

Using your Knowledge Organiser and Quizzable Knowledge Organiser

Knowledge Organisers

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

What are we learning this term?

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

4 Key Words for this term:

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

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

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

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

B. What are the different changes of state?

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

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

Pure: A material that is made up of only one type of particle.

Impure: A material that is made up of more than one type of particle.

Quizzable Knowledge Organisers

A. What is particle theory?

A. What is the law of conservation of mass?

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

Solid	
Liquid	
Gas	

B. What are the different changes of state?

Melting	
Freezing	
Evaporation	
Condensation	

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

Pure

Impure

Expectations for Prep and for using your Knowledge Organisers

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

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

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

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

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

Top Tip

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

How do I complete Knowledge Organiser Prep?

Step 1

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

The screenshot shows the epraise website interface. On the left is a 'Planner' for the week of 10th May to 14th May 2020, with a grid for different subjects. On the right is a 'New Topic' page for 'What is particle theory?' with various resources and a knowledge organiser template.

Step 2

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

The screenshot shows a knowledge organiser for 'What is particle theory?'. It includes sections for 'What is particle theory?', 'What is the law of conservation of mass?', and 'Describe the arrangement and movement of particles in the three states of matter'. A diagram shows particles in solid, liquid, and gas states. Handwritten notes include the date '29th May 2020' and the title 'Particle theory'.

Step 3

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

Handwritten notes in a prep book summarizing the key points of particle theory. The notes include the date '29th May 2020', the title 'Properties of the states of matter', and definitions for solid, liquid, and gas states.

Step 4

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

Handwritten notes in a prep book showing the definition of a solid written three times: 'Solid = regular pattern particles vibrate in fixed position'.

Step 5

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

The screenshot shows a quizzable knowledge organiser for 'What is particle theory?'. It includes sections for 'What is particle theory?', 'What is the law of conservation of mass?', and 'What are the different changes of state?'. Handwritten answers include 'Self quizzing' and 'Arrangement/movement of matter'.

Step 6

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

Handwritten notes in a prep book showing the definition of a solid with checkmarks and corrections. The notes include the date '29th May 2020', the title 'Properties of the states of matter', and definitions for solid, liquid, and gas states.

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

'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"> <li style="width: 50%;">1. Chromosomes <li style="width: 50%;">4. Respiration <li style="width: 50%;">2. Exchange <li style="width: 50%;">5. Aerobically <li style="width: 50%;">3. Anaerobic <li style="width: 50%;">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

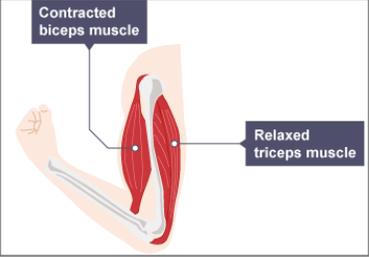
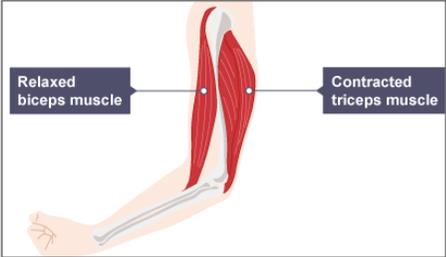
A	Making blood cells – what part of the bone makes blood cells?
Bone marrow produces: <ul style="list-style-type: none"> 1. Red blood cells (which transport O₂ and CO₂) 2. White blood cells (some of which fight disease) 3. Platelets (which cause blood clotting e.g. when we cut ourselves) 	
Why are bones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



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

A.	Movement and muscles
What are the following:	
Ligaments	
Muscles	
Tendons	

A.	How does the muscular system help us move?

A.	How do your muscles move your bones?

A.	What are the 4 functions of the Skeletal System?

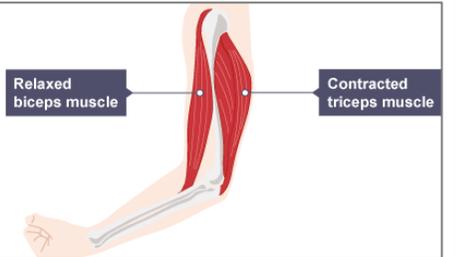
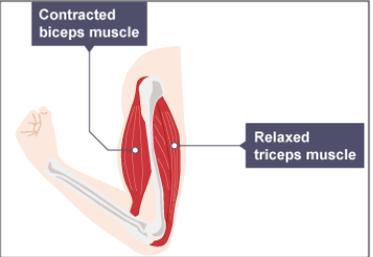
A.	What is Biomechanics?

A	Support – what is the main function of the spine?

A	What are antagonistic muscles?

Protection – what is the function of the following:	
Ribcage	
Cranium (skull)	

How do they work?



A	Making blood cells – what part of the bone makes blood cells?

A.	What is Osteoporosis

A.	What happens if you overstretch a tendon?

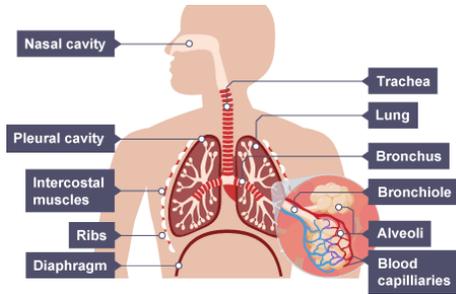
Why are bones hollow?

What are rickets?

What is Tendonitis?

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?

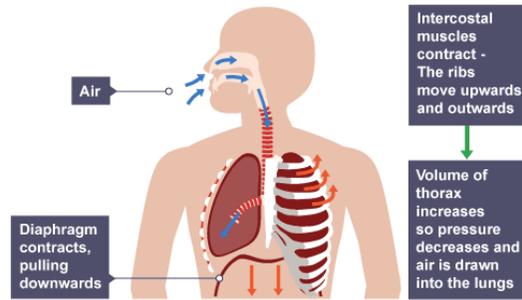
$$\text{Lung capacity} = \text{vital capacity} + \text{residual volume}$$

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?

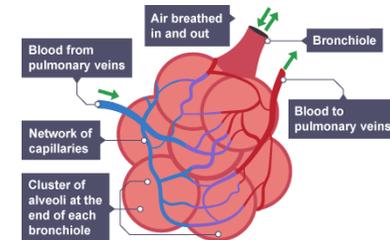
1. Destroys **cilia** in the airways so they are less able to sweep **mucus** containing pathogens out of the lungs, leading to **smoker's cough**
2. Irritates the **bronchi**, causing **bronchitis**
3. Destroys alveoli, reducing the surface area for gas exchange and causing **emphysema**
4. Cigarette 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?

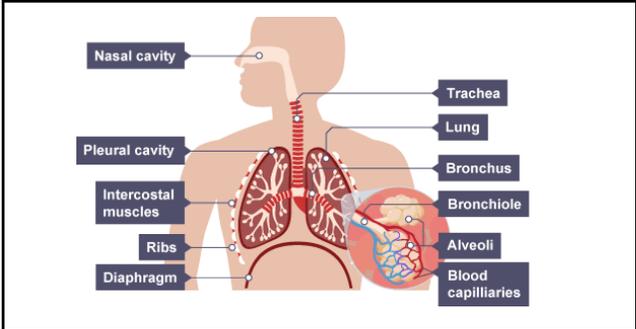
1. **High surface area** thanks to their balloon-like shape
2. Many **capillaries** give a **good blood supply** for gas exchange
3. Walls only **one cell thick**
4. **Moist** walls pick up gases (gases dissolve in water)

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 is the Respiratory System?



How does the respiratory system work?

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

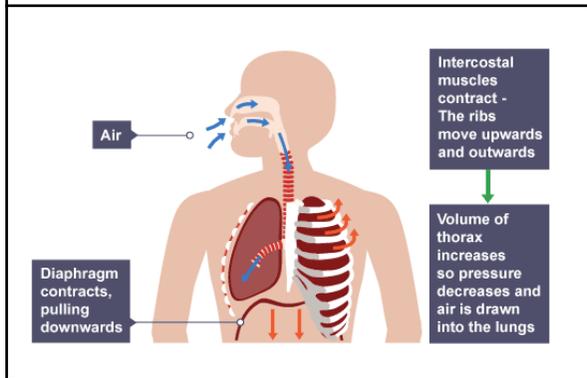
Vital capacity	
Residual volume	
Tidal volume	

What can you use to measure Lung Capacity?

What is the equation for lung capacity?

B. What is Ventilation?

Why are ventilation and Respiration different?



B. What is Asthma?

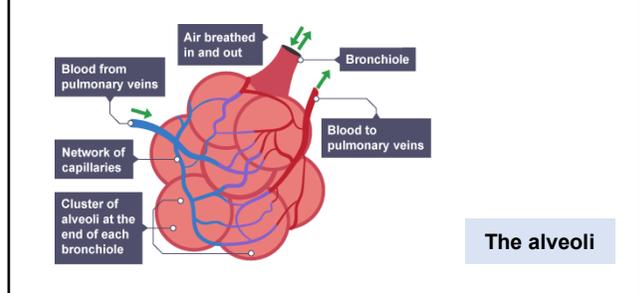
What triggers Asthma?

How can it be treated?

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

B. Where does gas exchange happen?

What are Alveoli?



The alveoli

What adaptations do the alveoli have?

What is Diffusion?



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	



B.	What benefits come from regular exercise?
Why do you breathe quicker during exercise?	

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

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

D.	What is fermentation?
What are the uses of fermentation?	

E.	Who discovered DNA?

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

E.	What is DNA?
What is a double helix?	

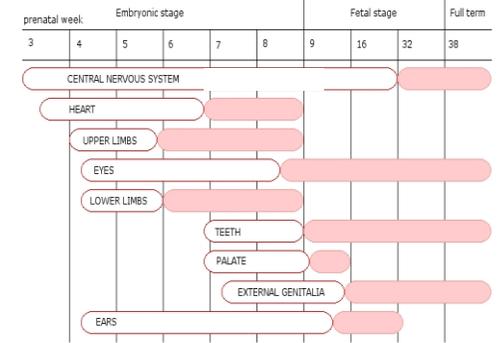


E.	What makes up DNA?
	<ul style="list-style-type: none"> DNA has a double helix structure with two sugar-phosphate backbones wound around each other. Pairs of complementary bases connect the two backbones (strands)
	What are the 4 bases and how are they paired?
	<ul style="list-style-type: none"> The 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?	
	Sexual reproduction	Asexual reproduction
	How many parents?	2 parents
	Will offspring inherit features from parents?	Offspring have features of both parents
		Offspring are clones of the 1 parent

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?
	Since they can't eat or breathe, they get this from the mother's blood. Nutrients and oxygen diffuse from the mother's blood into the baby's blood vessels, then umbilical cord in the placenta .
	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?	
	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.

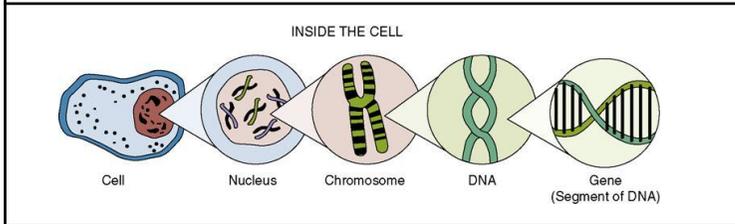


E. What makes up DNA?

What are the 4 bases and how are they paired?

What are Chromosomes?

What are Genes?



E. What are the different types of reproduction and how are they different?

How many parents?		
Will offspring inherit features from parents?		

E. What is Heredity?

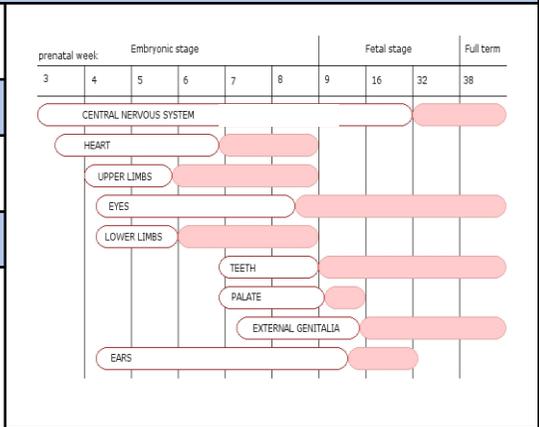
What is a Genetic Disease?

E. What is Gestation?

What does a foetus need to develop?

How does a foetus get what it needs to develop?

What is the Placenta?



What is the Umbilical cord?

E. How can an expectant mother's behaviour affect her unborn baby?

What problems can be caused by different drugs during gestation?

Drugs	Problems
Cigarettes	
Alcohol	
Other illegal drugs	



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

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

A.	What is a symbol equation?
<p>A symbol equation is a short-hand way of showing a chemical reaction using chemical symbols</p>	
<p>What would the symbol equation be? Potassium + Chlorine → Potassium Chloride</p>	
$2K + Cl_2 \rightarrow 2KCl$	
Why are symbol equations important?	
<ul style="list-style-type: none"> • 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>The diagram shows the reactivity series of metals grouped into five color-coded boxes. From top to bottom: <ul style="list-style-type: none"> Very reactive (blue box): Potassium, Sodium, Lithium, Calcium. React with water (light blue box): (This group overlaps with the 'Very reactive' group). React with acids (green box): Magnesium, Aluminium, Zinc, Iron, Tin, Lead. React with oxygen (yellow box): Copper, Mercury, Silver. Very unreactive (orange box): Gold. Blue arrows indicate the reactivity levels: 'React with water' points to the top group, 'React with acids' points to the middle group, and 'React with oxygen' points to the bottom group. A large blue arrow on the right points upwards from 'Very unreactive' to 'Very reactive'.</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
4. Displacement	8. Electrolysis

A. What is a symbol equation?

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

Why are symbol equations important?

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

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

Which metals have a strong reaction with water?

B.	What differences are there between metals and non-metals?	
	Metals	Non-metals
Where are they found in the periodic table?		
What charge do they form?		

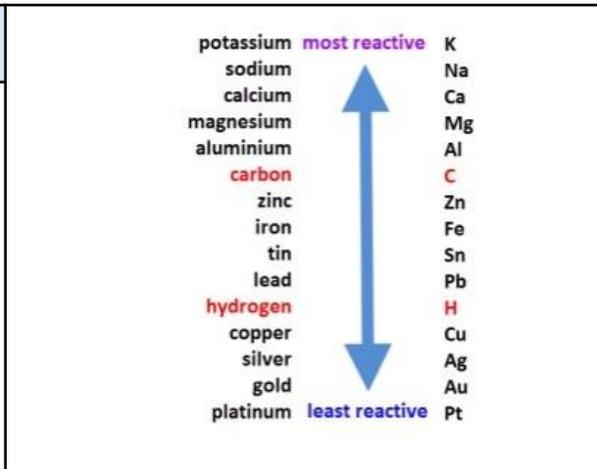
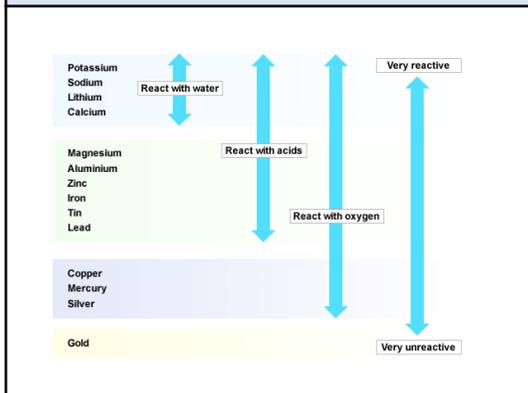
B. What products are made when a metal reacts with acid?

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="margin-left: auto; margin-right: auto;"> <tr> <td>Potassium</td> <td rowspan="3" style="font-size: 2em;">}</td> <td rowspan="3">Extracted from their ores by electrolysis (using electricity)</td> </tr> <tr> <td>Sodium</td> </tr> <tr> <td>Aluminium</td> </tr> <tr> <td>Carbon</td> <td rowspan="4" style="font-size: 2em;">}</td> <td rowspan="4">Extracted from their ores by reduction by carbon</td> </tr> <tr> <td>Zinc</td> </tr> <tr> <td>Iron</td> </tr> <tr> <td>Copper</td> </tr> <tr> <td>Silver</td> <td rowspan="2" style="font-size: 2em;">}</td> <td rowspan="2">No extraction necessary – found pure in the ground.</td> </tr> <tr> <td>Gold</td> </tr> </table>		Potassium	}	Extracted from their ores by electrolysis (using electricity)	Sodium	Aluminium	Carbon	}	Extracted from their ores by reduction by carbon	Zinc	Iron	Copper	Silver	}	No extraction necessary – found pure in the ground.	Gold
Potassium	}	Extracted from their ores by electrolysis (using electricity)														
Sodium																
Aluminium																
Carbon	}	Extracted from their ores by reduction by carbon														
Zinc																
Iron																
Copper																
Silver	}	No extraction necessary – found pure in the ground.														
Gold																

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?

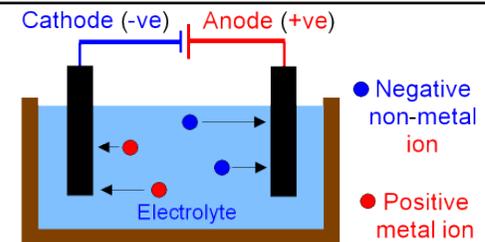
What is a Native metal?

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:
<ul style="list-style-type: none"> A. Compare Light and Sound waves B. Wave behaviour C. Sound waves D. Hearing ranges E. Uses of sound

3 Key Words for this term
<ul style="list-style-type: none"> 1. Ultrasound 2. Frequency 3. Transverse

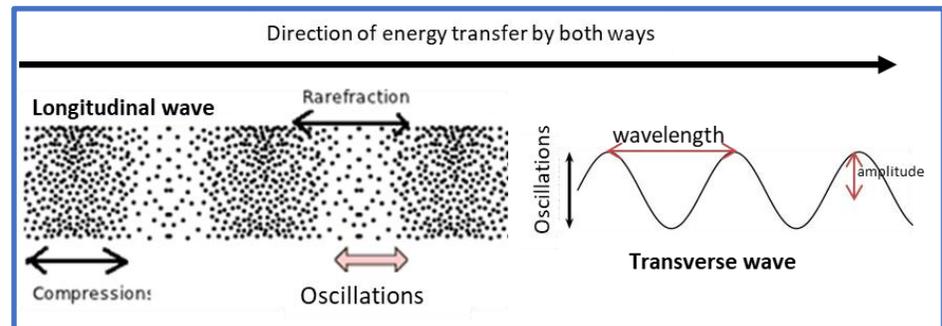
A. How do sound waves compare with Electromagnetic waves (e.g. Light)								
<table border="1"> <thead> <tr> <th>Sound</th> <th>EM waves, like light</th> </tr> </thead> <tbody> <tr> <td>Requires a medium (particles) to travel</td> <td>Does not require a medium (particles)</td> </tr> <tr> <td>Longitudinal waves</td> <td>Transverse Waves</td> </tr> <tr> <td>Travels faster in more dense media. In air 330m/s</td> <td>Travels slower in more dense material. In vacuum 3×10^8 m/s</td> </tr> </tbody> </table>	Sound	EM waves, like light	Requires a medium (particles) to travel	Does not require a medium (particles)	Longitudinal waves	Transverse Waves	Travels faster in more dense media. In air 330m/s	Travels slower in more dense material. In vacuum 3×10^8 m/s
Sound	EM waves, like light							
Requires a medium (particles) to travel	Does not require a medium (particles)							
Longitudinal waves	Transverse Waves							
Travels faster in more dense media. In air 330m/s	Travels slower in more dense material. In vacuum 3×10^8 m/s							

A. Types of Waves				
Waves transfer energy without transferring matter.				
A. What are the two types of waves?				
<table border="1"> <thead> <tr> <th>Transverse</th> <th>Longitudinal</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> • Oscillations are perpendicular to the direction of energy transfer. </td> <td> <ul style="list-style-type: none"> • Oscillations are parallel to the direction of energy transfer. </td> </tr> </tbody> </table>	Transverse	Longitudinal	<ul style="list-style-type: none"> • Oscillations are perpendicular to the direction of energy transfer. 	<ul style="list-style-type: none"> • Oscillations are parallel to the direction of energy transfer.
Transverse	Longitudinal			
<ul style="list-style-type: none"> • Oscillations are perpendicular to the direction of energy transfer. 	<ul style="list-style-type: none"> • Oscillations are parallel to the direction of energy transfer. 			

B. What different behaviours do waves show?										
Waves can travel through all sorts of media, and different things can happen at the boundary between different media:										
<table border="1"> <tbody> <tr> <td>Transmission</td> <td>Passing through, we say a wave is 'transmitted' through a medium</td> </tr> <tr> <td>Reflection</td> <td>When a wave bounces back from a boundary between media at the same angle as which it hit the boundary.</td> </tr> <tr> <td>Refraction</td> <td>When a wave changes direction at the boundary between media due to a change in speed.</td> </tr> <tr> <td>Absorption</td> <td>When the energy a wave transfers goes into heating a material.</td> </tr> <tr> <td>Diffraction</td> <td>The spreading out of a wave after it passes through a gap.</td> </tr> </tbody> </table>	Transmission	Passing through , we say a wave is 'transmitted' through a medium	Reflection	When a wave bounces back from a boundary between media at the same angle as which it hit the boundary.	Refraction	When a wave changes direction at the boundary between media due to a change in speed.	Absorption	When the energy a wave transfers goes into heating a material.	Diffraction	The spreading out of a wave after it passes through a gap.
Transmission	Passing through , we say a wave is 'transmitted' through a medium									
Reflection	When a wave bounces back from a boundary between media at the same angle as which it hit the boundary.									
Refraction	When a wave changes direction at the boundary between media due to a change in speed.									
Absorption	When the energy a wave transfers goes into heating a material.									
Diffraction	The spreading out of a wave after it passes through a gap.									

B. What is Superposition
Superposition occurs when two or more of the same kind of waves are travelling together. The waves can add up or cancel each other out depending on how they line up.
<p>Constructive Interference</p> <p>Destructive Interference</p>

C. Changes in sounds						
<table border="1"> <tbody> <tr> <td>What is pitch?</td> <td>The highness/lowness of a sound. Higher sounds have a higher frequency</td> </tr> <tr> <td>What is frequency?</td> <td>The number of oscillations in a wave per second. This is also the number of waves passing a point per second. It is measured in Hertz (Hz)</td> </tr> <tr> <td>What is volume?</td> <td>The intensity of a sound. Louder sounds have a larger amplitude. It is measured in decibels (dB)</td> </tr> </tbody> </table>	What is pitch?	The highness/lowness of a sound. Higher sounds have a higher frequency	What is frequency?	The number of oscillations in a wave per second. This is also the number of waves passing a point per second. It is measured in Hertz (Hz)	What is volume?	The intensity of a sound. Louder sounds have a larger amplitude. It is measured in decibels (dB)
What is pitch?	The highness/lowness of a sound. Higher sounds have a higher frequency					
What is frequency?	The number of oscillations in a wave per second. This is also the number of waves passing a point per second. It is measured in Hertz (Hz)					
What is volume?	The intensity of a sound. Louder sounds have a larger amplitude. It is measured in decibels (dB)					





What we are learning this term:	
A.	Compare Light and Sound waves
B.	Wave behaviour
C.	Sound waves
D.	Hearing ranges
E.	Uses of sound

3 Key Words for this term	
1.	
2.	
3.	

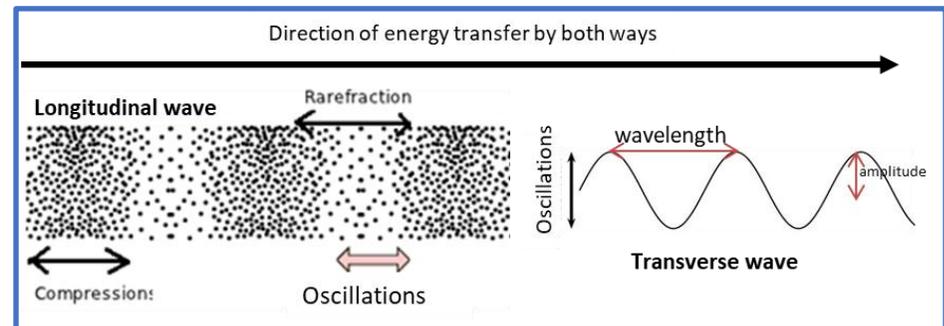
A. How do Sound waves compare to Electromagnetic waves (e.g. Light)?	
Sound	EM waves, like light

A. Types of Waves	
Waves <u>transfer energy</u> without transferring matter.	
A. What are the two types of waves?	

B. What different behaviours do Waves show?	
Waves can travel through all sorts of media, and different things can happen at the boundary between different media:	
Transmission	
Reflection	
Refraction	
Absorption	
Diffraction	

B. What is Superposition?	
<p>Constructive Interference</p>	
<p>Destructive Interference</p>	

C. Changes in sounds	
What is pitch?	
What is frequency?	
What is volume?	

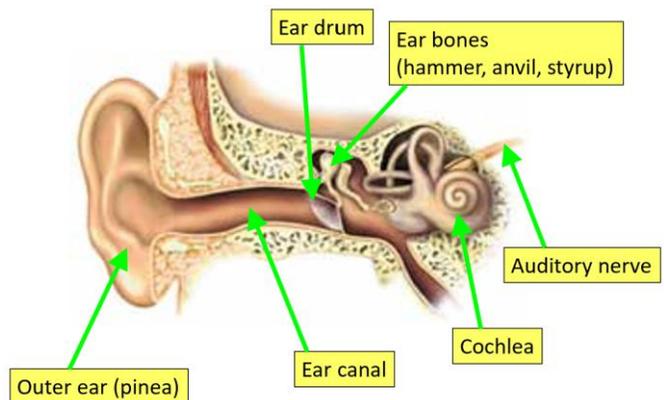




C.	How is sound produced?
Sound is produced by vibrations	
How does sound travel?	
Vibrations transfer energy through particles.	
Which media does sound travel fastest in and why?	
Solids – the particles are closer together	

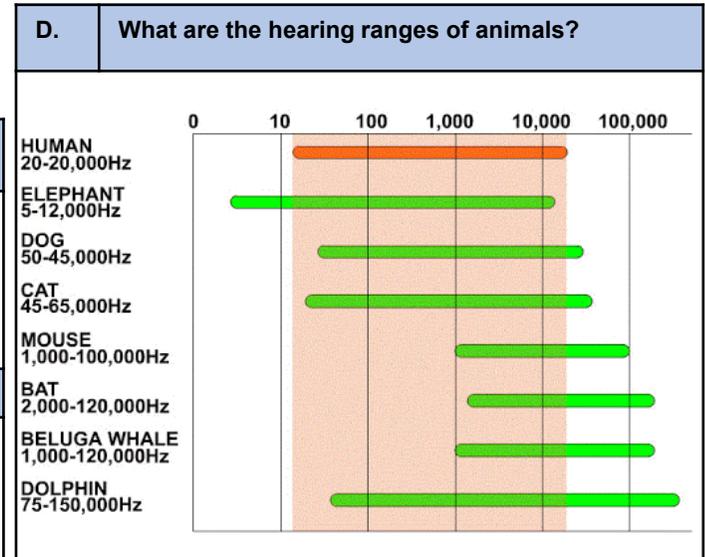
D.	Hearing ranges
What is the hearing range of humans?	Humans have a hearing range between 20 – 20 000 Hz
What is ultrasound?	Sounds with a frequency above 20 000 Hz
What is ultrasound used for?	Uses of ultrasound: <ul style="list-style-type: none"> • Prenatal scans of unborn babies • Ultrasonic cleaning of fragile objects (eg jewellery) • Breaking up kidney stones to prevent harm.

C.	Part of the Ear	What is the Function?
1.	Outer ear (pinna)	Collects the sound like a funnel.
2.	Ear canal	Transmits sounds from the pinna to the ear drum
3.	Ear drum	Sound waves causes this to vibrate
4.	Ear bones (hammer, anvil, stirrup)	After the ear drum vibrates, it passes the vibrations on to these. They transfer the vibrations to the cochlea
5.	Cochlea	Receives vibrations and converts these to nerve impulses
6.	Auditory nerve	Carries nerve impulses (messages) to the brain



E.	What is an echo?
A reflected sound	

E.	How do loudspeakers work?
<ul style="list-style-type: none"> • Loudspeakers are vibrating cones. • The pattern and frequency of the vibrations (oscillations) determines the sound. 	
How do Microphones work?	
Microphones have a vibrating <u>diaphragm</u> inside, which converts the sound wave into an electrical signal in a circuit.	



D.	Seeing sounds – How can you see sounds?
You can use an instrument called an oscilloscope to see a sound wave	
Amplitude (volume) is shown by the height. The higher the waves, the louder the sound.	
The frequency (pitch) is shown by how close the waves are to each other. The closer they are, the higher the pitch.	



C.	How is sound produced?
	How does sound travel?
	Which media does sound travel fastest and why?

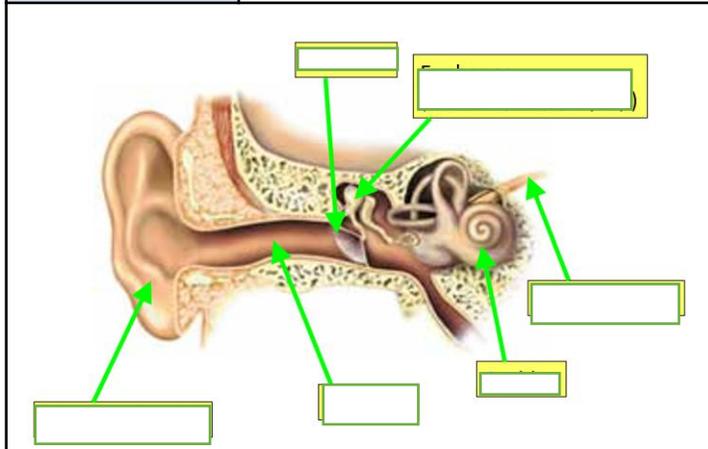
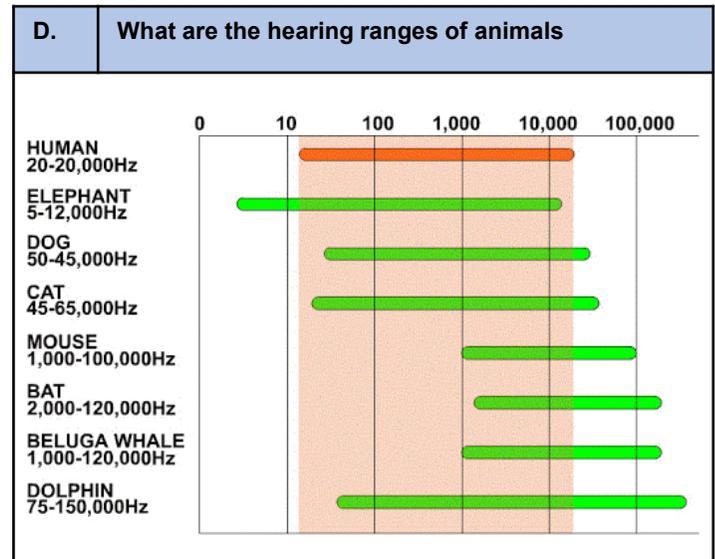
D.	Hearing ranges
	What is the hearing range of humans?
	What is Ultrasound?
	What is ultrasound used for?

C.	Part of the Ear	What is the Function?
	1. Outer ear (pinna)	
	2. Ear canal	
	3. Ear drum	
	4. Ear bones (hammer, anvil, stirrup)	
	5. Cochlea	
	6. Auditory nerve	

E.	What is an echo?

E.	How do loudspeakers work?

How do Microphones work?



D.	Seeing sounds – How can you see sounds?
Amplitude (volume) is shown by:	
The frequency is shown by:	

8.04: Tectonics



Structure of the Earth

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

Theory

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

Volcanoes and Earthquakes

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



8.04: Tectonics



Structure of the Earth

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

Theory

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

Volcanoes and Earthquakes

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

8.04: Tectonics



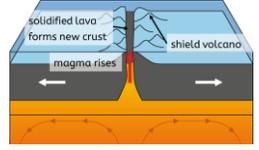
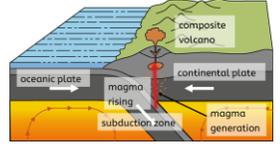
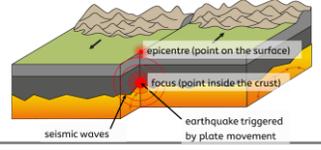
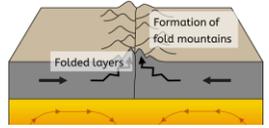
Living Near Volcanoes

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

Preparing for Earthquakes

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

Types of Plate Boundaries

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

Earthquake Case Study: Nepal 2015

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

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

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



8.04: Tectonics



Living Near Volcanoes

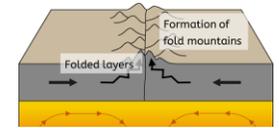
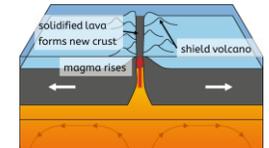
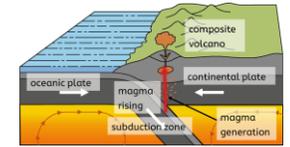
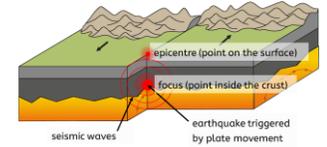
Opportunities	Challenges

Preparing for Earthquakes

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

Types of Plate Boundaries

- 1 **constructive**
- 2 **destructive**
- 3 **conservative**
- 4 **collision* (additional)**



Earthquake Case Study: Nepal 2015

Location:	
Magnitude, focus and epicentre:	
Effects	Responses



Year 8 Unit 4 Age of Exploration

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

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

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

Sponsorship	Contact with Natives	Expedition
<ul style="list-style-type: none"> - 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.

A. African kingdoms pre-1500

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

D.	Can you define these key words?
Transatlantic Slave Trade	The transportation by slave traders of enslaved African people, mainly to the Americas from the 16 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 who live on the farm.
Scavenger	Child labourer made to crawl below spinning machines and collect loose cotton

E. How did Britain benefit from the Slave Trade?

Employment (Workers)	Investment	Trade
<ul style="list-style-type: none"> • The slave trade provided thousands of job e.g. in Liverpool by 1774 there were eight sugar refineries and fifteen rope factories all of which provided plenty of new jobs • These factories made chains, anchors, rope and iron, copper and brass goods for the slave ships 	<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. 	<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

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

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

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

Sponsorship	Contact with Natives	Expedition
-	-	-

C. Conquistadors

Balboa	Cortez - Mexico	Pizarro - Peru
		-

A. African kingdoms pre-1500

--

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

E. How did Britain benefit from the Slave Trade?

Employment (Workers)	Investment	Trade



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



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



What we are learning 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 de marca	lots of designer clothes
unas gafas de sol de marca	designer sunglasses
iría a la peluquería	I would go to the hairdresser
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:	
<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!

_____	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 buy	Pruebas	Devuelves	_____
You get dressed	_____	You try on	_____	You (ex)change
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
_____	to rent / hire
cerrar	_____
_____	accessories
_____	crazy
_____	new
algunos/as	_____
ciertos/as	_____
muchos/as	_____
_____	T – shirt
el coche cuatro por cuatro	_____
_____	equipment
_____	own (possessive)
la ropa de marca	_____
_____	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')



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

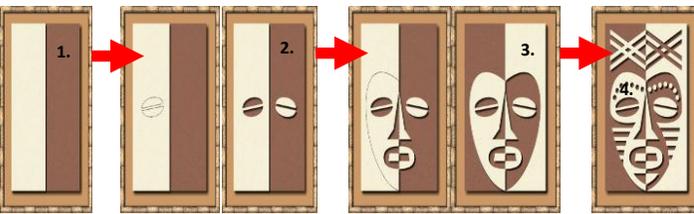


B.	How to use the Grid Method for accurate drawing.
1.	Use a ruler to draw an equally spaced grid onto your image.
2.	Draw an identical grid LIGHTLY onto paper.
3.	Draw in the main outlines of your image, focusing on one square at a time Use a ruler to help you measure the positioning of lines if needed.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

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

6 Key Words for this project

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



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

- 1
- 2
- 3
- 4
- 5



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

Collage is:

Steps for making your collage:

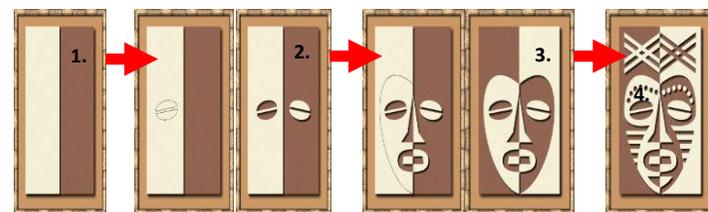
- 1
- 2
- 3
- 4

What each tool is used for:

Cutting mat

Craft knife

Glue stick



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

Papier mâché is:

Steps for making your sugar skull:

- 1
- 2
- 3
- 4
- 5



Keywords for this project in detail:

Sugar Skull		A colourful and heavily patterned skull. The term is often applied to edible version of a skull, with colour and pattern. They are made and eaten in celebrating ancestors who have died.
Mexican Day of the Dead		Or known as 'Día de Muertos' in Spanish, is a festival held in Mexico from 31 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?	<p>Different things happen on each day....</p> <p>DAY 1:</p> <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). <p>DAY 2:</p> <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. <p>DAY 3:</p> <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.



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

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

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

B. Materials

Timbers come from **trees**



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

Softwoods come in planks and boards

Manufactured Boards come from **wood pulp**



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

Manufactured Boards come in sheets

Polymers come from **crude oil**



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

Polymers come in sheets, graduals and filament

D. Art Deco Design Movement

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



Key Designer

Émile-Jacques Ruhlmann



Key Features:

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

Colours:

Rich, bold, contrasting colour palettes

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

Line Styles:

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



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

C.	Key Words
Research	
Template	
component	
Symmetrical	

A. Workshop Tools 						
_____	_____	_____	_____	_____	_____	_____
						

B. Materials

Timbers come from _____



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

Softwoods come in _____ and _____

Manufactured Boards come from _____



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

Manufactured Boards come in _____

Polymers come from _____

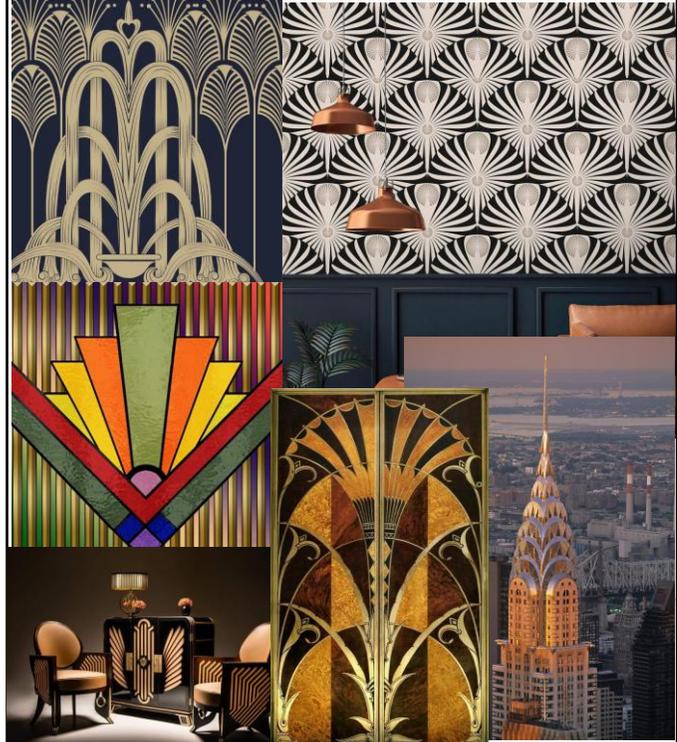


Acrylic – which you used as your Memphis shapes – is a **polymer**

Polymers come in _____, _____ and _____

D. Art Deco Design Movement

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



Key Designer _____



Key Features:
 _____ shapes and _____,
 _____ colours and contrasting _____,
 _____ and rectangular forms
 _____ and elongated forms
 Stepped or _____

Colours:

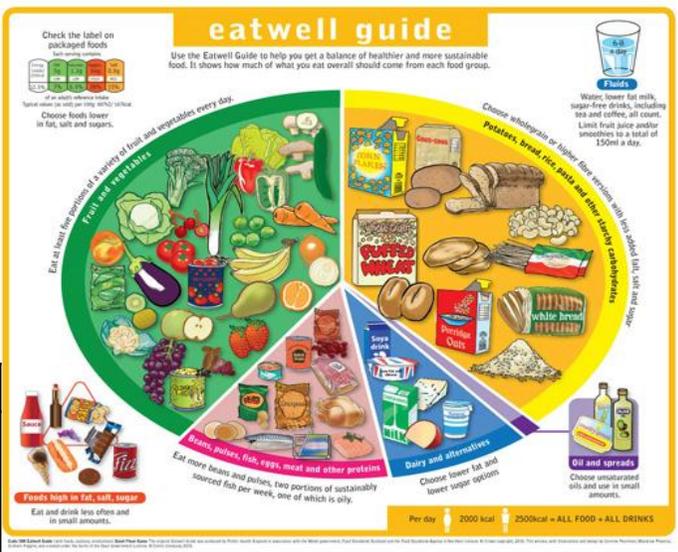
Line Styles:

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

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

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

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



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

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

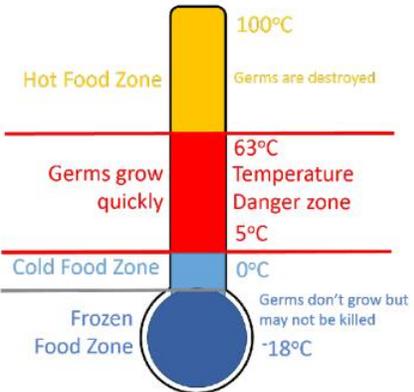


Image: TAFE NSW

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

What we are learning this term:

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

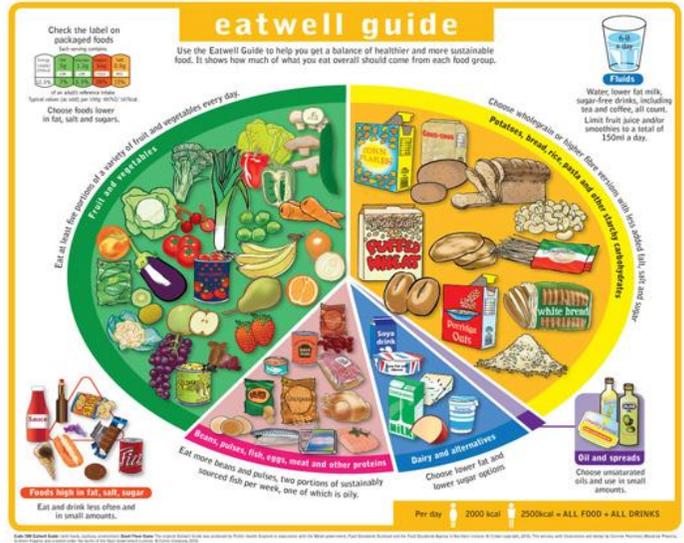
A.	What are the nutrients required in the diet?
Carbohydrates	
Protein	
Fats	
Vitamins	
Minerals	

c. Storing food safely

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

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

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



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

c. Food related waste

Reasons for wasting food:	Reducing Waste:
---------------------------	-----------------

c. Influences on food choice

--

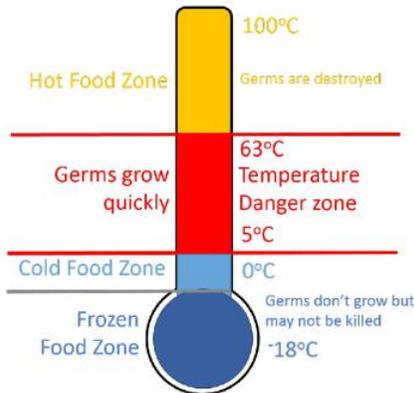


Image: TAFE NSW

YEAR 8 GRAPHIC COMMUNICATION

What are we learning this term?

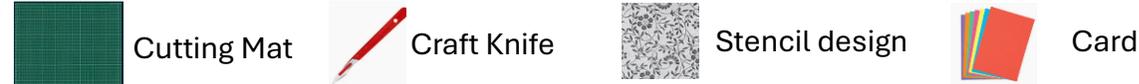
A Stencil design	B Step up card	C Accordion card	D Key words	E Evaluation
---------------------	-------------------	---------------------	----------------	-----------------

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

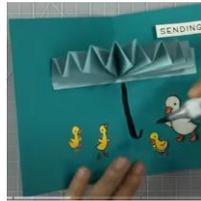


Coloured paper to add to the design
Cut any incisions

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

List 3 health and safety rules for using a cutting knife

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

C | Draw the inside of an accordion card

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

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

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?



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	1 1/2 beats	
	Quaver, Eighth Note	1/2 beat			Dotted Quaver, Dotted Eighth Note	3/4 beat	

G How to read music – treble clef and Bass Clef

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

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

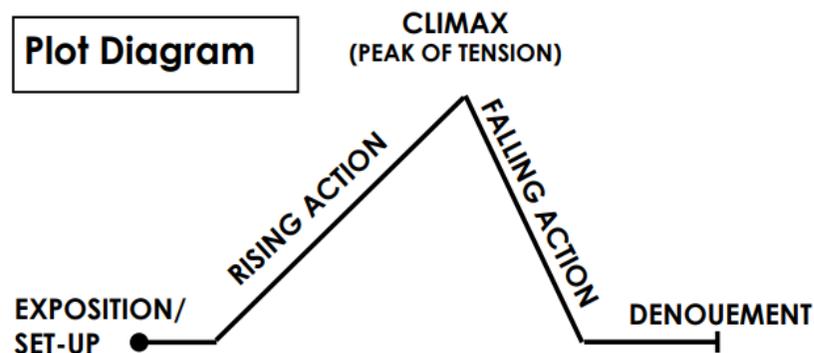
G Describing music – MAD T SHIRT

M	A	D	T	S	H	I	R	T
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

Drama YR8 Tension

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

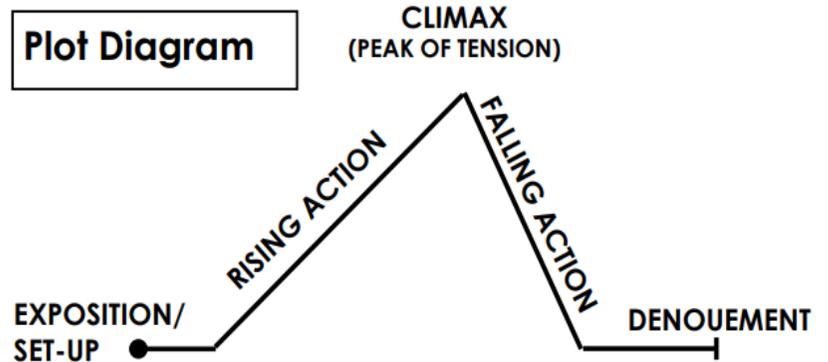
Plot Diagram



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

Drama YR8 Tension

Keywords	
Dramatic Tension	
Suspense	
Mime	
Slow-motion	
Atmosphere	
Cliff-hanger	
Exposition	
Rising Action	
Climax (Peak of Tension)	
Falling Action	
Denouement	
Pace	
Tone	
Volume	
Pause/silence	
Resonance / Clarity of voice	
Distinction between characters	
Pitch	



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

SWINDON ACADEMY READING CANON

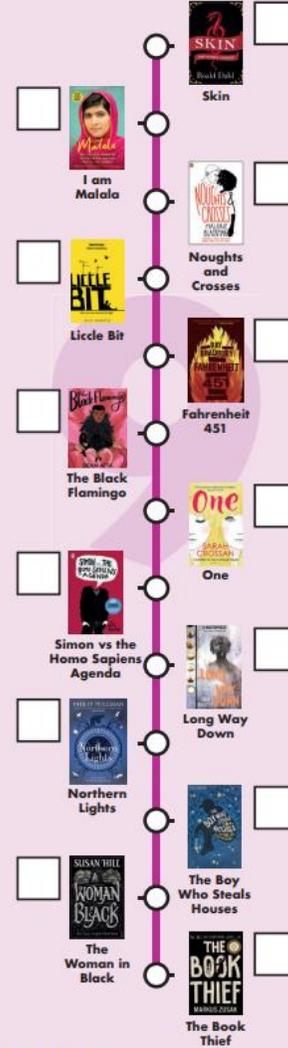
Year 7



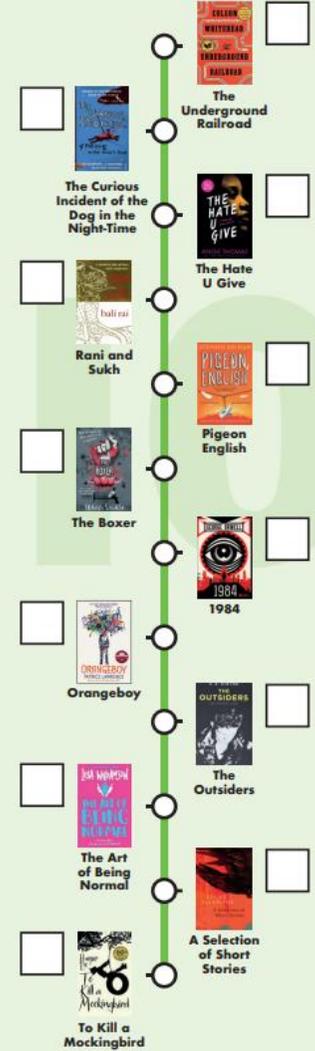
Year 8



Year 9



Year 10



#ReadingisPower