



# 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. Matter
2. Changing from
3. Particles
4. Solids
5. Liquids
6. Gases
7. Particles
8. Solids
9. Liquids
10. Gases

**4 Key Words for this term:**

1. Matter
2. Particles
3. Solids
4. Liquids
5. Gases
6. Particles
7. Evaporation
8. Solids
9. Liquids
10. Gases

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

**A. Describe the properties of the three states of matter.**

Solid	Liquid	Gas
• Particles are packed closely together in a regular pattern.	• Particles are packed closely together but can move past each other.	• Particles are far apart and are arranged randomly. Particles carry a lot of energy and they move in all directions in a high speed.

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

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

Solid	
Liquid	
Gas	

**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 states.

## 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 14th May 2020, with a grid for different subjects. On the right is a 'New Year's Homework/Revision: Topic TSP Pack' for 'What is particle theory?'. It includes a table of contents with sections like '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?'. Below the table are small diagrams and text boxes for each section.

## Step 2

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

This screenshot shows a printed page from the knowledge organiser. The date '29th May 2020' is handwritten at the top. The page contains several sections: 'A. What is particle theory?' (The theory that all matter is made up of particles), 'A. Describe the arrangement and movement of particles in the three states of matter.' (with sub-sections for Solid, Liquid, and Gas), and 'A. What is the law of conservation of mass?' (The Law of Conservation of Mass states that mass cannot be created or destroyed). A diagram shows the states of matter with arrows indicating transitions: melting, freezing, evaporation, condensation, and sublimation. The handwritten text 'Particle theory' is written across the middle of the page.

## Step 3

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

Handwritten notes on lined paper. At the top, the date '29th May 2020' is written. Below it, the title 'Properties of the states of matter' is underlined. The notes define particle theory as 'all matter is made of particles'. It then describes the three states: '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.

Handwritten notes on lined paper repeating the definitions of the three states of matter. Each definition is written three times: 'Solid = regular pattern particles vibrate in fixed position', 'Liquid = regular pattern particles vibrate in fixed position', and 'Gas = 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.

This screenshot shows a 'quizzable' version of the knowledge organiser. It has a similar layout to the previous one but with some sections highlighted for a quiz. The handwritten answers are: 'Self quizzing' for 'What are the different changes of state?', 'Arrangement/movement of matter' for 'Describe the arrangement and movement of particles in the three states of matter.', 'Solid = regular pattern particles vibrate in fixed position' for 'Solid', 'Liquid = particles are arranged randomly but are still touching each other' for 'Liquid', and 'Gas = particles are far apart and are arranged randomly. Particles carry a lot of energy' for 'Gas'. There are also boxes for 'solid', 'liquid', and 'gas' at the bottom.

## Step 6

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

Handwritten notes on lined paper, similar to Step 3, but with corrections and checkmarks. The definitions are: '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 ✓'. There are blue checkmarks next to the corrected parts.

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

# 'The Tempest' Foundation Knowledge Organiser

## Plot Summary

### The Tempest Act 1, Scene 1

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.

### After the Storm Act 1, Scene 2

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.

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

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.

### Kind Alonso Act 2, Scene 1

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.

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

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.

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

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.

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

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.

### Epilogue

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.

## Terminology: Keywords

**comedy** – a play that is funny. It has a happy ending.

**soliloquy** – when a character is speaking alone on stage to himself/herself or to the audience.

## Characters

Alonso – King of Naples

Sebastian – Alonso's brother

Ferdinand – Alonso's son

Antonio – Prospero's brother.

Antonio stole Prospero's title as Duke of Milan.

Gonzalo – the old counsellor to the King of Naples

Trinculo – a jester

Stephano – a drunken butler

Prospero – the rightful Duke of Milan

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

## Vocabulary: Keywords

**colonialism** – when one country establishes itself in another country. When someone **colonises** a new country, they are called a **coloniser**. The original inhabitants of the land are called **natives**.

**usurp** – to take control of someone else's power when you do not have the right to. Someone who usurps is called a **usurper**.

**tempest** – a violent storm.

**treason** – a crime that harms your country or government. Someone who commits treason is a **traitor**.

**callous** – when someone is cruel and does not care about other people.

**pathos** – a situation that makes us feel sympathy or sorrow.

**exploitation** – taking advantage of someone for your own benefit

**nurture** – to encourage or support the development of someone or something.

**dual nature** – having two sides.

## Background Information

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 **Jacobean** era, because Jacob is the Latin for James. Shakespeare lived and worked in both eras.

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.

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.

# 'The Tempest' Foundation Knowledge Organiser

## Plot Summary

### The Tempest Act 1, Scene 1

\_\_\_\_\_, the King of Naples, is on a ship with his son \_\_\_\_\_ and his companions \_\_\_\_\_. They are struck by a terrifying, howling \_\_\_\_\_. They abandon ship and swim to a nearby \_\_\_\_\_ but are washed ashore in \_\_\_\_\_. The island seems to be abandoned.

### 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. One night, Antonio ordered soldiers to take \_\_\_\_\_ and \_\_\_\_\_ and put them on a \_\_\_\_\_ to their \_\_\_\_\_. 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.

### 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. Prospero has agreed to \_\_\_\_\_ Ariel after this last mission. \_\_\_\_\_ is a deformed savage \_\_\_\_\_ who is also under Prospero's \_\_\_\_\_. He is the son of an old witch, \_\_\_\_\_, and is a \_\_\_\_\_ of the island. Prospero taught Caliban how to \_\_\_\_\_ but Caliban \_\_\_\_\_ the control \_\_\_\_\_ has over him.

### Kind Alonso Act 2, Scene 1

King Alonso and his younger brother \_\_\_\_\_, as well as \_\_\_\_\_ (the usurping Duke of Milan), wander around the island. King Alonso \_\_\_\_\_ as he believes his son \_\_\_\_\_ is \_\_\_\_\_. \_\_\_\_\_ and \_\_\_\_\_ to \_\_\_\_\_ Alonso so that Sebastian can be \_\_\_\_\_. They are stopped by Ariel's magical intervention.

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

The monster \_\_\_\_\_ is found by Stephano and Trinculo. They give him alcohol to drink and he gets \_\_\_\_\_. Caliban offers to \_\_\_\_\_ 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 \_\_\_\_\_ go to find and kill \_\_\_\_\_.

### 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 \_\_\_\_\_. They fall instantly in \_\_\_\_\_. Prospero wants to \_\_\_\_\_ that the love is \_\_\_\_\_. Ferdinand has to endure hard \_\_\_\_\_ to \_\_\_\_\_ his intentions are \_\_\_\_\_. Miranda pities \_\_\_\_\_ and wants to \_\_\_\_\_ him. Prospero \_\_\_\_\_ their marriage.

## 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 \_\_\_\_\_. Prospero and \_\_\_\_\_ send \_\_\_\_\_ to scare them away. \_\_\_\_\_ and \_\_\_\_\_ 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 \_\_\_\_\_ and asks for \_\_\_\_\_ from \_\_\_\_\_ which he grants.

## Epilogue

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

## Terminology: Keywords

comedy –

soliloquy –

## Characters

Alonso –

Sebastian –

Ferdinand –

Antonio –

Gonzalo –

Trinculo –

Stephano –

Prospero –

Miranda –

Ariel –

Caliban –

## Vocabulary: Keywords

colonialism – \_\_\_\_\_

\_\_\_\_\_ Th  
e original inhabitants of the land are called \_\_\_\_\_.

usurp –

tempest –

treason –

callous –

pathos –

exploitation –

nurture –

dual nature –

## Background Information

Shakespeare was born in the \_\_\_\_\_ era, named after Elizabeth I. After she died, James I became king. This period of history is called the \_\_\_\_\_ era, because \_\_\_\_\_ is the Latin for \_\_\_\_\_. Shakespeare lived and worked in \_\_\_\_\_.

Italian city states - A \_\_\_\_\_ is an area that is \_\_\_\_\_ by a major \_\_\_\_\_. During the Elizabethan and Jacobean era, Italy wasn't one unified country, but a number of small independent city-states.

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. \_\_\_\_\_ 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.

**What we are learning this term:**

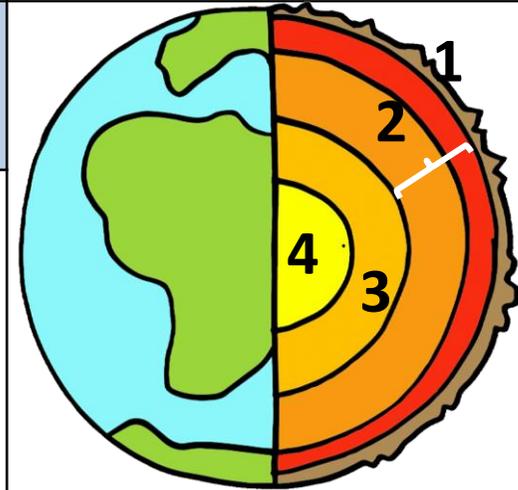
- A. Composition of the Earth
- B. Composition of the Atmosphere
- C. The Rock Cycle
- D. The Carbon Cycle
- E. Human Activity and Carbon Dioxide

**Key Words for this term**

- |                |                      |
|----------------|----------------------|
| 1. Igneous     | 4. Weathering        |
| 2. Sedimentary | 5. Greenhouse effect |
| 3. Metamorphic |                      |

**A. Label the four layers of the earth**

- 1. Crust
- 2. Mantle
- 3. Outer core
- 4. Inner core



**B. Define atmosphere.**

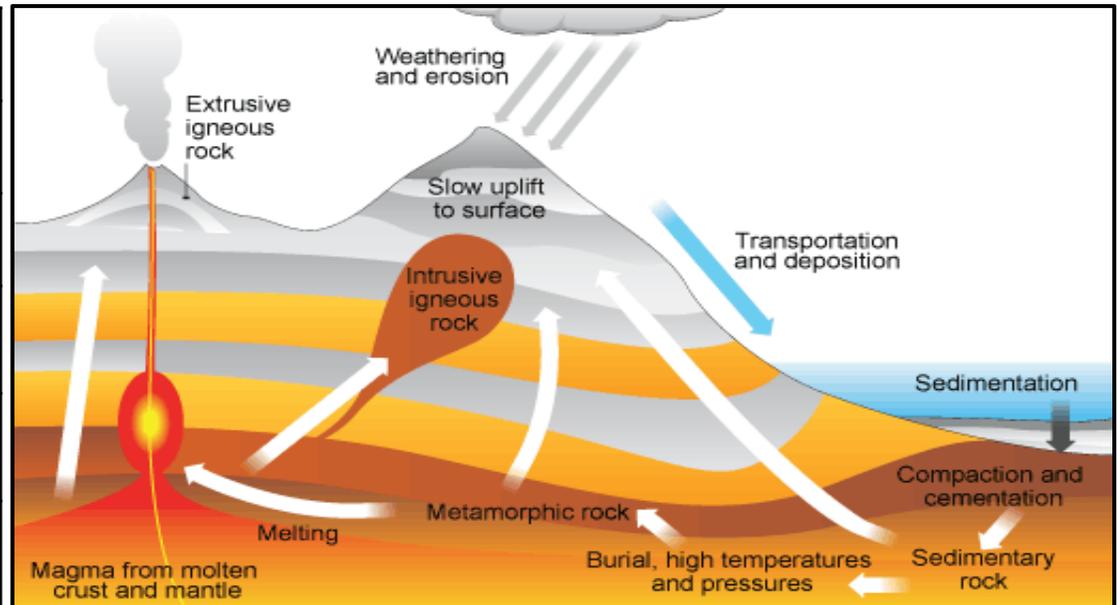
A layer of **gases** surrounding a planet

**C. Define the rock cycle.**

**Igneous, metamorphic and sedimentary** rocks can turn into one another through various processes, which are represented in the rock cycle.

**B. What is the atmosphere made up of?**

Nitrogen	78%
Oxygen	21%
Argon	0.9%
Carbon dioxide	0.037%
Others	0.63%



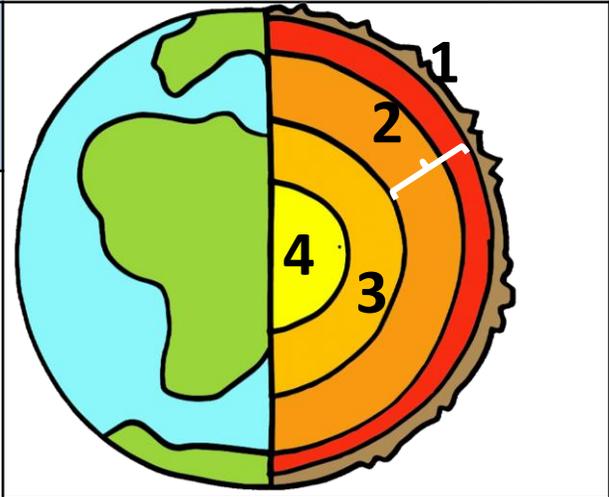
**What we are learning this term:**

- A. Composition of the Earth
- B. Composition of the Atmosphere
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- D. The Carbon Cycle
- E. Human Activity and Carbon Dioxide

**Key Words for this term**

**A. Label the four layers of the earth**

- 1.
- 2.
- 3.
- 4.

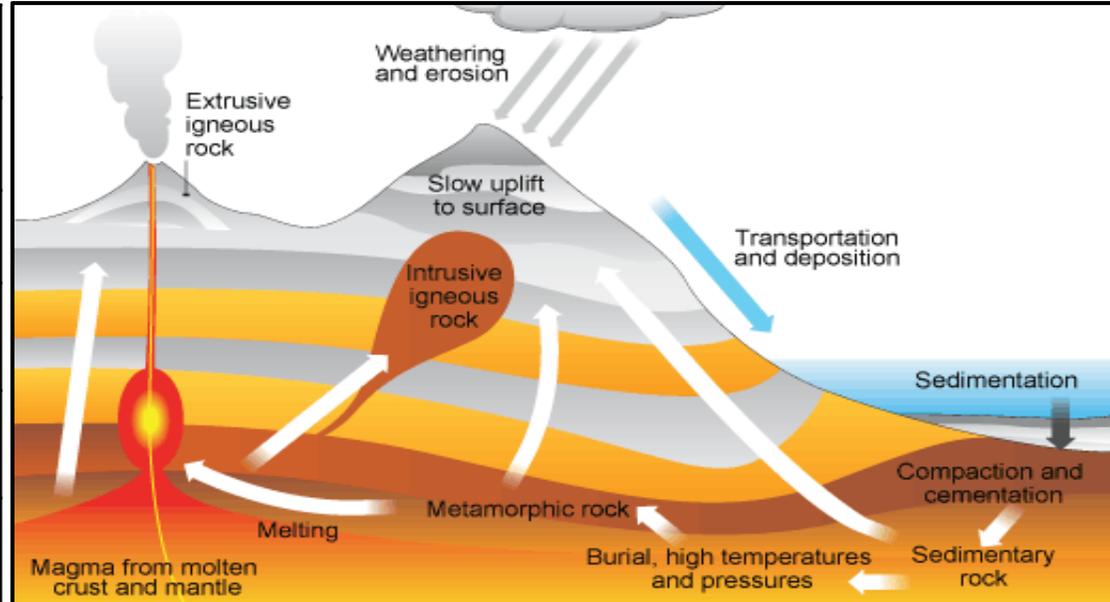


**B. Define atmosphere.**

**C. Define the rock cycle.**

**B. What is the atmosphere made up of?**

	78%
	21%
	0.9%
	0.037%
	0.63%



**D. What is the carbon cycle?**

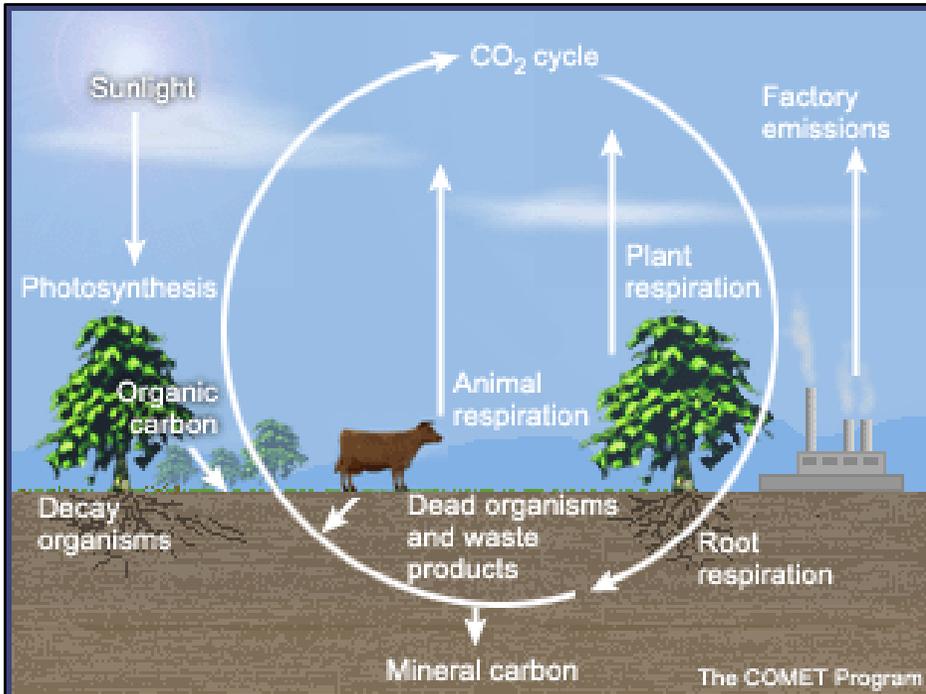
A series of processes that **moves carbon** through organisms and the atmosphere.

**D. What are the three stages of the carbon cycle?**

Step 1: **Removing carbon dioxide** from the atmosphere

Step 2: **Returning carbon dioxide** to the atmosphere

Step 3: Passing carbon from **one organism to the next**



**C. What are the 3 types of rocks?**

Sedimentary

A type of rock that is formed by the **compaction and cementation** of many layers of sediment over time.

Igneous

A type of rock that is formed by the **cooling of magma/lava**. They can be **intrusive** (magma cools slowly below the surface) or **extrusive** (lava cools rapidly above the surface.).

Metamorphic

A type of rock that is formed when **heat and pressure** change the chemical properties of the minerals in other rocks.

**E. Define global warming.**

The gradual **increase** in **global temperatures**

**E. Describe the greenhouse effect.**

When **gases** in the Earth's atmosphere **trap radiation** from the sun and slowly **heat up** the planet.

- The gases involved are called greenhouse gases and include **carbon dioxide**, **methane** and **water vapour**.
- The extra greenhouse gases released by **human activity** lead to an enhanced greenhouse effect.
- More heat is trapped by the atmosphere, causing the planet to become warmer than it would be naturally.
- It causes changes to **animals' habitats**, **sea levels rising**, and **ice melting**

**D. What is the carbon cycle?**

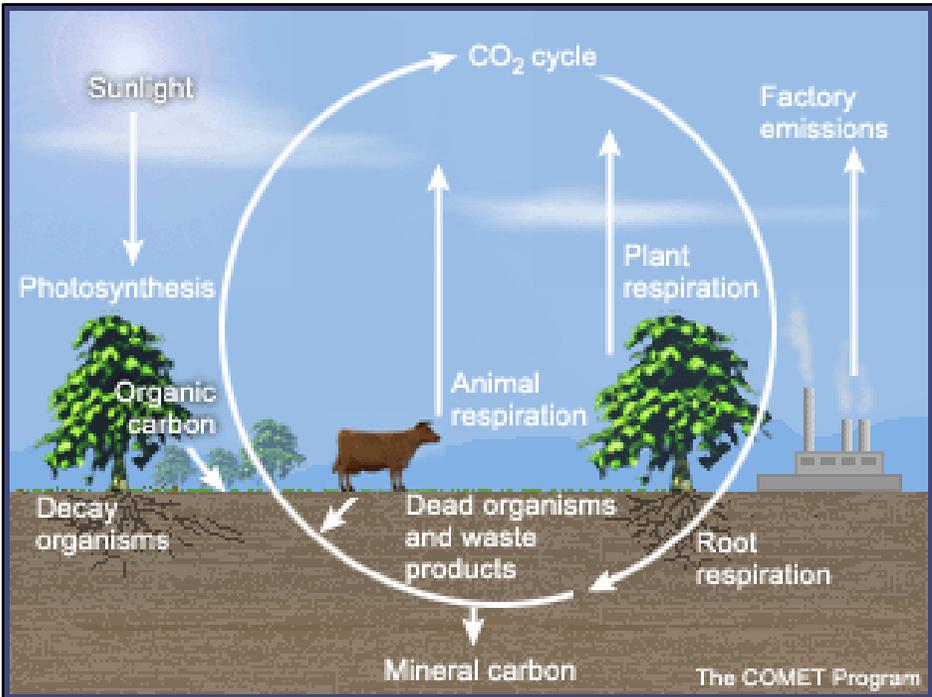
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**D. What are the three stages of the carbon cycle?**

Step 1:

Step 2:

Step 3:



**C. What are the 3 types of rocks?**

Sedimentary

Igneous

Metamorphic

**E. Define global warming.**

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**E. Describe the greenhouse effect.**

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- The gases involved are called greenhouse gases and include **C**\_\_\_\_\_ **d**\_\_\_\_\_, **m**\_\_\_\_\_ and **w**\_\_\_\_\_ **v**\_\_\_\_\_.
- The extra greenhouse gases released by **human activity** lead to the enhanced greenhouse effect.
- More heat is trapped by the atmosphere, causing the planet to become warmer than it would be naturally.
- It causes changes to.....

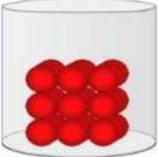
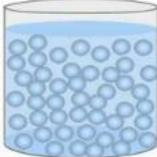
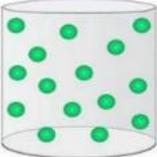
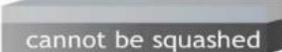
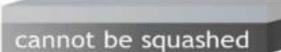
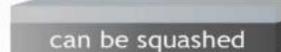
**What we are learning this term:**

- A. Particle Model
- B. Brownian Motion and Diffusion
- C. Pressure and Density
- D. Physical and Chemical changes

**2 Key Words for this term:**

- 1. Density
- 2. Compression

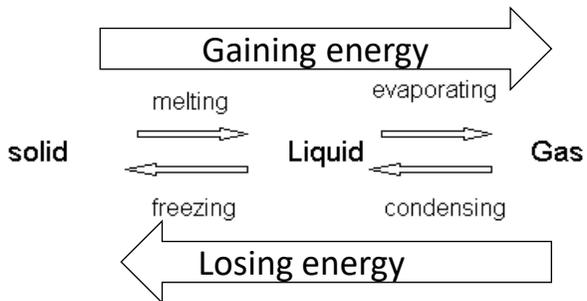
**A. Describe the properties of the three states of matter**

solid	liquid	gas
		
● rigid	● not rigid	● not rigid
● fixed shape	● no fixed shape	● no fixed shape
● fixed volume	● fixed volume	● no fixed volume
		

**A.**

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

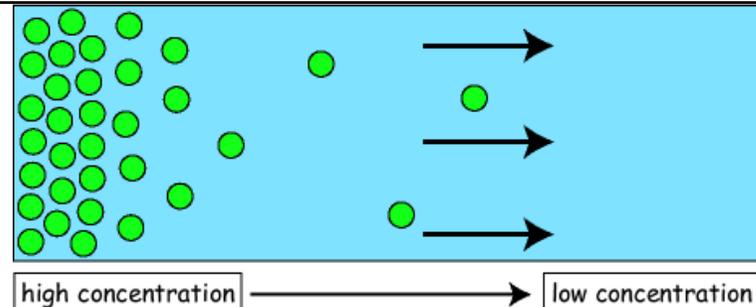
<b>Melting</b>	Change of state from solid to liquid
<b>Freezing</b>	Change of state from liquid to solid
<b>Evaporation</b>	Change of state from liquid to gas
<b>Condensation</b>	Change of state from gas to liquid



**B.**

**What is Brownian Motion?**

The **random motion** of small particles in fluids due to their bumping into even smaller particles.



**B.**

**What is diffusion?**

Movement of particles from a **higher concentration** to a **lower concentration**.

**B.**

**What is the equation to calculate concentration?**

$$\text{Concentration} = \frac{\text{mass of solute}}{\text{volume of solvent}}$$



**What we are learning this term:**

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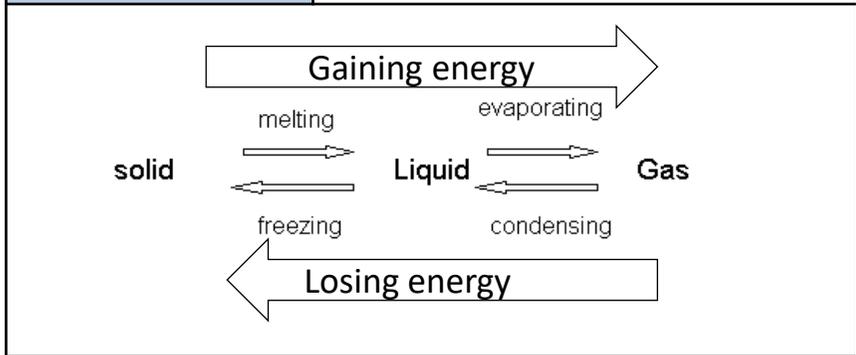
- 1.
- 2.

**A. Describe the properties of the three states of matter**

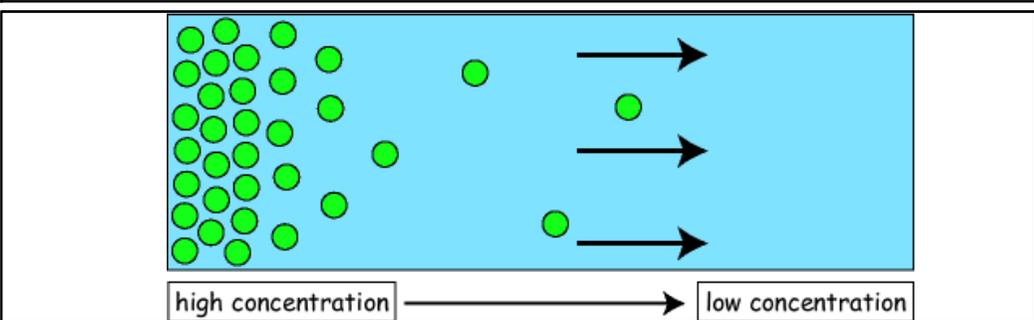
solid	liquid	gas
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**A. What are the different changes of state?**

<b>Melting</b>	
<b>Freezing</b>	
<b>Evaporation</b>	
<b>Condensation</b>	



**B. What is Brownian Motion?**



**B. What is diffusion?**

**B. What is the equation to calculate concentration?**

**C. State the equation to calculate density.**

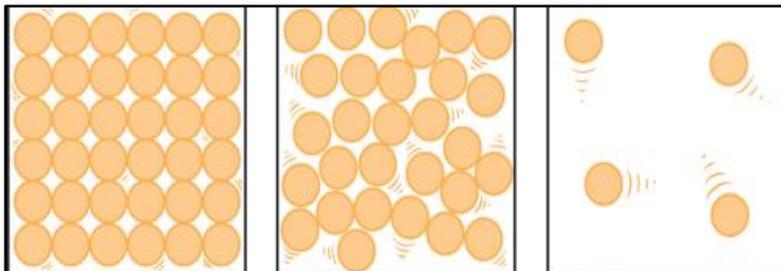
$$\text{Density} = \frac{\text{mass}}{\text{volume}}$$

- It is a measure of how many particles fit in a certain unit of volume.
- Solids are denser than liquids.
- Liquids are denser than gases.
- There is an exception: ice (solid water) is less dense than liquid water.

**C. State the equation to calculate pressure.**

$$\text{Pressure} = \frac{\text{force}}{\text{area}}$$

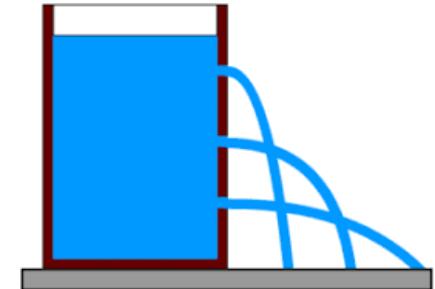
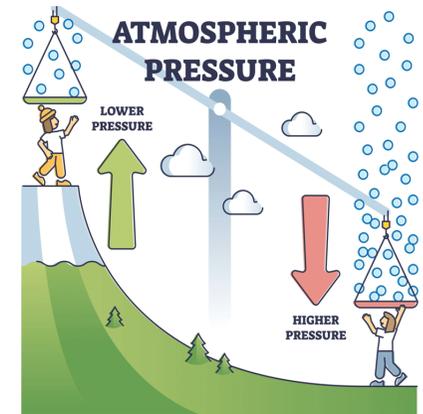
- Pressure is a compound measure of how much force acts on a particular unit of area.
- Pressure increases if the force acting on an area increases.
- Pressure increases if the area a force acts on decreases.



**C. Pressure in fluids:**

**Atmospheric pressure decreases with increase of height**, as weight of air above decreases with height.

**Pressure in a liquid is different at different depths, it increases deeper down** due to the weight of the column of water above.



**B. Compare chemical changes and physical changes.**

Chemical changes	Physical changes
Not easily reversed	Easily <b>reversed</b>
<b>New product</b> formed	No new product formed
Often <b>heat/light/sound/gas production</b> (fizzing) occurs	Often just a <b>change of state</b>
E.g: wood burning	E.g: ice melting

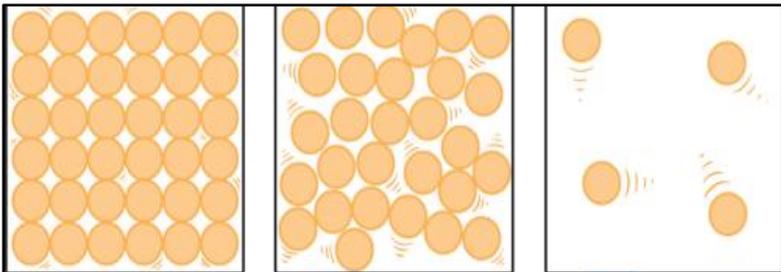


**C. State the equation to calculate density.**

- It is a measure of how much stuff fits in a certain unit of volume.
- Solids are denser than liquids.
- Liquids are denser than gases.
- There is an exception: ice (solid water) is less dense than liquid water.

**C. State the equation to calculate pressure.**

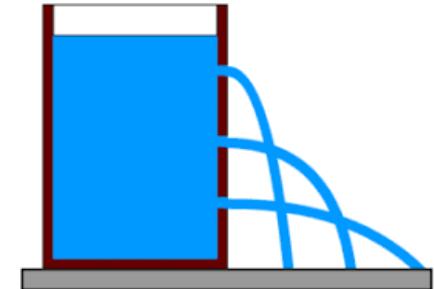
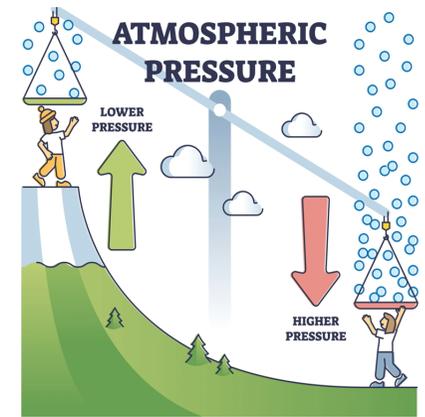
- Pressure is a compound measure of how much force acts on a particular unit of area.
- Pressure increases if the force acting on an area increases.
- Pressure increases if the area a force acts on decreases.



**C. Pressure in fluids:**

**Atmospheric**

**Pressure in a liquid**



**B. Compare chemical changes and physical changes.**

Chemical changes	Physical changes
	Easily <b>reversed</b>
<b>New product</b> formed	
	Often just a <b>change of state</b>
Eg	Eg

# 8.04: Tectonics



## Structure of the Earth

1	<b>crust</b>	(n) the rocky, outer layer of earth made up of rock and minerals
2	<b>mantle</b>	(n) a layer of dense rock found below the crust
3	<b>outer core</b>	(n) a liquid layer of mostly molten metals that lies between the mantle and inner core
4	<b>inner core</b>	(n) a solid ball of metals that lies at the centre of earth
5	<b>continental crust</b>	(n) parts of Earth's crust that are found below landmasses
6	<b>oceanic crust</b>	(n) parts of Earth's crust that are found below oceans

## Theory

1	<b>tectonic plates</b>	(n) individual sections of the Earth's crust and the upper mantle that lies beneath it
2	<b>plate boundary</b>	(n) locations where tectonic plates meet and interact
3	<b>convection currents</b>	(n) the movement of fluids because of temperature differences
4	<b>subduction</b>	(n) the process where one tectonic plate slides beneath another and sinks into the mantle, usually when a denser oceanic plate meets a lighter continental plate
5	<b>continental drift</b>	(n) a theory that proposed earth's continents were once one landmass (supercontinent) that gradually drifted apart over time
6	<b>Pangaea</b>	(n) a supercontinent made up of all the world's land masses before they were broken up into the different continents we recognise today
7	<b>geological timescale</b>	(n) a timeline that shows the history of the Earth, divided into eons, eras, periods and epochs
8	<b>era</b>	(n) a major division of time within an eon, marked by significant changes in Earth's life and landforms

## Volcanoes and Earthquakes

1	<b>shield volcano</b>	(n) a wide, gently sloping volcano formed by runny (low-viscosity) lava that flows easily over long distances, building a shape similar to a warrior's shield
2	<b>composite volcano</b>	(n) a tall, steep-sided volcano made of alternating layers of ash and thick, sticky lava; these volcanoes often produce explosive eruptions
3	<b>lava</b>	(n) molten rock that has erupted onto the Earth's surface from a volcano and begins to cool and solidify
4	<b>magma</b>	(n) molten rock located beneath the Earth's surface in the mantle or crust, which can rise through cracks and erupt as lava
5	<b>geothermal energy</b>	(n) energy produced by heat from beneath the Earth's surface, often used for electricity or heating
6	<b>epicentre</b>	(n) the point on the Earth's surface directly above the focus; it is usually where the shaking is felt most strongly and where the most damage occurs
7	<b>focus</b>	(n) the point inside the Earth's crust where the earthquake starts; it is the place where the rocks first break and release energy in the form of seismic waves
8	<b>seismic waves</b>	(n) waves of energy that travel through the Earth during an earthquake
9	<b>Moment Magnitude Scale</b>	(n) a modern scale used to measure the total energy released by an earthquake (Mw)
10	<b>seismometer</b>	(n) the instrument that detects and measures ground vibrations caused by seismic waves (earthquakes)



# 8.04: Tectonics



## Structure of the Earth

- 1 crust
- 2 mantle
- 3 outer core
- 4 inner core
- 5 continental crust
- 6 oceanic crust

## Theory

- 1 tectonic plates
- 2 plate boundary
- 3 convection currents
- 4 subduction
- 5 continental drift
- 6 Pangaea
- 7 geological timescale
- 8 era

## Volcanoes and Earthquakes

- 1 shield volcano
- 2 composite volcano
- 3 lava
- 4 magma
- 5 geothermal energy
- 6 epicentre
- 7 focus
- 8 seismic waves
- 9 Moment Magnitude Scale
- 10 seismometer

# 8.04: Tectonics



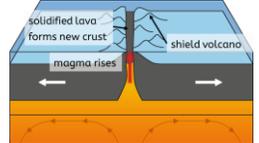
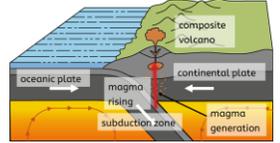
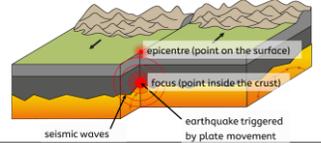
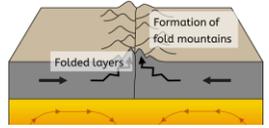
## Living Near Volcanoes

Opportunities	Challenges
fertile soils	volcanic eruptions
geothermal energy	gases
tourism	ash clouds

## Preparing for Earthquakes

	Advantages	Disadvantages
Earthquake resistant buildings	designed to withstand shaking and therefore are less likely to collapse	expensive to build
Earthquake drills	people can react quickly and calmly without panic	people can forget proper actions if drills are not repeated regularly or if they do not feel realistic enough
Training emergency services	response teams can mobilise quickly and respond more efficiently	requires significant time, funding, technology and ongoing training
Land use planning	keeps people away from the most dangerous fault lines or areas	difficult and costly to move communities

## Types of Plate Boundaries

1 <b>constructive</b>	(n) a type of tectonic plate boundary where two plates move apart, allowing magma to rise and create new crust, often forming mid-ocean ridges or rift valleys	
2 <b>destructive</b>	(n) a type of tectonic plate boundary where an oceanic plate is forced beneath a continental plate (subduction); this process destroys crust, generates magma, and often leads to explosive volcanic eruptions	
3 <b>conservative</b>	(n) a type of tectonic boundary where two plates slide past each other horizontally, often causing earthquakes	
4 <b>collision* (additional)</b>	(n) a type of tectonic plate boundary where two continental plates move towards each other and collide	

## Earthquake Case Study: Nepal 2015

**Location:** Asia, landlocked, between India and China, in the Himalayan mountain range.

**Magnitude, focus and epicentre:** Gorkha earthquake 7.8 Mw. Collision boundary between the Indian and Eurasian plates. Focus depth 15-16km (shallow). Epicentre was 80km northwest of Kathmandu, the capital city.

Effects	Responses
8,773 people were killed and over 23,000 injured	ActionAid supported more than 150,000 people and provided food to over 18,500 families and emergency shelter to 7,000 families
600,000 homes were destroyed	The Oxfam International programme helped more than 600,000 people; provided clean water, sanitation, food and shelter
7000 schools were damaged or destroyed	Disasters Emergency Committee (DEC) raised £87 million from 13 charities which was used to rebuild schools with earthquake resistance



# 8.04: Tectonics



## Living Near Volcanoes

Opportunities	Challenges

## Preparing for Earthquakes

	Advantages	Disadvantages
Earthquake resistant buildings		
Earthquake drills		
Training emergency services		
Land use planning		

## Types of Plate Boundaries

1 <b>constructive</b>	
2 <b>destructive</b>	
3 <b>conservative</b>	
4 <b>collision* (additional)</b>	

## Earthquake Case Study: Nepal 2015

<b>Location:</b>	
<b>Magnitude, focus and epicentre:</b>	
Effects	Responses



# Year 8 Unit 4 Age of Exploration

## What we are covering whilst working from home: Age of Exploration

**We will be looking studying:** The exploration and expansion of the Spanish empire – Christopher Columbus and the actions of Spanish conquistadors. (A,B), How the expansion of the empire and its involvement in the slave trade led to developments in British industry and economy (C, D), Factors that led to rapid population growth in Britain between 1750 and 1900 (E)

## B. Key Events that led to Columbus sighting land in the New World

Sponsorship	Contact with Natives	Expedition
<ul style="list-style-type: none"> <li>- King Ferdinand and Queen Isabella of Spain agreed to sponsor Columbus voyage.</li> <li>- This was because they wanted to spread Christianity to newly discovered lands and to give Spain international status.</li> <li>- This meant Columbus was able to hire a crew, 3 ships and a translator.</li> </ul>	<ul style="list-style-type: none"> <li>- Columbus came into contact with peaceful natives and found that they were wearing small items of gold jewellery.</li> <li>- They did not tell him where they got the gold from, however seeing these gold items spurred him on to continue exploring in the hopes of finding their gold reserves.</li> <li>- Columbus took precious metals, exotic food and animals back to Spain – led to further exploration.</li> </ul>	<ul style="list-style-type: none"> <li>- Four weeks without sighting land – men losing moral</li> <li>- Running out of food and water – men wanted to turn back</li> <li>- Columbus convicted them to stay for 4 more days, if they didn't sight land within those days then they would turn back</li> <li>- On the second day a sailor sighted land</li> </ul>

## C. Conquistadors

Balboa	Cortez - Mexico	Pizarro - Peru
<ul style="list-style-type: none"> <li>- Established the first European settlement on the American mainland (Darian)</li> <li>- Tortured the natives in his position as governor of Darian.</li> <li>- Explored and took back pearls for Spain.</li> </ul>	<ul style="list-style-type: none"> <li>- Found stockpiles of gold at Tenochtitlan the Aztec capital city</li> <li>- Got into a disagreement with their leader (Montezuma) and decided to invade the city.</li> <li>- Aztecs were a stone age civilisation so stood no chance</li> <li>- Tenochtitlan destroyed and built over.</li> </ul>	<ul style="list-style-type: none"> <li>- Landed in Peru and brought with him European diseases - ravaged the population.</li> <li>- Defeated an Inca force of 80,000 with 168 men due to the panic and confusion of his cannons and horses.</li> <li>- Inca bought him off with rooms of gold and silver.</li> </ul>

## A. African kingdoms pre-1500

- **Mali Empire**- led by Mansa Musa. Many people went on Hajj to Makkah.
- **Benin Kingdom**- strong, powerful leader (the Oba).
- **Songhai Kingdom**- religious importance (Islam).
- Significant wealth across all these kingdoms.

D.	Can you define these key words?
Transatlantic Slave Trade	The transportation by slave traders of enslaved African people, mainly to the Americas from the 16 <sup>th</sup> to the 19 <sup>th</sup> century.
Empire	a group of countries ruled over by a single monarch or ruling power
Plantation	A large area of farmland on which crops are grown by workers who live on the farm.
Scavenger	Child labourer made to crawl below spinning machines and collect loose cotton

## E. How did Britain benefit from the Slave Trade?

Employment (Workers)	Investment	Trade
<ul style="list-style-type: none"> <li>• The slave trade provided thousands of job e.g. in Liverpool by 1774 there were eight sugar refineries and fifteen rope factories all of which provided plenty of new jobs</li> <li>• These factories made chains, anchors, rope and iron, copper and brass goods for the slave ships</li> </ul>	<ul style="list-style-type: none"> <li>• Money poured into Britain from the slave trade</li> <li>• Banks did well by lending money to traders, but slave merchants also used their profits to set up important banks</li> <li>• The trade was so profitable that it was not just the rich who wanted to be part of it - many tradespeople bought a share in a slave ship.</li> <li>• This money was used to improve and invest in things like education which impacted everyone in Britain.</li> </ul>	<ul style="list-style-type: none"> <li>• In a period that <b>saw Britain industrialise</b>, profits could be made by exporting manufactured British goods to Africa and then further profits made from imported slave products such as sugar, which became very fashionable with the British people.</li> <li>• The slave trade was <b>important in the development of the wider economy</b></li> <li>• The slave trade played an important role in <b>providing British industry with access to raw materials</b> (cotton). This contributed to the increased production of manufactured goods (leading to the Industrial Revolution)</li> </ul>

# Year 8 Unit 4 Age of Exploration

## What we are covering whilst working from home: Age of Exploration

**We will be looking studying:** The exploration and expansion of the Spanish empire – Christopher Columbus and the actions of Spanish conquistadors. (A,B), How the expansion of the empire and its involvement in the slave trade led to developments in British industry and economy (C, D), Factors that led to rapid population growth in Britain between 1750 and 1900 (E)

### B. Key Events that led to Columbus sighting land in the New World

Sponsorship	Contact with Natives	Expedition
-	-	-

### C. Conquistadors

Balboa	Cortez - Mexico	Pizarro - Peru
		-

### A. African kingdoms pre-1500

D.	Can you define these key words?
Transatlantic Slave Trade	
Empire	
Plantation	
Scavenger	

### E. How did Britain benefit from the Slave Trade?

Employment (Workers)	Investment	Trade



		C.	<i>What is the Trimurti?</i>
A. Key words.	D. Hindu Sacred texts	Trimurti	The triad of Gods (meaning "three forms" of God) consisting of Brahma the creator, Vishnu the preserver, and Shiva the destroyer as the three highest manifestations of the one ultimate reality.
B. Hindu understanding of God.	E. Hindu beliefs about the afterlife	Representation of Brahma	The creator shown with 4 heads facing 4 directions- shows that it has created the whole universe and represents the four vedas. Holds rosary (mala) to symbolise that he meditates to recreate the universe after each era. Sits on a lotus flower to symbolise its purity.
C. The meaning of Trimurti	F. The principles of Ahimsa.	Representation of Vishnu	Vishnu means pervading. He is the preserver, protector, guard. His job is to maintain and preserve the order and harmony of the universe. Blue in colour to represent endless bliss, mind and infinity like the sky.
<b>A.</b>	<b>Can you define these key words?</b>	Representation of Shiva	The destroyer, re-creator, transformer. Blue skin to show how he swallowed poison to save the world. Holding a trident which represents the Trimurti and a cobra to represent power over danger.
<b>Key word</b>	<b>Key definition</b>	<b>D. What are the sacred texts in Hindu Dharma?</b>	
Mandir	The Hindu temple (place of worship)	Core and most holy texts	The most holy texts are the four Vedas. The Vedas are Shruti (that which is heard – this means they are believed to be the words of God). Contains the Upanishads – texts about the nature of life and the soul.
Trimurti	The triad of gods consisting of Brahma, Vishnu and Shiva.	Other important texts	The Bhagavad Gita is An epic poem about a battle fought by Prince Arjuna.
Atman	Sanskrit name for soul. It is a deep self hidden in all beings.		In the Bhagavad Gita Krishna advises Arjuna to follow his dharma and not worry about the result.
Samsara	The cycle of birth, death and rebirth to which life in the material world is bound.		The Ramayana is an epic story about the triumph of good over evil. Rama defeats Ravana and rescues Sita.
Pervading	Be present and apparent throughout, everywhere.		The Ramayana is remembered during the Diwali festival (the festival of lights).
Eternal	Everlasting or existing forever; without end.	<b>E. What are the Hindu beliefs about worship and the afterlife?</b>	
Dharma	Duty. There is sanatana (universal) dharma and varnashrama (individual) dharma.	Puja	This means 'worship'. It can be done at a mandir or at a home shrine. It involves offering prasad (blessed sweets or fruits) to the murti (statue/picture of the deity), chanting mantras and doing arti.
Karma	The force produced by a person's actions in one life that influences what happens to them in future lives.	Arti	This is a ritual where diya lamps are lit and waved around a deity (god). It can be done during daily puja or on pilgrimage at the River Ganges (Ganga arti). It represents removing darkness.
Moksha	The release from the cycle of rebirth, the perfect peace, happiness and bliss of union with Brahman	The cycle of Death and rebirth.	Hindus believe that the soul passes through a cycle of successive lives (samsara) and its next incarnation is always dependent on how the previous life was lived (karma). Moksha is the end of the death and rebirth cycle and is the ultimate goal. Hindus are cremated after death to release the soul towards moksha
Ahimsa	Ahimsa means harmlessness or non-violence carried out in words, in thought and in action	How these beliefs affect everyday life	Karma literally means 'action'. Every action has an equal reaction at some point in the future. So Hindus try to conduct good actions in their lives. Namakarana (naming) ceremony is done at 11 days to set the baby on a good spiritual path. After death, cremated ashes may be put in the Ganges river which can purify sins.
Reincarnation	The rebirth of a soul in another body.	<b>F. What is meant by Ahimsa.</b>	
<b>B</b>	<b>How do Hindus understand God?</b>	1	Meaning- Showing respect for all living things and avoidance of violence towards others
Polytheism	This is the belief in or worship of more than one God. However, Hindus believe in One God, Brahman- who can take many forms.	2	Why do Hindus follow the principle of Ahimsa? Hindus believe Ahimsa is a universal vow that is required for self-realisation. It is a necessity for anyone who aims to control their mind.
Concept of Brahman	Brahman is understood as the life-giving force that is the 'origin of all that comes into being'. This power dwells within all living beings but is also beyond the universe. Brahman is often described as 'it' showing there is no gender as God is not a physical being.	3	How is the principle of Ahimsa shown in practice? By being a vegetarian, refusing to fight in war and being a pacifist, protecting the environment
Understanding of God	They believe there is one supreme universal spirit, Brahman. This power dwells in all living beings. God is invisible, formless and pervading.		



What we are learning this term:		C.	What is the Trimurti?
A. Key words.	D. The sacred texts	Trimurti	
B. Hindu understanding of God.	E. Hindu beliefs about the afterlife	Representation of Brahma	
C. The meaning of Trimurti	F. The principles of Ahimsa.	Representation of Vishnu	
		Representation of Shiva	
A.	Can you define these key words?	D.	What are the sacred texts in Hindu Dharma?
Key word	Key definition	Core and most holy texts	
Mandir		Other important texts	
Trimurti			
Atman			
Samsara			
Pervading			
Eternal			
Dharma		E.	What are the Hindu beliefs about worship and the afterlife?
Karma		Puja	
Moksha		Arti	
Ahimsa		The cycle of Death and rebirth.	
Reincarnation		How these beliefs affect a Hindus everyday life	
B.	How do Hindus understand God?	F.	What is meant by Ahimsa.
Polytheism		1	
Concept of Brahman		2	
Understanding of God		3	



What we are learning during these term:	
A.	About Day of the Dead (DOTD) Mexican Holiday.
B.	How to use the Grid Method for accurate drawing of a skull.
C.	DOTD artists: Thaneeya McArdle and Laura Barbosa.
D.	Positive/negative collage.
E.	Papier mâché sugar skulls.

6 Key Words for this project	
1.	Sugar Skull
2.	Mexican Day of the Dead
3.	Symmetry
4.	Armature
5.	Papier Mâché
6.	Outcome

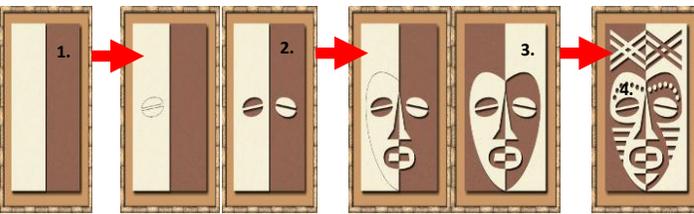


B.	How to use the Grid Method for accurate drawing.
1.	Use a ruler to draw an equally spaced grid onto your image.
2.	Draw an identical grid <b>LIGHTLY</b> onto paper.
3.	Draw in the main <b>outlines</b> of your image, focusing on one square at a time Use a ruler to help you <b>measure</b> the positioning of lines if needed.
4.	Add main details before erasing the grid on the paper.
5.	Add fine <b>details</b> and build in <b>tone</b> .



D.	How to make a positive/negative collage.
Collage is a form of art by cutting and ripping paper to create interesting artworks.	
Steps for making your collage:	
1.	Cut a piece of light A4 piece of paper in half and place one half over the top of the darker A4 piece of paper.
2.	Draw and cut out one facial feature at a time from the light piece of paper and flip it over onto the dark piece of paper. <b>DO NOT cut into the dark piece of paper, only the light. Remove the dark piece of paper from underneath the light piece before cutting.</b>
3.	Draw the shape of the face on the light piece of paper and flip it over to the dark piece of paper, aligned with the rest of the face.
4.	Add additional details on the face and in the background, following the same technique as step 2.
What each tool is used for:	
Cutting mat	To protect the table from damage.
Craft knife	To precisely cut shapes from paper.
Glue stick	To cleanly stick the shapes onto paper.

Keywords for this project in detail:	
Sugar Skull	A colourful and heavily patterned skull. The term is often applied to edible version of a skull, with colour and pattern. They are made and eaten in celebrating ancestors who have died.
Mexican Day of the Dead	Or known as 'Día de Muertos' in Spanish, is a festival held in Mexico from 31 <sup>st</sup> October to 2 <sup>nd</sup> November every year to remember the deceased.
Symmetry	Same on both sides, like a reflection.
Armature	A support and foundations (starting point) for a sculpture.
Papier Mâché	A technique using watered down PVA glue and paper.
Outcome	The final piece of art for a project, which shall be the DOTD papier mâché sugar skull sculptures.



A.	About Day of the Dead, Mexican Holiday.
What?	<ul style="list-style-type: none"> <li>It is a Mexican Christian holiday.</li> <li>It began as a day of thanks for the harvest.</li> <li>The festival lasts 3 days. It Occurs 31<sup>st</sup> October – 2<sup>nd</sup> November every year.</li> </ul>
Why?	It is a festival that celebrates the lives of those who have died.
How?	Different things happen on each day.... DAY 1: <ul style="list-style-type: none"> <li>Relatives put flowers on graveyards or in vases.</li> <li>They create an altar somewhere in the house with pictures of the dead, along with favourite objects. The rest of this day is spent making the favourite foods of the person(s).</li> </ul> DAY 2: <ul style="list-style-type: none"> <li>Families have big celebrations at their homes. They serve all the food they made the day before. They eat candies shaped like skeletons. Friends stop by and people dance and sing.</li> </ul> DAY 3: <ul style="list-style-type: none"> <li>The holiday expands to the town. There are parades and floats and characters in costume.</li> </ul>

C.	DOTD artists: Thaneeya McArdle and Laura Barbosa.
<b>Thaneeya McArdle</b>	<ul style="list-style-type: none"> <li>Inspired by Indian Art.</li> <li>Works with a range of materials including acrylic. paint and various programmes on the computer.</li> <li>Her work shows a creative and personal. interpretation of Day of the Dead and has Indian like qualities.</li> <li>Designs are vibrant, symmetrical and include the use of intricate patterns.</li> </ul>
<b>Laura Barbosa</b>	<ul style="list-style-type: none"> <li>Self-taught painter</li> <li>Produces artwork based on the theme Mexican day of the dead</li> <li>Uses fluorescent and vibrant colours that also have contrasting areas.</li> <li>Her brush strokes are dominant in her work and</li> <li>Her use of patterns are simplistic.</li> </ul>

E.	How to make a papier mâché sugar skull.
Papier mâché is made from newspaper and PVA glue, which hardens solid once dry.	
Steps for making your sugar skull:	
1.	Roll two balls of white tissue, one slightly bigger than the other and tape it to a piece of A4 card. This is the armature, the bare bones of starting the sculpture.
2.	Apply the first layer of papier mâché using newspaper as smoothly as possible using PVA glue.
3.	Mould the facial features with papier mâché using white tissue and PVA glue, building it up to make it three dimensional and as smooth as possible.
4.	Apply a final thin layer of newsprint and PVA papier mâché for a smooth and even finish.
5.	Paint the sugar skull with white emulsion paint and allow to dry. Apply colourful poster paint in the background and use acrylic paint and pens to add the final details.





**What we are learning during these term:**

- A. About Day of the Dead (DOTD) Mexican Holiday.
- B. How to use the Grid Method for accurate drawing of a skull.
- C. DOTD artists: Thaneeya McArdle and Laura Barbosa.
- D. Positive/negative collage.
- E. Papier mâché sugar skulls.

**6 Key Words for this project**

- 1. Sugar Skull
- 2. Mexican Day of the Dead
- 3. Symmetry
- 4. Armature
- 5. Papier Mâché
- 6. Outcome



**B. Explain how to use the Grid Method for accurate drawing.**

- 1
- 2
- 3
- 4
- 5



**D. Explain how to make a positive/negative collage.**

Collage is:

**Steps for making your collage:**

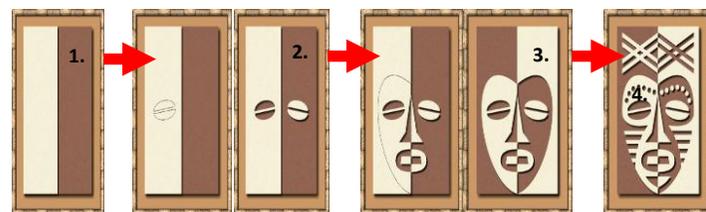
- 1
- 2
- 3
- 4

What each tool is used for:

Cutting mat

Craft knife

Glue stick



**E. Explain how to make a papier mâché sugar skull.**

Papier mâché is:

**Steps for making your sugar skull:**

- 1
- 2
- 3
- 4
- 5



**Keywords for this project in detail:**

Sugar Skull		A colourful and heavily patterned skull. The term is often applied to edible version of a skull, with colour and pattern. They are made and eaten in celebrating ancestors who have died.
Mexican Day of the Dead		Or known as 'Día de Muertos' in Spanish, is a festival held in Mexico from 31 <sup>st</sup> October to 2 <sup>nd</sup> November every year to remember the deceased.
Symmetry		Same on both sides, like a reflection.
Armature		A support and foundations (starting point) for a sculpture.
Papier Mâché		A technique using watered down PVA glue and paper.
Outcome		The final piece of art for a project, which shall be the DOTD papier mâché sugar skull sculptures.

**A. About Day of the Dead, Mexican Holiday.**

**What?**

- It is a Mexican Christian holiday.
- It began as a day of thanks for the harvest.
- The festival lasts 3 days. It Occurs 31<sup>st</sup> October – 2<sup>nd</sup> November every year.

**Why?** It is a festival that celebrates the lives of those who have died.

**How?** Different things happen on each day....

**DAY 1:**

- ❖ Relatives put flowers on graveyards or in vases.
- ❖ They create an altar somewhere in the house with pictures of the dead, along with favourite objects. The rest of this day is spent making the favourite foods of the person(s).

**DAY 2:**

- ❖ Families have big celebrations at their homes. They serve all the food they made the day before. They eat candies shaped like skeletons. Friends stop by and people dance and sing.

**DAY 3:**

- ❖ The holiday expands to the town. There are parades and floats and characters in costume.

**C. DOTD artists: Thaneeya McArdle and Laura Barbosa.**

**Thaneeya McArdle**



- Inspired by Indian Art.
- Works with a range of materials including acrylic paint and various programmes on the computer.
- Her work shows a creative and personal interpretation of Day of the Dead and has Indian like qualities.
- Designs are vibrant, symmetrical and include the use of intricate patterns.

**Laura Barbosa**



- Self-taught painter
- Produces artwork based on the theme Mexican day of the dead
- Uses fluorescent and vibrant colours that also have contrasting areas.
- Her brush strokes are dominant in her work and
- Her use of patterns are simplistic.



**What we are learning this term:**  
**A. Workshop Tools    B. Materials    C. Key words    D. Art Deco Design Movement**

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

C.	Key Words
<b>Research</b>	An investigation of resources and materials to help inspire ideas
<b>Template</b>	A pre-designed structure you can use as a starting point for creating something new. It saves time and keeps things accurate.
<b>component</b>	Part of a whole
<b>symmetrical</b>	balanced or the same on both sides

**B. Materials**

**Timbers** come from **trees**



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

**Softwoods** come in planks and boards

**Manufactured Boards** come from **wood pulp**



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

**Manufactured Boards** come in sheets

**Polymers** come from **crude oil**

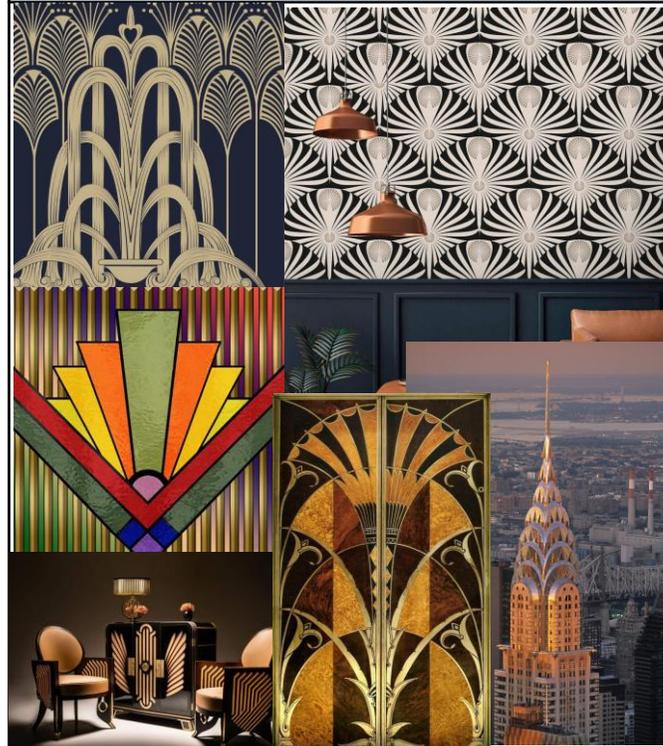


**Acrylic** – which you used as your Memphis shapes – is a **polymer**

**Polymers** come in sheets, graduals and filament

**D. Art Deco Design Movement**

Art Deco was a decorative art and architectural style that originated in France in the 1920s and flourished until the start of World War II. It's characterized by its geometric shapes, luxurious materials, and bold colors, often reflecting a sense of glamour and modernity.



**Key Designer**

Émile-Jacques Ruhlmann



**Key Features:**

- Geometric shapes and patterns,
- Bold colours and contrasting palletes,
- Symmetry and rectangular forms
- Streamlined and elongated forms
- Stepped or Setback forms

**Colours:**

Rich, bold, contrasting colour palletes

Key colours include; red, blue, green often contrasted with black, gold or silver.

**Line Styles:**

Very geometric, straight lines, symmetry, streamlined forms, repetitive patterns



What we are learning this term:  
A. Workshop Tools    B. Materials    C. Key words    D. Art Deco Design Movement

C.	Key Words
Research	
Template	
component	
Symmetrical	

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 \_\_\_\_\_

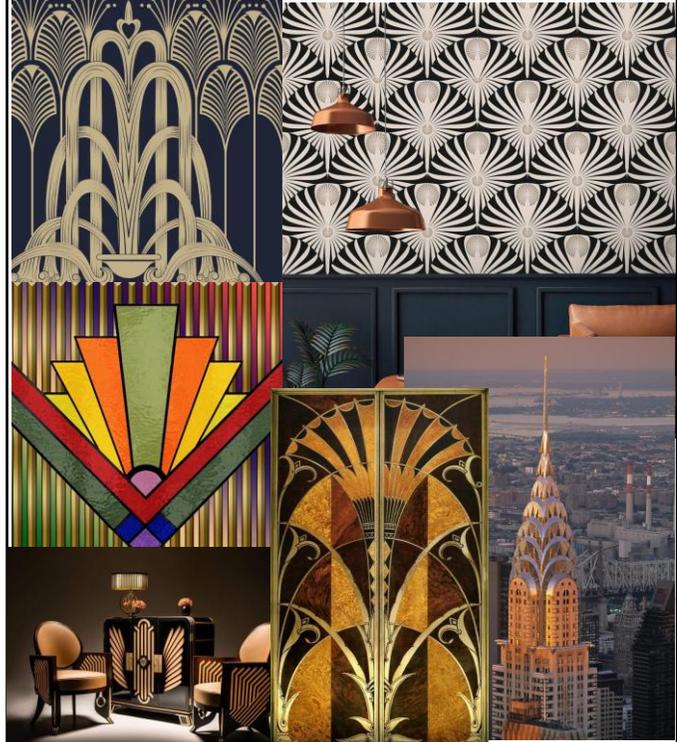


**Acrylic** – which you used as your Memphis shapes – is a **polymer**

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

D. Art Deco Design Movement

Art Deco was a decorative art and architectural style that originated in France in the 1920s and flourished until the start of World War II. It's characterized by its \_\_\_\_\_



Key Designer 

\_\_\_\_\_

**Key Features:**

\_\_\_\_\_ shapes and \_\_\_\_\_,

\_\_\_\_\_ colours and contrasting \_\_\_\_\_,

\_\_\_\_\_ and rectangular forms

\_\_\_\_\_ and elongated forms

Stepped or \_\_\_\_\_

**Colours:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Line Styles:**

\_\_\_\_\_

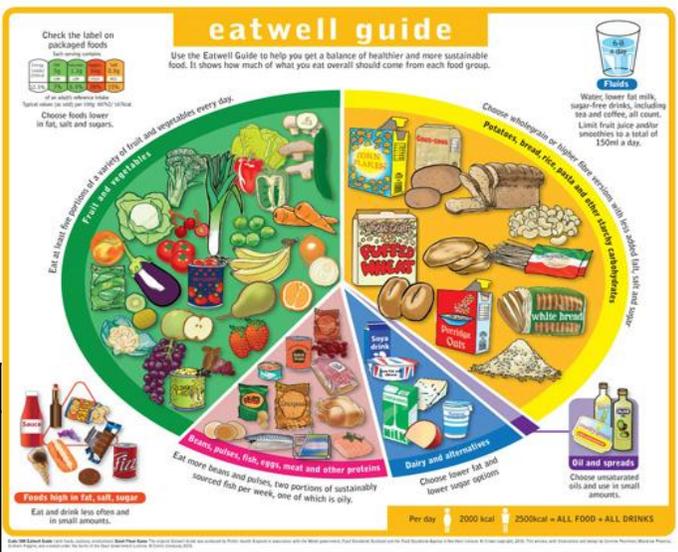
\_\_\_\_\_

What we are learning this term:
<ol style="list-style-type: none"> <li>1. Health, safety and hygiene in the kitchen</li> <li>2. The Eatwell guide and nutrients</li> <li>3. Storing food safely</li> <li>4. Causes and solutions for food and food packaging waste</li> <li>5. Influences on people's food choice</li> <li>6. Practical skills</li> </ol>

B	What are the 5 different sections of the Eatwell plate?
<ol style="list-style-type: none"> <li>1 <b>Fruit and Vegetables</b> – provides minerals, vitamins &amp; fibre</li> <li>2 <b>Carbohydrates</b> – provides carbs and fibre</li> <li>3 <b>Protein</b> - provides protein, omega 3, some vitamins</li> <li>4 <b>Dairy</b> - provides vitamins, minerals (calcium)</li> <li>5 <b>Fats and Oils</b></li> </ol>	

E.	Keywords
Hygiene	A method of keeping yourself and equipment clean
Cross contamination	The transfer of contaminants onto food through either the hands, the equipment or the surfaces. Causes food poisoning.
Spoilage	When food becomes unsafe to eat i.e rot, mould.
Perishable food	Food that spoils if not kept in the fridge or freezer e.g ham.
Fibre	Foods that keep your digestive system healthy and avoid constipation.
Allergen	A substance (sometimes food) that causes an immune system response that can be fatal i.e throat swelling up. Nuts are common allergens.
Intolerance	When the body cannot digest a food and rejects it i.e vomiting, diarrhea. Many people are lactose intolerant (milk intolerance).
Coeliac	When someone cannot eat gluten (wheat), similar to an intolerance but more dangerous.
Vegan	When someone does not eat anything that comes from an animal including eggs, milk, honey.

A.	What are the nutrients required in the diet?
Carbohydrates	To give the body energy e.g bread.
Protein	To grow and repair the body, and to give energy e.g eggs.
Fats	To insulate your body, give you energy, and protect your organs i.e butter.
Vitamins	For general body health and function i.e carrots for eyesight.
Minerals	For general body health and function i.e iron to make blood cells.



c.	Storing food safely
<p><b>Perishable</b> foods should be stored out of the <b>temperature danger zone</b> to reduce the risk of <b>food poisoning</b>. Hot foods should be kept above 63°C and cold foods should be kept below 5°C.</p>	

c.	Food related waste
<p><b>Reasons for wasting food:</b></p> <ul style="list-style-type: none"> <li>• Confusion over best before dates and other date marks</li> <li>• Too much food was cooked</li> <li>• Preparing food incorrectly</li> <li>• Food is spoiled</li> </ul>	<p><b>Reducing Waste:</b></p> <ul style="list-style-type: none"> <li>• Plan meals and correct portion sizes</li> <li>• Correctly storing food and paying attention to use by dates</li> <li>• Use up contents of your fridge before buying more food</li> <li>• Use leftovers in meals the day after or freeze them</li> <li>• Use the whole food e.g. bones for stock</li> <li>• Choose products with recyclable packaging</li> <li>• Bring your own shopping bags</li> <li>• No single use plastic i.e straws</li> <li>• Buy food loose i.e apples</li> </ul>

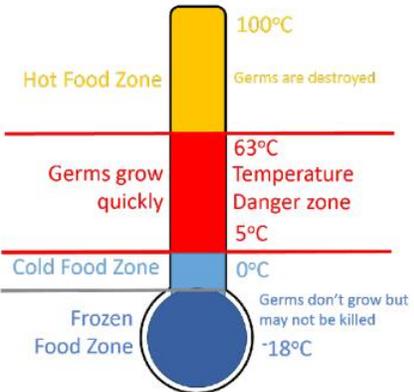


Image: TAFE NSW

c.	Influences on food choice
<ul style="list-style-type: none"> <li>- A person's <b>physical activity level (PAL)</b></li> <li>- Whether they want to <b>eat healthily</b></li> <li>- The <b>cost</b> of the food vs their income</li> <li>- Whether they are influenced by <b>peer pressure</b> or online trends</li> <li>- Their cooking skills (<b>culinary skills</b>)</li> <li>- Their <b>lifestyle</b> and how much time they have to cook/eat</li> <li>- Whether they have rules in their <b>religion, culture or ethical rules</b></li> <li>- Whether the food is <b>available</b> in that season</li> <li>- Whether they <b>enjoy</b> that food</li> <li>- Whether there is a <b>special occasion</b> with special food</li> </ul>	

**What we are learning this term:**

1. Health, safety and hygiene in the kitchen
2. The Eatwell guide and nutrients
3. Storing food safely
4. Causes and solutions for food and food packaging waste
5. Influences on people's food choice
6. Practical skills

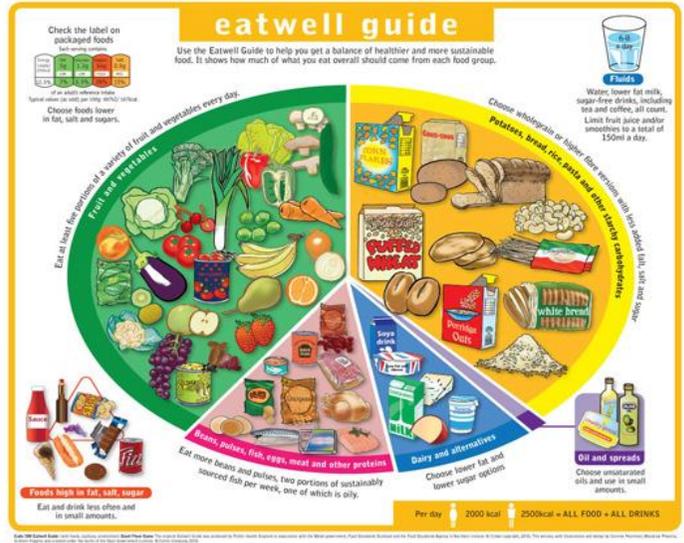
A.	What are the nutrients required in the diet?
Carbohydrates	
Protein	
Fats	
Vitamins	
Minerals	

**c. Storing food safely**

**Perishable** foods should be stored out of the **temperature danger zone** to reduce the risk of **food poisoning**. Hot foods should be kept above 63°C and cold foods should be kept below 5°C.

**B. What are the 5 different sections of the Eatwell plate?**

- 1 **Fruit and Vegetables**
- 2 **Carbohydrates**
- 3 **Protein**
- 4 **Dairy**
- 5 **Fats and Oils**



E.	Keywords
Hygiene	
Cross contamination	
Spoilage	
Perishable food	
Fibre	
Allergen	
Intolerance	
Coeliac	
Vegan	

**c. Food related waste**

Reasons for wasting food:	Reducing Waste:
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**c. Influences on food choice**

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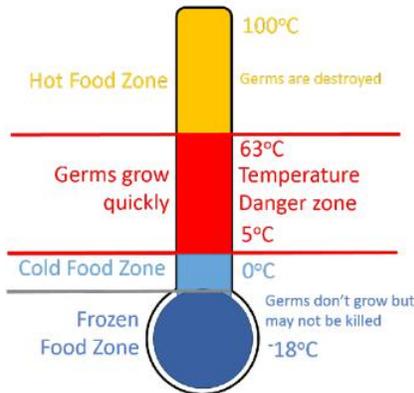


Image: TAFE NSW

# YEAR 8 GRAPHIC COMMUNICATION

## What are we learning this term?

A Stencil design	B Step up card	C Accordion card	D Key words	E Evaluation
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### A | Stencil design

List 3 health and safety rules for using a cutting knife

Three health and safety rules to consider that could be considered when using a craft knife are to hold the knife in the correct way with finger and thumb on base of knife to support the blade, to cut pushing the blade away from you, to tuck tie in and tie hair up.

List the materials you need to create a stencil



### B | Draw the inside of the pop up card

Annotate the different steps, materials you need to make the card

2 pieces of card, both folded in half  
A ruler to measure the cut out  
A pencil to draw the guidelines  
Scissors to make the incisions

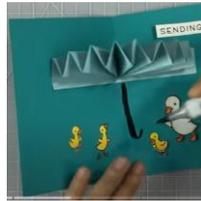


Coloured paper to add to the design  
Cut any incisions

### C | Draw the inside of an accordion card

Annotate the different steps, materials you need to make the card

2 pieces of card, one folded in half  
A ruler to measure the folds  
Second card folded to create the accordion



Coloured paper to add to the design

### D | Key words

Material	The matter from which a thing can be made. E.g. a pop-up card would be made from paper and card
Stencil	a thin sheet of card, plastic, or metal with a pattern or letters cut out of it, used to produce the cut design on the surface below by the application of ink or paint through the holes.
Design	a plan or drawing produced to show the look and function or workings of a building, garment, or other object before it is made

### E | Evaluation

Evaluation: To judge or give an opinion

Designers will evaluate their products to see what works well and what doesn't. This way they can make any improvements on their current designs to ensure a high-quality product.

**When writing an evaluation it is important to include the following three things:**

1. Positives – what works well
2. Negatives – what doesn't work well
3. Possible improvements – how could you make it better?

**For example:**

My tote bag looks great, the colours are bright which appeals to the audience of the festival. However, I have not designed a combined logo. One improvement I could make is to use images and text to create a combined logo.





**What we are learning this term:**

- A. 12 Bar Blues Structure (Chords)
- B. Playing the Keyboard – left hand / right hand
- C. History of Blues Music – Check out this youtube video here!



**C** Playing the Keyboard

- Remember to use your right hand when playing notes in the treble clef

**Chords:**

- C = CEG
- F = FAC
- G = GBD

**C** 12 bar blues Structure

**12 Bar Blues Chord Progression in C**

1	C	2	C	3	C	4	C
5	F	6	F	7	C	8	C
9	G	10	F	11	C	12	G



F	Keywords
<b>Chord</b>	A group of <b>notes played together</b> .
<b>Accompaniment</b>	A musical line that <b>supports the melody</b>
<b>12 Bar Blues</b>	A <b>chord progression</b> used in Blues music using chords 1,4,and 5.
<b>Improvisation</b>	<b>Music that is created spontaneously</b> , or without preparation
<b>Walking Bass</b>	Bass line that <b>moves up and down</b> the scale note by note.
<b>Riff</b>	<b>Similar to ostinato</b> . A repeating chord progression, pattern or melody.
<b>Syncopation</b>	A placement of rhythmic stresses/accents where they wouldn't normally occur. <b>Off-beat sounding</b> .
<b>Blues Music</b>	A <b>musical style originating in the US</b> at the end of the 19 <sup>th</sup> century, mostly performed by Black Americans.
<b>Blues Scale</b>	A <b>six-note scale</b> based on the major/minor pentatonic

**E** What are the music symbols?

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** How to read music – treble clef and Bass Clef

**TREBLE LINES: E G B D F**      **TREBLE SPACES: F A C E**

**BASS LINES: G B D F A**      **BASS SPACES: A C E G**

**G** Describing music – MAD T SHIRT

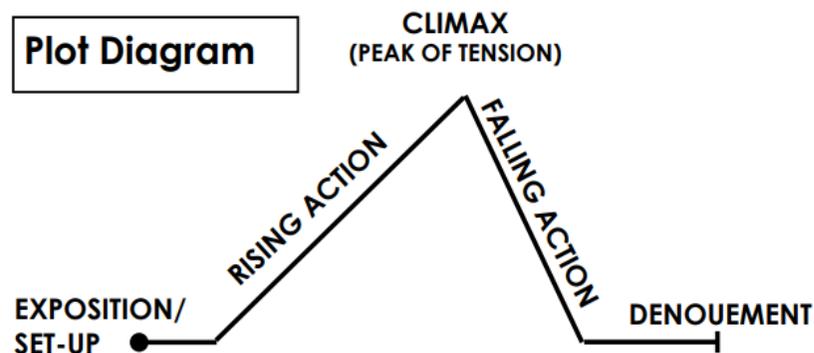
M	A	D	T	S	H	I	R	T
<b>Melody</b>	<b>Articulation</b>	<b>Dynamics</b>	<b>Texture</b>	<b>Structure</b>	<b>Harmony/Tonality</b>	<b>Instruments</b>	<b>Rhythm</b>	<b>Tempo</b>
The tune of the song/music	How notes are played	Loud/quiet and any other volume changes	Layers of sound / how they fit together	The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



## Drama YR8 Tension

Keywords	
<b>Dramatic Tension</b>	Keeping an audience wondering; not knowing something they want to know
<b>Suspense</b>	A synonym for Dramatic Tension
<b>Mime</b>	Movement/copying physical action
<b>Slow-motion</b>	The slowing down of real-life speed to highlight a key moment
<b>Atmosphere</b>	The mood or feeling of a narrative
<b>Cliff-hanger</b>	Halting the action at the peak of tension
<b>Exposition</b>	Establishing information and details about characters, background and plot
<b>Rising Action</b>	Events, actions and problems created for the characters
<b>Climax (Peak of Tension)</b>	The highest point of suspense, where danger, uncertainty etc is at its greatest
<b>Falling Action</b>	After the Peak, the immediate events that affect the characters
<b>Denouement</b>	The longer term impact/consequences on the remaining characters suggested or shown
<b>Pace</b>	The speed at which the story is delivered, or with which something happens or changes
<b>Tone</b>	A quality in the voice which expresses the speaker's feelings or thoughts
<b>Volume</b>	The level of sound produced
<b>Pause/silence</b>	A short period in which something such as a sound or an activity is stopped before starting again
<b>Resonance / Clarity of voice</b>	The quality of being loud and clear
<b>Distinction between characters</b>	The use of different voices for different characters
<b>Pitch</b>	The relative highness or lowness of a tone as perceived by the ear

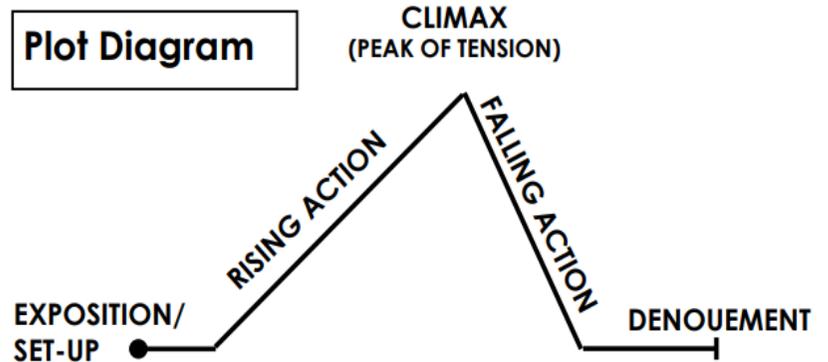
### Plot Diagram



Genre	Definition	Conventions - Key Features
<b>Science Fiction</b>	Stories that make imaginative use of scientific knowledge. Often show HUMANITY at its best and worst, e.g. corrupt governments using technology to trick the people; space battles to free enslaved people from terrible dictators.	<ul style="list-style-type: none"> <li>•These stories are often set in the future.</li> <li>•They use the science and discoveries that we have made to imagine other things that may or may not be possible.</li> <li>•Futuristic technology is often featured.</li> <li>•They might be set in space or on a 'Future Earth'.</li> </ul>
<b>Gothic Horror</b>	Gothic horror is a genre or mode of literature and film that combines fiction and horror, death, and at times romance. The effect of Gothic fiction feeds on a pleasing sort of terror.  Examples are: Dracula, Frankenstein, Jekyll and Hyde, The Woman in Black	<ul style="list-style-type: none"> <li>•Gothic plots often surround a family mystery, curse, ancient prophecies or revenge. Concepts of "inherited" curses or terrible family mysteries are common</li> <li>•Often, the protagonist must overcome the ancestral curse to restore the world to order.</li> <li>•Sometimes depicts a fallen society -- one that has succumbed to some kind of evil or temptation -- that must be brought back to the light.</li> </ul>

## Drama YR8 Tension

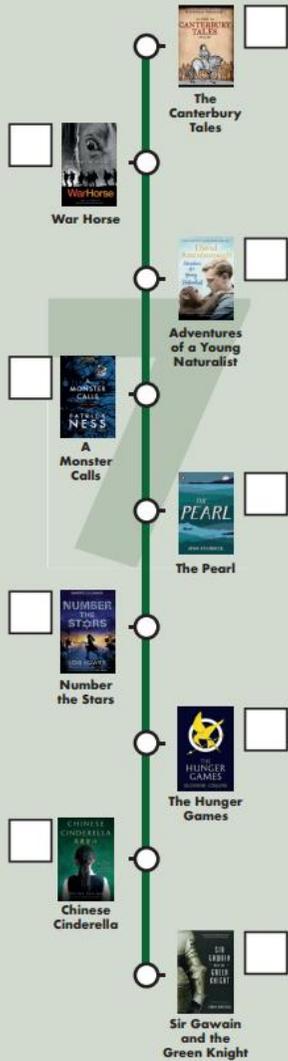
Keywords	
Dramatic Tension	
Suspense	
Mime	
Slow-motion	
Atmosphere	
Cliff-hanger	
Exposition	
Rising Action	
Climax (Peak of Tension)	
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Genre	Definition	Conventions - Key Features
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# SWINDON ACADEMY READING CANON

## Year 7



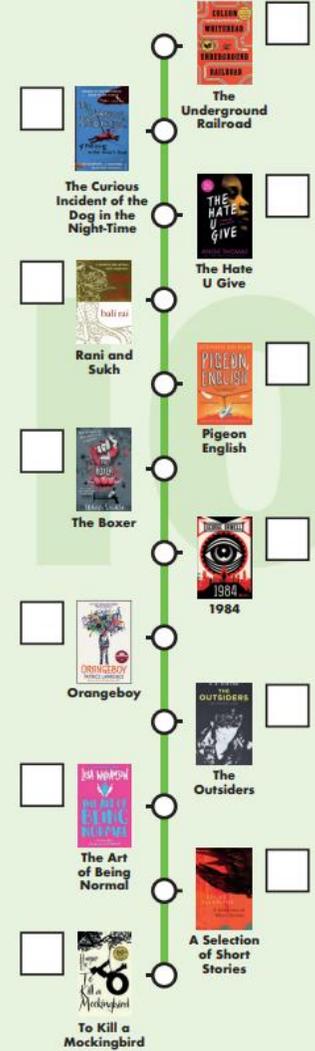
## Year 8



## Year 9



## Year 10



#ReadingisPower