b>What problems can be caused by different drugs during gestation?</b>								
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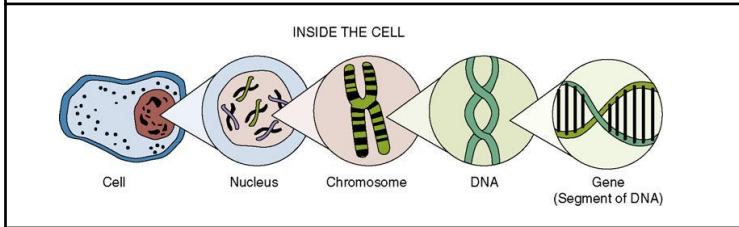


**E. What makes up DNA?**

**What are the 4 bases and how are they paired?**

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How many parents?		
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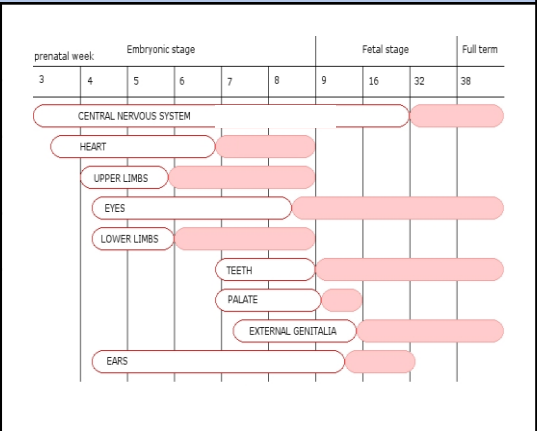
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Drugs	Problems
Cigarettes	
Alcohol	
Other illegal drugs	



What we are learning this term:
<p>A. Symbol equations                  B. Metals and non-metals                  C. Reactivity of metals                  D. Displacement reactions</p>

8 Key Words for this term
<p>1. Reactant                  2. Product                  3. Salts                  4. Displacement                  5. Reactivity                  6. Properties                  7. Extraction                  8. Electrolysis</p>

A.	What is a symbol equation?
<p>A symbol equation is a short-hand way of showing a chemical reaction using chemical symbols</p>	
<p>What would the symbol equation be?                  Potassium + Chlorine → Potassium Chloride</p>	
$2K + Cl_2 \rightarrow 2KCl$	
Why are symbol equations important?	
<ul style="list-style-type: none"> <li>• They are a quick way of showing a reaction.</li> <li>• They are universal – all languages recognise them</li> <li>• You can see how many of each molecule is used in the reaction if you balance it</li> </ul>	

B.	What products are made when a metal reacts with water?
<p>Some metals are so reactive they react with water. The products are hydrogen gas and a metal hydroxide</p>	
What are the word and symbol equations for the reaction of Sodium metal with water?	
<p><b>Sodium + Water → Sodium Hydroxide + Hydrogen</b>  <math display="block">2Na + 2H_2O \rightarrow 2NaOH + H_2</math></p>	
Which metals have a strong reaction with water?	
<p>Lithium, Sodium, Potassium and Calcium</p>	

B.	What differences are there between metals and non-metals?	
	Metals	Non-metals
Where are they found in the periodic table?	Metals are found on the left of the periodic table	Non-metals are found on the right hand side
What charge do they form?	Metals form positive ions (Lose electrons)	Non-metals form negative ions (Gain electrons)

B.	What products are made when a metal reacts with acid?
<p>When a metal reacts with acid, a <b>salt and hydrogen gas are made.</b></p>	
What is a salt?	
<p>A compound where a metal is bonded to a non-metal – example is sodium chloride</p>	
What are the word and symbol equations for the reaction of Sodium metal with Hydrochloric acid?	
<p><b>Sodium + Hydrochloric acid → Sodium Chloride + Hydrogen</b>  <math display="block">2Na + 2HCl \rightarrow 2NaCl + H_2</math></p>	

C.	What is the reactivity series?
<p>A table which ranks metals on relative reactivity.</p>	
<p>Can you come up with a way to remember the order of the metals in the reactivity series?</p>	
	<p>potassium <b>most reactive</b> K                  sodium Na                  calcium Ca                  magnesium Mg                  aluminium Al                  carbon C                  zinc Zn                  iron Fe                  tin Sn                  lead Pb                  hydrogen H                  copper Cu                  silver Ag                  gold Au                  platinum <b>least reactive</b> Pt</p>



**What we are learning this term:**

- A. Symbol equations
- B. Metals and non-metals
- C. Reactivity of metals
- D. Displacement reactions

**8 Key Words for this term**

1. Reactant	5. Reactivity
2. Product	6. Properties
3. Salts	7. Extraction
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**A. What is a symbol equation?**

**What would the symbol equation be?  
Potassium + Chlorine → Potassium Chloride?**

**Why are symbol equations important?**

**B. What products are made when a metal reacts with water?**

**What are the word and symbol equations for the reaction of Sodium metal with water?**

**Which metals have a strong reaction with water?**

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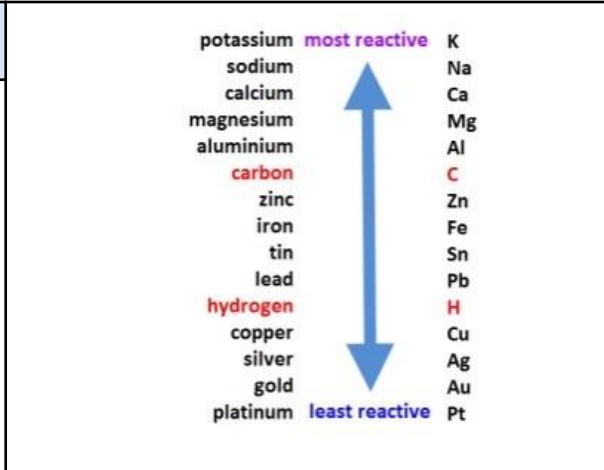
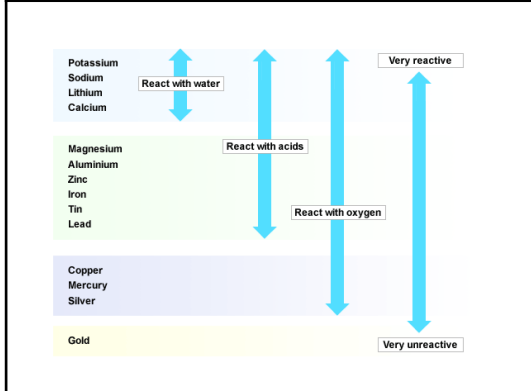
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**What are the word and symbol equations for the reaction of Sodium metal with Hydrochloric acid?**

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Can you come up with a way to remember the order of the metals in the reactivity series?





<b>D,</b>	<b>What is a displacement reaction?</b>
A more reactive metal will displace a less reactive metal from its compounds	
<b>What will happen when Magnesium metal is added to copper sulphate solution?</b>	
Magnesium will displace copper to form Magnesium Sulphate and Copper	
<b>What is the word and symbol equation for this reaction?</b>	
Copper Sulphate + Magnesium → Magnesium Sulphate + Copper $\text{CuSO}_4 + \text{Mg} \rightarrow \text{MgSO}_4 + \text{Cu}$	
<b>Why do displacement reactions happen?</b>	
A more reactive metal is more stable as an ion	

<b>D,</b>	<b>What is Extraction by Carbon?</b>
Carbon can displace elements that are below it from their compounds. This means they can be used to extract some metals from their ores.	
<b>Which metals is extraction by carbon used to extract?</b>	
Carbon can be used to extract metals from zinc downwards (Zinc, iron, tin, lead, copper)	
<b>What is an example word and symbol equation?</b>	
<ul style="list-style-type: none"> <li><b>Example: Lead Oxide + Carbon → Lead + Carbon Dioxide</b>  <math>\text{PbO}_2 + \text{C} \rightarrow \text{Pb} + \text{CO}_2</math></li> </ul> This reaction is an example of a reduction reaction as the lead has lost oxygen.	
<b>What is a reduction reaction?</b>	
When an atom loses an oxygen atom	
<b>What are the downsides of using this method?</b>	
High temperatures needed. Very expensive. Production of $\text{CO}_2$ .	

<b>D,</b>	<b>What is an ore?</b>															
Most metals are found in compounds in the Earth's crust. We call these compounds <b>ores</b> . You usually dig them up and extract the metal.																
<b>What is a Native metal?</b>																
A metal which does not need to be extracted from its compound.																
<b>D,</b>	<b>How are some metals extracted?</b>															
Metals are either found in the ground as a native metal, extracted by carbon, or extracted by electrolysis																
<table style="margin-left: auto; margin-right: auto;"> <tr> <td>Potassium</td> <td rowspan="3" style="font-size: 2em;">}</td> <td rowspan="3">Extracted from their ores by <b>electrolysis</b> (using electricity)</td> </tr> <tr> <td>Sodium</td> </tr> <tr> <td>Aluminium</td> </tr> <tr> <td>Carbon</td> <td rowspan="4" style="font-size: 2em;">}</td> <td rowspan="4">Extracted from their ores by <b>reduction</b> by carbon</td> </tr> <tr> <td>Zinc</td> </tr> <tr> <td>Iron</td> </tr> <tr> <td>Copper</td> </tr> <tr> <td>Silver</td> <td rowspan="2" style="font-size: 2em;">}</td> <td rowspan="2">No extraction necessary – found pure in the ground.</td> </tr> <tr> <td>Gold</td> </tr> </table>		Potassium	}	Extracted from their ores by <b>electrolysis</b> (using electricity)	Sodium	Aluminium	Carbon	}	Extracted from their ores by <b>reduction</b> by carbon	Zinc	Iron	Copper	Silver	}	No extraction necessary – found pure in the ground.	Gold
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<b>D,</b>	<b>What is electrolysis?</b>
The breaking down of a substance using electricity	
<b>Which metals are extracted by electrolysis</b>	
Metals more reactive than carbon – potassium, sodium, aluminium	
<b>What are the downsides of this method?</b>	
It is very expensive, compounds have to be molten or in solution for it to work	
<div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p>● Negative non-metal ion</p> <p>● Positive metal ion</p> </div> </div>	





D, What is a displacement reaction?

What will happen when Magnesium metal is added to copper sulphate solution?

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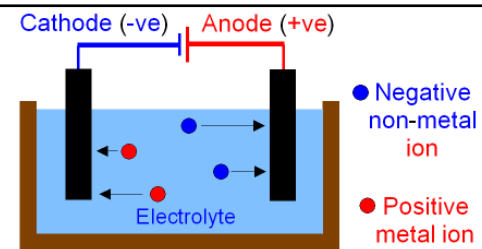
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What we are learning this term:
<ul style="list-style-type: none"> <li>A. Forces</li> <li>B. Moments</li> <li>C. Springs</li> <li>D. Energy transfers in mechanical systems</li> <li>E. Balanced forces in mechanical systems</li> </ul>

5 Key Words for this term
<ul style="list-style-type: none"> <li>1. Internal</li> <li>2. Work</li> <li>3. Equilibrium</li> <li>4. Deformation</li> <li>5. Moment</li> </ul>

C.	What do these terms mean?
Deformation	Changing of shape by a force
Compression	Changing the shape by squashing
Tension	Changing the shape by stretching

D.	What is Internal energy?
Internal energy = kinetic energy of the particles + potential energy of the particles.	
Kinetic energy	All matter is made of particles that are moving
Potential energy	Energy due to the relative position of particles, and the attraction between particles.

D.	Work Done	
<b><i>work done = force × distance moved in the direction of the force</i></b>		
Applying a force to get an object to move is one way to transfer energy between stores.	Work is done (energy is transferred) when elastic objects are?	What is the amount of work done?
Transferring energy is also known as 'doing work'.	<ul style="list-style-type: none"> <li>• Extended</li> <li>• Compressed</li> </ul>	The amount of elastic potential energy stored in the elastic object

A	Forces: Newtons Laws	
What is a Resultant Force?	The overall force of 2 or more forces acting in different directions	
What is Newton's First Law	<ul style="list-style-type: none"> <li>• A stationary object stays stationary unless a resultant force acts on it.</li> <li>• A moving object keeps moving at a constant speed unless a resultant force acts on it.</li> </ul>	
What is Newton's Second Law	<ul style="list-style-type: none"> <li>• A <b>resultant force</b> acting on an object causes acceleration,</li> <li>• This depends on the size of the resultant force and the mass of the object.</li> </ul> <p>This formula shows the link:</p> $F_R = m \times a$ <p><math>F_R</math> is the <b>resultant force</b> measured in newtons,  <math>m</math> is the <b>mass</b> of the object measured in kilograms,  <math>a</math> is the <b>acceleration</b> of the object measured in metres per second per second (m/s/s).</p>	
What is Newton's Third Law	<ul style="list-style-type: none"> <li>• Forces are always caused by an interaction between <b>two</b> objects.</li> <li>• Each force has an equal and opposite reaction</li> </ul>	

All	What Unit is usually used?
Force	N (newton)
Energy	J (joule)
Distance	m (metre)
Moments	Nm (newton metres)

C.	Hookes Law is a linear relationship	
	What does Hookes law state?	The extension/compression of an elastic object is directly proportional to the force applied.
	What is the elastic limit?	When the material stretches to the point that it does not return to its original length.
	What is a directly proportional relationship?	The relationship between variables produces a straight line through the origin. If one doubles the other doubles

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Internal energy =	
	All matter is made of particles that are moving
	Energy due to the relative position of particles, and the attraction between particles.

D. What is the equation for Work Done?		
Applying a force to get an object to move is one way to transfer energy between stores.	Work is done (energy is transferred) when elastic objects are ?	What is the amount of work done?
Transferring energy is also known as ' <b>doing work</b> '.		

A Forces: Newtons Laws	
What is a Resultant Force?	
What is Newton's First Law	
What is Newton's Second Law	
What is Newton's Third Law	

All	What is the Unit <u>usually</u> used?
Force	
Energy	
Distance	
Moments	

C.	Hookes Law is a linear relationship
	What does Hookes law state?
	What is the elastic limit?
	What is a linear relationship?



E.	Turning effects
Both the effort and load are forces that have a turning effect – they make the lever rotate	
What is the <b>moment</b> of the force?	
The size of the forces <b>turning effect</b>	
How can you increase the moment of a force?	
<ul style="list-style-type: none"> <li>• Increase the force</li> <li>• Increase the perpendicular distance from the pivot to the force</li> </ul>	

E.	What are levers and what are the parts of them?
Levers involve turning, or rotation. Levers allow forces applied to be multiplied	
Pivot	Levers have a pivot, a fixed centre of rotation
Effort	The force applied to a lever
Load	The output force of the lever

E.	Equation to calculate the moment of a force
$moment = force \times perpendicular\ distance\ from\ pivot$	
Moments are measured in a compound measure using the units for force and distance, usually newton metres, Nm.	

E.	Moments
Ways to describe the direction of moments of a force	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>CLOCKWISE</p> </div> <div style="text-align: center;"> <p>ANTI-CLOCKWISE</p> </div> </div>

E.	Moments
Key terms	Definitions
lever	A simple machine that multiplies applied forces (efforts) through rotation around a pivot.
rotation	Turning, with a fixed centre of rotation. Rotation can be clockwise or anticlockwise – see diagram.
turning effect	The rotation of a lever caused by a force (effort OR load force).
moment	Another, more formal, name for ‘turning effect of a force’. See <i>equation</i> .
perpendicular	At right angles to.
equilibrium	Describes a lever that is NOT rotating because the clockwise and anticlockwise moments are equal.

E.	When does equilibrium in lever systems happen?
<ul style="list-style-type: none"> <li>• When a lever is at <b>equilibrium</b>, it is NOT rotating.</li> <li>• Equilibrium happens when: <u>the clockwise moments = the anticlockwise moments</u></li> </ul>	
<ul style="list-style-type: none"> <li>• The forces in each direction are not necessarily equal, but the <i>moments</i> of the forces in each direction are equal at equilibrium.</li> <li>• Where there are multiple forces in one direction (clockwise or anticlockwise), the <b>TOTAL</b> moment in one direction is found by <u>adding up</u> the moments of each force in a particular direction.</li> </ul>	



<b>E.</b>	<b>Turning effects</b>
Both the effort and load are forces that have a turning effect – they make the lever rotate	
What is the moment of the force?	
How can you increase the moment of a force?	

<b>E.</b>	<b>What are levers and what are the different parts?</b>
Levers involve turning, or rotation. Levers allow forces applied to be multiplied.	
Pivot	
Effort	
Load	

<b>E.</b>	<b>What is the equation to calculate the moment of a force?</b>
Moments are measured in a compound measure using the units for force and distance, usually newtonmetres, Nm.	

<b>E.</b>	<b>Moments</b>
What ways describe the direction of moments of a force?	

<b>E.</b>	<b>Moments</b>
<b>Key terms</b>	<b>Definitions</b>
lever	
rotation	
turning effect	
moment	
perpendicular	
equilibrium	

<b>E.</b>	<b>When does equilibrium in lever systems happen?</b>
<ul style="list-style-type: none"> <li>The forces in each direction are not necessarily equal, but the <i>moments</i> of the forces in each direction are equal at equilibrium.</li> <li>Where there are multiple forces in one direction (clockwise or anticlockwise), the <b>TOTAL</b> moment in one direction is found by <u>adding up</u> the moments of each force in a particular direction.</li> </ul>	



Background:	
1.	Coastlines are dynamic changing landscapes, which are affected by the action of the waves.
2.	Waves can have differing features; these features can influence the processes and landforms which may develop along our coastlines. <b>(A)</b>
3.	Destructive waves can erode the coastline. <b>(B)</b>
4.	Through erosion a number of distinctive coastal features can form. <b>(D, E, F)</b>
5.	Further processes act on the coastline, leading to material being transported along the coastline. <b>(C)</b>
6.	This material will eventually be deposited leading to the formation of landforms such as spits. <b>(G)</b>
7.	Coastal erosion can impact the landscape and the lives of people living in areas of coastal erosion.
8.	Different strategies are used to reduce erosion. <b>(H)</b>
9.	Often these strategies can be controversial. <b>(I)</b>

A. Wave features (5)	
Swash	Movement of a wave up the beach. The direction is dependent upon the wind direction.
Backwash	Movement of a wave back down the beach, this happens at 90°.
Constructive wave	Have a strong swash and weak backwash; they cause deposition.
Destructive wave	Have a weak swash and strong back wash; they cause erosion.
Fetch	The distance a wave has travelled.

B. Types of erosion (4)	
Hydraulic action	Waves compress pockets of air in cracks in a cliff, causing the crack to widen, breaking off rock.
Abrasion	Eroded material is hurled or scrapes against the cliff, breaking off rock.
Attrition	Eroded material in the sea, hit into each other breaking down into smaller pieces.
Solution	Cliffs e.g. chalk dissolve in seawater.

C. Other coastal processes (4)	
Transportation	The movement of sediment.
Deposition	When waves drop the sediment they are transporting, either due to a loss of energy or change in direction of coastline.
Longshore drift	The movement of sediment along the coastline in a zig-zag motion, due to the wind & swash occurring at an angle to the beach.
Weathering	Breaking down of rocks by physical and chemical processes.

D. Headlands and bays (3)	
Geology	Different rock types e.g. resistant rock such as granite, and less resistant rock such as clay.
Headland	Resistant rock which is not easily eroded so sticks out to sea.
Bay	Soft rock which is easily eroded so retreats to form a bay.

E. Wave cut platforms (2)	
Wave cut notch	These form at the foot of a cliff due to erosion. This undercuts the cliff above leaving it unsupported.
Wave cut platform	When the unsupported cliff collapses, the process repeats and the cliff retreats leaving a sloping wave cut platform.

F. Caves stacks and arches (3)	
Crack	A weakness in the headland is eroded by hydraulic pressure, forming a cave.
Cave	This is eroded further, until the cave erodes all the way through the headland forming an arch.
Arch	The roof of the arch has no support, so collapses to form a stack.

G. Spits (3)	
Change in coastline	Leads to material transported by longshore drift being deposited into the sea, forming a spit.
Hooked ends	Form on a spit due to a change in the direction of the prevailing wind.
Salt marsh	An area of salty marshland found behind a spit, which has dried out as the sea can no longer reach this area.

H. Coastal management (2)	
Hard engineering	Human-made structures that help to deal with coastal erosion, such as: 1. <b>Sea walls</b> , which reflect the waves energy back out to sea 2. <b>Groynes</b> , which trap longshore drift.
Soft engineering	Adaptations to work with nature, such as: <b>Managed retreat</b> , allowing the coast to erode and moving people away.

I. Case study example: Holderness coast, Mablethorpe		
Where?	The fastest eroding coastline in Europe, in east Yorkshire.	
Reasons to protect (2)	Management strategies (2)	Success (2)
1. Rocks are made of soft rock (till), eroding at 2m per year. 2. The B1242 runs through Mablethorpe and would be expensive to re-route.	1. Rock groyne put in place to trap sediment being transported by longshore drift, creating a wider beach to absorb the power of the waves. 2. Rip-rap has been placed in front of the cliffs to absorb the wave energy.	1. Good – erosion in front of Mablethorpe has reduced, so the road has been saved. 2. Bad - beaches further south have been starved of sediment so erosion has increased e.g. at Great Cowden.



<b>Background:</b>
<ol style="list-style-type: none"> <li>Coastlines are dynamic changing landscapes, which are affected by the action of the waves.</li> <li>Waves can have differing features; these features can influence the processes and landforms which may develop along our coastlines. <b>(A)</b></li> <li>Destructive waves can erode the coastline. <b>(B)</b></li> <li>Through erosion a number of distinctive coastal features can form. <b>(D, E, F)</b></li> <li>Further processes act on the coastline, leading to material being transported along the coastline. <b>(C)</b></li> <li>This material will eventually be deposited leading to the formation of landforms such as spits. <b>(G)</b></li> <li>Coastal erosion can impact the landscape and the lives of people living in areas of coastal erosion.</li> <li>Different strategies are used to reduce erosion. <b>(H)</b></li> <li>Often these strategies can be controversial. <b>(I)</b></li> </ol>

<b>A.</b>	<b>Wave features (5)</b>
Swash	
Backwash	
Constructive wave	
Destructive wave	
Fetch	

<b>B.</b>	<b>Types of erosion (4)</b>
Hydraulic action	
Abrasion	
Attrition	
Solution	

<b>C.</b>	<b>Other coastal processes (4)</b>
Transportation	
Deposition	
Longshore drift	
Weathering	

<b>D.</b>	<b>Headlands and bays (3)</b>
Geology	
Headland	
Bay	

<b>E.</b>	<b>Wave cut platforms (2)</b>
Wave cut notch	
Wave cut platform	

<b>F.</b>	<b>Caves stacks and arches (3)</b>
Crack	
Cave	
Arch	

<b>G.</b>	<b>Spits (3)</b>
Change in coastline	
Hooked ends	
Salt marsh	

<b>H.</b>	<b>Coastal management (2)</b>
Hard engineering	
Soft engineering	

<b>I.</b>	<b>Case study example: Holderness coast, Mablethorpe</b>		
Where?			
<b>Reasons to protect (2)</b>	<b>Management strategies (2)</b>	<b>Success (2)</b>	

# Year 8 History : English Civil War



## What we are learning this term:

We will explore the reign of Charles I, the role of Parliament in 17<sup>th</sup> century England and Laud's religious reforms. We will then look at how these factors contributed to the outbreak of the English Civil War.

A.	Can you define these key words?
Divine Right	The right of a sovereign to rule directly from God and not from the people.
Personal Rule	The period from 1629 to 1640, when King Charles I of England ruled without Parliament
Parliament	A collection of people representing all parts of England, who approve or reject laws
Restoration	The return of the monarch to England with Charles II's coronation in May 1660
Tyranny	Cruel and oppressive government or rule
Commonwealth	The period when England ceased to be a monarchy, and was at first ruled by Parliament
Absolutist	A ruler who as supreme authority or power
Parliamentarians	A supporter of Parliament in the English Civil War; a Roundhead
Royalists	A supported of the monarch in the English Civil War; a Cavalier
Civil War	War between citizens of the same country

## Key people

<b>Charles I</b> The second Stuart king of England, executed by Parliament in 1648 following the Civil War.	<b>Archbishop Laud</b> Famously introduced new prayer books along with other religious changes that bought back some Catholic practices.
<b>John Pym</b> Puritan member of Parliament, and a major opponent of Charles I before the Civil War.	<b>Oliver Cromwell</b> Parliamentary general, who became Lord Protector of the Commonwealth in 1653
<b>General Monck</b> A general who had worked with Charles I and Cromwell who dismissed Parliament and called for elections after almost 20 years.	<b>Charles II</b> The king of England following the Restoration.

## B. How did Charles I's belief in the Divine Right of Kings lead him to make mistakes?

1. Personal Rule	2. Marriage to Henrietta Maria	3. Appointment of Laud
<p>- Charles's belief in the Divine Right of Kings meant that he thought anyone who challenged his power was challenging the power of God. This meant he did not respond well to being controlled.</p> <p>- Many Puritans were in Parliament during Charles's rule – they repeatedly questioned and tried to limit his power</p> <p>- As a result, Charles dissolved parliament in 1629 and ruled without them for 11 years until 1640.</p>	<p>- An attempt to make peace with France and create an alliance – this was a failure as war continued</p> <p>- She was Catholic which the people of England did not like – they saw this as Charles being a Catholic sympathiser and some even suspected a secret Catholic</p> <p>- She became involve in the running of court – this caused problems as she was not a Protestant and was a foreigner so many thought that she was meddling in the affairs of the nation</p>	<p>- Suspicions that Charles was a secret catholic were strengthened after the appointment of Archbishop Laud.</p> <p>- Laud brought back many aspects of Catholic services e.g. stain glass windows and stone altars.</p> <p>- Laud punished those who defied him e.g. in 1637 he cut off the ears of 3 Puritans that were writing pamphlets that criticised his beliefs.</p> <p>- These changes and punishments disturbed the Protestant people of England as Charles was allowing Catholic changes to be made</p>

## E. What key events occurred between 1649 and 1660 that led to England having a monarch again?

1. English Civil War	2. Commonwealth	3. Restoration	D. Why was Charles disgraced after the Battle of Naseby 1645?	C.	Consequences of Charles's 11 Year Tyranny
<p>- <b>1642-1649</b></p> <p>- Battle of Naseby</p> <p>Charles I lost and was found guilty of treason (private letters) and beheaded (Jan <b>1649</b>)</p> <p>- Cromwell then took over and became Lord Protector – introduced the commonwealth and military dictatorship to England.</p>	<p>- England was made a commonwealth (<b>1649</b>) as there was no longer a monarch - it was now being ruled in the best interests of the people</p> <p>- Banned theatre, pubs, dancing, Christmas, sports and shops on Sundays.</p> <p>- After Cromwell's death (<b>1658</b>) his son Richard took over.</p> <p>- He was a weak leader and stepped down after a year (<b>1659</b>).</p> <p>- This left the door open for Charles II to return as king</p>	<p>- Charles II was accepted back as king but only on the condition that he not punish those involved in the ECW, he ruled alongside parliament and was tolerant of religion. (Declaration of Breda)</p> <p>- He was welcomed into London in <b>May 1660</b> with excited crowds glad to have their king back.</p>	<p>1. <b>The New Model Army (NMA)</b> – This was the first major battle fought by the NMA. Royalist troops were outnumbered. By the end of the battle the Royalists had 6000 casualties and the Parliamentarians only had 400.</p> <p>2. <b>Loss of Support</b> – After the battle, evidence was found amongst items that Parliamentarians had seized that Charles was sending letters asking the Irish and French armies to invade England and reinstate him as king. Charles has promised to abolish the anti-Catholic laws in England. This was used as evidence to show that the King was committing treason against his people.</p> <p>3. <b>Strategic Advantage</b> – During the battle the NMA moved to a weaker starting position. To begin with, Sir Thomas Fairfax decided to start on the steep slopes of Naseby ridge. However, Cromwell believed that the Royalists would not attack such a strong position and persuaded Fairfax to move the troops back.</p>	<p>Ship Money</p> <p>Bishops' War</p> <p>Long Parliament</p>	<ul style="list-style-type: none"> <li>An old tax only meant to be applied to coastal towns when England was at war.</li> <li>Charles applied this to every town in order to raise new money without the assistance of parliament.</li> <li>As a result, people lost faith and trust in Charles and began to turn against him.</li> <li>Presbyterians in Scotland rebelled to the Catholic elements of Laud's prayer book.</li> <li>This resulted in 2 conflicts between England and Scotland in 1639 and 1640.</li> <li>Despite fighting back both times, the king was defeated and as a result needed to pay Scotland</li> <li>Charles needed to raise money and called parliament for the first time in 11 years.</li> <li>This became known as the Long Parliament as they remained in session on and off for 20 years.</li> <li>The conditions given by the MP's were that they would meet every 3 years, ship money would be stop and they no longer wanted the king to have the power to dissolve parliament.</li> </ul>





# Year 8 History : English Civil War

**What we are learning this term:**  
 We will explore the reign of Charles I, the role of Parliament in 17<sup>th</sup> century England and Laud's religious reforms. We will then look at how these factors contributed to the outbreak of the English Civil War.

A.	Can you define these key words?
Divine Right	
Personal Rule	
Parliament	
Restoration	
Tyranny	
Commonwealth	
Absolutist	
Parliamentarians	
Royalists	
Civil War	

Key people	
Charles I	Archbishop Laud
John Pym	Oliver Cromwell
General Monck	Charles II

B. How did Charles I's belief in the Divine Right of Kings lead him to make mistakes?		
1. Personal Rule	2. Marriage to Henrietta Maria	3. Appointment of Laud

**E. What key events occurred between 1649 and 1660 that led to England having a monarch again?**

1. English Civil War	2. Commonwealth	3. Restoration

**D. Why was Charles disgraced after the Battle of Naseby 1645?**

1.	<u>The New Model Army (NMA)</u> –
2.	<u>Loss of Support</u> –
3.	<u>Strategic Advantage</u> –

C.	Consequences of Charles's 11 Year Tyranny
Ship Money	
Bishops' War	
Long Parliament	

# Year 8 Religious Education: The Philosophy of Religion

A. Can you define these key words?		B. Design Argument	C. Cosmological Argument
<b>Key word</b>	<b>Key definition</b>	<ul style="list-style-type: none"> <li>This is the argument for the existence of God based on evidence of design in the world.</li> <li>Examples of design include purpose and regularity in the world. For example, the laws of physics mean the planets move around the sun in a regular and ordered way. The human eye has all the complex structures to enable it to fulfil a purpose- vision</li> </ul>	<ul style="list-style-type: none"> <li><b>This is</b> the argument for the existence of God which argues that God is the cause of the universe.</li> <li>Things in the world must have a cause – if a door opens then something must have opened it – this argument suggests that there must have been a first cause to begin life in the universe and that first cause is God.</li> <li>Something cannot come from nothing, therefore something must have caused the world into existence. Without a first cause there could be no second cause etc.</li> </ul>
Omnipotent	The belief that God is all-powerful		
Omniscient	The belief that God is all-knowing		
Omnibenevolent	The belief that God is all-loving		
Theism	The belief in God		
Atheism	Disbelief or lack of belief in God		
Agnosticism	The belief that nothing can be known about the existence or nature of God		
Empirical evidence	Evidence for something based on observation or experience		
Analogy	A comparison between things that have similar features, often used to help explain a principle or idea.		
Theodicy	An argument which defends God against the problem of evil.		
Fallacy	A mistaken belief, especially one based on unsound arguments.		
		D. The Problem of Evil	E. Religious Experience
		<ul style="list-style-type: none"> <li><b>This is</b> the argument that the existence of evil undermines belief in an omnipotent and omnibenevolent God.</li> <li>If God is meant to be omnibenevolent, omnipotent and omniscient, then the existence of evil cancels out one of these attributes of God.</li> <li>The problem of evil is frequently known as the inconsistent triad.</li> <li>The inconsistent triad is only a challenge to the god of classical theism/ monotheistic Abrahamic faiths, as this is the description of God they offer.</li> </ul>	<ul style="list-style-type: none"> <li><b>This is an</b> experience which has a religious meaning for the person who experienced it.</li> <li>Religious experiences are where you experience God. It can include visions / dreams where you are visited/ hearing God/ seeing a miracle/ prayers being answered or just feeling the presence of God/ Near death experiences</li> <li>Bernadette at Lourdes had religious experiences where the Virgin Mary spoke to her.</li> </ul>

F. Criticisms Design Argument	Cosmological Argument	Theodicies	Religious Experience
<ul style="list-style-type: none"> <li>God is supposed to be perfect therefore how can there be flawed design such as corruptions in DNA which cause cancers or damage to bodies</li> <li>The 'Design' of the world may be coincidence. For example, sometimes we see pictures in the clouds, like a rabbit or a face. We know this is just a random coincidence. Just like clouds that move into and out of shape quickly, without a designer, the atoms in the universe have moved into this shape and will move out of it again before long. We think we see design, but it is just coincidence</li> </ul>	<ul style="list-style-type: none"> <li>Just because something is true of the part, it does not mean it is true of the whole- eg a brick is small, so a wall is small.</li> <li>Our understanding of the universe is limited to the world around us – because things require a cause in this world, does not mean that the entire universe requires a first cause.</li> <li>If the existence of God as a 'necessary' being without a cause can be a fact, why can't the universe itself just be a 'brute fact'?</li> </ul>	<ul style="list-style-type: none"> <li>Many religions explain the origin of evil in the world – such as in Christianity with Adam and Eve and the original sin.</li> <li>God gave humans free will, and through free will humans can choose evil.</li> <li>Some people argue that experiencing the bad in the world allows humans to grow and develop.</li> <li>Do we need evil to understand what good is? If we lived in a world that was all red, we wouldn't have an understanding of what red really meant. So if we lived in a world that was only good, would we understand what good really meant?</li> </ul>	<ul style="list-style-type: none"> <li>There is no evidence that people who claim to have had religious experiences are telling the truth.</li> <li>Factors such as certain foods, drugs and alcohol make people have strange feelings.</li> <li>There have been times when there seems to be an increase in reported religious experiences.</li> <li>If God is able to give people religious experiences that they cannot deny, why doesn't He give them to everyone so there is no doubt that God exists?</li> <li>People who have religious experiences have often had some form of religious upbringing. Could this mean that they are more likely to think that a mysterious experience has an obvious explanation?</li> </ul>

# Year 8 Religious Education: The Philosophy of Religion

A.	Can you define these key words?	B.	Design Argument	C.	Cosmological Argument
Key word	Key definition				
Omnipotent					
Omniscient					
Omnibenevolent					
Theism					
Atheism					
Agnosticism					
Empirical evidence		D.	The Problem of Evil	E.	Religious Experience
Analogy					
Theodicy					
Fallacy					

F. Criticisms Design Argument	Cosmological Argument	Theodicies	Religious Experience
<ul style="list-style-type: none"> <li>God is supposed to be _____ therefore how can there be flawed design such as _____ in DNA which cause cancers or damage to bodies</li> <li>The 'Design' of the world may be _____. For example, sometimes we see pictures in the clouds, like a rabbit or a face. We know this is just a _____. Just like clouds that move into and out of shape quickly, without a designer, the atoms in the universe have moved into this shape and will move out of it again before long. We think we see design, but it is just _____</li> </ul>	<ul style="list-style-type: none"> <li>Just because something is true of the _____, it does not mean it is true of the _____ - eg a brick is small, so a wall is small.</li> <li>Our understanding of the universe is limited to the world around us – because things require a _____ in this world, does not mean that the entire _____ requires a first cause.</li> <li>If the existence of God as a '_____ ' being without a cause can be a fact, why can't the universe itself just be a '_____ '?</li> </ul>	<ul style="list-style-type: none"> <li>Many religions explain the _____ of evil in the world – such as in _____ with Adam and Eve and the original sin.</li> <li>God gave humans _____, and through free will humans can choose evil.</li> <li>Some people argue that experiencing the _____ in the world allows humans to grow and _____.</li> <li>Do we need _____ to understand what _____ is? If we lived in a world that was all red, we wouldn't have an _____ of what red really meant. So if we lived in a world that was only _____, would we understand what good really meant?</li> </ul>	<ul style="list-style-type: none"> <li>There is no _____ that people who claim to have had religious experiences are telling the truth.</li> <li>Factors such as certain _____ and _____ make people have strange feelings.</li> <li>There have been times when there seems to be an increase in reported _____ experiences.</li> <li>If God is able to give people religious experiences that they cannot _____, why doesn't He give them to everyone so there is no _____ that God exists?</li> <li>People who have religious experiences have often had some form of religious _____. Could this mean that they are more likely to think that a mysterious experience has an obvious _____?</li> </ul>



What we are learning this term:	
A. Discussing the internet and social media B. Discussing TV programmes C. Watching films at the cinema and at home D. Discussing music tastes E. Creating an online profile F. Discussing jobs and careers G. Translation practice	
6 Key Words for this term	
1. las redes sociales	4. etiquetar
2. acabar de...	5. en directo
3. en línea	6. chatear

**A. Generación Digital – Digital Generation**

descargar música	to download music
gastar batería	to waste battery
hacer la compra por internet	to do shopping online
jugar a videojuegos	to play videogames
llamar por videollamada	to call by videocalling
sacar fotos	to take photos
subir fotos	to upload photos
ver videos	to watch videos
la aplicación / la app	app
las compras	shopping
la conexión wifi	wifi connection
la cuenta	account
el navegador	sat-nav
la radio digital	digital radio
el supermercado virtual	virtual supermarket
la tableta	tablet

**B. ¿Qué ponen en la television? –What do they put on TV?**

el concurso	game show
los dibujos animados	cartoons
el documental	documentary
la película	film
el programa de deportes	sports programme
el programa de humor	comedy programme
el programa musical	music programme
la serie	series
el telediario	the news
la telenovela	soap opera
a la carta	on demand
el canal	channel
el capítulo	episode/chapter

C. Las Películas – Films	
el dispositivo	device
la experiencia	experience
hacer un maratón	to binge watch
la programación	TV schedule
la variedad	variety
una película cómica	a film comedy
de aventuras	adventure
de ciencia ficción	science fiction
de dibujos animados	animated/cartoon
de miedo	horror
de misterio	mystery
del oeste	western

**D. ¿Qué piensas? – What do you think?**

músical	musical
romántica	romantic
cautivador(a)	captivating
complejo/a	complex
decepcionante	disappointing
entretenido/a	entertaining
espeluznante	terrifying
impactante	striking
mejor	better
memorable	memorable
nuevo/a	new
peor	worse
predicible	predictable
profundo/a	deep / insightful
sangriento/a	bloody
triste	sad
me da miedo	it scares me
me hace pensar	it makes me think
me hace reír	it makes me laugh
me recuerda a	it reminds me of
lo/la recomiendo	I recommend it
porque	because
emocionante	exciting
maravilloso/a	amazing
grave	serious
largo/a	long
corto/a	short
el cortometraje	a short film
grabar	to record
ver	to watch / see
el Actor	actor
la Actriz	actress
la trama	the plot line

Key Verbs				
Ver To watch/ to see	Acabar de To just finish	Subir To upload	Descargar To download	Etiquetar To tag
Veo I watch	Acabo de I just finish	Subo I upload	Descargo I download	Etiqueto I tag
Ves You watch	Acabas de You just finish	Subes You upload	Descargas You download	Etiquetas You tag
Ve s/he watches	Acaba de s/he just finishes	Sube s/he uploads	Descarga s/he downloads	Etiqueta s/he tags
Vemos We watch	Acabamos de We just finish	Subimos We upload	Descargamos We download	Etiquetamos We tag
Ven They see	Acaban de They just finish	Suben They upload	Descargan They download	Etiquetan They tag

**E. Quiero ser – I want to be...**

el / la actor/actriz	actor/actress
el / la arquitecto/a	architect
el / la bibliotecario/a	librarian
el / la bloguero/a	blogger
el / la carnicero/a	butcher
el / la científico/a	scientist
el / la cocinero/a	chef
el / la dentista	dentist
el / la electricista	electrician
el / la enfermero/a	nurse
el / la escritor(a)	writer
el / la fontanero/a	plumber
el / la fotógrafo/a	photographer
el / la granjero/a	farmer
el / la jugador(a) de fútbol	football player
el / la mecánico/a	mechanic
el / la médico	doctor
el / la pescadero/a	fishmonger
el / la piloto de avión	airline pilot
el / la policía	police officer
el / la profesor(a)	teacher
el / la recepcionista	receptionist
el / la secretario/a	secretary
el / la jefe/jefa	boss
la libertad	freedom
el sueldo	salary
agradable	pleasant
estimulante	stimulating
exigente	demanding
gratificante	satisfying

**F. Somos melóman@s – We are music lovers**

los instrumentos	instruments
la música	music
tocar	to play (instrument)
la batería	the drums
la flauta	the flute
la gaita	the bagpipes
la guitarra	the guitar
la pandereta	the tambourine
el piano	the piano
la trompeta	the trumpet
el violín	the violin
el / la artista	the artist
la banda	the band / group
el / la cantante	the singer
el concierto	concert
el / la melómano/a	music lover
la pasión	passion
los datos	personal details
personales	
el estado	status
la obsesión	obsession
el perfil de internet	internet profile
la tendencia	trend
el tuit	the tweet
dar 'me gusta'	to 'like' something
estar de moda	to be in fashion
estar bien	to be well informed
informado/a	
poner filtros	to add filters
poner efectos	to add effects
subir selfis	to upload selfies



G. Translation Practice	
I like to go online and upload selfies	M g i e l y s s
I download music	D m
I like to watch horror films because they are terrifying	M g v l p d m p s e
I prefer to watch films at home because it's cheaper	P v l p e c p e m b
What film do you want to watch?	¿Q p q v
I play the trumpet	T l t
I can't play the tambourine	N p t l t
I like the tweets	M g l t
I like to tag my friends in photos on Facebook	M g e a m a e f e F
I like to use Instagram because it's fun	M g u l p e d
Do you have a Wifi connection?	¿T u c d w?
I don't have Wifi	N t w
I use my phone to listen to music	U m m p e m
My favourite app is Spotify because I love music	M a f e S p m e l m
I want to be a dentist	Q s d
My brother is a plumber	M h e f
My sister is a police officer	M h e p
I want to be a teacher	Q s p

H . Key Questions: Answer the following in your own words. Use these model answers	
¿Qué tipo de película te gusta y por qué?	Me gustan mucho las películas de ciencia ficción porque me fascinan los caracteres en las películas y pienso que son muy interesantes. Creo que las películas de ciencia ficción son una escapada de la realidad. Me gusta ver también los documentales porque son importantes.
¿Qué tipo de música te gusta y por qué?	Prefiero la música rock porque me da mucha energía y me banda favorita es una banda de rock se llama The Eagles. Me gusta el ritmo de sus canciones y su pasión por música.
¿Para qué usas tu móvil?	Uso mi móvil para sacar selfis en Instagram y grabo videos en TikTok con mis amigos. Es muy divertido porque nos encanta reír. También descargo música en mi móvil.
¿Qué quieres hacer en el futuro?	En el futuro me gustaría ser profesora de historia porque me interesa mucho el pasado.
I. Key Questions: Translate these model answers using the KO	
¿Qué tipo de película te gusta y por qué?- What type of film do you like and why?	My favourite type of film is a romantic film because I think they are exciting and interesting but my friend hates romantic films because she says that they are boring. I also like to watch action films because they are very entertaining.
¿Qué tipo de música te gusta y por qué? – What type of music do you like and why?	I love pop music because it makes me feel very happy and I love to dance in my bedroom when I listen to pop music. My favourite band is One Direction because they are very good. I hate rock music because it's too loud.
¿Para qué usas tu móvil? – What do you use your mobile for?	I use my mobile to send messages to my family and I use whatsapp to speak to my friends. I love to take photos and upload them onto Instagram. I add filters to my photos and special effects.
¿Qué quieres hacer en el futuro? - What do you want to do in the future?	In the future I would like to be a dentist. I think that teeth are very important. My dad is a dentist and he really likes his work. I would not like to be a policía officer because the work is very dangerous. My mum works in the supermarket in the town centre.
J. Key Grammar	
Use the personal 'a' when using the verb etiquetar (to tag)	e.g. <i>Me gusta etiquetar a mis amigos en Instagram porque es divertido.- I like to tag my friends on Instagram because it's fun.</i> <i>¿Me puedes etiquetar en esta foto? – Can you tag me in this photo?</i>
Using ACABAR DE... to just finish something or to have just finished something:	e.g. <i>Acabo de ver esta película – I have just finished watching this film</i> <i>Acabamos de estudiar para hoy – We have just finished studying for today</i>
Making comparisons with <b>más que</b> and <b>menos que / mejor</b> and <b>peor</b>	e.g. <i>Esta película es mejor que la otra – This film is better than the other one</i> <i>Esta película es peor que la otra – This film is worse than the other one</i> <i>Esta película es más divertida que la otra – This film is more fun than the other one</i> <i>Esta película es menos interesante que la otra – this film is less interesting than the other</i>
SER AND ESTAR both mean TO BE	SER is for PERMANENT things. E.g. <i>Soy español – I am Spanish</i> ESTAR is for TEMPORARY things: e.g. <i>Está enfadado contigo – He is angry with you</i>



What we are learning this term:	
A. Discussing the internet and social media B. Discussing TV programmes C. Watching films at the cinema and at home D. Discussing music tastes E. Creating an online profile F. Discussing jobs and careers G. Translation practice	
6 Key Words for this term	
1. las redes sociales	4. etiquetar
2. acabar de...	5. en directo
3. en línea	6. chatear

C. Las Películas – Films	
el dispositivo	_____
_____	experience
_____	to binge watch
la programación	_____
_____	variety
una película	_____
_____	comedy
de aventuras	_____
de ciencia ficción	_____
de dibujos animados	_____
de miedo	_____
_____	mystery
_____	western

Key Verbs				
Ver To watch/ to see	Acabar de _____	_____ To upload	Descargar To download	Etiquetar To tag
Veo _____	Acabo de I just finish	Subo I upload	Descargo I _____	_____ I tag
_____ You watch	_____ You just finish	_____ You upload	Descargas You _____	Etiquetas _____
Ve s/he watches	Acaba de s/he just finishes	_____ s/he uploads	_____ s/he downloads	Etiqueta s/he tags
Vemos _____	Acabamos de _____	Subimos We upload	Descargamos _____	_____ We tag
Ven They see	Acaban de They just finish	_____ They upload	_____ They download	Etiquetan They tag

**A. Generación Digital – Digital Generation**

_____	to download music
_____	to waste battery
_____	_____
hacer la compra por internet	_____
jugar a videojuegos	_____
llamar por videollamada	_____
sacar fotos	_____
subir fotos	_____
ver videos	_____
_____	app
_____	shopping
la conexión wifi	_____
la cuenta	_____
el navegador	_____
_____	digital radio
el supermercado virtual	_____
_____	tablet

**D. ¿Qué piensas? – What do you think?**

_____	musical
_____	romantic
cautivador(a)	_____
complejo/a	_____
_____	disappointing
_____	entertaining
_____	_____
espeluznante	_____
impactante	_____
mejor	_____
memorable	_____
_____	new
_____	worse
predicible	_____
_____	deep / insightful
sangriento/a	_____
triste	_____
_____	it scares me
_____	it makes me think
_____	it makes me laugh
me recuerda a	_____
_____	_____
_____	I recommend it
_____	because
emocionante	_____
maravilloso/a	_____
grave	_____
_____	long
_____	short
el cortometraje	_____
_____	to record
ver	_____
la Actriz	actor
la trama	_____

**E. Quiero ser – I want to be...**

_____	actor/actress
_____	_____
el / la arquitecto/a	_____
el / la bibliotecario/a	_____
el / la bloguero/a	_____
_____	butcher
_____	scientist
_____	_____
el / la cocinero/a	_____
el / la dentista	_____
el / la electricista	nurse
_____	writer
_____	_____
el / la fontanero/a	_____
el / la fotógrafo/a	farmer
_____	_____
el / la jugador(a) de fútbol	_____
el / la mecánico/a	doctor
_____	fishmonger
_____	_____
el / la piloto de avión	_____
el / la policía	teacher
_____	_____
el / la recepcionista	_____
el / la secretario/a	freedom
el / la jefe/jefa	salary
_____	_____
agradable	_____
estimulante	demanding
_____	_____
gratificante	_____

**F. Somos melóman@s – We are music lovers**

los instrumentos	_____
la música	_____
_____	to play (instrument)
_____	the drums
_____	the flute
_____	_____
la gaita	_____
la guitarra	_____
la pandereta	_____
el piano	_____
_____	the trumpet
_____	the violin
_____	the artist
_____	_____
la banda	_____
el / la cantante	concert
_____	_____
el / la melónamo/a	passion
_____	_____
los datos personales	_____
el estado	_____
_____	obsession
_____	internet profile
_____	_____
la tendencia	_____
el tuit	to 'like' something
_____	to be in fashion
_____	_____
estar bien informado	_____
poner filtros	_____
poner efectos	_____
_____	to upload selfies

**B. ¿Qué ponen en la television? –What do they put on TV?**

_____	game show
los dibujos animados	_____
_____	documentary
la película	_____
el programa de deportes	_____
el programa de humor	_____
_____	music programme
la serie	_____
_____	the news
la telenovela	_____
_____	on demand
el canal	_____
el capítulo	_____



## Year 8 COMPUTER SCIENCE Term 3 – Combined



### What we are learning this term:

A. Strong Passwords      B. Social Engineering      C. File Handling      D. Definitions

A.	Creating Strong Passwords
A strong password should:	
A	
B	
C	
D	
E	
A weak password	
A	
B	
C	
D	
E	

B	Social Engineering
The manipulation of people to hand over confidential information or access.	
	Making up a story to get monetary assistance or access.
	Redirecting a user from a genuine website to a fraudulent one.
	Phishing
	Observing personal information over the shoulder when entering a password or a pin.
	A phishing attack targeting a specific organisation or group.
	Whaling

C.	File Handling
Keyboard shortcuts	
Renaming a file	
Copy	
Paste	
Cut	
New folder	
D	Definitions
	The safe and responsible use of technology, the internet and other means of communication.
Cyber-attack	
Cyber-security	



**What we are learning this term:**

A. Strong Passwords      B. Social Engineering      C. File Handling      D. Definitions

A.	Creating Strong Passwords
A strong password should:	
A	Use a mixture of 10-15 characters.
B	Use symbols and numbers.
C	Use upper and lower case letters.
D	Avoid sequences.
E	Not contain personal information
A weak password	
A	Is short (less than 10 characters long)
B	Uses popular terms.
C	Uses common phrases.
D	Uses sequences of letters or numbers.
E	Uses personal information (individual's name, date of birth).









B	Social Engineering
The manipulation of people to hand over confidential information or access.	
Blagging	Making up a story to get monetary assistance or access.
Pharming	Redirecting a user from a genuine website to a fraudulent one.
Phishing	Sending an email which appears to be from a legitimate source.
Shouldering	Observing personal information over the shoulder when entering a password or a pin.
Spear-phishing	A phishing attack targeting a specific organisation or group.
Whaling	. A phishing attack targeting a specific individual.


B.	File Handling
Keyboard shortcuts	
Renaming a file	<b>F2</b>
Copy	<b>Ctrl+C</b>
Paste	<b>Ctrl+V</b>
Cut	<b>Ctrl+X</b>
New folder	<b>Ctrl+Shift+N</b>
D	Definitions
Esafety	The safe and responsible use of technology, the internet and other means of communication.
Cyber-attack	Using computers or other technology to modify programs or data to cause harm or damage.
Cyber-security	The technology and practices needed to protect devices and data from cyberattacks.







**What we are learning this term:**  
**A. Workshop Tools    B. Materials    C. CAD    D. CAM    E. Memphis Design Movement**


A. Workshop Tools 						
Steel Rule	Wooden Vice	Clamp	Bench Hook	Tenon Saw	Pillar Drill	Bandfacer
						


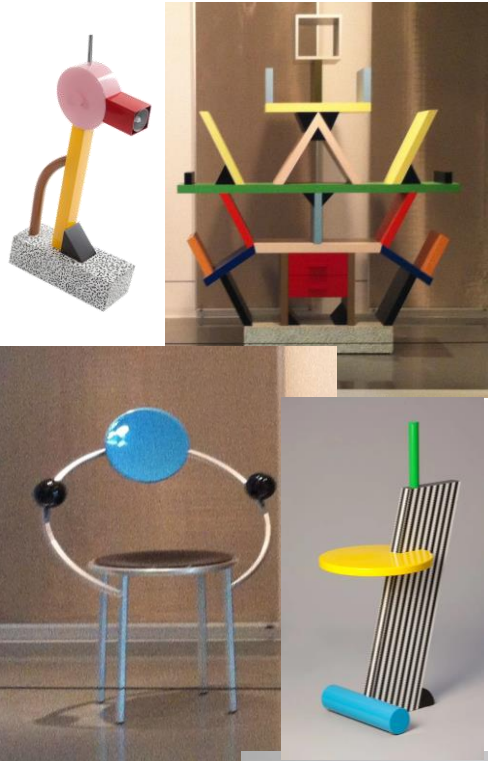

B. Materials	
<b>Timbers</b> come from <b>trees</b>	
	<p><b>Scots pine</b> – which you used for your clock base – is a <b>softwood</b></p> <p><b>Softwoods</b> come in planks and boards</p>

<b>Manufactured Boards</b> come from <b>wood pulp</b>	
	<p><b>Plywood</b> – which you used as your Memphis shapes – is a <b>manufactured board</b></p> <p><b>Manufactured Boards</b> come in sheets</p>

<b>Polymers</b> come from <b>crude oil</b>	
	<p><b>Acrylic</b> – which you used as your Memphis shapes – is a <b>polymer</b></p> <p><b>Polymers</b> come in sheets, graduals and filament</p>

C. CAD 	
<b>Computer-aided design (CAD)</b> is the process of using <b>computer software</b> to create <b>2D</b> or <b>3D</b> designs.	
Advantages of CAD	Disadvantages of CAD
Designs can be <b>created, saved</b> and <b>edited</b> quickly, saving time	CAD takes a <b>long time</b> to <b>learn</b>
Designs or parts of design can be easily viewed from <b>different angles, copied</b> or <b>repeated</b>	Software can be <b>very expensive</b>
CAD is <b>very accurate</b>	CAD files can become <b>corrupted</b> or <b>lost</b>

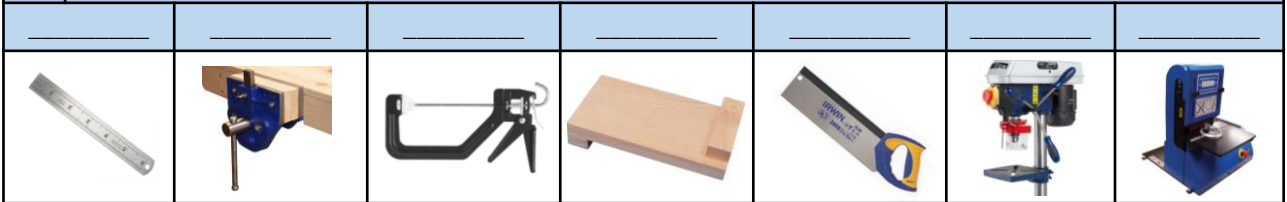
D. CAM 	
By using <b>computer aided manufacture (CAM)</b> , designs can be sent to <b>CAM machines</b> such as <b>laser cutters</b> and <b>3D printers</b>	
Advantages of CAM	Disadvantages of CAM
<b>Quick</b> – Speed of production can be <b>increased</b>	CAM takes a <b>long time</b> to <b>learn</b>
<b>Consistency</b> – All parts manufactured are all the <b>same</b>	High initial cost can be <b>very expensive</b>
<b>CAM</b> is <b>very accurate</b>	Production <b>stoppage</b> – If the machines break down, the production will <b>stop</b>

E. Memphis Design Movement 	
<p>The <b>Memphis Design</b> movement was a collection of designers and artists that wanted to create something to break the rules of <b>traditional design</b> and still function in the sense of traditional design.</p> <p>The idea was for the products to be <b>bright, colourful, playful</b>.</p>	
	<p><b>Key Designer</b></p> <p>Ettore Sottsass </p> <p><b>Key Features:</b></p> <p>Crazy patterns; animal print, geometric, pinstripes. Strange shapes thrown together.</p> <p><b>Contrast!</b></p> <p><b>Colours:</b></p> <p>Bright, bold, Contrasting primary and secondary colours. Black patterns.</p> <p><b>Line Styles:</b></p> <p>Very geometric; rectangles, triangles, squares, circles and arcs.</p>




**What we are learning this term:**  
**A. Workshop Tools    B. Materials    C. CAD    D. CAM    E. Memphis Design Movement**

**A. Workshop Tools** 



**B. Materials**


**Timbers** come from \_\_\_\_\_



**Scots pine** – which you used for your clock base – is a **softwood**

**Softwoods** come in \_\_\_\_\_ and \_\_\_\_\_


**Manufactured Boards** come from \_\_\_\_\_



**Plywood** – which you used as your Memphis shapes – is a **manufactured board**

**Manufactured Boards** come in \_\_\_\_\_

**Polymers** come from \_\_\_\_\_



**Acrylic** – which you used as your Memphis shapes – is a **polymer**

**Polymers** come in \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_

**C. CAD** 


**Computer-aided design (CAD)** is the process of using \_\_\_\_\_ to create **2D** or **3D** designs.

Advantages of CAD	Disadvantages of CAD
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

**D. CAM** 

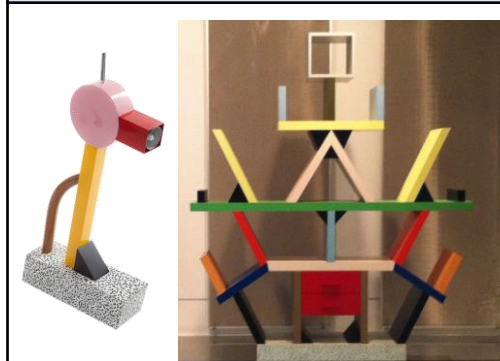
By using **computer aided manufacture (CAM)**, designs can be sent to \_\_\_\_\_ such as \_\_\_\_\_

Advantages of CAM	Disadvantages of CAM
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

**E. Memphis Design Movement** 

The **Memphis Design** movement was a collection of designers and artists that wanted to create something \_\_\_\_\_ and still function in the sense of traditional design.

The idea was for the products to be \_\_\_\_\_



**Key Designer**  
 Ettore Sottsass 

**Key Features:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



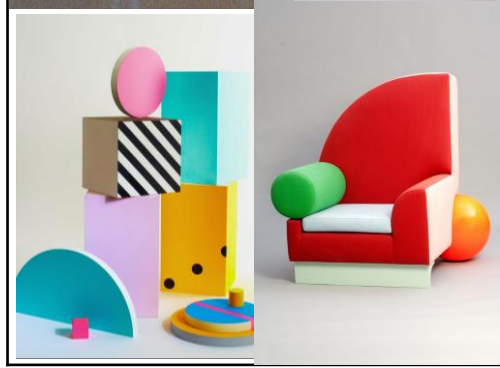
**Colours:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**Line Styles:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Year 8 Term 1 : Topic = Planning a Healthy Meal**

**What we are learning this term:**

- A. Health, safety and hygiene in the kitchen
- B. The Eatwell guide and nutrients
- C. Design Ideas
- D. Weighing
- E. Practical skills
- F. Evaluation Work

**6 Key Words for this term**

1 Hygiene	4 Balanced
2 Health	5 Nutritional
3 Food Poisoning	6 Target Market

**B. Can you give 5 reasons for why someone should eat healthily?**

- 1 to avoid obesity
- 2 it can be less expensive
- 3 to keep a healthy heart
- 4 to keep your body fit
- 5 it can make a positive impact on your family

**A. What is cross contamination and how can it be prevented?**

Cross contamination happens when you use the wrong chopping board or equipment to prepare food which can therefore result in food poisoning.

**B. What is the image on the left showing and how is it used?**

In the photo you can see a food temperature probe. You use it to check that food is cooked. First you need to make sure that the probe is clean, then you insert it into the thickest part of the food and then check the temperature. If the food is cooked it can be served, if the food is not the correct temperature it needs to be cooked for longer.



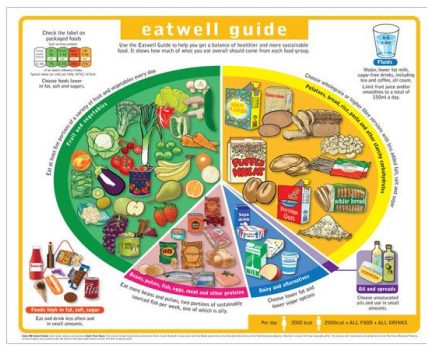
**A. What are the three macronutrients in the diet?**

<b>Carbohydrates</b>	Foods that are eaten to give the body energy
<b>Protein</b>	Food that are eaten to build and repair muscles and cells
<b>Fats</b>	Food that are eaten to protect your vital organs and insulate your body.

**C. Can you list 5 reasons for why we cook food and why it is important?**

Rule	Why it is important
• 1 to get rid of bacteria on the food	• 1 to stop food poisoning
• 2 to make the food taste better	• 2 to make the food more appealing
• 3 to make food chewable	• 3 it could be raw or a choking hazard
• 4 to ensure that food is not raw	• 4 to stop food poisoning
• 5 to add colour to the food	• 5 to make it look more appetising or change its use

E.	Keywords
Hygiene	A method of keeping yourself and equipment clean
Research	Information that you find out to help you with a project
Nutritious	A meal that is healthy and contains vital nutrients.
Target Market	The age or type of person you re creating a product for.
Carbohydrates	Foods that give you energy
Protein	Food that grow and repair your muscles
Fibre	Foods that keep your digestive system healthy and avoid constipation.
Calcium	Foods that make your teeth and bones strong
Design Idea	A sketch or plan of how you are hoping a project to turn out.
Organisation	Having everything ready for a lesson and following instructions
Time keeping	Using the time to remain organised.
Sensory analysis	Use your senses to taste and describe a product
Mood Board	A collage of photos and key words based on a project

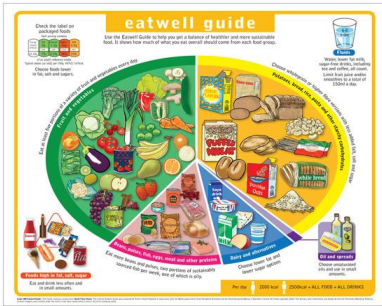


**Year 8 Term 1 : Topic = Planning a Healthy Meal**

What we are learning this term:	
A.	Health, safety and hygiene in the kitchen
B.	The Eatwell guide and nutrients
C.	Design Ideas
D.	Weighing
E.	Practical skills
F.	Evaluation Work

6 Key Words for this term	
1 Hygiene	4 Balanced
2 Health	5 Nutritional
3 Food Poisoning	6 Target Market

A.	What are the three macronutrients in the diet?



B.	Can you give 5 reasons for why someone should eat healthily?
1	
2	
3	
4	
5	



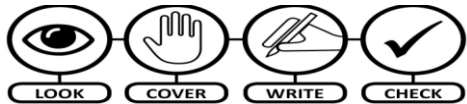
A.	What is cross contamination and how can it be prevented?
B.	What is the image on the left showing and how is it used?

C.	Can you list 5 reasons for why we cook food and why it is important?	
<u>Rule</u>		<u>Why it is important</u>
• 1		• 1
• 2		• 2
• 3		• 3
• 4		• 4
• 5		• 5

E.	Keywords
Hygiene	
Research	
Nutritious	
Target Market	
Carbohydrates	
Protein	
Fibre	
Calcium	
Design Idea	
Organisation	
Time keeping	
Sensory analysis	
Mood Board	



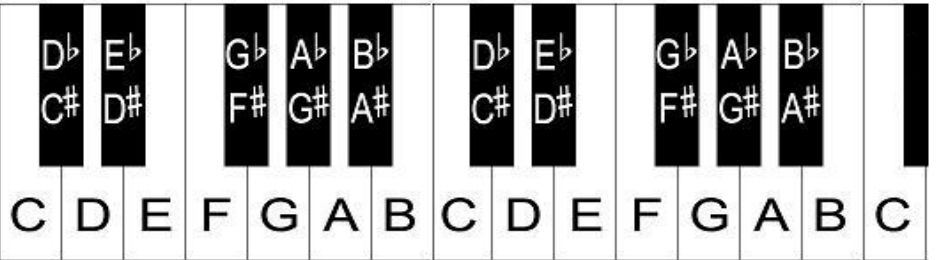
A	What we are learning about this term...
1	Develop music reading skills
2	Treble / Bass clef notation
3	Sharp, Flats and Natural notes
4	Structure and Tonality



B	Keywords
Binary	A piece of music divided into 2 sections
Ternary	A piece of music divided into 3 sections
Chromatic	The full 12 notes of a scale, including sharps and flats
Pentatonic	A set of 5 musical notes that are being played as a scale
Atonal	Music that is neither major or minor, sounding clashing
Structure	The way the Music is put together – overall plan of the music



**C** Layout of a Keyboard

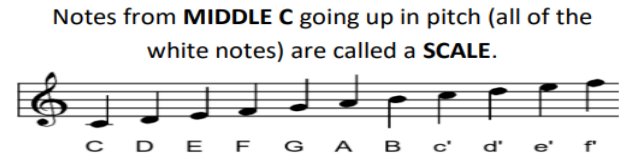
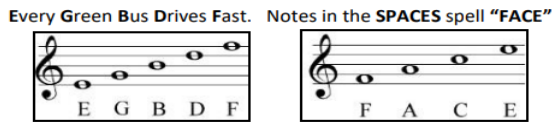


octave

A piano or keyboard is laid out with **WHITE KEYS** and **BLACK KEYS** (as above). **C** is to the left of the two **BLACK KEYS** and the notes continue to **G** when they go back to **A** again. Notes with the same letter name/pitch are said to be an **OCTAVE** apart. **MIDDLE C** is normally in the centre of a piano keyboard.

**D** Treble Clef & Treble Clef Notation

A **STAVE** or **STAFF** is the name given to the five lines where musical notes are written. The position of notes on the staff shows their **PITCH** (how high or low a note is). The **TREBLE CLEF** is a symbol used to show high-pitched notes on the staff and is usually used for the right hand on a piano or keyboard to play the **MELODY** and used by high pitched instruments such as the flute and violin. The staff or staff is made up of 5 **LINES** and 4 **SPACES**.

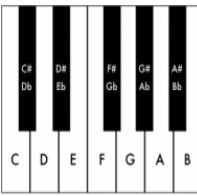


**E** Black Keys and Sharps and Flats

There are five different black notes or keys on a piano or keyboard. They occur in groups of two and three right up the keyboard in different pitches. Each one can be a **SHARP** or a **FLAT**. The # symbol means a **SHARP** which raises the pitch by a semitone (e.g. C# is higher in pitch (to the right) than C). The b symbol means a **FLAT** which lowers the pitch by a semitone (e.g. Bb is lower in pitch (to the left) than B). Each black key has two names – there's just two different ways of looking at it!

- C# is the same as Db
- there's just two different ways of looking at it!

Remember, black notes or keys that are to the **RIGHT** of a white note are called **SHARPS** and black notes to the **LEFT** of a white note are called **FLATS**.



**F** Note Values and Dotted Note Values

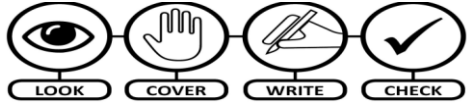
Note	Name	Beats	Rest	Note	Name	Beats	Rest
	Semibreve, Whole Note	4 beats			Dotted Semibreve, Dotted Whole Note	6 beats	
	Minim, Half Note	2 beats			Dotted Minim, Dotted Half Note	3 beats	
	Crotchet, Quarter Note	1 beat			Dotted Crotchet, Dotted Quarter Note	1 1/2 beats	
	Quaver, Eighth Note	1/2 beat			Dotted Quaver, Dotted Eighth Note	3/4 beat	

**G** Describing music – MAD T SHIRT

M	A	D	T	S	H	I	R	T
Melody	Articulation	Dynamics	Texture	Structure	Harmony/Tonality	Instruments	Rhythm	Tempo
The tune	How notes are played	Loud/quiet and any other volume changes	Layers of sound / how they fit together	The sections and organising	Chords used / the mood	Types of instruments heard	Pattern of notes	The speed



A	What we are learning about this term...
1	Develop music reading skills
2	Treble / Bass clef notation
3	Sharp, Flats and Natural notes
4	Structure and Tonality



B	Keywords
Binary	
Ternary	
Chromatic	
Pentatonic	
Atonal	
Structure	



**C** Layout of a Keyboard

octave

**E** Black Keys and Sharps and Flats

**D** Treble Clef & Treble Clef Notation

A **STAVE** or **STAFF** is the name given to the five lines where musical notes are written. The position of notes on the staff shows their **PITCH** (how high or low a note is). The **TREBLE CLEF** is a symbol used to show high-pitched notes on the staff and is usually used for the right hand on a piano or keyboard to play the **MELODY** and used by high pitched instruments such as the flute and violin. The staff or staff is made up of 5 **LINES** and 4 **SPACES**.

Every Green Bus Drives Fast. Notes in the **SPACES** spell "FACE"

Notes from **MIDDLE C** going up in pitch (all of the white notes) are called a **SCALE**.

**F** Note Values and Dotted Note Values

Note	Name	Beats	Rest	Note	Name	Beats	Rest
					Dotted		

**G** Describing music – MAD T SHIRT

M	A	D	T	S	H	I	R	T
M_____	A_____	D_____	T_____	S_____	H_____/T_____	I_____	R_____	T_____

## Year 8 Term 3: Craig & Bentley

### Christopher Craig

Was 16 years old so did not suffer the death penalty but was sent to prison even though he was the one who was carrying a gun at the time of the crime. Christopher was the one who suggested to Derek that they go and break into the warehouse that caused the death of one police officer and injury to another.

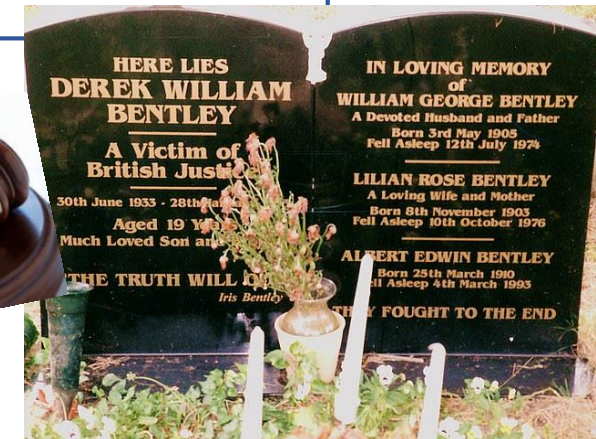
**He served 10 years in Prison and was released in 1963**

### Derek Bentley

Was 18 years old and sentenced to death by hanging for a crime he did not commit. It was known that Christopher had the mental age of a 12-year-old. He carried no weapons on him at the time of the crime and was simply mis-lead by his friend Derek Bentley. He was heard shouting the phrase "Let Him Have it" but it remains unclear as to what he meant when he said this. **He was hung on the 28th January 1953.**

### Key Words and Definitions

<b><u>Corporal Punishment</u></b>	The infliction of physical pain upon a person's body as punishment for a crime or infraction
<b><u>Capital Punishment</u></b>	The state-sanctioned practice of killing a person as a punishment for a crime usually following an authorised, rule-governed process
<b><u>Still Image</u></b>	A picture which communicates meaning. It can provide insight into character relationships with a clear focus upon use of space, levels, body language and facial expression.
<b><u>Reconstruction</u></b>	Acting out a real event after it has happened and keeping it as close/true to the real event as possible
<b><u>Facial Expressions</u></b>	Showing us how a character is feeling through their face.
<b><u>Hot Seating</u></b>	Character is questioned about their background, thoughts or feelings.



**What do you think Christopher meant by the phrase "Let him have it?"**

**Do you think the outcome for Craig and Bentley was fair?**



### Christopher Craig

- How old was Christopher?
- What did he suggest for him and Derek to do on the 2<sup>nd</sup> November?
- Who was killed and injured that night?
- How many years did he serve in Prison?

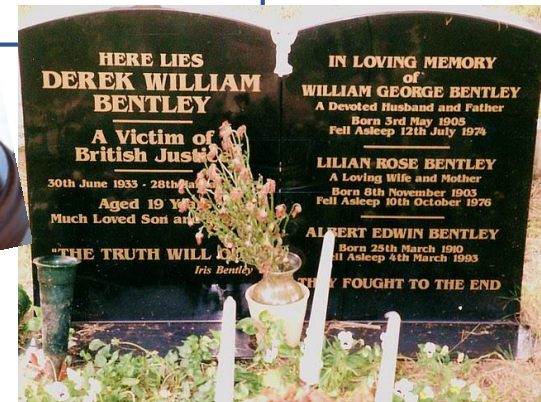
### Derek Bentley

- How old was Derek?
- What was his mental age during the time of his trial?
- What did he shout to Christopher on the 2<sup>nd</sup> November?
- What was the date of his death?



## Key Words and Definitions

<u>C</u>	The infliction of physical pain upon a person's body as punishment for a crime or infraction
<u>Capital Punishment</u>	
<u>Still I e</u>	A picture which communicates . It can provide insight into character relationships with a clear focus upon use of s , l , b l e and facial expression.
<u>R</u>	Acting out a real event <b>before or after?</b> it has happened and keeping it as close/true to the real event as possible
<u>Facial Expressions</u>	
<u>H S g</u>	Character is questioned about their?



## Answers



# SWINDON ACADEMY READING CANON

## Year 7



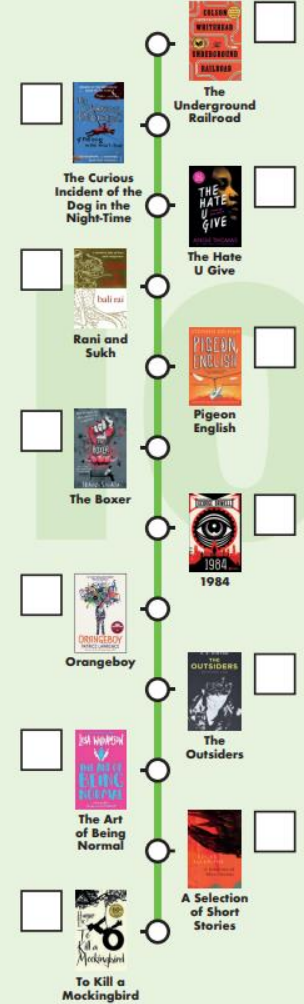
## Year 8



## Year 9



## Year 10



#ReadingisPower