

100% book - Year 8 Grammar

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



Term 4

Swindon Academy 2024-25

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?

- Particle model
- Changing state
- Mixtures
- Separating techniques

Key Words for this term:

- Matter
- Particles
- Diffusion
- Making
- Freezing
- Condensation
- Evaporation
- Solids
- Solvent
- Solution

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
<ul style="list-style-type: none"> • Particles are packed closely together in a regular pattern. • Particles vibrate in fixed positions. 	<ul style="list-style-type: none"> • Particles are arranged randomly but are still touching each other. • Particles can slide past each other and move around. 	<ul style="list-style-type: none"> • Particles are far apart and are arranged randomly. • Particles carry a lot of energy and they move in all directions in a high speed.

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. 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.

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!

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.

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 image 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 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 image shows a student's prep book. The date '29th May 2020' and the title 'Particle theory' are written in the top right corner. The knowledge organiser template is partially filled out, showing sections for 'What is particle theory?' and 'Describe the arrangement and movement of particles in the three states of matter.' 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 image shows a student's prep book with handwritten notes. The date '29th May 2020' is written at the top. Below it, the title 'Properties of the states of matter' is written. The notes define the three 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 image shows a student's prep book with the handwritten notes from Step 3 repeated three times. Each repetition includes the definition of solid, liquid, and gas states of matter.

Step 5

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

The image shows a student's prep book with the quizzable Knowledge Organiser template. The student has written 'Self quizzing' in the 'What are the different changes of state?' section and 'Arrangement/movement of matter' in the 'Describe the arrangement and movement of particles in the three states of matter.' section. 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 image shows a student's prep book with the handwritten notes from Step 3. The notes are now marked with checkmarks, indicating that the student has checked their answers and is confident. The date '29th May 2020' and the title 'Particle theory' are also present.

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

'The Tempest' GS Knowledge Organiser

Plot Summary		Vocabulary: Keywords
<p>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.</p>	<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>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.</p>	<p>imperialism - a policy of extending a country's power and influence through colonization, use of military force, or other means.</p>
<p>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.</p>	<p>Terminology: Keywords</p> <p>comedy – a play that is funny. It has a happy ending.</p>	<p>usurp – to take control of someone else's power when you do not have the right to. Someone who usurps is called a usurper.</p>
<p>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.</p>	<p>soliloquy – when a character is speaking alone on stage to himself/herself or to the audience.</p>	<p>tempest – a violent storm.</p>
<p>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.</p>	<p>sibilance – figure of speech in which the letter 'S' is repeated. This often creates a hissing sound.</p>	<p>treason – a crime that harms your country or government. Someone who commits treason is a traitor.</p>
<p>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.</p>	Characters	<p>callous – when someone is cruel and does not care about other people.</p>
	<p>Alonso – King of Naples</p>	<p>pathos – a situation that makes us feel sympathy or sorrow.</p>
	<p>Sebastian – Alonso's brother</p>	<p>exploitation – taking advantage of someone for your own benefit</p>
	<p>Ferdinand – Alonso's son</p>	<p>nurture – to encourage or support the development of someone or something.</p>
	<p>Antonio – Prospero's brother.</p>	<p>dual nature – having two sides.</p>
	<p>Antonio stole Prospero's title as Duke of Milan.</p>	
	<p>Gonzalo – the old counsellor to the King of Naples</p>	Background Information
	<p>Trinculo – a jester</p>	<p>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.</p>
	<p>Stephano – a drunken butler</p>	<p>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.</p>
	<p>Prospero – the rightful Duke of Milan</p>	<p>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.</p>
	<p>Miranda – Prospero's daughter</p>	
	<p>Ariel – an airy spirit; a slave of Prospero's who earns his freedom</p>	
	<p>Caliban – a savage and deformed slave of Prospero's; a native of the island</p>	

'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.



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

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

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

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

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

A	Making blood cells – what part of the bone makes blood cells?
Bone marrow produces: <ul style="list-style-type: none"> 1. Red blood cells (which transport O₂ and CO₂) 2. White blood cells (some of which fight disease) 3. Platelets (which cause blood clotting e.g. when we cut ourselves) 	
Why are bones hollow?	
Long bones in the body are hollow – in the middle of the bone is a marrow cavity . The cavity contains bone marrow , from which blood is produced.	

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

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

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

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

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

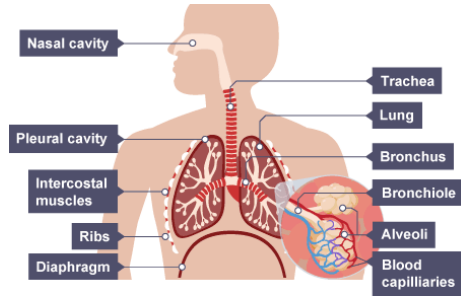
A.	What is Osteoporosis
Osteoporosis is a condition in which someone loses bone density, making their bones fragile so they are more likely to break bones.	
What are rickets?	
Rickets can be caused by a deficiency of calcium or vitamin D . Rickets causes bone pain, and soft bones which can deform.	

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



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?

Vital capacity	The volume of air you can breathe out after breathing in as much as you can.
Residual volume	Volume of air left in the lungs after breathing out as much as you can.
Tidal volume	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?

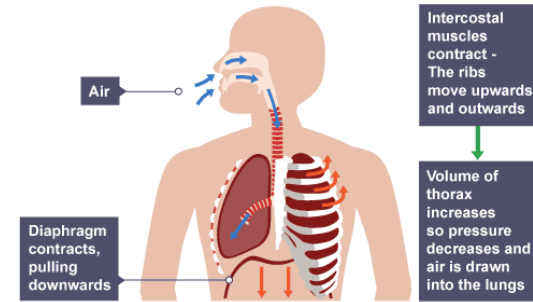
$$\text{Lung capacity} = \text{vital capacity} + \text{residual volume}$$

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?

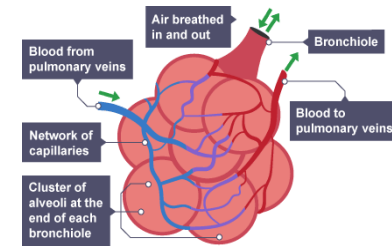
1. Destroys **cilia** in the airways so they are less able to sweep **mucus** containing pathogens out of the lungs, leading to **smoker's cough**
2. Irritates the **bronchi**, causing **bronchitis**
3. Destroys alveoli, reducing the surface area for gas exchange and causing **emphysema**
4. Cigarette 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 benefits come from regular exercise?
Regular training has the following effects:	
<ul style="list-style-type: none"> Heart muscles are strengthened Cardiac output increases Resting heart rate is lower (fewer beats needed because heart muscles are stronger) Recovery (returning to resting heart rate) happens more quickly after exercise 	
Why do you breathe quicker during exercise?	
More oxygen is required as body is working harder.	

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

D.	What is Respiration?	
Respiration is a chemical reaction that releases energy from food molecules.		
Why is respiration important?		
An organism can use the energy produced by respiration in several different ways including:		
<ol style="list-style-type: none"> To build large molecules from smaller ones (grow) To move To keep warm 		
What are the 2 types of respiration?		
	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: glucose → lactic acid In plants/yeast: glucose → ethanol and carbon dioxide
Which produces the most energy?	Aerobic respiration produces more energy	Anaerobic produces less energy

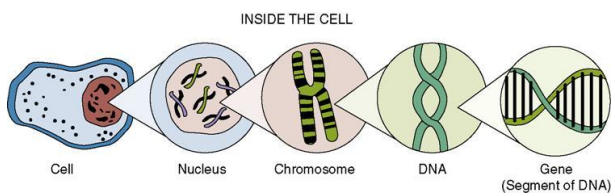
D.	What is fermentation?
When plants/yeast respire anaerobically, they produce ethanol and carbon dioxide.	
What are the uses of fermentation?	
It is useful as the ethanol can be used to make alcoholic drinks and the carbon dioxide is what makes bread rise.	

E.	Who discovered DNA?
Rosalind Franklin and Maurice Wilkins 1952	
Using x-ray photography, Franklin and Wilkins produced high-resolution photographs of DNA fibres. They used these to deduce that DNA had a helical structure and that the outside of the molecule contained phosphates	
James Watson and Francis Crick 1953	
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.	

D.	What happens when Lactic Acid builds up in muscles from anaerobic respiration?
If lactic acid builds up in muscle cells it causes fatigue.	
How does the body get rid of lactic acid?	
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.	

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

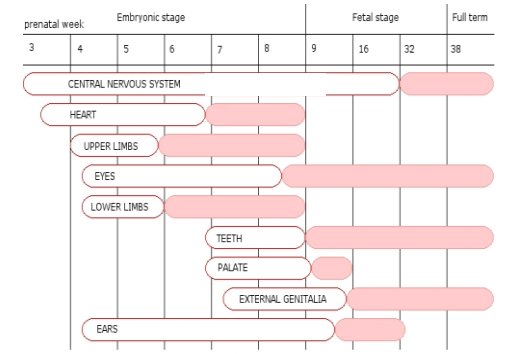


E.	What makes up DNA?
	<ul style="list-style-type: none"> DNA has a double helix structure with two sugar-phosphate backbones wound around each other. Pairs of complementary bases connect the two backbones (strands)
	What are the 4 bases and how are they paired?
	<ul style="list-style-type: none"> The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

E.	What are the different types of reproduction and how are they different?									
	<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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How many parents?	2 parents	1 parent								
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E.	What is Heredity?
	Heredity is the process by which genetic information is transmitted from one generation to the next
	What is a Genetic Disease?
	Genetic diseases are passed on from parents to children through their genetic material. Children will be born with the disease

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



E.	How can an expectant mother's behaviour affect her unborn baby?								
	The mother's behaviour during gestation can affect the development of the unborn baby because of the transfer of substances across the placenta.								
	What problems can be caused by different drugs during gestation?								
	<table border="1"> <thead> <tr> <th>Cigarettes</th> <th>Alcohol</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> Reduces the volume of oxygen which reaches the baby's cells, affecting their ability to release energy. (Nicotine narrows blood vessels, Carbon monoxide in smoke inhibits red blood cells from carrying oxygen) Increases the risk of premature (early) birth, stillbirth (death of the foetus), cot death (death of the new-born) and low birth weight caused by growth impairment Children whose mothers smoked during gestation are more likely to experience: <ul style="list-style-type: none"> learning disorders behavioural problems low IQ asthma </td> <td> <ul style="list-style-type: none"> Physical defects e.g. small head size, low birth weight Cerebral palsy (movement and coordination problems) Behavioural differences including autistic traits and attention-deficit hyperactivity disorder (ADHD) Problems with organs including the liver, kidneys, and heart Learning difficulties </td> </tr> <tr> <td></td> <td>Other illegal drugs</td> </tr> <tr> <td></td> <td>Neonatal abstinence syndrome occurs when a mother has taken a drug which causes dependency, during gestation. The baby is born with a dependency on the drug.</td> </tr> </tbody> </table>	Cigarettes	Alcohol	<ul style="list-style-type: none"> Reduces the volume of oxygen which reaches the baby's cells, affecting their ability to release energy. (Nicotine narrows blood vessels, Carbon monoxide in smoke inhibits red blood cells from carrying oxygen) Increases the risk of premature (early) birth, stillbirth (death of the foetus), cot death (death of the new-born) and low birth weight caused by growth impairment Children whose mothers smoked during gestation are more likely to experience: <ul style="list-style-type: none"> learning disorders behavioural problems low IQ asthma 	<ul style="list-style-type: none"> Physical defects e.g. small head size, low birth weight Cerebral palsy (movement and coordination problems) Behavioural differences including autistic traits and attention-deficit hyperactivity disorder (ADHD) Problems with organs including the liver, kidneys, and heart Learning difficulties 		Other illegal drugs		Neonatal abstinence syndrome occurs when a mother has taken a drug which causes dependency , during gestation. The baby is born with a dependency on the drug.
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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 5. Reactivity 2. Product 6. Properties 3. Salts 7. Extraction 4. Displacement 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"> • They are a quick way of showing a reaction. • They are universal – all languages recognise them • You can see how many of each molecule is used in the reaction if you balance it 	

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>Sodium + Water → Sodium Hydroxide + Hydrogen $2Na + 2H_2O \rightarrow 2NaOH + H_2$</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 salt and hydrogen gas are made.</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>Sodium + Hydrochloric acid → Sodium Chloride + Hydrogen $2Na + 2HCl \rightarrow 2NaCl + H_2$</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 most reactive 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 least reactive Pt</p>



What we are learning this term:

- Symbol equations
- Metals and non-metals
- Reactivity of metals
- Displacement reactions

8 Key Words for this term

1. Reactant	5. Reactivity
2. Product	6. Properties
3. Salts	7. Extraction
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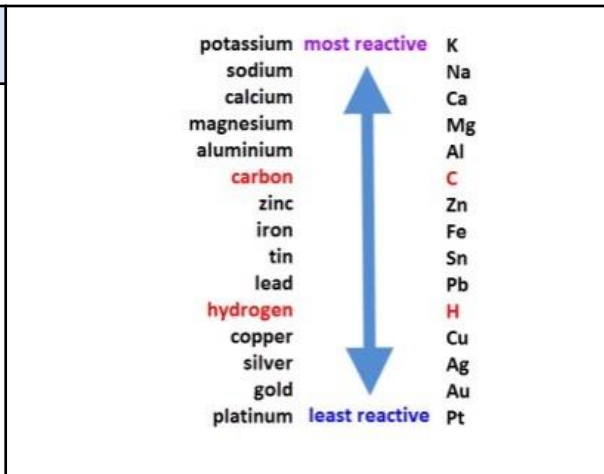
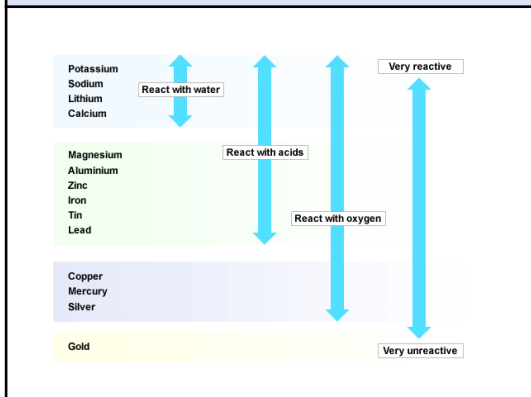
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What is a salt?

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

C. What is the reactivity series?

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





D,	What is a displacement reaction?
A more reactive metal will displace a less reactive metal from its compounds	
What will happen when Magnesium metal is added to copper sulphate solution?	
Magnesium will displace copper to form Magnesium Sulphate and Copper	
What is the word and symbol equation for this reaction?	
Copper Sulphate + Magnesium → Magnesium Sulphate + Copper $CuSO_4 + Mg \rightarrow MgSO_4 + Cu$	
Why do displacement reactions happen?	
A more reactive metal is more stable as an ion	

D,	What is Extraction by Carbon?
Carbon can displace elements that are below it from their compounds. This means they can be used to extract some metals from their ores.	
Which metals is extraction by carbon used to extract?	
Carbon can be used to extract metals from zinc downwards (Zinc, iron, tin, lead, copper)	
What is an example word and symbol equation?	
<ul style="list-style-type: none"> Example: Lead Oxide + Carbon → Lead + Carbon Dioxide $PbO_2 + C \rightarrow Pb + CO_2$ This reaction is an example of a reduction reaction as the lead has lost oxygen.	
What is a reduction reaction?	
When an atom loses an oxygen atom	
What are the downsides of using this method?	
High temperatures needed. Very expensive. Production of CO ₂ .	

D,	What is an ore?									
Most metals are found in compounds in the Earth's crust. We call these compounds ores . You usually dig them up and extract the metal.										
What is a Native metal?										
A metal which does not need to be extracted from its compound.										
D,	How are some metals extracted?									
Metals are either found in the ground as a native metal, extracted by carbon, or extracted by electrolysis										
<table style="width: 100%; border: none;"> <tr> <td style="width: 30%; vertical-align: top;"> Potassium Sodium Aluminium Carbon Zinc Iron Copper Silver Gold </td> <td style="width: 10%; vertical-align: middle; font-size: 2em;">}</td> <td style="vertical-align: middle;"> Extracted from their ores by electrolysis (using electricity) </td> </tr> <tr> <td style="vertical-align: middle;">}</td> <td style="vertical-align: middle;">}</td> <td style="vertical-align: middle;"> Extracted from their ores by reduction by carbon </td> </tr> <tr> <td style="vertical-align: middle;">}</td> <td style="vertical-align: middle;">}</td> <td style="vertical-align: middle;"> No extraction necessary – found pure in the ground. </td> </tr> </table>		Potassium Sodium Aluminium Carbon Zinc Iron Copper Silver Gold	}	Extracted from their ores by electrolysis (using electricity)	}	}	Extracted from their ores by reduction by carbon	}	}	No extraction necessary – found pure in the ground.
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D,	What is electrolysis?
The breaking down of a substance using electricity	
Which metals are extracted by electrolysis	
Metals more reactive than carbon – potassium, sodium, aluminium	
What are the downsides of this method?	
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?

What is the word and symbol equation for this reaction?

Why do displacement reactions happen?

D, What is Extraction by Carbon?

Which metals is extraction by carbon used to extract?

What is an example word and symbol equation?

What is a reduction reaction?

What are the downsides of using this method?

D, What is an ore?

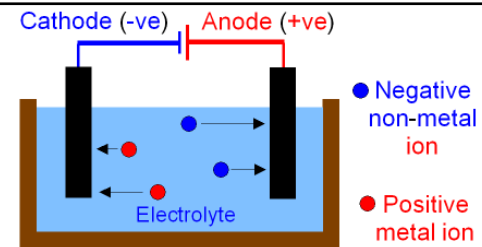
What is a Native metal?

D, How are some metals extracted?

D, What is electrolysis?

Which metals are extracted by electrolysis

What are the downsides of this method?





What we are learning this term:

- A. Types of reaction
 B. Catalysts
 C. Energy in Reactions

5 Key Words for this term

1. Decomposition
 2. Oxidation
 3. Exothermic
 4. Endothermic
 5. Displacement

A. What is a chemical reaction?

The breaking of bonds in reactants and making of bonds to form products. A new substance is formed

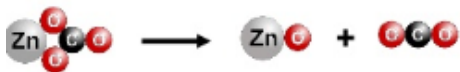
A. What is Thermal Decomposition?

Thermal decomposition is a chemical reaction where heat is used to break down a substance.

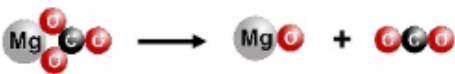
Does a thermal decomposition reaction give out energy, or take in energy from its surroundings?

Thermal decomposition is an endothermic reaction - it takes in more energy than it gives out

Examples: Zinc Carbonate → Zinc Oxide + Carbon dioxide
 $ZnCO_3 \rightarrow ZnO + CO_2$



Magnesium carbonate → Magnesium Oxide + Carbon dioxide
 $MgCO_3 \rightarrow MgO + CO_2$



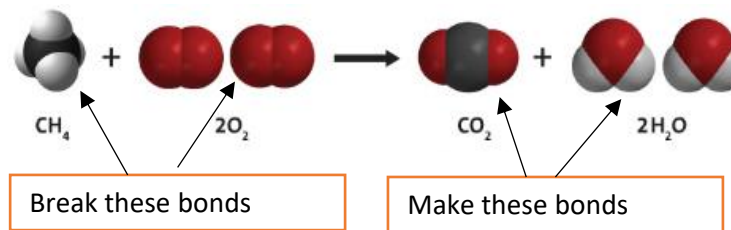
A. What is Combustion?

A chemical reaction where a fuel reacts with oxygen to make carbon dioxide and water

Does a combustion reaction give out energy, or take in energy from its surroundings?

Combustion is an exothermic reaction- it gives energy into the surroundings. It gives out more energy than it takes in.

Examples: methane + oxygen → carbon dioxide + water
 $CH_4 + 2O_2 \rightarrow CO_2 + 2H_2O$



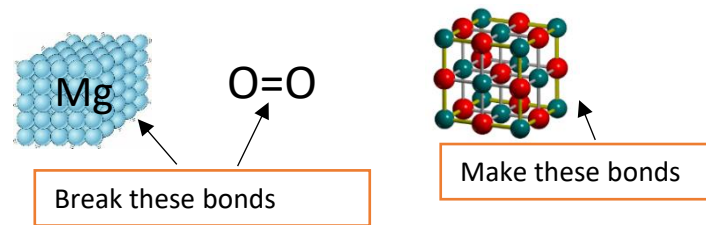
A. What is oxidation?

Oxidation is a chemical reaction where an element or compound reacts with oxygen

Does an oxidation reaction give out energy, or take in energy from its surroundings?

Oxidation reactions are mostly exothermic reactions- giving energy to the surrounding. It gives out more energy than it takes in

Examples: Magnesium + Oxygen → Magnesium Oxide
 $Mg + O_2 \rightarrow MgO$



What we are learning this term:

- A. Types of reaction
- B. Catalysts
- C. Energy in Reactions

5 Key Words for this term

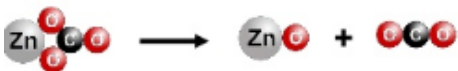
- 1.
- 2.
- 3.
- 4.
- 5.

A. What is a chemical reaction?

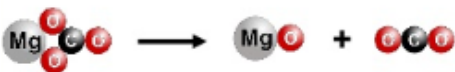
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Examples: Zinc Carbonate →



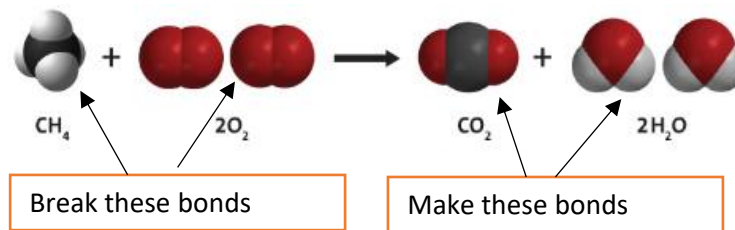
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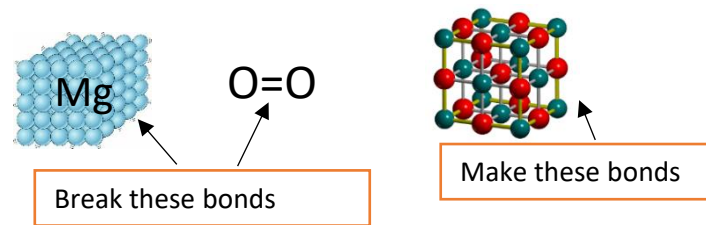
Examples: methane + oxygen →



A. What is oxidation?

Does an oxidation reaction give out energy, or take in energy from its surroundings?

Examples: Magnesium + Oxygen →





B. What 2 things do you need for a successful reaction to happen?

1. Particles to collide
2. Sufficient energy for a reaction to occur (activation energy)

B. What is the rate of a reaction?

The rate of reaction is the speed at which a chemical reaction is happening. This can vary hugely from reaction to reaction.

- | | |
|---|--|
| What factors can affect rate of reaction? | <ol style="list-style-type: none"> 1.Changing temperature 2.Changing the concentration of a solution 3.Changing the surface area of a solid 4. Adding a catalyst |
|---|--|

B. What is a catalyst?

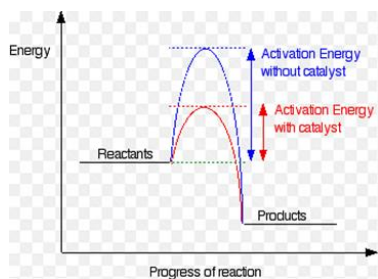
A catalyst is a substance which speeds up a chemical reaction without being used up.

- They are specific to each reaction

B. How do catalysts work?

- Catalysts speeds up a reaction by:
- Lowering the activation energy
 - More particles will now have sufficient energy to react

How can you show this on a reaction profile?



B. Why aren't catalysts written in the chemical equation of a reaction?

Catalysts are not included in a chemical equation as they are not used up in a chemical reaction.

C. What is Activation energy?

The minimum energy required for a successful collision between reactants

What is a reaction profile?

A graph which show the energies of the reactants and products at different stages of the chemical reaction

C. What are exothermic and endothermic reactions?

	Exothermic reactions	Endothermic Reactions
What are they?	A reaction in which energy is transferred from the reacting substances to their surroundings	A reaction in which energy is transferred to the reacting substances from their surroundings.
Do things warm up or cool down?	Temperature increases : Energy is transferred to surroundings	Temperature decreases : Energy is absorbed from the surroundings
Bond making or breaking?	Bond making is an exothermic process	Bond breaking is an endothermic process
Reaction profile		



B. What 2 things do you need for a successful reaction to happen?

- 1.
- 2.

B. What is the rate of a reaction?

What factors can affect rate of reaction?

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

B. What is a catalyst?

B. How do catalysts work?

How can you show this on a reaction profile?

B. Why aren't catalysts written in the chemical equation of a reaction?

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C. What are exothermic and endothermic reactions?

	Exothermic reactions	Endothermic Reactions
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What are they?		

Do things warm up or cool down?		
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Bond making or breaking?		
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Reaction profile		
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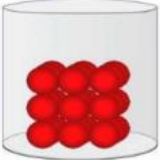
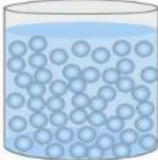
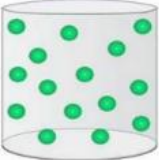
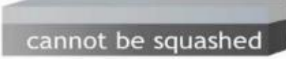
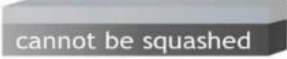
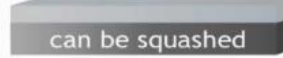
What we are learning this term:

- 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

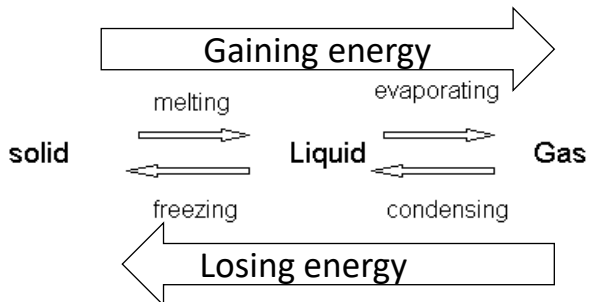
A. Describe the properties of the three states of matter

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?

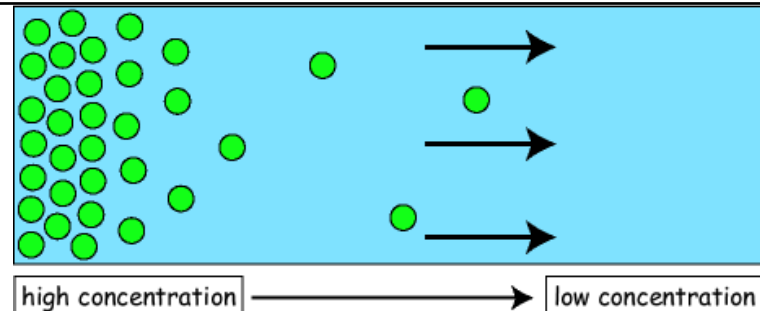
Melting	Change of state from solid to liquid
Freezing	Change of state from liquid to solid
Evaporation	Change of state from liquid to gas
Condensation	Change of state from gas to liquid



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:

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

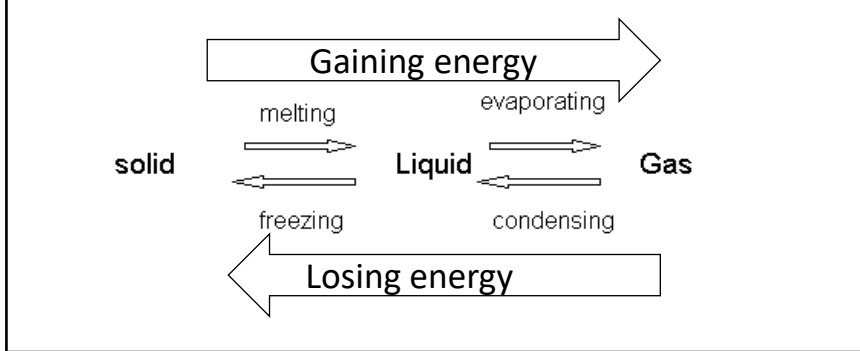
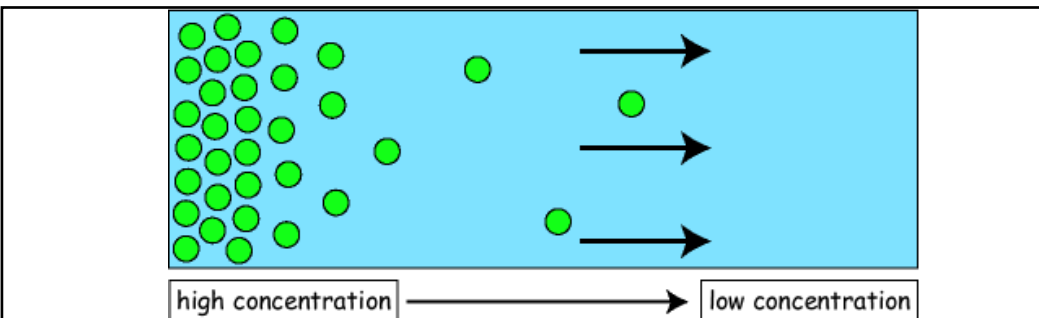
2 Key Words for this term:

- 1.
- 2.

A.	Describe the properties of the three states of matter
	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 10px; text-align: center; width: 30%;"> <p style="color: red; font-size: 24px; margin: 0;">solid</p> </div> <div style="border: 1px solid black; padding: 10px; text-align: center; width: 30%;"> <p style="color: blue; font-size: 24px; margin: 0;">liquid</p> </div> <div style="border: 1px solid black; padding: 10px; text-align: center; width: 30%;"> <p style="color: green; font-size: 24px; margin: 0;">gas</p> </div> </div>

A.	What are the different changes of state?
Melting	
Freezing	
Evaporation	
Condensation	

B. What is Brownian Motion?



B. What is diffusion?

B. What is the equation to calculate concentration?

C. State the equation to calculate density.

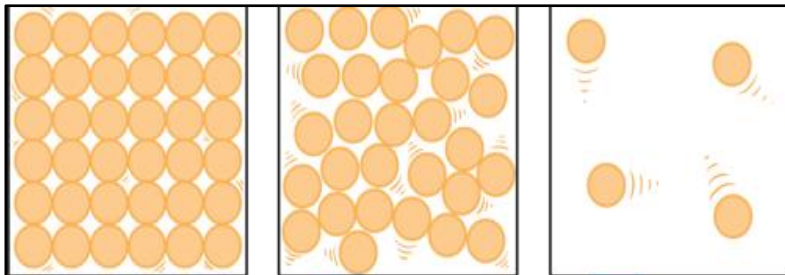
$$\text{Density} = \frac{\text{mass}}{\text{volume}}$$

- 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.

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

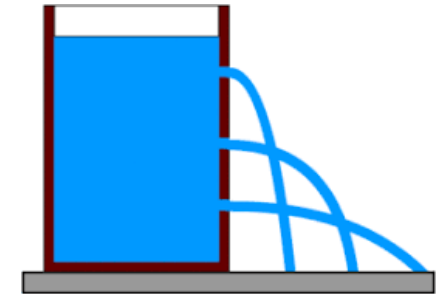
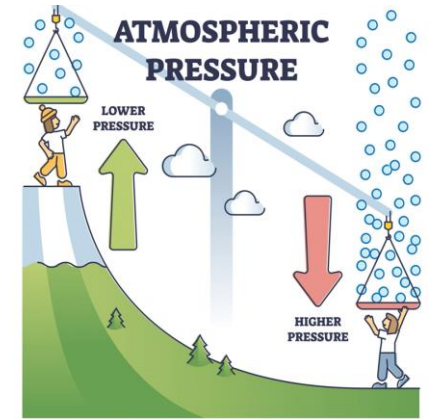
- Pressure is a compound measure of how much force acts on a particular unit of area.
- Pressure increases if the force acting on an area increases.
- Pressure increases if the area a force acts on decreases.



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 reversed
New product formed	No new product formed
Often heat/light/sound/gas production (fizzing) occurs	Often just a change of state
E.g: wood burning	E.g: ice melting

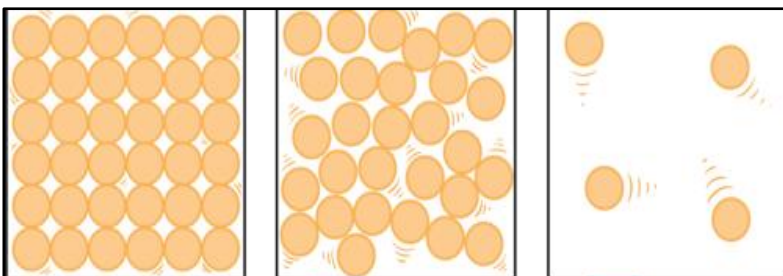


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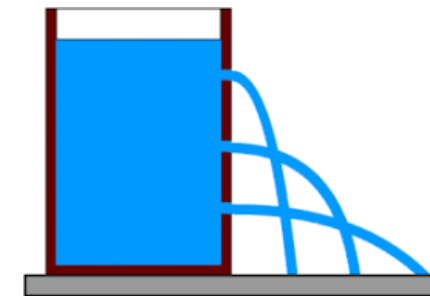
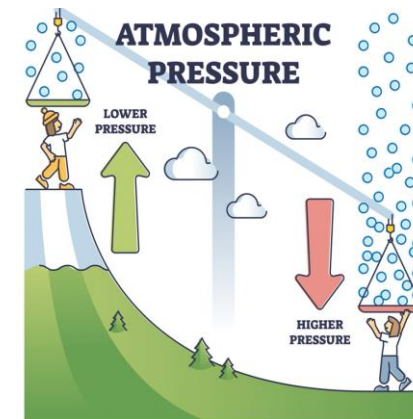
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C. Pressure in fluids:

Atmospheric

Pressure in a liquid



B. Compare chemical changes and physical changes.

Chemical changes	Physical changes
	Easily reversed
New product formed	
	Often just a change of state
Eg	Eg



Geography Knowledge Organiser: Year 8 Term 4 Weather and Climate



Background:

- Weather and climate are different, however both are influenced, measured and described by a few factors. **(A)**
- The climatic conditions of an area are determined by several factors. **(B)**
- There are four distinct climatic zones in the UK, which are determined by the direction of the prevailing wind. **(C)**
- Precipitation is caused when warm air rises. There are three ways that this can happen. **(B, D)**
- High pressure air systems bring warm, settled weather conditions. **(E)**
- Low pressure air systems bring wet, changeable weather conditions. **(F)**
- Tropical storms (an example of a low pressure climatic hazard) need certain conditions to form. **(G)**
- Hurricane Katrina is a famous tropical storm that affected the USA in 2005. **(H)**

A. Weather and climate (5)

Weather	The day-to-day conditions of the atmosphere which change quickly.
Climate	The average weather conditions over longer periods of time.
Precipitation	Any form of water falling from the sky.
Humidity	The amount of moisture in the air.
Air pressure	The force exerted onto the Earth's surface by the weight of the air.

B. Factors affecting weather and climate (4)

Latitude	Higher latitudes are colder. Lower latitudes (nearer the equator) are hotter.
Winds	Wind can bring different weather conditions depending on where it comes from.
Altitude	Higher areas get more rainfall and are colder than low land.
Urban areas	Can be 2.2°C warmer than the surrounding rural areas.

C. The UK's air masses (4)

Tropical maritime	Wind from the south west brings wet weather, with warm temperatures in the summer, but mild in the winter.
Tropical continental	Wind from the south east brings dry weather with hot temperatures in the summer, but mild in the winter.
Polar continental	Wind from the north east brings dry weather with cold temperatures in the summer, and often freezing conditions in the winter.
Polar maritime	Wind from the north west brings wet weather with cold temperatures.

D. The types of precipitation (3)

Convictional	Produced when warm air rises, cools and condenses, forming clouds and then rainfall.
Frontal	Warm air meets cold air and rises because it is less dense. It cools, condenses forming clouds, then precipitation.
Relief	Warm air is forced to rise as it meets a hill or mountain. It cools at high altitude, condenses and forms clouds, then precipitation.

E. High pressure systems

How is the air moving?	Areas where air is sinking, this air has little moisture.	
Conditions (3)	Positive impacts (2)	Negative impacts (2)
<ol style="list-style-type: none"> Calm weather with a cloudless sky. Hot weather in summer, cold weather in winter. Morning frost is common. 	<ol style="list-style-type: none"> Lots of sunlight means farmers can grow more crops. Increase in tourism, which boosts the local economy. 	<ol style="list-style-type: none"> Places such as Spain and Portugal are at high risk of forest fires during prolonged dry periods. Can cause fog in the winter, which can lead to traffic accidents.

F. Low pressure systems

How is the air moving?	Air is rising, it cools and condenses causing high levels of precipitation.	
Conditions (3)	Positive impacts (2)	Negative impacts (3)
<ol style="list-style-type: none"> Unsettled weather which can change quickly. High winds and high cloud cover. Precipitation occurs as rising air cools and condenses. 	<ol style="list-style-type: none"> Rainfall refills stores of water, such as reservoirs. Wind farms will generate more energy. 	<ol style="list-style-type: none"> Low pressure systems can cause large, destructive storms. Bad weather can harm the tourist industry as tourists are put off. Areas can be flooded.

G. Causes of tropical storms (3)

High temperatures	Oceans have to be 26.5°C or higher.
Weather system	A low pressure system means air rushes in and causes high winds.
Deep ocean	Warm water is the power source for a tropical storm and should be 60 metres deep or more.

H. Case study example: Hurricane Katrina 2005

Where?	New Orleans, south coast of the USA.	
Effects (3)	Responses (2)	
<ol style="list-style-type: none"> 1,836 died. 10,000 people homeless. Floods were up to 3 metres deep in places. 	<ol style="list-style-type: none"> \$105 billion was spent on rebuilding. 10,000 people evacuated to the Superdome for shelter. 	



Geography Knowledge Organiser: Year 8 Term 4 Weather and Climate



Background:

- Weather and climate are different, however both are influenced, measured and described by a few factors. **(A)**
- The climatic conditions of an area are determined by several factors. **(B)**
- There are four distinct climatic zones in the UK, which are determined by the direction of the prevailing wind. **(C)**
- Precipitation is caused when warm air rises. There are three ways that this can happen. **(B, D)**
- High pressure air systems bring warm, settled weather conditions. **(E)**
- Low pressure air systems bring wet, changeable weather conditions. **(F)**
- Tropical storms (an example of a low pressure climatic hazard) need certain conditions to form. **(G)**
- Hurricane Katrina is a famous tropical storm that affected the USA in 2005. **(H)**

A. Weather and climate (5)

Weather	
Climate	
Precipitation	
Humidity	
Air pressure	

B. Factors affecting weather and climate (4)

Latitude	
Winds	
Altitude	
Urban areas	

C. The UK's air masses (4)

Tropical maritime	
Tropical continental	
Polar continental	
Polar maritime	

D. The types of precipitation (3)

Convictional	
Frontal	
Relief	

E. High pressure systems

How is the air moving?	Areas where air is sinking, this air has little moisture.	
Conditions (3)	Positive impacts (2)	Negative impacts (2)

F. Low pressure systems

How is the air moving?		
Conditions (3)	Positive impacts (2)	Negative impacts (3)

G. Causes of tropical storms (3)

High temperatures	
Weather system	
Deep ocean	

H. Case study example: Hurricane Katrina 2005

Where?		
Effects (3)	Responses (2)	

Year 8 Unit 4 Age of Exploration

A. African Kingdoms before the 16 th Century
<ul style="list-style-type: none"> - Ghana- very advanced and prosperous. Traded in gold, salt and copper. - Benin- skilled in ivory carving, pottery, rope and gum production. - Slavery existed before Europeans arrived in Africa, but it was very different to the slave trade. - Charles II and his brother James establish the Royal African Company in 1672 to trade with Asia and India. Later relied on slave labour to earn it profit.

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

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

Key dates
<p>1607-1732 - British Colonies were formed</p> <p>1807 - The slave trade was abolished by Parliament (slaves could still be owned but buying and selling was illegal)</p> <p>1833 - Slavery was abolished</p>

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 th to the 19 th 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 (typically slaves) who live on the farm.
Scavenger	Child labourer made to crawl below spinning machines and collect loose cotton
Conquistador	Spanish armed adventurers who conquered parts of North and South America
Abolition	The act of <u>officially</u> ending or stopping something, e.g. slavery.
Middle Passage	The sea journey undertaken by slave ships from West Africa across the Atlantic Ocean to The Americas.

E. How did Britain benefit from the Slave Trade?		
Employment (Workers)	Investment	Trade
<ul style="list-style-type: none"> • The slave trade provided thousands of jobs e.g. in Liverpool by 1774 there were eight sugar refineries and fifteen rope factories all of which provided plenty of new jobs • These factories made chains, anchors, rope and iron, copper and brass goods for the slave ships. • Liverpool had a population of 5000 in 1700 but 78 000 in 1800 due to slave trade employment. 	<ul style="list-style-type: none"> • Money poured into Britain from the slave trade • Banks did well by lending money to traders, but slave merchants also used their profits to set up important banks • 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. • This money was used to improve and invest in things like education which impacted everyone in Britain. • Slaves bought for £3 and sold for £20. 	<ul style="list-style-type: none"> • In a period that saw Britain industrialise, 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. • The slave trade was important in the development of the wider economy • The slave trade played an important role in providing British industry with access to raw materials (cotton). This contributed to the increased production of manufactured goods (leading to the Industrial Revolution)

Year 8 Unit 4 Age of Exploration

A. African Kingdoms before the 16 th Century		

A. Key Events that led to Columbus sighting land in the New World		
Sponsorship	Contact with Natives	Expedition

Key dates	
1607-1732 -	
1807 -	
1833 -	

C.	Can you define these key words?
Transatlantic Slave Trade	
Empire	
Plantation	
Scavenger	
Conquistador	
Abolition	
Middle Passage	

D. How did Britain benefit from the Slave Trade?		
Employment (Workers)	Investment	Trade

B. Conquistadors		
Balboa	Cortez - Mexico	Pizarro - Peru

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	<ul style="list-style-type: none"> This is the argument for the existence of God based on evidence of design in the world. 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 	<ul style="list-style-type: none"> This is the argument for the existence of God which argues that God is the cause of the universe. 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. 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. 		
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 <ul style="list-style-type: none"> This is the argument that the existence of evil undermines belief in an omnipotent and omnibenevolent God. If God is meant to be omnibenevolent, omnipotent and omniscient, then the existence of evil cancels out one of these attributes of God. The problem of evil is frequently known as the inconsistent triad. 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. 	E. Religious Experience <ul style="list-style-type: none"> This is an experience which has a religious meaning for the person who experienced it. 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 Bernadette at Lourdes had religious experiences where the Virgin Mary spoke to her. 		

F. Criticisms Design Argument	Cosmological Argument	Theodicies	Religious Experience
<ul style="list-style-type: none"> 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 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 	<ul style="list-style-type: none"> 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. 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. 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'? 	<ul style="list-style-type: none"> Many religions explain the origin of evil in the world – such as in Christianity with Adam and Eve and the original sin. God gave humans free will, and through free will humans can choose evil. Some people argue that experiencing the bad in the world allows humans to grow and develop. 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? 	<ul style="list-style-type: none"> There is no evidence that people who claim to have had religious experiences are telling the truth. Factors such as certain foods, drugs and alcohol make people have strange feelings. There have been times when there seems to be an increase in reported religious experiences. 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? 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?

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			
Analogy			
Theodicy			
Fallacy			
		D. The Problem of Evil	E. Religious Experience

F. Criticisms Design Argument	Cosmological Argument	Theodicies	Religious Experience
<ul style="list-style-type: none"> God is supposed to be _____ therefore how can there be flawed design such as _____ in DNA which cause cancers or damage to bodies 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 _____ 	<ul style="list-style-type: none"> 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. 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. If the existence of God as a '_____ ' being without a cause can be a fact, why can't the universe itself just be a '_____ '? 	<ul style="list-style-type: none"> Many religions explain the _____ of evil in the world – such as in _____ with Adam and Eve and the original sin. God gave humans _____, and through free will humans can choose evil. Some people argue that experiencing the _____ in the world allows humans to grow and _____. 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? 	<ul style="list-style-type: none"> There is no _____ that people who claim to have had religious experiences are telling the truth. Factors such as certain _____ and _____ make people have strange feelings. There have been times when there seems to be an increase in reported _____ experiences. 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? 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 _____?



What we are learning this term:	
<p>A. Describing what you wear B. Describing fashion in greater detail C. Talking about shopping on the high street D. Visiting a shopping centre E. Dealing with problems when shopping F. Fashion in the Hispanic world G. Translation practice</p>	
6 Key Words for this term	
1. la moda	4. rebajas
2. vestirse	5. lo/la/los/las
3. la ropa	6. la talla

A. ¡Es imposible comprar así! – It's impossible to buy like that!

tiene un agujero	It has a hole
está roto/a	It's broken
cambiar	to (ex)change
el cambio	exchange
funcionar	to work / function
pedir	to ask for
probar	to try (on)
quedar bien	to suit / fit
el reembolso	refund
¿en serio?	really?
lo siento	I'm sorry
el tique de compra	receipt
vale	right/Good//ok
vender	to sell
otros/as	other
pocos/as	few
todos/as	all
varios/as	several

B. Estrellas con estilo – Stars with style

los estampados	patterns
amplio/a	baggy
corto/a	short
de cuadros	checked
estampado/a	patterned
estrecho/a	tight
de flores	floral
hortera	tacky
largo/a	long
liso/a	plain
de lunares	spotted
de rayas	striped
apropiado/a	appropriate
distinto/a	different

C. Si ganara la lotería – If I won the lottery	
Si fuera millonario/a	If I were a millionaire
Si fuera posible...	If it were possible...
Si ganara la lotería..	If I won the lottery...
cambiaría de peinado	I would change my hairstyle
compraría...	I would buy
un montón de ropa	lots of designer clothes
de marca	designer
unas gafas de sol	sunglasses
de marca	I would go to the hairdresser
iría a la peluquería	
tendría un asistente personal	I would have a personal assistant
tendría un teléfono móvil de lujo	I would have an expensive mobile

D. Esto es lo que llevo – This is what I wear

la ropa	clothing
llevar	to wear
¿Qué llevas?	What do you wear?
Llevo...	I wear...
los calcetines	socks
la camisa	shirt
la chaqueta	jacket
la corbata	tie
la falda	skirt
la gorra	cap
el jersey	jumper
los pantalones	trousers
el uniforme	uniform
los vaqueros	jeans
el vestido	dress
las zapatillas (de deporte)	trainers
los zapatos	shoes
bonito/a	pretty
cómodo/a	comfortable
elegante	smart / stylish
guay	cool
tradicional	traditional
este/este	this
estos/estas	these
ese/esa	that
esos/esas	those
aquel/aquella	that (further away)
aquellos/aquellas	those (further away)
la blusa	blouse
la cinta para el pelo	headband
el cinturón	belt
el estilo	style

Key Verbs				
Vestirse To get dressed	Comprar To buy	Probar To try on	Devolver To return (item)	Cambiar To (ex)change
Me visto I get dressed	Compro I buy	Pruebo I try on	Devuelvo I return	Cambio I (ex)change
Te vistes You get dressed	Compras You buy	Pruebas You try on	Devuelves You return	Cambias You (ex)change
Se viste s/he gets dressed	Compra s/he buys	Prueba s/he tries on	Devuelve s/he returns	Cambia s/he (ex)changes
Nos vestimos We get dressed	Compramos We buy	Probamos We try on	Devolvemos We return	Cambiamos We (ex)change
Se visten They get dressed	Compran They buy	Prueban They try on	Devuelven They return	Cambian They (ex)change

E. En el centro comercial – In the shopping centre

los centros comerciales	shopping centres
por internet	online
las tiendas pequeñas	small shops
la agencia de viajes	travel agency
las alfombras	rugs
la alimentación	food
la azotea	rooftop
el juguete	toy
la juguetería	toy shop
el hogar	homewares/home
la moda deportiva	sportswear
los muebles	furniture
la planta baja	ground floor
la relojería	watch shop
el anuncio	advert
devolver	to return
en línea	online
hacer clic	to click (mouse)
la oferta	offer
el ratón	mouse (computer)
la variedad	variety
primero	first
segundo	second
tercero	third
cuarto	fourth
quinto	fifth
sexto	sixth
séptimo	seventh

F. De tiendas – At the shops

la carnicería	butchers
la chocolatería	chocolate shop
la joyería	jewellers
la panadería	bakery
la papelería	stationery shop
la perfumería	perfume shop
la pescadería	fishmongers
la tienda de disfraces	fancy dress shop
la tienda de ropa	clothes shop
la zapatería	shoe shop
el abrigo	coat
abrir	to open
alquilar	to rent / hire
cerrar	to close
los complementos	accessories
loco/a	crazy
nuevo/a	new
algunos/as	some
ciertos/as	certain
muchos/as	many
la camiseta	T – shirt
el coche cuatro por cuatro	4 x 4 vehicle
el equipamiento propio/a	equipment own (possessive)
la ropa de marca	designer clothes
salir de fiesta	to go out partying



What we are learning this term:	
A. Describing what you wear B. Describing fashion in greater detail C. Talking about shopping on the high street D. Visiting a shopping centre E. Dealing with problems when shopping F. Fashion in the Hispanic world G. Translation practice	
6 Key Words for this term	
1. la moda	4. rebajas
2. vestirse	5. lo/la/los/las
3. la ropa	6. la talla

A. ¡Es imposible comprar así! – It's impossible to buy like that!

_____	It has a hole
_____	It's broken
_____	to (ex)change
el cambio	_____
funcionar	to ask for
_____	_____
probar	really?
quedar bien	I'm sorry
el reembolso	receipt
_____	right/Good//ok
_____	_____
vender	_____
otros/as	_____
pocos/as	_____
todos/as	_____
varios/as	_____

B. Estrellas con estilo – Stars with style

_____	patterns
_____	baggy
_____	short
de cuadros	_____
estampado/a	_____
estrecho/a	_____
_____	floral
_____	tacky
_____	long
liso/a	_____
de lunares	_____
de rayas	_____
apropiado/a	_____
_____	different

C. Si ganara la lotería – If I won the lottery	
_____	If I were a millionaire
_____	If it were possible...
_____	If I won the lottery...
_____	I would change my hairstyle
compraría...	_____
un montón de ropa	_____
de marca	_____
_____	designer sunglasses
_____	I would go to the hairdresser
iría a la peluquería	_____
_____	I would have a personal assistant
_____	_____
tendría un teléfono	_____
movil de lujo	_____

D. Esto es lo que llevo – This is what I wear

_____	clothing
_____	to wear
_____	What do you wear?
_____	I wear...
los calcetines	_____
la camisa	_____
la chaqueta	_____
la corbata	_____
_____	skirt
_____	cap
el jersey	trousers
_____	uniform
_____	jeans
el vestido	_____
las zapatillas (de deporte)	_____
los zapatos	_____
_____	pretty
_____	comfortable
_____	smart / stylish
_____	cool
tradicional	this
_____	_____
estos/estas	_____
ese/esa	_____
esos/esas	_____
_____	that (further away)
_____	those (further away)
la blusa	_____
la cinta para el pelo	_____
el cinturón	_____
_____	style

Key Verbs				
Vestirse	Comprar	Probar	Devolver	_____
_____	To _____	_____	To return (item)	To (ex)change
Me visto	Compro	Pruebo	Devuelvo	Cambio
I get dressed	I _____	I _____	_____	_____
You get dressed	You buy	Pruebas	Devuelves	You (ex)change
_____	_____	You try on	_____	_____
Se viste	Compra	_____	_____	_____
s/he gets dressed	_____	s/he tries on	s/he returns	s/he (ex)changes
Nos vestimos	Compramos	Probamos	_____	Cambiamos
_____	_____	We try on	We return	_____
Se visten	_____	_____	Devuelven	Cambian
They get dressed	They buy	They try on	They return	They (ex)change

E. En el centro comercial – In the shopping centre

_____	shopping centres
_____	_____
por internet	_____
las tiendas	_____
pequeñas	_____
la agencia de viajes	_____
_____	rugs
_____	food
la azotea	_____
el juguete	_____
la juguetería	_____
_____	homewares/home
_____	sportswear
_____	furniture
la planta baja	_____
la relojería	_____
_____	advert
devolver	_____
en línea	_____
_____	to click (mouse)
_____	offer
el ratón	_____
_____	variety
primero	_____
segundo	_____
tercero	_____
_____	fourth
_____	fifth
sexto	_____
_____	seventh

F. De tiendas – At the shops

_____	butchers
la chocolatería	_____
_____	jewellers
la panadería	_____
_____	stationery shop
la perfumería	_____
_____	fishmongers
la tienda de disfraces	_____
la tienda de ropa	_____
la zapatería	_____
_____	coat
_____	to open
cerrar	to rent / hire
_____	_____
_____	accessories
algunos/as	crazy
ciertos/as	new
muchos/as	_____
_____	_____
el coche cuatro por cuatro	T – shirt
_____	_____
_____	equipment
la ropa de marca	own (possessive)
_____	_____
_____	to go out partying



G. Translation Practice	
The shoes and the T – shirt	L z y l c
The trousers and a jumper	L p y u j b
I wear some white trainers	L u z b
The black jumper is more expensive than the shoes	E j n e m c q l z
The white socks are less expensive than the trainers	L c b s m c q l z
I like the green shoes more than the white shoes	M g l z v m q l z b
I don't like the red shirt but I like red dresses	N m g l c r p m g e v r
I wear socks but he wears trainers	L c p l z
The jeans are more comfortable than the trousers	L v s m c q l p
To go to the party, I'm going to wear a black suit	P i a l f v a l u t n
I would like to wear blue jeans to school	M g l v a a c
I would like to wear white Nike trainers to school	M g l z d N a c
I love those boots	M e e b
I want that T-shirt	Q e c
Can I try it on?	¿M l p p?
It suits me well.	M q b

H . Key Questions: Answer the following in your own words. Use these model answers	
¿Qué llevas normalmente? What do you normally wear?	Normalmente, llevo una camiseta y unos vaqueros. A veces llevo un vestido.
¿Cómo es tu uniforme? What is your uniform like?	Para ir al colegio, llevo una camisa azul, unos pantalones negros, una corbata y una chaqueta granate. De vez en cuando llevo una falda negra con medias, y unos zapatos negros.
¿Qué piensas de tu uniforme? What do you think of your uniform?	No me gusta mi uniforme porque en mi opinión es muy incómodo y no es elegante. Sin embargo, pienso que llevar uniforme es una buena idea porque todos los estudiantes son iguales.
¿Cómo sería el uniforme de tus sueños? What would your ideal uniform be like?	El uniforme de mis sueños sería más cómodo y de moda. Me gustaría llevar unos vaqueros y una camiseta. También me gustaría llevar unas zapatillas de deporte.

I. Key Questions: Translate these model answers using the KO	
¿Qué llevas normalmente? What do you normally wear?	Normally, I like to wear blue jeans with a black jumper. I think that it is very comfortable. Sometimes I wear a white T – shirt.
¿Cómo es tu uniforme? What is your uniform like?	My uniform is very Smart. I wear a white shirt with a black tie. I wear a black jacket and black trousers. I wear black shoes too. Sometimes I wear my blue jeans.
¿Qué piensas de tu uniforme? What do you think of your uniform?	I love my uniform because it's very smart; it's not ugly! I think that my uniform is very comfortable but expensive to buy.
¿Cómo sería el uniforme de tus sueños? What would your ideal uniform be like?	The uniform of my dreams would be less smart and cheaper. I would like to wear black jeans everyday with trainers. I would also love to wear a black jumper.

J. Key Grammar	
Using demonstrative adjectives	este/esta – this estos/estas – these ese/esa – that aquel/aquella - that (further away) aquellos/as – those (further away) Demonstrative adjectives need to agree with the noun they are referring to. e.g. <i>Me gustan estas botas</i> – I like these boots e.g. <i>No me gustan nada estos jerseys</i> – I don't like these jumpers at all
Using DOP (direct object pronouns)	lo/la/los / las Basically, a DOP means 'it/them' it saves you from having to keep repeating the noun all the time. DOPs must agree with the noun you are replacing / referring to. e.g. <i>Me gusta llevar la camiseta</i> – I like to wear the T-shirt <u>OR</u> you can use DOP and say <i>Me gusta llevarla</i> . (la on the end refers to the noun which in this case is FEM. SINGULAR) e.g. <i>La voy a comprar</i> = I'm going to buy it (the DOP is LA so we know the noun is FEM. SINGULAR). e.g. <i>Voy a comprar el jersey</i> = I'm going to buy the jumper <u>OR</u> <i>lo voy a comprar</i> = I'm going to buy IT. (LO in this case refers to MASC. SINGULAR. noun which is 'el jersey')



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	



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	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	F2
Copy	Ctrl+C
Paste	Ctrl+V
Cut	Ctrl+X
New folder	Ctrl+Shift+N
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 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

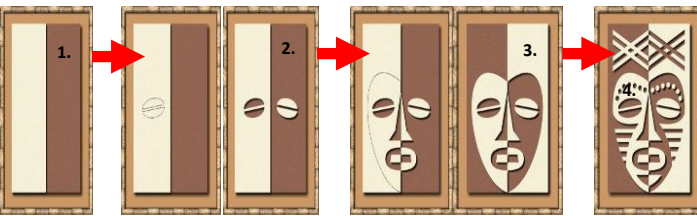


B.	How to use the Grid Method for accurate drawing.
1.	Use a ruler to draw an equally spaced grid onto your image.
2.	Draw an identical grid LIGHTLY onto paper.
3.	Draw in the main outlines of your image, focusing on one square at a time Use a ruler to help you measure the positioning of lines if needed.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



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. 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.
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 st October to 2 nd 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"> It is a Mexican Christian holiday. It began as a day of thanks for the harvest. The festival lasts 3 days. It Occurs 31st October – 2nd 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: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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.




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.



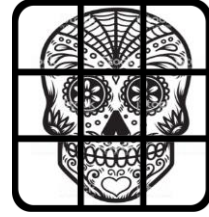


- What we are learning during these term:**
- About Day of the Dead (DOTD) Mexican Holiday.
 - How to use the Grid Method for accurate drawing of a skull.
 - DOTD artists: Thaneeya McArdle and Laura Barbosa.
 - Positive/negative collage.
 - Papier mâché sugar skulls.

- 6 Key Words for this project**
- Sugar Skull
 - Mexican Day of the Dead
 - Symmetry
 - Armature
 - Papier Mâché
 - 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:

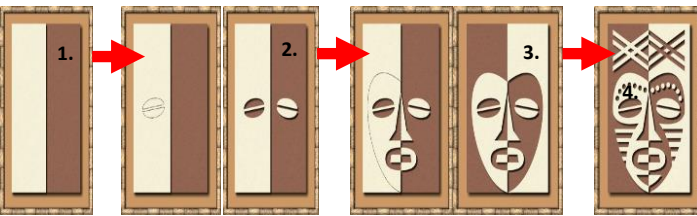
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-
-
-

What each tool is used for:

Cutting mat	
Craft knife	
Glue stick	

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

Papier mâché is:








Steps for making your sugar skull:

-
-
-
-
-




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

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

C. CAD

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

Advantages of CAD	Disadvantages of CAD
Designs can be created, saved and edited quickly, saving time	CAD takes a long time to learn
Designs or parts of design can be easily viewed from different angles, copied or repeated	Software can be very expensive
CAD is very accurate	CAD files can become corrupted or lost

D. CAM

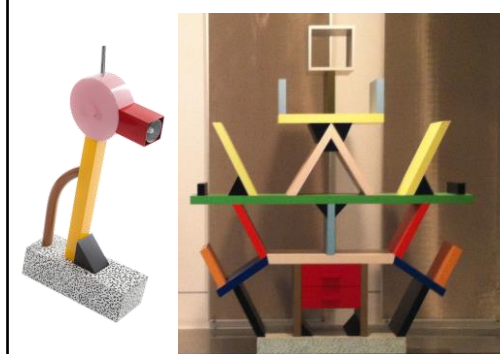
By using **computer aided manufacture (CAM)**, designs can be sent to **CAM machines** such as **laser cutters** and **3D printers**

Advantages of CAM	Disadvantages of CAM
Quick – Speed of production can be increased	CAM takes a long time to learn
Consistency – All parts manufactured are all the same	High initial cost can be very expensive
CAM is very accurate	Production stoppage – If the machines break down, the production will stop

E. Memphis Design Movement

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

The idea was for the products to be **bright, colourful, playful**.



Key Designer
 Ettore Sottsass




Key Features:
 Crazy patterns; animal print, geometric, pinstripes. Strange shapes thrown together.

Contrast!



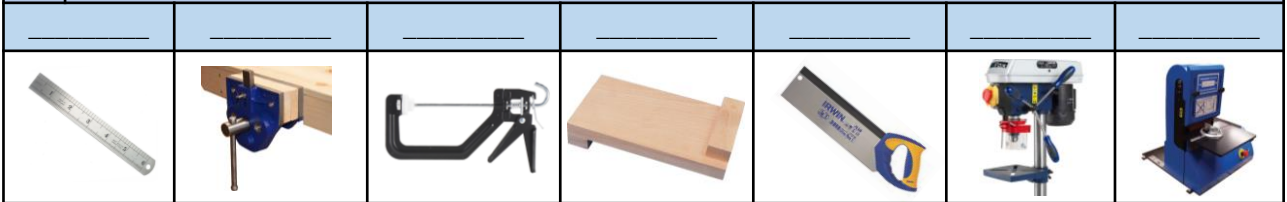
Colours:
 Bright, bold, Contrasting primary and secondary colours. Black patterns.

Line Styles:
 Very geometric; rectangles, triangles, squares, circles and arcs.




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 _____

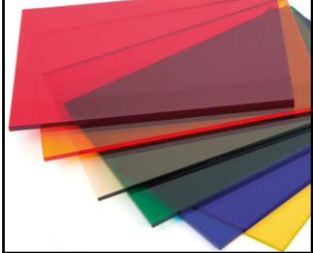
Manufactured Boards come from _____



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

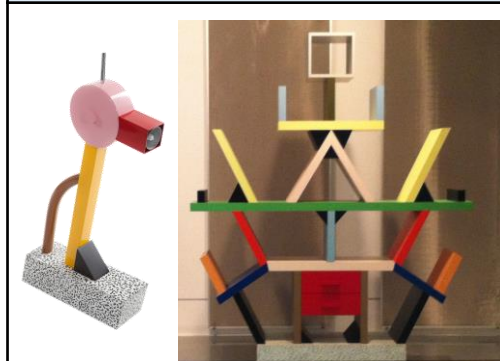
By using **computer aided manufacture (CAM)**, designs can be sent to _____ such as _____

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

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	

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

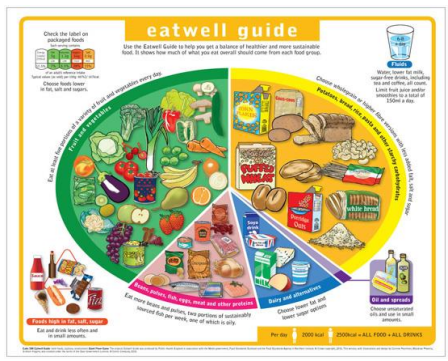
6 Key Words for this term
1 Hygiene 4 Balanced 2 Health 5 Nutritional 3 Food Poisoning 6 Target Market

A.	What 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?
Carbohydrates	Foods that are eaten to give the body energy
Protein	Food that are eaten to build and repair muscles and cells
Fats	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
<ul style="list-style-type: none"> 1 to get rid of bacteria on the food 2 to make the food taste better 3 to make food chewable 4 to ensure that food is not raw 5 to add colour to the food 	<ul style="list-style-type: none"> 1 to stop food poisoning 2 to make the food more appealing 3 it could be raw or a choking hazard 4 to stop food poisoning 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?

Rule

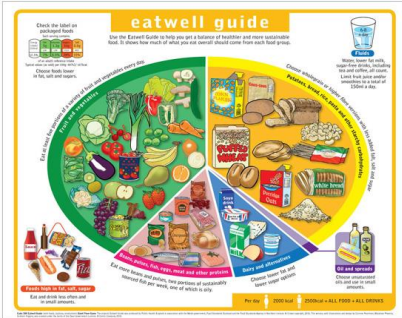
- 1
- 2
- 3
- 4
- 5

Why it is important

- 1
- 2
- 3
- 4
- 5

E. Keywords

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



YEAR 8 GRAPHIC COMMUNICATION

What are we learning this term?

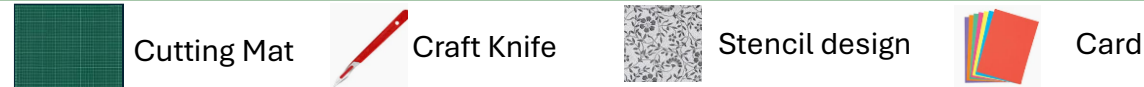
A Stencil design	B Step up card	C Accordion card	D Key words	E Evaluation
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A | Stencil design

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

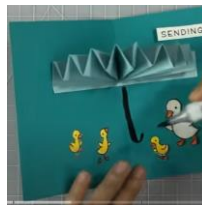


Coloured paper to add to the design
Cut any incisions

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.

YEAR 8 GRAPHIC COMMUNICATION

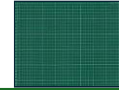
What are we learning this term?

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

A | Stencil design

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List the materials you need to create a stencil



B | Draw the inside of the pop up card

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C | Draw the inside of an accordion card

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

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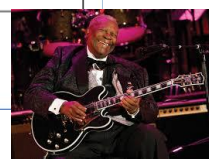
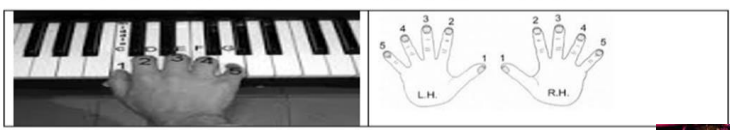
What we are learning this term:

- 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
Chord	A group of notes played together .
Accompaniment	A musical line that supports the melody
12 Bar Blues	A chord progression used in Blues music using chords 1,4,and 5.
Improvisation	Music that is created spontaneously , or without preparation
Walking Bass	Bass line that moves up and down the scale note by note.
Riff	Similar to ostinato . A repeating chord progression, pattern or melody.
Syncopation	A placement of rhythmic stresses/accents where they wouldn't normally occur. Off-beat sounding .
Blues Music	A musical style originating in the US at the end of the 19 th century, mostly performed by Black Americans.
Blues Scale	A six-note scale 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	1½ beats	
	Quaver, Eighth Note	1/2 beat			Dotted Quaver, Dotted Eighth Note	¾ beat	

G How to read music – treble clef and Bass Clef

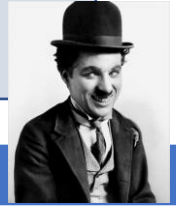
TREBLE LINES: E G B D F	TREBLE SPACES: F A C E
BASS LINES: G B D F A	BASS SPACES: A C E G

G Describing music – MAD T SHIRT

M	A	D	T	S	H	I	R	T
Melody	Articulation	Dynamics	Texture	Structure	Harmony/Tonality	Instruments	Rhythm	Tempo
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

SLAPSTICK

For GCSE drama, you need to understand and be able to apply techniques from different genres of performance. This genre is COMEDY



Background

Its roots go back to Ancient Greece and Rome.
 The term arises from a device developed for use in the physical comedy style known as commedia dell'arte
 The slapstick was a two-piece paddle that actors would use to accentuate the impact of a hit.
Shakespeare incorporated slapstick into his comedies, such as in his play The Comedy of Errors

The BOSS character is the only one to talk.
 Deliberately clumsy actions and humorously embarrassing events.
 There are elements of stage combat



Simple and predictable storylines.
 Music and sound effects are key
 Genre of COMEDY

Characters

BOSS- The only character who talks.
 Always thinks they have control. Has pain inflicted on them more so than the sidekick.



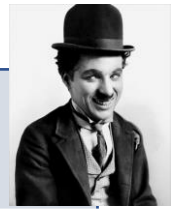
SIDEKICK- Works against the boss character. Inflicts pain towards the boss. Does not speak.



KEY WORDS- Exaggeration, Mime
 Pain, comedic timing, gestures, sound effects, music.

How can you create humour without the use of words?
 Why is it important that the characters have specific roles?
 How would you mark the moment of the sidekick inflicting pain?

Why ?
 What is a BOSS CHARACTER?
 What role do sound effects play in this genre?



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Background

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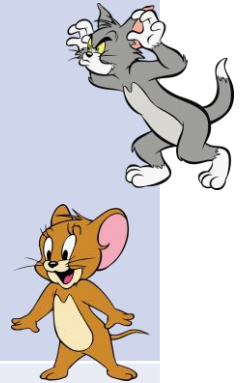
The _____ character is the only one to talk.
 Deliberately clumsy actions and humorously embarrassing events.
 There are elements of _____



Simple and predictable _____
 Music and _____ are key

Characters

BOSS-



SIDEKICK-

KEY WORDS-

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SWINDON ACADEMY READING CANON

Year 7



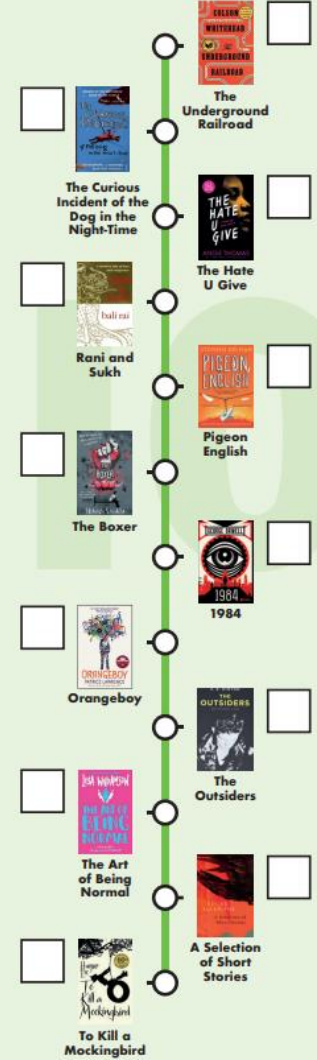
Year 8



Year 9



Year 10



#ReadingisPower