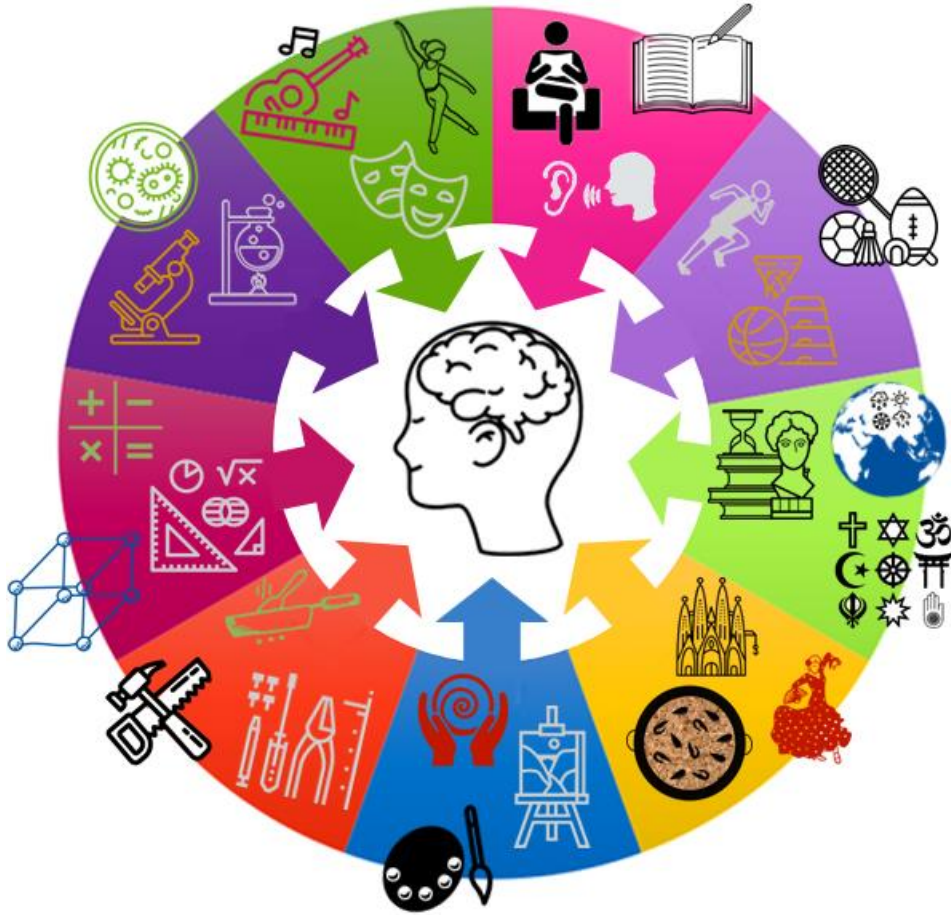


Year 8 – Mainstream Knowledge Organisers

Term 5



Swindon Academy 2024-25

Name:	
Tutor Group:	
Tutor & Room:	

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

Using your Knowledge Organiser and Quizzable Knowledge Organiser

Knowledge Organisers

Year 7 Term 1 Science/Chemistry - Topic TOP Particles

What are we learning this term:

- Particle model
- Changing states
- Mixtures
- Separating mixtures

5 Key Words for this term:

- Matter
- Particles
- Dissolution
- Mixing
- Freezing
- Condensation
- Solids
- Solvent
- Filtration

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
• tight	• not tight	• not tight
• fixed shape	• no fixed shape	• no fixed shape
• fixed volume	• fixed volume	• no fixed volume

B. What happens to the temperature of a substance when it changes state?
During the change of state, the temperature will stay the same until the change of state is complete.

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

B. What are the different changes of state?

Change of State	From	To
Melting	Solid	Liquid
Freezing	Liquid	Solid
Evaporation	Liquid	Gas
Condensation	Gas	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.

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.

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?

Change of State	From	To
Melting	Solid	Liquid
Freezing	Liquid	Solid
Evaporation	Liquid	Gas
Condensation	Gas	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.

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.

Expectations for Prep and for using your Knowledge Organisers

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

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.com website interface. On the left is a 'Planner' for the week of 10th May to 14th May 2020, with columns for different subjects. On the right is a 'New! Year 10 Knowledge Organiser: What is Particle Theory?' which includes sections for 'What is particle theory?', 'Describe the arrangement and movement of particles in the three states of matter', and 'What is the law of conservation of mass?'. It also features diagrams of particle arrangements for solid, liquid, and gas states.

Step 2

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

This screenshot shows a printed knowledge organiser page with handwritten notes. The date '29th May 2020' and the title 'Particle theory' are written at the top. A diagram shows the transitions between solid, liquid, and gas states: melting (solid to liquid), freezing (liquid to solid), evaporation (liquid to gas), and condensation (gas to liquid). Arrows indicate 'Gaining energy' for melting and evaporation, and 'Losing energy' for freezing and condensation.

Step 3

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

Handwritten notes on lined paper. At the top, the date '29th May 2020' is written. The title 'Properties of the states of matter' is underlined. The notes define particle theory as 'all matter is made of particles'. It then describes the three states: 'Solid = regular pattern particles vibrate in fixed position', 'Liquid = particles are arranged randomly but are still touching each other particles can slide past each other and move around', and 'Gas = Particles are far apart and are arranged randomly. Particles carry a lot of energy'.

Step 4

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

Handwritten notes on lined paper repeating the definitions from Step 3. It lists 'Solid = regular pattern particles vibrate in fixed position' three times, 'Liquid = particles are arranged randomly but are still touching each other particles can slide past each other and move around' once, and 'Gas = Particles are far apart and are arranged randomly. Particles carry a lot of energy' once.

Step 5

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

This screenshot shows a quizzable version of the knowledge organiser. The questions are: 'What is particle theory?', 'What are the different changes of state?', and 'What are the different states of matter?'. Handwritten answers are provided: 'Self quizzing' for the first question, and 'Arrangement/movement of matter' for the second. For the third question, 'Solid = regular pattern particles vibrate in fixed position', 'Liquid =', and 'Gas =' are written.

Step 6

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

Handwritten notes on lined paper showing corrections. The definitions from Step 3 are repeated with checkmarks indicating they are correct. The definition for gas is corrected from 'far apart' to 'far apart and are arranged randomly'. The definition for liquid is corrected from 'are still touching each other' to 'are still touching each other'.

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

'The Tempest' T Knowledge Organiser

Plot Summary

The Tempest Act 1, Scene 1

Alonso, the King of Naples, is on a ship with his son Ferdinand and his companions Sebastian, Antonio, Stephano and Trinculo. They are struck by a terrifying, howling storm. They abandon ship and swim to a nearby island but are washed ashore in different places. The island seems to be abandoned.

After the Storm Act 1, Scene 2

From a nearby island, Miranda watches the huge tempest. She lives with her father Prospero and has little memory of her life before the island. Prospero tells his daughter of their past: he was the Duke of Milan twelve years ago, but he was so involved with his books and secret studies that he did not realise his brother Antonio was stealing power from him. One night, Antonio ordered soldiers to take Prospero and Miranda and put them on a boat to their death. But they were washed ashore this island safely and have lived there ever since. Prospero has been ruler of the island. Prospero has created the storm to bring his brother to the island.

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

Prospero is a powerful magician who controls the spirit Ariel who completes tasks for him. Prospero has agreed to release Ariel after this last mission. Caliban is a deformed savage slave who is also under Prospero's control. He is the son of an old witch, Sycorax, and is a native of the island. Prospero taught Caliban how to speak but Caliban resents the control Prospero has over him.

Kind Alonso Act 2, Scene 1

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

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

The monster Caliban is found by Stephano and Trinculo. They give him alcohol to drink and he gets drunk. Caliban offers to serve Stephano because he believes he is a god because of the heavenly drink! Caliban explains to them how Prospero has treated him and that he will be their guide on the island if they overthrow him. The three drunks go to find and kill Prospero.

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

Ferdinand has survived the storm. He is safely on the island and is found by Miranda. They fall instantly in love. Prospero wants to test that the love is real. Ferdinand has to endure hard labour to prove his intentions are honourable. Miranda pities Ferdinand and wants to marry him. Prospero blesses their marriage.

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

A marriage for Ferdinand and Miranda is arranged and celebrated with a masque attended by spirits. It is interrupted when Prospero recalls the threat from Trinculo, Stephano and Caliban. Prospero and Ariel send spirit dogs to scare them away. King Alonso, Sebastian and Antonio meet Prospero. He explains what has been happening on the island. He shows them Ferdinand and Miranda who are now married. King Alonso is filled with regret and asks for forgiveness from Prospero which he grants.

Epilogue

Prospero declares that he will be giving up his magic. Ariel is released from his service. The party travel back to Milan. We do not know what has happened to Caliban.

Terminology: Keywords

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

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

sibilance – figure of speech in which the letter 'S' is repeated. This often creates a hissing sound.

Characters

Alonso – King of Naples

Sebastian – Alonso's brother

Ferdinand – Alonso's son

Antonio – Prospero's brother.
Antonio stole Prospero's title as Duke of Milan.

Gonzalo – the old counsellor to the King of Naples

Trinculo – a jester

Stephano – a drunken butler

Prospero – the rightful Duke of Milan

Miranda – Prospero's daughter

Ariel – an airy spirit; a slave of Prospero's who earns his freedom

Caliban – a savage and deformed slave of Prospero's; a native of the island

Vocabulary: Keywords

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

imperialism - a policy of extending a country's power and influence through colonization, use of military force, or other means.

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

tempest – a violent storm.

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

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

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

exploitation – taking advantage of someone for your own benefit

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

dual nature – having two sides.

Background Information

Shakespeare was born in the Elizabethan era, named after Elizabeth I. After she died, James I became king. This period of history is called the **Jacobean** era, because Jacob is the Latin for James. Shakespeare lived and worked in both eras.

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

Sea exploration was booming in the Elizabethan era as people 'discovered' new parts of the world. Queen Elizabeth I was obsessed with their discoveries and was happy to pay for their travels. Led by her example, the rest of the country were also fascinated by their stories and goods. Colonialism has had a lasting impact on the world. Many natives were exploited and killed by the white European colonisers. Issues of colonialism; such as racism and slavery are important to the play.

'The Tempest' T 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 - _____

'The Tempest'
T Knowledge
Organiser

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 _____

d 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.

Vocabulary: Keywords

colonialism - _____

_____ The original inhabitants of the land are called _____.

usurp - _____

imperialism - _____

tempest - _____

treason - _____

callous - _____

pathos - _____

exploitation - _____

nurture - _____

dual nature - _____



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

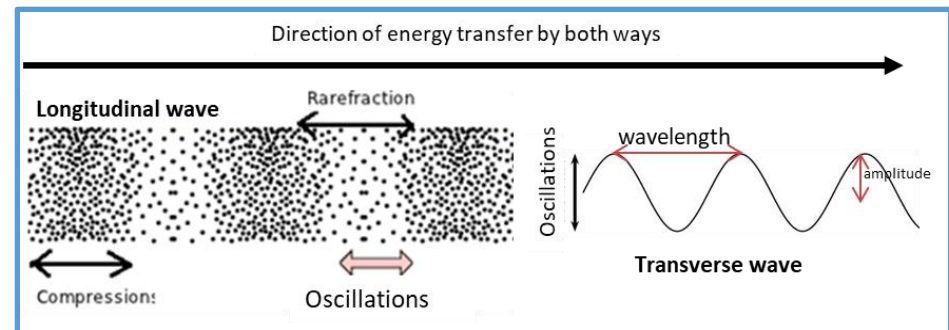
A. How do sound waves compare with Electromagnetic waves (e.g. Light)								
<table border="1"> <thead> <tr> <th>Sound</th> <th>EM waves, like light</th> </tr> </thead> <tbody> <tr> <td>Requires a medium (particles) to travel</td> <td>Does not require a medium (particles)</td> </tr> <tr> <td>Longitudinal 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
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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.
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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)
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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.	

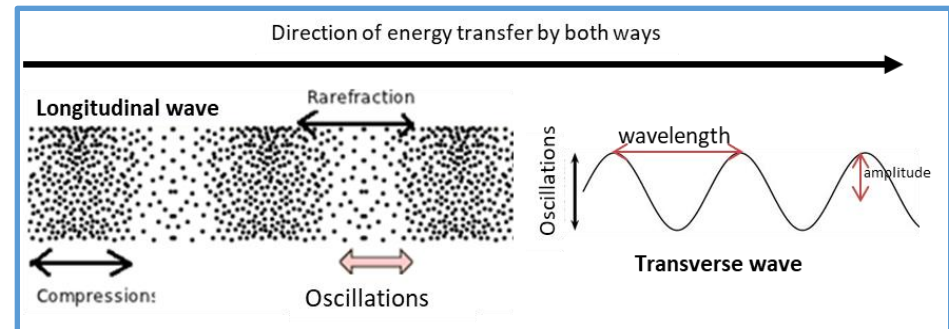
A. How do Sound waves compare to Electromagnetic waves (e.g. Light)?	
Sound	EM waves, like light

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?	

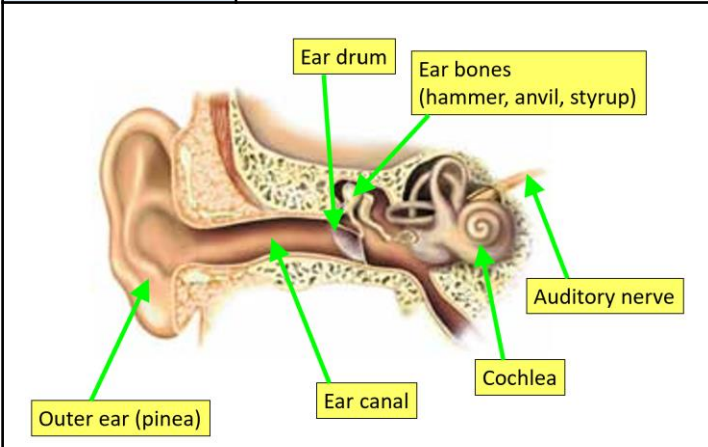




C.	How is sound produced?
	Sound is produced by vibrations
	How does sound travel?
	Vibrations transfer energy through particles.
	Which media does sound travel fastest in and why?
	Solids – the particles are closer together

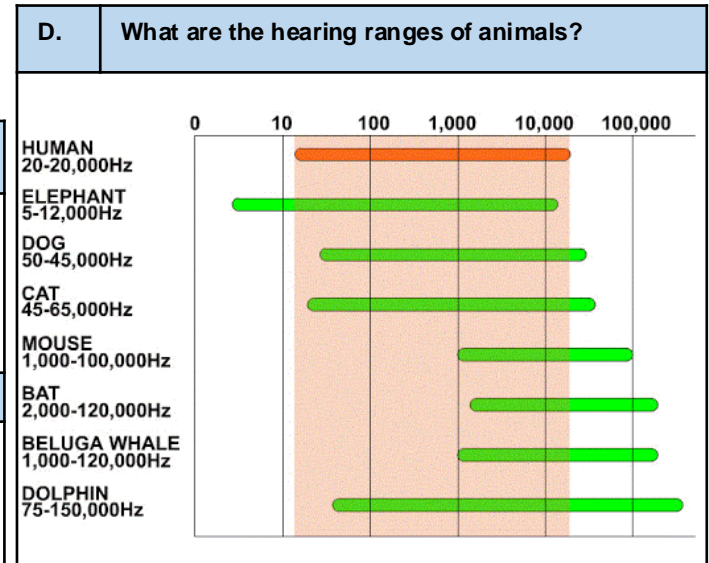
D.	Hearing ranges
What is the hearing range of humans?	Humans have a hearing range between 20 – 20 000 Hz
What is ultrasound?	Sounds with a frequency above 20 000 Hz
What is ultrasound used for?	Uses of ultrasound: <ul style="list-style-type: none"> • Prenatal scans of unborn babies • Ultrasonic cleaning 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 diaphragm 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?

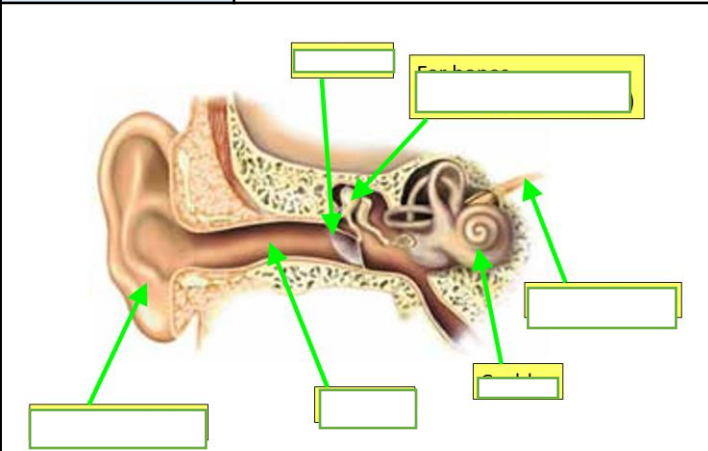
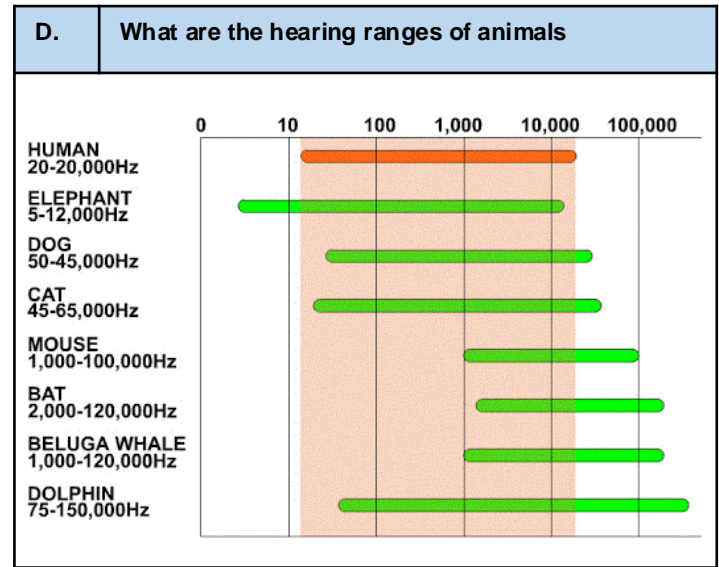
D.	Hearing ranges
	What is the hearing range of humans?
	What is Ultrasound?
	What is ultrasound used for?

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:	



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

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

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

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

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

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

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

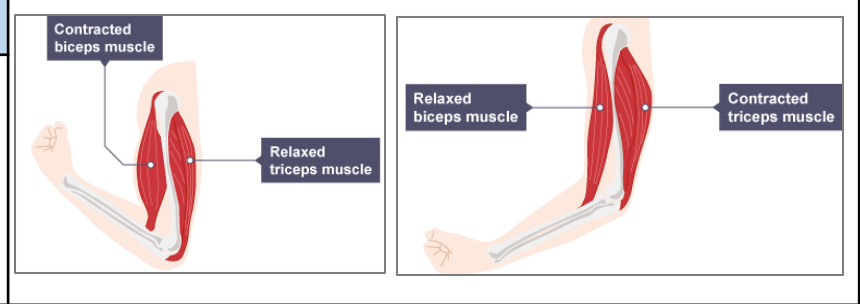
A.	How does the muscular system help us move?
This system allows us to move by contracting and relaxing our muscles	

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

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

A	What are antagonistic muscles?
In order to move bones in two directions (e.g. bending then stretching your arm), muscles are paired antagonistically (one moves the bone in one direction, the other in the opposite direction).	

How do they work?
<ul style="list-style-type: none"> 1. To raise the forearm, the biceps contracts and the triceps relaxes. 2. To lower the forearm again, the triceps contracts and the biceps relaxes.



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

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



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

A	What are antagonistic muscles?

How do they work?		

A	Making blood cells – what part of the bone makes blood cells?
Why are bones hollow?	

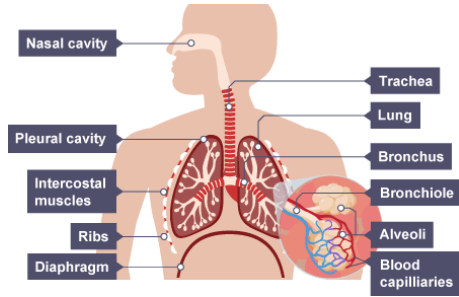
A.	What is Osteoporosis
What are rickets?	

A.	What happens if you overstretch a tendon?
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?

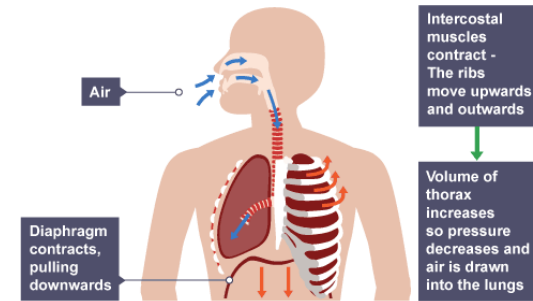
$$\text{Lung capacity} = \text{vital capacity} + \text{residual volume}$$

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?

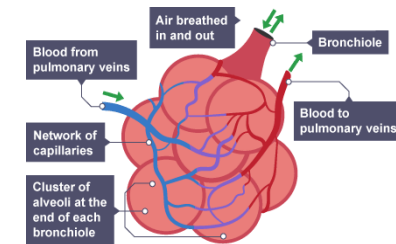
1. Destroys **cilia** in the airways so they are less able to sweep **mucus** containing pathogens out of the lungs, leading to **smoker's cough**
2. Irritates the **bronchi**, causing **bronchitis**
3. Destroys alveoli, reducing the surface area for gas exchange and causing **emphysema**
4. Cigarette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



The alveoli

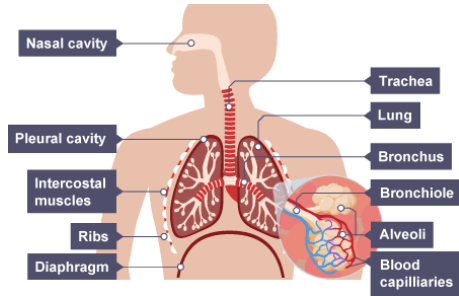
What adaptations do the alveoli have?

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.

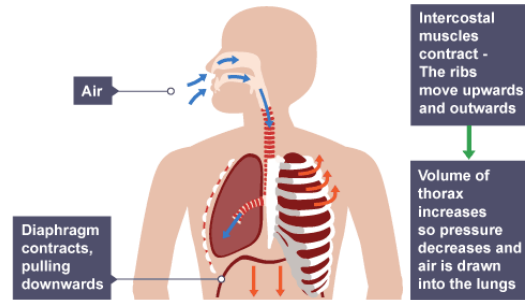
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How does the respiratory system work?

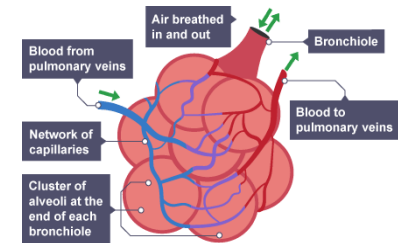
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Why are ventilation and Respiration different?



B. Where does gas exchange happen?

What are Alveoli?



The alveoli

B. What is Asthma?

What triggers Asthma?

How can it be treated?

What adaptations do the alveoli have?

What is Diffusion?

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 effects can smoking have on the gas exchange system?



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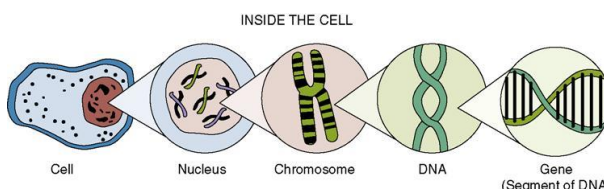
D.	What is fermentation?
What are the uses of fermentation?	

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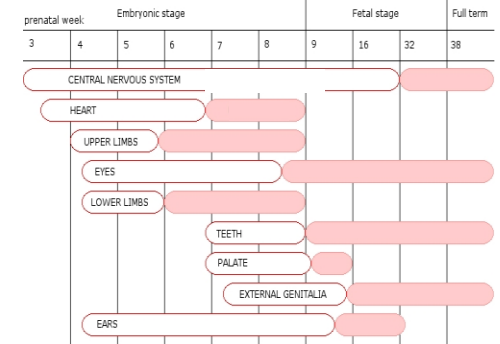


E.	What makes up DNA?
	<ul style="list-style-type: none"> DNA has a double helix structure with two sugar-phosphate backbones wound around each other. Pairs of complementary bases connect the two backbones (strands)
	What are the 4 bases and how are they paired?
	<ul style="list-style-type: none"> The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

E.	What are the different types of reproduction and how are they different?									
	<table border="1"> <thead> <tr> <th></th> <th>Sexual reproduction</th> <th>Asexual reproduction</th> </tr> </thead> <tbody> <tr> <td>How many parents?</td> <td>2 parents</td> <td>1 parent</td> </tr> <tr> <td>Will offspring inherit features from parents?</td> <td>Offspring have features of both parents</td> <td>Offspring are clones of the 1 parent</td> </tr> </tbody> </table>		Sexual reproduction	Asexual reproduction	How many parents?	2 parents	1 parent	Will offspring inherit features from parents?	Offspring have features of both parents	Offspring are clones of the 1 parent
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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?								
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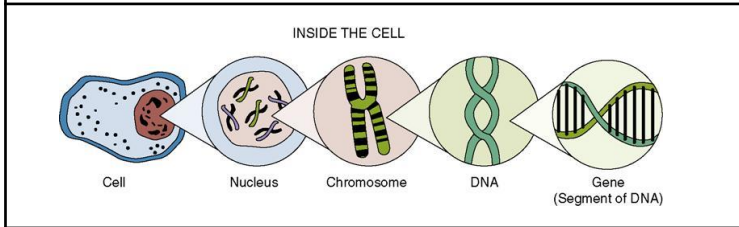


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Will offspring inherit features from parents?		

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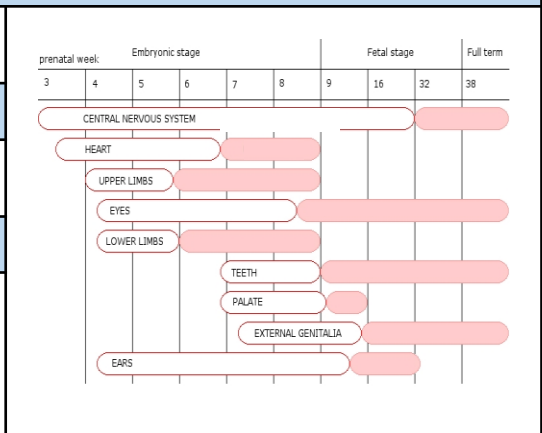
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What is the Umbilical cord?

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What problems can be caused by different drugs during gestation?

Drugs	Problems
Cigarettes	
Alcohol	
Other illegal drugs	

Geography Knowledge Organiser: Year 8 Term 5 Ecosystems



Background:	
1.	An ecosystem is a community of things that are linked together to make up a type of environment. (A, B)
2.	An ecosystem contains biotic (living) and abiotic (non-living) parts. (B)
3.	The climate of an ecosystem is very important as it influences what you will find there. (C)
4.	The main world biomes can be found in specific parts of the world, they have very different climatic conditions & features. (C, D)
5.	The rainforest biome has some distinctive features. (F)
6.	However, deforestation is a major challenge facing rainforests world-wide. (E)
7.	The deserts world-wide also have some key characteristics. (G)
8.	The Sahara desert is a place with opportunities for people, but there are also challenges which need to be overcome. (H)

A. Classification of ecosystem (4)	
Ecosystem	A community of things linked together in an environment.
Biome	An ecosystem on a large scale that covers parts of continents and whole countries.
Habitat	A place where plants and animals live. Example: a pond, or hedgerow.
Biodiversity	The amount of variety of life there is in a place.

B. Features of an ecosystem (3)	
Biotic	The living parts of an ecosystem. Examples: plants, animals, humans.
Abiotic	The non-living parts of an ecosystem. Examples: soil, climate, river.
Food chain	A diagram that shows what is eating what in an ecosystem.

C. Climatic features (4)	
Climate graph	A graph showing rainfall and temperature in a place over a whole year.
Precipitation	Any form of water falling from the sky.
Convictional rainfall	Rain that is produced when warm air rises, cools and condenses, forming clouds and then rainfall.
High pressure	Areas where air is sinking, this air has little moisture, thus condensation can not happen.
F. Rainforest features (4)	
Rainforest layers	Forest floor, understorey, canopy, emergent layer.
Nutrient cycle	Nutrients move from living things to litter and the soil in a continuous cycle, keeping both plants and soil healthy.
Drip tip leaves	A plant adaptation that lets excess water drip off leaves quickly.
G. Desert characteristics (4)	
Diurnal range	Differences between the highest day and lowest night time temperature.
Nocturnal	Animals only come out at night.
Cactus	Long root systems to get as much water as possible from dry ground.
Camel	Webbed feet to help walk in sand.

D. Major global biomes (4)	
Tundra (2)	1. Found at the far north and south of the planet. 2. A cold ecosystem, little rainfall.
Hot desert (2)	1. Found along the Tropic of Cancer and the Tropic of Capricorn. 2. Hot environments with little rain.
Tropical rainforest (2)	1. Found in places along the Equator. 2. Hot and humid environments with huge amounts of rainfall.
Temperate forest (2)	1. The main biome of the UK and other places along the same lines of latitude. 2. Warm summers, mild winters. No extremes of temperature, rainfall.
E. Deforestation in the rainforest (6)	
Deforestation	The cutting down and removal of forest. This happens due to many factors.
Logging	Cutting down trees to sell the wood for a profit, sometime this is done illegally.
Cattle ranching	Removing trees from a large part of the rainforest and keeping cows on the land. These are sold for meat.
Slash and burn	A type of farming where you cut down a small area of trees, burn the vegetation and then grow crops on this land.
Soil erosion	When the soil in an area loses its minerals (water or wind erosion) so that it becomes difficult to grow crops there.
Indigenous tribes	A group of people who live traditional lives in places (like the rainforest).

H. Opportunities and challenges for development in the Sahara desert	
Where	The Sahara is found in Northern Africa.
Opportunities (2):	
1. In Algeria, oil extraction accounts for 60% of the GDP. 2. Farming in Egypt happens because the Aswan dam provides water all year round to grow crops and providing an income for farmers.	
Challenges (2)	
1. Extreme temperatures can cause illness or death because of dehydration. 2. Water is scarce and so farming can be unreliable meaning an unreliable income for farmers.	



Background:

1. An ecosystem is a community of things that are linked together to make up a type of environment. **(A, B)**
2. An ecosystem contains biotic (living) and abiotic (non-living) parts. **(B)**
3. The climate of an ecosystem is very important as it influences what you will find there. **(C)**
4. The main world biomes can be found in specific parts of the world, they have very different climatic conditions & features. **(C, D)**
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A. Classification of ecosystem (4)	
Ecosystem	
Biome	
Habitat	
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B. Features of an ecosystem (3)	
Biotic	
Abiotic	
Food chain	

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Climate graph	
Precipitation	
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Where	
Opportunities (2):	Challenges (2)

D. Major global biomes (4)	
Tundra (2)	
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Deforestation	
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Soil erosion	
Indigenous tribes	

Year 8 History Unit 4 Age of Exploration

What we are covering: Age of Exploration

We will be studying: How this helped to kickstart the Industrial Revolution (E, F), The lives of slaves on plantations and how this compares to those of factory workers during the Industrial Revolution (G), Factors that contributed to the abolition of slavery and the slave trade (H), Developments in transport during the Industrial Revolution (I).

F. Causes of the Industrial Revolution

Population growth – Rapid growth in population. The more people there are the more goods they buy. Increase in population provided source of labour – workers.

Raw materials – Lots of iron to make machines, railways and cannons, coal to drive steam engines in the factories and clay to supply the pottery industry. Raw materials for new machines/inventions were available, either home produced or imported

Farmers grew more food – They are producing more food for the growing population, particularly for those in towns who cannot grow their own food. Farm workers are earning more and so have more money to spend on goods produced by industry.

Empire and Trade – Traders make more money and invest it in improving British industry and transports. Traders bring in raw materials like cotton from America. People overseas buy lots of British goods e.g. cotton cloth. This keeps the factories and workers busy back in Britain.

British transport improved – Better transport (canals and railways) makes raw materials cheaper and makes the supply more reliable. It also enlarges the markets and makes the finished goods cheaper. Improved transport allows new ideas and inventions to spread more quickly.

Talented Entrepreneurs and Inventors – Britain has great inventors (e.g. Arkwright) who have ideas about how to improve industry. Entrepreneurs can see how to make money out of these new ideas and invention.

E. Why did Britain's population increase so rapidly after 1750?

Improvements in farming After 1750 farmers produced more food and people had the opportunity to enjoy a healthier diet (fruit, veg, dairy and meat). All the proteins and vitamins helped the body to fight disease.

Edward Jenner – in 1796, Jenner discovered how to vaccinate against one of Britain's worst diseases – smallpox. Gradually, more and more people were treated until 1870 when vaccination was made compulsory for all. Smallpox disappeared.

Improvements in Public Health – After the 1860's councils began to clean up towns and cities. Clean water supplies and sewers were installed, better housing was built too.

Super Soap – after 1800 cheap soap became readily available. Soap is a powerful germ-killer (although before the 1860's (at this time) people did not know that germs caused disease.

Medical advancements – After 1870, doctors started to use anaesthetics (numbs pain) and antiseptics (kills germs) to make operations safer and cleaner. Fewer patients died of shock, pain or infection.

G. How did the lives of slaves and factory workers compare?

Slaves	Factory Workers
Families were deliberately split up	Labourers worked 12- to 14-hour days, six days a week. When demand increased it could be up to 19 hours
Owners gave their slaves new names, and some owners branded their initials onto the slaves' skin	The noise of the machines caused workers to lose their hearing, and the dust and cotton fibres that filled the air caused lung diseases.
Working in sugar cane and rice plantations was exhausting, but tobacco plantations tended to be less demanding.	Factory owners kept strict discipline, docking the wages of employees who broke factory rules.
One of the worst jobs was working in the salt ponds of the Turks and Caicos Islands, where standing for long hours in the saltwater caused blisters and boils to spread across slaves' legs	Poor families depended upon the extra income provided by their children – children would start work as young as 5 (as scavengers and piecers)
Small minority of slaves were taken into the plantation owners house, where they worked as cooks, servants or cleaners – some given a basic education	Children had to work right next to moving machinery, and if their arms or leg got caught, they could lose a limb – they would be beaten with a leather strap for not working hard enough/being disobedient.

H. Beginnings of the Slave Trade

Discovery of the New World

- Interest in the New World. Christopher Columbus discovered America in 1492.
- Conquistadors- Balboa's exploration of Isthmus of Panama led to the establishment of the first European settlement on the American mainland.
- British colonies benefitted from their place in the empire by gaining more developed infrastructure, better education and improved law and order. Britain also introduced democracy to its colonies which gave more power to the people. Even colonies that had left the Empire were provided with help and support through the commonwealth.

The trade triangle

- Around 11 million African people arrived as slaves in the Americas between 1500 and 1850.
- Ships full of commodities were transported from Britain to West Africa in port towns along the coast.
- Slaves were shipped across the Atlantic ocean to the Americas and the Caribbean.
- Slaves were sold, and the ships then transported the raw materials from the plantations back to Britain to sell to the British public.

Year 8 History Unit 4 Age of Exploration

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British transport improved –

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E.	Why did Britain's population increase so rapidly after 1750?			
<u>Improvements in farming</u>	<u>Edward Jenner</u> –	<u>Improvements in Public Health</u> –	<u>Super Soap</u> –	<u>Medical advancements</u> –

G. How did the lives of slaves and factory workers compare?

Slaves	Factory Workers

H Beginnings of the Slave Trade

Discovery of the New World

The trade triangle

Year 8 History Unit 4 Age of Exploration

I Factors in the abolition of slavery and the slave trade			
Slave Rebellions	The Maroons – escaped slaves who ran away from their plantations into the mountains There were 2 wars and the Maroons were cheated out of their peace agreement, arrested and transported out of Jamaica	Nat Turner’s – Organised an uprising which resulted in the murder of the plantation owner and his family and the murder of 51 other white people. Turner was arrested, convicted and hanged along with 16 of his followers. This resulted in harsher laws against slaves.	Haitian Revolution – most successful slave rebellion. Resulted in the foundation of Haiti. The slaves rebelled killing thousands of whites and burning down sugar plantations. The slaves succeeded and declared their independence in 1804.
Sugar Boycotts	<ul style="list-style-type: none"> - After Parliament rejected the abolition bill in 1791, abolitionists took action by sidestepping Parliament entirely and calling for a boycott on Britain's largest import, slave-grown sugar. - An anti-sugar pamphlet by William Fox published in 1791 sold 70,000 copies in four months - by 1792, 400,000 people in Britain were boycotting sugar - The boycott spread rapidly until by 1794 it is estimated that well over 300,000 families had joined - Grocers reported that demand had fallen by a third 		
Economy	<ul style="list-style-type: none"> - Less people were buying slave-grown sugar from the West Indies because they were able to get cheaper and more ethical sugar from countries such as Cuba and Brazil. This led to the plantation owners in the West Indies losing business. - It became clear to the plantation owners that it was actually cheaper to employ ex-slaves as waged labourers than to own slaves who had to be housed and fed. With a smaller market for their cargoes there was less profit for the slave traders in the West Indies. 		
Abolitionists	Granville Sharp- set up the Abolition Committee in 1787 to encourage the government to abolish slavery. Defended black enslaved people such as Jonathan Strong.	William Wilberforce- abolitionists' representative in parliament. Wilberforce introduced the abolition bill every year between 1790 and 1806, but they kept being defeated. Succeeded- 1807 Abolition of Slavery	Thomas Clarkson- helped to start the Committee for the Abolition of the African Slave Trade in 1787.

J. How did developments in transport improve people's lives in Britain?

Canals	Railways
<ul style="list-style-type: none"> • People knew that it was far easier to transport goods over water than it was over land • A horse could pull a barge with ten times more weight on than if the horse was pulling a cart – fewer horses pulling more goods = profitable • Francis Egerton the Duke of Bridgewater had seen how effective canals were for transporting raw materials so he decided to link some coal mines that he owned in Worsley by a canal to the city of Manchester where the coal was used for iron and ship making (The Bridgewater Canal). • Made it easier to transport coal to Manchester - the price of coal in the city halved and the Duke of Bridgewater made huge amounts of money – this inspired others to want to build canals. 	<ul style="list-style-type: none"> • Trains were a cheaper, more efficient and more effective way of travelling than canals - could travel at 15 miles an hour which was far faster than the couple of miles an hour a horse could walk carrying a barge • Trains could carry 50 tonnes of goods - far more than a horse could pull on a barge • Trains could be used to carry passengers and up to 600 passengers would be carried on it every journey - people could go to places that they would have never been able to before • It allowed fresh dairy and agricultural produce from rural areas to be delivered to towns and cities • Trains were a financial success and people suddenly realised that railways could provide huge profits – investors spend huge amounts of money on railways.

Year 8 History Unit 4 Age of Exploration

I	Factors in the abolition of slavery and the slave trade		
Slave Rebellions			
Sugar Boycotts			
Economy			
Abolitionists			

J. How did developments in transport improve people's lives in Britain?	
Canals	Railways



What we are learning this term:		C.	What is the Trimurti?
A. Key words.	D. The nature of Goddess	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. 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. It is the preserver, protector, guard. Its 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		
Polytheism	The belief in or worship of more than one God.		
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.		
Immortal	living forever; never dying		
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.		
B		How do Hindus understand God?	
Hindus believe is Polytheistic	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.		
D.		What is the nature of the Goddess in Hinduism?	
Meaning		the Goddess is seen as the activating force that enables the male Gods to exert their power. The goddess has many forms.	
Different forms of Goddess		Kali, she represents the ferocious nature of the goddess	
		Parvati, she represents the kindness and gentleness of the goddess	
		Saraswathi is worshipped as the goddess of learning, wisdom, speech, and music.	
		Lakshmi is the goddess of good fortune, wealth, wellbeing.	
E.		What are the Hindu beliefs about the afterlife?	
Atman (soul)		It is 'a deep self hidden in all beings'. This soul within all living things is part of the pervading spirit of Brahman.	
Reincarnation		After death, the atman continues to exist and enters another body just 'as a man casts off old clothes and takes on other clothes'. This is because the atman is 'eternal' and 'indestructible'.	
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 classed as the fourth and ultimate goal.	
How these beliefs affect a Hindus everyday life		Karma literal meaning is 'action'. Hindus believe in a law that every action has an equal reaction either immediately or at some point in the future. Good or virtuous actions, will have good reactions or responses and bad actions, will have the opposite effect. So Hindus try to conduct good actions in their lives. They live good, ethical and moral lives, help people around them and follow the god's words. Follow the principles of Ahimsa.	
F.		What is meant by Ahimsa.	
1		Meaning- Showing respect for all living things and avoidance of violence towards others	
2		Why 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 nature of Goddess	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 is the nature of the Goddess in Hinduism?	
Polytheism		Meaning	
Trimurti		Different forms of Goddess	
Atman			
Samsara			
Pervading			
Eternal		E. What are the Hindu beliefs about the afterlife?	
Immortal		Atman (soul)	
Karma		Reincarnation	
Moksha		The cycle of Death and rebirth.	
Ahimsa		How these beliefs affect a Hindus everyday life	
Reincarnation			
B	How do Hindus understand God?	F.	What is meant by Ahimsa.
Hindus believe is Polytheistic		1	
Concept of Brahman		2	
Understanding of God		3	



What we are learning this term:	
<p>A. Describing morning routines B. Describing afternoon and evening routines C. Personality descriptors D. Relationships at home E. Relationships at home F. Film vocabulary</p>	
6 Key Words for this term	
1. Mi rutina diaria	4. las relaciones
2. el mundo	5. las soluciones
3. llevarse bien con	6. puntos de vista

A. Lo que hago por las mañanas – What I do in the mornings

la rutina	routine
desayunar	to have breakfast
despertar(se)	to wake up
duchar(se)	to shower
ir al instituto	to go to school
lavar(se) los dientes	to brush your teeth
levantar(se)	to get up
peinar(se)	to brush your hair
vestir(se)	to get dressed
a menudo	often
a veces	sometimes
antes	before
después	afterwards
durar	to last
inmediatamente	immediately
luego	then/later
mientras	while
nunca	never

B. Lo que hago por las tardes y por las noches – What I do in the afternoons and evenings

acostar(se)	to go to bed
cambiar de ropa	to get changed
cenar	to have dinner
hacer los deberes	to do homework
merendar	to snack
pasear al perro	to walk the dog
relajar(se)	to relax
volver a casa	to return home
cuando llego a casa	when I get home
cuando me apetece	when I feel like it
si mis padres me dejan	if my parents let me
si tengo tiempo	if I have time
siempre que puedo	whenever I can

C. Personalidad

trabajador	Hard working
hablador	Talkative
tranquilo	Quiet
serio	Serious
simpático	Friendly/nice
deportista	Sporty
estudioso	Studious
sociable	Sociable
Antipático	Unfriendly
Bastante	Quite
Un poco	A little bit
Siempre	Always
De vez en cuando	From time to time
Nunca	never
Sería	He/she would be
Tendría	He/she would have

Key Verbs			
<u>Aguantar(se)</u> To stand / bear	<u>Llevarse bien con – to</u> get on well with	<u>Cuidar de</u> To care for	<u>Pensar</u> To think
Me aguanto I stand / bear	Me llevo bien con I get on well with	Cuido de I care for	Pienso I think
Te aguantas You stand / bear	Te llevas bien con You get on well with	Cuidas de You care for	Piensas You think
Se aguanta S/he stands / bears	Se lleva bien con S/he gets on well with	Cuida de s/he cares for	Piensa s/he thinks
Nos aguantamos We stand / bear	Nos llevamos bien We get on well with	Cuidamos de We care for	Pensamos We think
Se aguantan They stand / bear	Se llevan bien con They get on well with	Cuidan de They care for	Piensan They think

D. ¡Te he dicho que no! – I've told you no!

estricto/a	strict
incompatible	incompatible
injusto/a	unfair
justo/a	fair
razonable	reasonable
a todas horas	all the time
el conflicto	conflict
el lio	mess
el permiso	permission
la regla	rule
raras veces	rarely
siempre	always
deprisa	fast / quickly

E. ¡Te he dicho que no! – I've told you no!

aguantar(se)	to stand / bear
criticar	to criticise
discutir	to argue
enfadarse	to get angry
Gritar	to shout
pelearse	to fight / argue
respetar	to respect
llegar a casa	to arrive home
llevarse bien con	to get on well with
llevarse mal con	to get on badly with
volver a casa	to return home
estar de acuerdo	to agree with
estar en contra	to be against

F. En busca de un mundo mejor – In search of a better world

las películas de acción	action films
las películas del Oeste	Westerns
las películas de amor	romantic films
las películas de artes marciales	martial arts films
las películas de ciencia ficción	science fiction films
los dibujos animados	animated films
las comedias	comedies
las películas de guerra	war films
las películas de terror	horror films
las películas policíacas	Police films
emocionantes	exciting
graciosas	Funny
interesantes	Interesting
infantiles	Childish
divertidas	Fun
inteligentes	Intelligent
tontas	Silly/stupid
aburridas	boring



G. Translation Practice	
I have breakfast then I clean my teeth	D l m l d d
I brush my hair while I get dressed	M p m q m v
My mum wakes up at 6.30 in the morning	M m s l a l s y m d l m
They go to school in the afternoon	V a c p l t
I get on well with my parents because they respect me	M l b c m p p m r
I don't get on with my sister	N m l b c m h
My dad is very strict	M p e m e
My mum is very reasonable	M m e m r
I get on with my teachers because they're hardworking =	m l b c m p p s t
From time to time I'm sporty but always I'm hardworking =	d v e c s d p s s t
Sometimes I'm lazy but often I'm friendly =	a v s p p a m s s
I get on with my teachers because they're hardworking =	m l b c m p p s t
I don't get on with my brother because he's annoying –	n m l b c m h p e m
I get on well with my parents because they're friendly =	m l b c m p p s s
My parents are more friendly than my teachers =	m p s m s q m p
My maths teacher is less studious and less hardworking =	m p d m e m e y m t
My geography teacher is more chatty =	m p d g e m h
They're less hardworking but more chatty –	s m t p m h
My friends are hardworking and chatty and sociable =	m a s t y h y s

H . Key Questions: Answer the following in your own words. Use these model answers	
¿Cómo es tu rutina diaria? – What is your daily routine like?	Normalmente me despierto a las siete de la mañana y me levanto muy pronto después. Me lavo los dientes, me visto y salgo de casa a las ocho para ir al colegio.
¿Te llevas bien con tus padres? – Do you get on well with your parents?	Sí, me llevo muy bien con mis padres especialmente con mi madre. Ella me respeta mucho y me da permiso para salir con mis amigos todo el tiempo. No me lleva muy bien con mi padre porque es muy estricto y se enfada todo el tiempo.
¿Describe tus profesores?	Mi profesor de matemáticas es muy simpático y divertido. Mi profesora de ingles es más simpática que mi profesor de ciencias pero mi profesor de ciencias es menos generoso. Mi profesor de español es tan guapo como mi profesor de educación física.
¿Qué películas te gustan? What films do you like?	Me encantan las películas de terror porque son emocionantes y entretenidas. Me gustan también las películas cómicas porque en mi opinión son muy graciosas y bastante divertidas

I. Key Questions: Translate these model answers using the KO	
¿Cómo es tu rutina diaria? – What is your daily routine like?	I get up at 8am and then I have a shower. I have my breakfast at 8.20 and then I get dressed. Normally on the weekends I get up later.
¿Te llevas bien con tus padres? – Do you get on well with your parents?	No, I don't get on well with my parents because they are very strict. I get on very well with my sister because she is fun and she makes me laugh. I also get on well with my brother because he respects me and we have a good relationship.
¿Describe tus profesores?	Mi profesor de matemáticas es muy simpático y divertido. Mi profesora de ingles es más simpática que mi profesor de ciencias pero mi profesor de ciencias es menos generoso. Mi profesor de español es tan guapo como mi profesor de educación física.

J. Key Grammar	
Using reflexive verbs	Reflexive verbs reflect an action that is done to oneself. When you use reflexive verbs, you need to use the reflexive pronoun before each one (conjugations to the verb apply as normal) e.g. Me levanto (I get (myself) up) e.g. Mi madre se levanta (My mum gets (herself) up) The reflexive pronouns are: me, te, se, nos, os, se You can recognise a reflexive verb in the dictionary because it ends in –SE
Using direct object pronouns (DOPs)	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. Me gusta llevar la camiseta – I like to wear the T-shirt <u>QR</u> you can use DOP and say Me gusta llevarla . (la on the end refers to the noun which in this case is FEM. SINGULAR) e.g. La voy a comprar = I'm going to buy it (the DOP is LA so we know the noun is FEM. SINGULAR). e.g. Voy a comprar el jersey = I'm going to buy the jumper <u>QR</u> lo voy a comprar = I'm going to buy IT. (LO in this case refers to MASC. SINGULAR. noun which is 'el jersey')



What we are learning this term:	
A. Describing morning routines B. Describing afternoon and evening routines C. Personality descriptors D. Relationships at home E. Relationships at home F. Film vocabulary	
6 Key Words for this term	
1. Mi rutina diaria	4. las relaciones
2. el mundo	5. las soluciones
3. llevarse bien con	6. puntos de vista

A. Lo que hago por las mañanas – What I do in the mornings

_____	routine
desayunar	_____
_____	to wake up
duchar(se)	_____
_____	to go to school
lavar(se) los dientes	_____
_____	to get up
peinar(se)	_____
_____	to get dressed
a menudo	_____
_____	sometimes
antes	_____
_____	afterwards
durar	_____
_____	immediately
luego	_____
_____	while
nunca	_____

B. Lo que hago por las tardes y por las noches – What I do in the afternoons and evenings

acostar(se)	_____	to get changed
_____	_____	_____
cenar	_____	to do homework
_____	_____	_____
merendar	_____	to walk the dog
_____	_____	_____
relajar(se)	_____	to return home
_____	_____	when I get home
cuando llego a casa	_____	when I feel like it
_____	_____	_____
si mis padres me dejan	_____	if my parents let me
si tengo tiempo	_____	whenever I can

C. Personalidad

trabajador	_____	Talkative
_____	_____	_____
tranquilo	_____	Serious
_____	_____	_____
simpático	_____	Sporty
_____	_____	_____
estudioso	_____	Sociable
sociable	_____	Unfriendly
_____	_____	_____
Bastante	_____	A little bit
_____	_____	_____
Siempre	_____	From time to time
_____	_____	_____
Nunca	_____	He/she would be
_____	_____	He/she would have
_____	_____	_____

Key Verbs

<u>Aguantar(se)</u> To stand / bear	<u>Llevarse bien con – to</u> get on well with	<u>Cuidar de</u> To care for	<u>Pensar</u> To think
I stand / bear	I get on well with	I care for	I think
You stand / bear	You get on well with	You care for	You think
S/he stands / bears	S/he gets on well with	s/he cares for	s/he thinks
We stand / bear	We get on well with	We care for	We think
They stand / bear	They get on well with	They care for	They think

D. ¡Te he dicho que no! – I've told you no!

_____	strict
incompatible	incompatible
_____	unfair
justo/a	fair
_____	reasonable
a todas horas	all the time
el conflicto	_____
el lio	_____
el permiso	_____
la regla	_____
raras veces	_____
siempre	_____
deprisa	_____

E. ¡Te he dicho que no! – I've told you no!

aguantar(se)	_____
criticar	to _____
discutir	_____
enfadarse	_____
Gritar	_____
pelearse	_____
respetar	_____
_____	_____
llegar a casa	_____
llevarse bien con	_____
llevarse mal con	_____
volver a casa	_____
estar de acuerdo	_____
estar en contra	_____

F. En busca de un mundo mejor – In search of a better world

_____	action films
_____	Westerns
_____	romantic films
_____	martial arts films
_____	science fiction films
_____	animated films
_____	comedies
_____	war films
_____	_____
_____	horror films
_____	Police films
_____	_____
_____	exciting
_____	Funny
_____	Interesting
_____	Childish
_____	Fun
_____	Intelligent
_____	Silly/stupid
_____	boring

Year 8 COMPUTER SCIENCE Term 3 – Combined



What we are learning this term:

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



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

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

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

Year 8 COMPUTER SCIENCE Term 3 – Combined



What we are learning this term:

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

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

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

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



What we are learning this term:	
A.	Research and Key Words
B.	Drawing
C.	Mind Mapping
D.	Designing
E.	Making
F.	Decorating

B.	What equipment do you need to complete a successful grid method?		
	<ol style="list-style-type: none"> 1. Sharp pencil 2. Ruler 3. Image you are drawing and plain paper. 		
C.	Similarities and differences between Eva Funderberg and Anya Stasenko (Images on top banner)		
	<table border="0"> <tr> <td> <p><u>Similarities:</u></p> <ul style="list-style-type: none"> • 1. Both made from ceramic • 2. Both outcomes explore emotions • 3. Both made using the pinch pot technique </td> <td> <p><u>Differences</u></p> <ul style="list-style-type: none"> • 1. Anya hopes to make people smile with her work • 2. Eva tried to portray a dark emotion • 3. Eva creates her objects based on what humans feel on the inside. </td> </tr> </table>	<p><u>Similarities:</u></p> <ul style="list-style-type: none"> • 1. Both made from ceramic • 2. Both outcomes explore emotions • 3. Both made using the pinch pot technique 	<p><u>Differences</u></p> <ul style="list-style-type: none"> • 1. Anya hopes to make people smile with her work • 2. Eva tried to portray a dark emotion • 3. Eva creates her objects based on what humans feel on the inside.
<p><u>Similarities:</u></p> <ul style="list-style-type: none"> • 1. Both made from ceramic • 2. Both outcomes explore emotions • 3. Both made using the pinch pot technique 	<p><u>Differences</u></p> <ul style="list-style-type: none"> • 1. Anya hopes to make people smile with her work • 2. Eva tried to portray a dark emotion • 3. Eva creates her objects based on what humans feel on the inside. 		

A.	Key word for this term?
Key word	Key definition
1. Sculpture	A 3D artwork
2. Materials	What an artwork is made from
3. Formal Elements	The building blocks for Art
4. Mental Health	Psychological and emotions wellbeing
5. Ceramic	Objects made from clay and the fired in a kiln.
6. Artist study	Drawing a piece of artist work
7. Tone	Lightness and darkness within art.
8. Pinch Pot	Creating a small vessel with clay- like a small pot.

E.	Step by step to making a pinch pot and then score and slip:
1.	Roll the clay in your hands, you are wanting to warm and smooth it through.
2.	Next, with your thumb, press lightly to make an indentation.
3.	Continue this process until the indentation become a small hole.
4.	Be careful to not make the edges too thin. You want to have a sturdy bottom and strong edges.
5.	To make the score and slip effective, take a clay tool. Carve into the top of the edges you would like to join together with the tool.
6.	Next, add slip. Slip is like clay glue. It is watery paste clay.
7.	Add the slip and join edges together, making sure to smooth any bumps or holes. This might prevent a good seal.
8.	You have now, successfully created a pinch pot with score and slip.

Images of tools.

D.	Mind Mapping for Inner Self
	Use the space below to design and create your own mind map for Inner Self.
	<p>Goals</p> <ul style="list-style-type: none"> -Get amazing GCSE grades -Bungie jump <p>Strengths</p> <ul style="list-style-type: none"> - Kind - Sporty - Ambitious - Funny <p>Weakness</p> <ul style="list-style-type: none"> -Face my fear of heights <p>Emotions</p> <ul style="list-style-type: none"> -Happy -Cheerful <p style="text-align: center;">Inner Self</p>

Use the images below to help with step by step to making a pinch pot

D.	Tools needed for working with clay:
1	Clay
2	Wooden board
3	Rolling pin
4	Slats
5	Clay tools
6	Plastic bags
7	Sponges or wipes
8	Spray water



What we are learning this term:	
A.	Research and Key Words
B.	Drawing
C.	Mind Mapping
D.	Designing
E.	Making
F.	Decorating

A.	Key word for this term?	
	Key word	Key definition
1.	Sculpture	
2.	Materials	
3.	Formal Elements	
4.	Mental Health	
5.	Ceramic	
6.	Artist study	
7.	Tone	
8.	Pinch Pot	

D.	Mind Mapping for Inner Self
Use the space below to design and create your own mind map for Inner Self.	

B.	What equipment do you need to complete a successful grid method?	
1.		
2.		
3.		
C.	Similarities and differences between Eva Funderberg and Anya Stasenko (Images on top banner)	
<u>Similarities:</u>		<u>Differences:</u>
<ul style="list-style-type: none"> • . • . • . 		<ul style="list-style-type: none"> • . • . • .

E.	Step by step to making a pinch pot and then score and slip:
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	







Images of tools.


Use the images below to help with step by step to making a pinch pot

D	Tools needed for working with clay:
.	
1	
2	
3	
4	
5	
6	
7	
8	

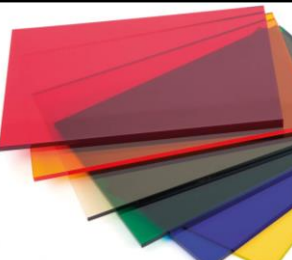



What we are learning this term:
A. Workshop Tools B. Materials C. CAD D. CAM E. Memphis Design Movement


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


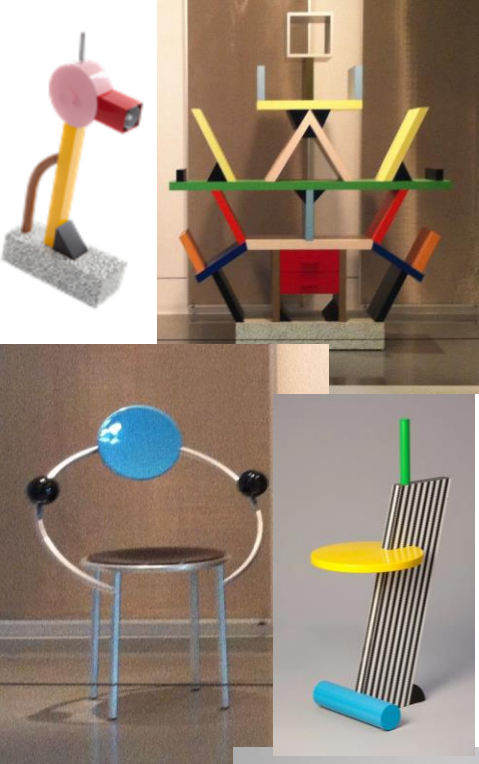

B. Materials	
Timbers come from trees	
	<p>Scots pine – which you used for your clock base – is a softwood</p> <p>Softwoods come in planks and boards</p>

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

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

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

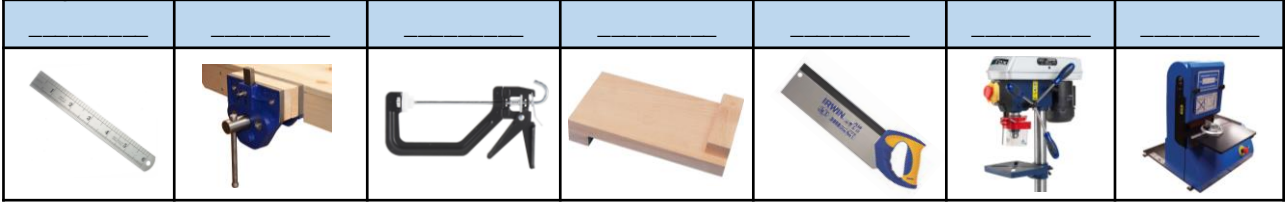
D. CAM 	
By using computer aided manufacture (CAM) , designs can be sent to CAM machines such as laser cutters and 3D printers	
Advantages of CAM	Disadvantages of CAM
Quick – Speed of production can be increased	CAM takes a long time to learn
Consistency – All parts manufactured are all the same	High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

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




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

A. Workshop Tools



B. Materials


Timbers come from _____



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

Softwoods come in _____ and _____


Manufactured Boards come from _____



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

Manufactured Boards come in _____

Polymers come from _____



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

Polymers come in _____ and _____

C. CAD

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

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

D. CAM

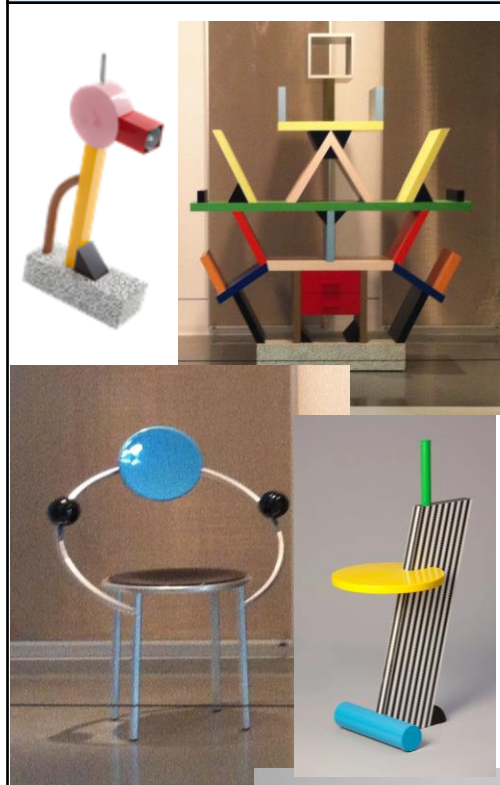
By using **computer aided manufacture (CAM)**, designs can be sent to _____ such as _____

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

E. Memphis Design Movement

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

The idea was for the products to be _____



Key Designer
 Ettore Sottsass



Key Features:

Colours:



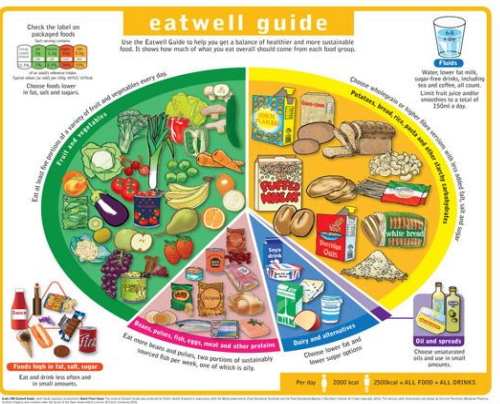
Line Styles:

Year 8 Term 5 : Topic = Planning a Healthy Meal

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

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

A.	What are the three macronutrients in the diet?
Carbohydrates	Foods that are eaten to give the body energy
Protein	Food that are eaten to build and repair muscles and cells
Fats	Food that are eaten to protect your vital organs and insulate your body.



B.	Can you give 5 reasons for why someone should eat healthily?
	<ol style="list-style-type: none"> 1 to avoid obesity 2 it can be less expensive 3 to keep a healthy heart 4 to keep your body fit 5 it can make a positive impact on your family



A.	What is cross contamination and how can it be prevented?
	Cross contamination happens when you use the wrong chopping board or equipment to prepare food which can therefore result in food poisoning.
B.	What is the image on the left showing and how is it used?
	In the photo you can see a food temperature probe. You use it to check that food is cooked. First you need to make sure that the probe is clean, then you insert it into the thickest part of the food and then check the temperature. If the food is cooked it can be served, if the food is not the correct temperature it needs to be cooked for longer.

C.	Can you list 5 reasons for why we cook food and why it is important?
<u>Rule</u>	<u>Why it is important</u>
<ul style="list-style-type: none"> • 1 to get rid of bacteria on the food • 2 to make the food taste better • 3 to make food chewable • 4 to ensure that food is not raw • 5 to add colour to the food 	<ul style="list-style-type: none"> • 1 to stop food poisoning • 2 to make the food more appealing • 3 it could be raw or a choking hazard • 4 to stop food poisoning • 5 to make it look more appetising or change its use

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

Year 8 Term 5 : Topic = Planning a Healthy Meal

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

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

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

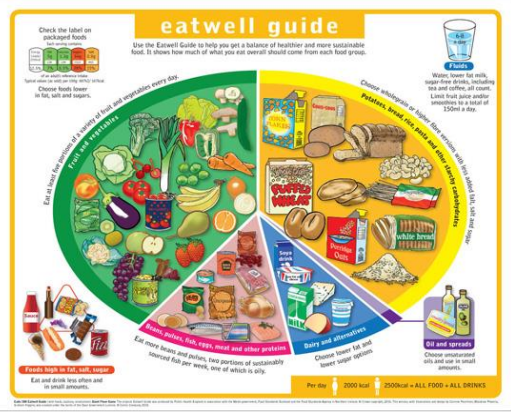
- 1
- 2
- 3
- 4
- 5

A. What are the three macronutrients in the diet?



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

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



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

<u>Rule</u>	<u>Why it is important</u>
• 1	• 1
• 2	• 2
• 3	• 3
• 4	• 4
• 5	• 5

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

YEAR 8 GRAPHIC COMMUNICATION

What are we learning this term?

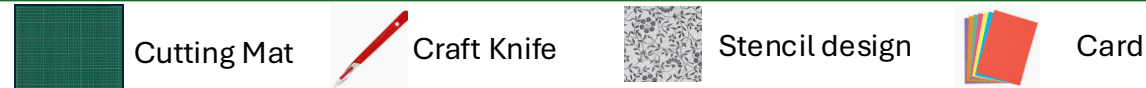
A Stencil design	B Step up card	C Accordion card	D Key words	E Evaluation
---------------------	-------------------	---------------------	----------------	-----------------

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

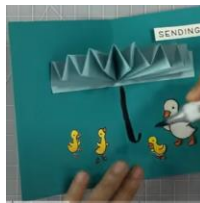


Coloured paper to add to the design
Cut any incisions

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
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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	1½ beats	
	Quaver, Eighth Note	1/2 beat			Dotted Quaver, Dotted Eighth Note	¾ beat	

G How to read music – treble clef and Bass Clef

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

G Describing music – MAD T SHIRT

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

BLOCKING

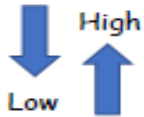
Planning your positioning and movement around the stage, including entrances and exits.

Year 8 TEACHERS Term 2/5

SET DESIGN

Deciding on the different elements that will be used to create a visual interpretation of the environment/setting of the scene.

PERFORMANCE SKILLS



Vocals - Pitch: How high or low your voice is.

Vocals - Pace: The speed that you speak at.



'Teachers' is a play written by John Godber in 1985. It is a play within a play in which three students perform for their teachers. The three actors multirole throughout the performance providing an account of their time in secondary school.

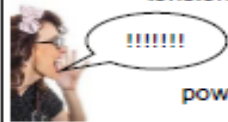
Key Characters:

Lillian Hobson - *'Hobby'* - fed up with her friends.
Gail Saunders - *The flirty one*
Ian Salt - *'Salty'* - *The fired soul, doesn't know what he'll do with his life after leaving school.*
Mr Nixon - *the drama teacher*
Mrs. Hudson - *the headmistress, renamed Mrs. Parry for the play, loud and large with a terrible dress sense.*
Bobby Moxon - *(Oggy Moxon) Bully of the school who scares teachers and students alike.*
Ms. Whitham - *Hopeless English teacher, eager to leave*
Mr. Basford - *The deputy head and maths teacher. Hates children, typically nasty.*
Miss Jackie Prime - *The sports teacher, young and bouncy.*
Doug - *The caretaker. Grouchy and assertive.*
Mr. Dean - *A teacher who thinks that all of the kids love him.*

Vocals - Emphasis: 'Highlighting' a specific word or phrase, by changing at least one aspect of your vocals.



Vocals - Power: The amount of tension in your voice. This is not the same as volume - you can have large vocal power at a low volume.

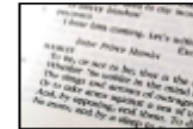


Spatial Awareness: The ability to see yourself, (in relation to other actors/set), in the stage space to create a specific effect.



DRAMA TERMS

Script: The entire play written down. Scripts include all the dialogue that the characters speak, stage directions and a brief overview of the setting.



Proxemics: The use of space/distance to communicate relationship.

Given Circumstances: Everything that the script tells you. The 'world' of the play - the things that make the play that play and not a different play.

• **Environmental** - Geographic location (inc. climate), date, year, season, time of day. Also includes the economic environment: the character's relationship to wealth or poverty, and the class of the character in relationship to the society in which they live.



• **Previous Action** - Any action mentioned in the play's dialogue that reveals any incident or action that took place before the current action of the play/scene began. Often called, 'exposition'.



• **Polar Opposition/Attitude** - Beliefs held by a character that are in direct opposition to the world in which the character lives. This opposition creates conflict. Conflict creates dramatic action.



DIG DEEPER QUESTIONS

How could you use vocal skills to communicate subtle changes to a character's emotions?
How might environmental given circumstances influence a set designer?
How might you as an actor use given circumstances to craft your character?
What do you think is the most important part of the 'page to stage' process?

Why is blocking an important part of the 'page to stage' process?
Why are proxemics so important when creating meaning?
How can eye contact change the meaning of a line of dialogue?
What makes a successful, scripted performance?

BLOCKING

Year 8 TEECHERS Term 2/5

Deciding on the different elements that will be used to create a visual interpretation of the environment/setting of the scene.

PERFORMANCE SKILLS



Vocals - Pitch: How high or low your voice is.

Vocals - Pace:



'Teachers' is a play written by John Godber in which it is a play within a play in which students perform for their teachers. The three actors throughout the performance providing an account of their time in secondary school.

Key Characters:

"Hobby" - fed up with her friends.

- The flirty one

"- The fired soul, doesn't know what

he'll do with his life after leaving school.

Mr - the drama teacher

- the headmistress, renamed Mrs. Parry for

the play, loud and large with a terrible dress sense.

- (Oggy Moxon) Bully of the school who scares teachers and students alike.

- Hopeless English teacher, eager to leave

Mr. - The deputy head and maths teacher. Hates children, typically nasty.

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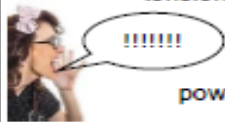
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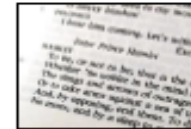


The ability to see yourself, (in relation to other actors/set), in the stage space to create a specific effect.



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SWINDON ACADEMY READING CANON

Year 7



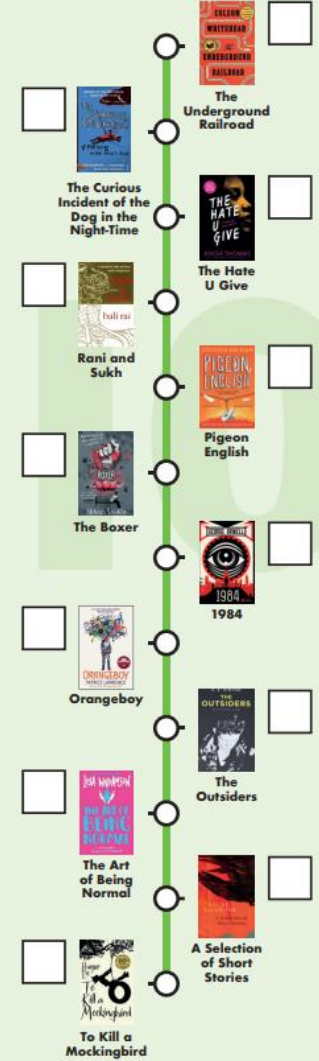
Year 8



Year 9



Year 10



#ReadingisPower