

100% book - Year 8 Booster

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

Term 1



Swindon Academy 2026-27

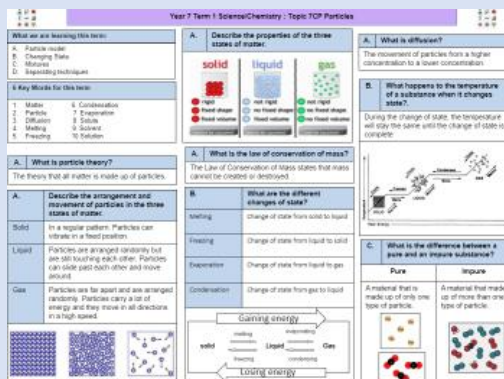
Name:	
Tutor Group:	
Tutor & Room:	

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

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

How to use your 100% book of Knowledge Organisers and Quizzable Organisers

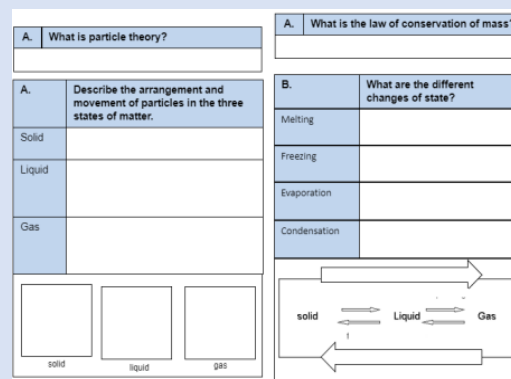
Knowledge Organisers



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



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

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

Top Tip

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

How do I complete Knowledge Organiser Prep?

Step 1

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

The screenshot shows the epraise website interface. On the left is a 'Planner' for the dates 10th May to 14th May 2020, with a grid for different subjects (Science, History, English, Maths) and years (All Years, Year 7, Year 8, Year 9, Year 10, Year 11). On the right is a 'Knowledge Organiser' for 'Particle Theory' for 'All Years'. It includes sections for 'What is particle theory?', 'Describe the arrangement and movement of particles in the three states of matter', and 'What is the law of conservation of mass?'. There are also diagrams of particle arrangements in solid, liquid, and gas states.

Step 2

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

The screenshot shows a student's prep book. The date '29th May 2020' and the title 'Particle theory' are written in blue ink. The printed Knowledge Organiser for 'Particle Theory' is visible in the background, showing sections for 'What is particle theory?', 'Describe the arrangement and movement of particles in the three states of matter', and 'What is the law of conservation of mass?'. There are also diagrams of particle arrangements in solid, liquid, and gas states.

Step 3

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

The screenshot shows a student's prep book with handwritten notes for 'Particle theory'. The notes are written in blue ink and include: '29th May 2020', 'Properties of the states of matter', 'Particle theory = all matter is made of particles', 'Solid = regular pattern particles vibrate in fixed position', 'Liquid = particles are arranged randomly but are still touching each other. Particles can slide past each other and move around.', and 'Gas = Particles are far apart and are arranged randomly. Particles carry a lot of energy'.

Step 4

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

The screenshot shows a student's prep book with the handwritten notes from Step 3 repeated three times. The notes are written in blue ink and include: 'Solid = regular pattern particles vibrate in fixed position', 'Solid = regular pattern particles vibrate in fixed position', and 'Solid = regular pattern particles vibrate in fixed position'.

Step 5

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

The screenshot shows a student's prep book with the quizzable Knowledge Organiser for 'Particle Theory'. The missing words are filled in with blue ink. The notes include: 'What is particle theory?', 'Describe the arrangement and movement of particles in the three states of matter.', 'What is the law of conservation of mass?', 'What are the different changes of state?', 'Self quizzing', 'Arrangement/movement of matter', '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 6

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

The screenshot shows a student's prep book with the handwritten notes from Step 3. The notes are written in blue ink and include: 'Particle theory = all matter is made of particles', 'Solid = regular pattern particles vibrate in fixed position', 'Liquid = particles are arranged randomly but are still touching each other. Particles can slide past each other and move around.', and 'Gas = Particles are far apart and are arranged randomly. Particles carry a lot of energy'. There are checkmarks and corrections in blue ink.

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

'Animal Farm': Knowledge Organiser		The seven commandments		Key words	
Chapter breakdown		1	Whatever goes upon two legs is an enemy.	allegory – A story with two meanings. It has a literal meaning, which is what actually happens in the story. But it also has a deeper meaning. The deeper meaning is often a moral. It teaches you a lesson about life. tyrant – Someone who has total power and uses it in a cruel and unfair way. A tyranny is a situation in which a leader or government has too much power and uses that power in a cruel and unfair way. rebellion – A rebellion is a situation in which people fight against those who are in charge of them. harvest – The time when crops are cut and collected from fields. corrupt – When people use their power in a dishonest way order to make life better for themselves. propaganda – Information that is meant to make people think a certain way. The information may not be true. cult of personality – A cult of personality is where a leader convinces people to worship him or her, and treat them like a god. treacherous – If you betray someone who trusts you, you could be described as treacherous .	
2	The animals rebel and overthrow Jones. The commandments are written.	2	Whatever goes upon four legs, or has wings, is a friend.		
3	The animals' first harvest is a success. The pigs keep the milk and apples to themselves.	3	No animal shall wear clothes.		
4	The Battle of the Cowshed: Jones attempts to reclaim the farm.	4	No animal shall sleep in a bed.		
5	Snowball and Napoleon debate the windmill. Napoleon uses dogs to chase Snowball from the farm. Napoleon makes himself leader.	5	No animal shall drink alcohol.		
6	Work begins on the windmill. The pigs move into the farmhouse. Winds destroy the windmill.	6	No animal shall kill any other animal.		
7	Work on the windmill starts again. Napoleon demands eggs from the hens. Napoleon slaughters animals at the show trials.	7	All animals are equal.		
		Characters			
		Napoleon 'a large, rather fierce-looking Berkshire boar, the only Berkshire on the farm, not much of a talker, but with a reputation for getting his own way.'			
		Snowball 'a more vivacious pig than Napoleon, quicker in speech and more inventive, but was not considered to have the same depth of character.'			
		Squealer 'with very round cheeks, twinkling eyes, quick movements, and a shrill voice. He was a brilliant talker, and when he was arguing some difficult point he had a way of skipping from side to side and whisking his tail which was somehow very persuasive. The others said of Squealer that he could turn black into white.'			
		Boxer 'an enormous beast, nearly eighteen hands high, and as strong as any two ordinary horses put together... in fact he was not of first-rate intelligence, but he was universally respected for his steadiness of character and tremendous powers of work.'			
8	Napoleon betrays Mr. Pilkington and sells timber to Mr. Frederick. Frederick pays with counterfeit money. Frederick attacks the farm. The animals suffer losses in the Battle of the Windmill. The windmill is destroyed.				
9	Boxer is sold to the knacker's yard.				
10	The pigs are leaders on the farm. They start walking on two legs and carrying whips. There is no difference between the pigs and the humans they sought to overthrow at the start of the novel.				
				Biographical information	
		1	'Animal Farm' was written in 1945.		
		2	It was written by George Orwell.		
		3	Orwell was born in 1903.		
		4	'Animal Farm' was influenced by the events of World War II.		
		5	Orwell wanted to write about the cruel leaders of Europe during World War II.		
		6	'Animal Farm' is an allegory for the events of the Russian Revolution.		

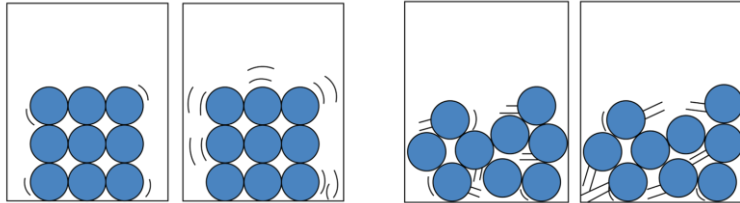
'Animal Farm': Knowledge Organiser		The seven commandments		Key words	
Chapter breakdown		1	Whatever goes upon ____ legs is an ____.	allegory – A story with ____ meanings. It has a ____ meaning, which is what actually happens in the story. But it also has a ____ meaning. The deeper meaning is often a _____. It teaches you a lesson about life. tyrant – Someone who has total ____ and uses it in a ____ and ____ way. A tyranny is a situation in which a ____ or government has too much ____ and uses that power in a cruel and unfair way. rebellion – A rebellion is a situation in which people ____ against those who are in ____ of them. harvest – The time when crops are ____ and ____ from fields. corrupt – When people use their ____ in a dishonest way order to make life ____ for _____. propaganda – _____ that is meant to make people ____ a certain way. The information may ____ be _____. cult of personality – A cult of personality is where a leader convinces people to ____ him or her, and treat them like a _____. treacherous – If you betray someone who trusts you, you could be described as treacherous .	
2	The animals ____ and overthrow Jones. The ____ are written.	2	Whatever goes upon ____ legs, or has wings, is a ____.		
3	The animals' first harvest is a success. The pigs keep the ____ and ____ to themselves.	3	No animal shall wear ____.		
4	The Battle of the ____: Jones attempts to reclaim the farm.	4	No animal shall sleep in a ____.		
5	Snowball and Napoleon debate the _____. Napoleon uses ____ to chase Snowball from the farm. Napoleon makes himself _____.	5	No animal shall drink _____.		
6	Work begins on the _____. The pigs move into the _____. _____ destroy the windmill.	6	No animal shall ____ any other animal.		
7	Work on the ____ starts again. Napoleon demands ____ from the hens. Napoleon ____ animals at the show trials.	7	All animals are _____.		
		Characters		Biographical information	
8	Napoleon betrays Mr. Pilkington and sells timber to Mr. Frederick. Frederick pays with ____ money. Frederick attacks the farm. The animals suffer losses in the Battle of the _____. The windmill is _____.	Napoleon 'a large, rather ____-looking Berkshire boar, the only Berkshire on the farm, not much of a talker, but with a reputation for getting his ____ ____.'		1	'Animal Farm' was written in _____.
		Snowball 'a more vivacious pig than Napoleon, quicker in ____ and more _____, but was not considered to have the same depth of character.'		2	It was written by George _____.
9	Boxer is sold to the ____ yard.	Squealer 'with very round cheeks, twinkling eyes, _____ movements, and a shrill _____. He was a brilliant _____, and when he was arguing some difficult point he had a way of _____ from side to side and whisking his _____ which was somehow very persuasive. The others said of Squealer that he could turn black into white.'		3	Orwell was born in _____.
		Boxer 'an ____ beast, nearly eighteen hands high, and as ____ as any two ordinary horses put together... in fact he was ____ of first-rate _____, but he was universally respected for his steadiness of character and tremendous powers of _____.'		4	'Animal Farm' was influenced by the events of _____.
10	The pigs are leaders on the farm. They start walking on ____ legs and carrying _____. There is _____ between the pigs and the humans they sought to overthrow at the start of the novel.			5	Orwell wanted to write about the _____ of Europe during World War II.
				6	'Animal Farm' is an ____ for the events of the _____.

8.01: Heating and Cooling

Year 8 Sets 1 -6Term 1



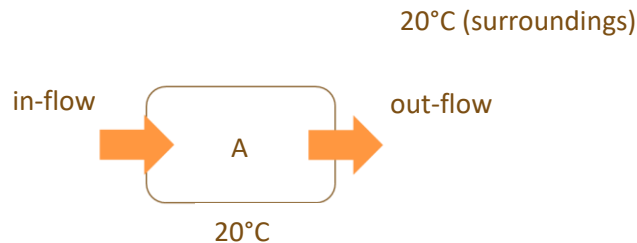
Temperature



- a physical quantity which is a measure of the **average energy** of particles due to their **motion**
- Net flow of energy is **always** from hotter to colder objects' thermal store.

Thermal Equilibrium

- when two objects reach the **same temperature**
- with no net flow of energy between thermal stores

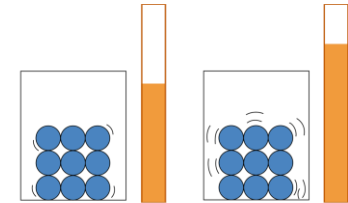


- Often the result of energy **dissipating** to the cooler surroundings.

Energy in Thermal Stores

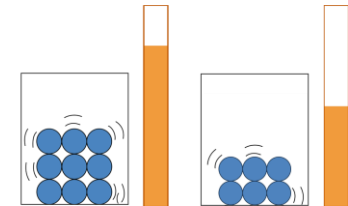
Hotter objects have more energy in their thermal store.

- Particles moving more.
- Each particle has more energy.
- Total energy of all particles: more.



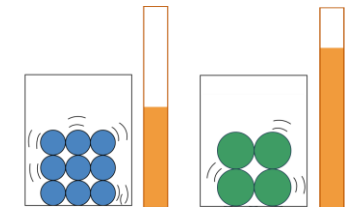
Larger masses have more energy in their thermal store.

- Greater mass: more particles.
- At same temperature, each particle has same energy.
- Total energy of all particles: more.



Some materials have more energy in their thermal store.

- Some materials have particles that require more energy to vibrate.
- At same temperature, each particle is vibrating the same, but they required more energy to do so.
- Total energy of all particles: more.

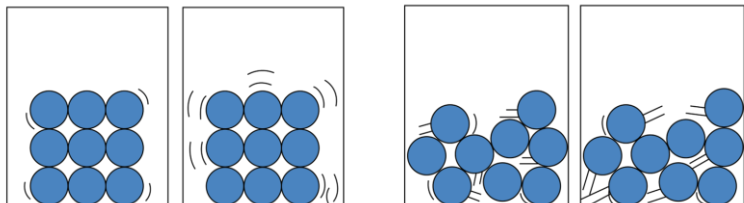


8.01: Heating and Cooling

Year 8 Sets 1 -6Term 1



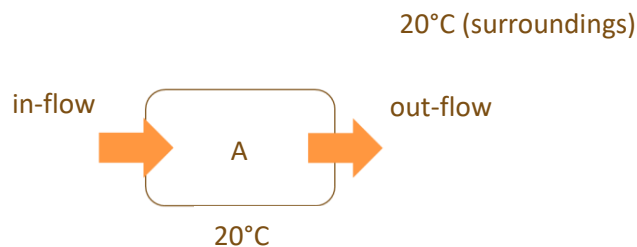
Temperature



- a physical quantity which is a measure of the _____ of particles due to their _____
- Net flow of energy is **always** from _____er to _____er objects' thermal store.

Thermal Equilibrium

- when two objects reach the _____
- with no net flow of _____ between thermal stores

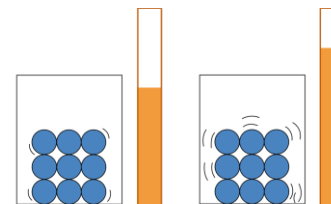


- Often the result of energy _____ to the cooler surroundings.

Energy in Thermal Stores

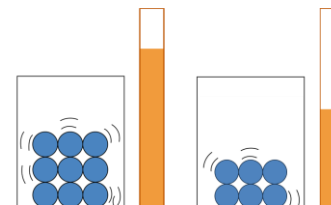
Hotter objects have more energy in their thermal store.

- Particles _____.
- Each particle has _____.
- Total energy of all particles: more.



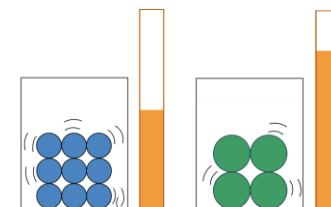
Larger masses have more energy in their thermal store.

- Greater mass: more _____.
- At same _____, each particle has same _____.
- Total energy of all particles: more.



Some materials have more energy in their thermal store.

- Some materials have particles that require more energy to _____.
- At same temperature, each particle is vibrating the same, but they required more energy to do so.
- Total energy of all particles: more.



8.01: Heating and Cooling

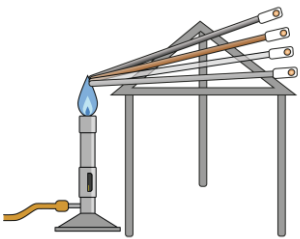
Year 8 Sets 1 -6Term 1



Thermal Conduction

- spontaneous process of energy transfer between a hotter and a cooler object in contact, without the movement of the material

Thermal conductivity



Good conductors have a higher thermal conductivity: energy transmitted easily through them.

The **rate of thermal conduction** is affected by:

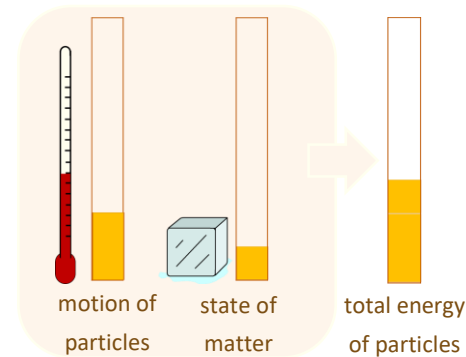
temperature difference	greater	} → higher rate
material	higher thermal conductivity	
thickness	less thick	
surface area	greater	

Insulators

- poor thermal conductors that minimise energy transfer to/from thermal stores

Internal Energy

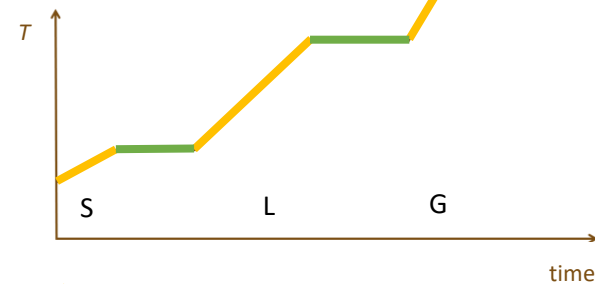
- total energy within an object due to the motion and position of its particles.



When an object is heated two things can happen:

- State Changes
- Temperature Changes

Heating



Temp changing (no change of state)

Change of state (no change in Temp)

8.01: Heating and Cooling

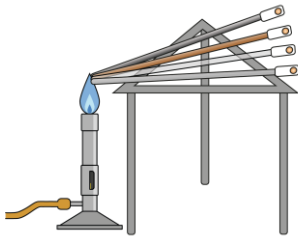
Year 8 Sets 1 -6Term 1



Thermal Conduction

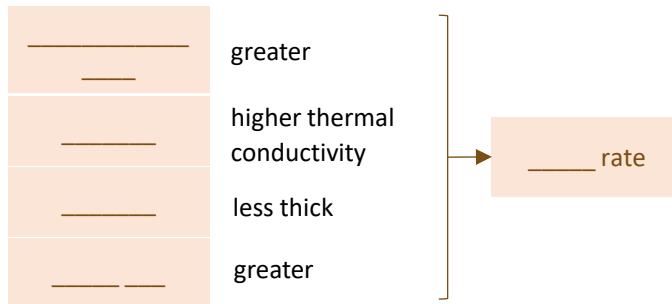
- spontaneous process of energy transfer between a h___ and a c___ object in contact, without the movement of the m___.

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Good conductors have a h___ thermal conductivity: energy transmitted easily through them.

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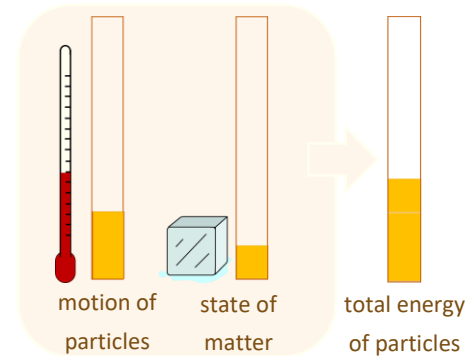


Insulators

- poor thermal conductors that _____ energy transfer to/from thermal stores

Internal Energy

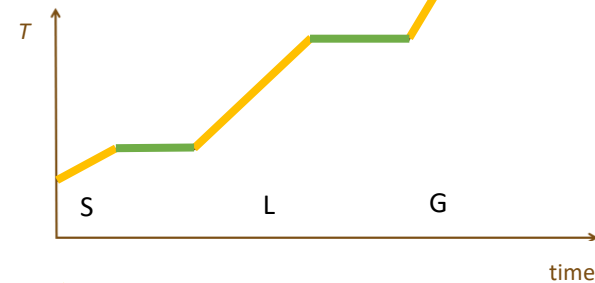
- total energy within an object due to the _____ and _____ of its particles.



When an object is heated two things can happen:

- _____
- _____

Heating



- T ___ changing (no change of s___)
- Change of ___ (no change in T ___)

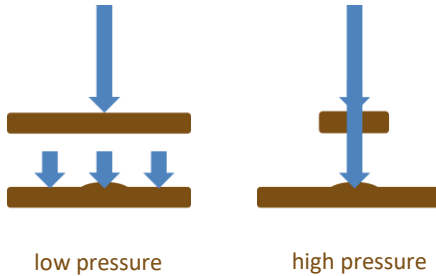
8.01: Heating and Cooling

Year 8 Sets 1 -6Term 1



Pressure

- quantity resulting from a force acting on a surface



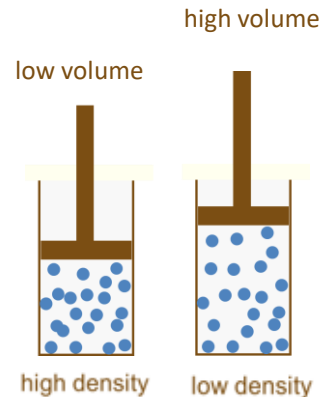
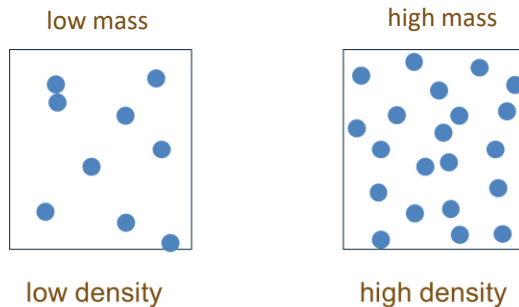
Pressure on objects

Pressure is **higher** when:

- a force acts over a **smaller surface area**
- a **large force** acts.

Density

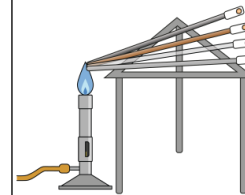
$$\text{density (g/cm}^3\text{)} = \frac{\text{mass (g)}}{\text{volume (cm}^3\text{)}}$$



Heat Transfers

Heat can be transferred in 3 ways:

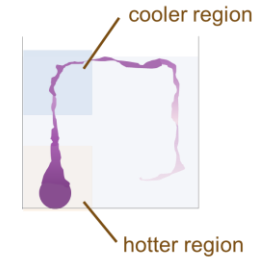
Conduction



Energy transferred through particles vibrating and colliding with each other.

Fastest in solids

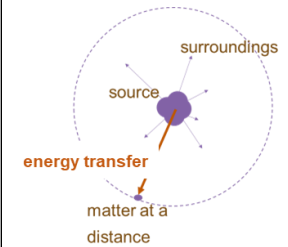
Convection



Energy transferred due to particles vibrating, reducing density in certain areas causing **convection currents**.

Only in **fluids** (liquids and gases)

Radiation



Energy transfer to or from a thermal store by absorption or emission of light, normally **infrared**.

Fastest in a **vacuum**

(an area with no particles)

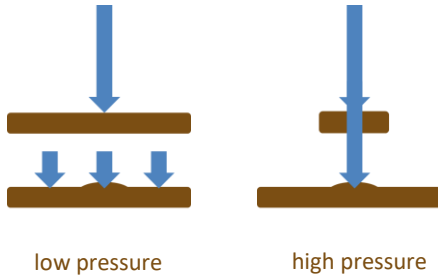
8.01: Heating and Cooling

Year 8 Sets 1 -6Term 1



Pressure

- quantity resulting from a f ____ acting on a surface



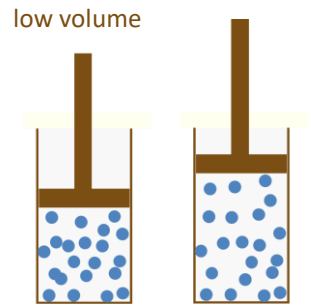
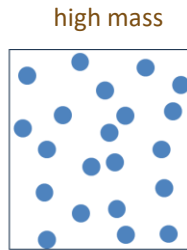
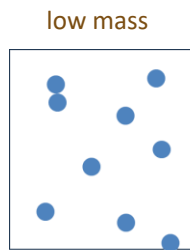
Pressure on objects

Pressure is **higher** when:

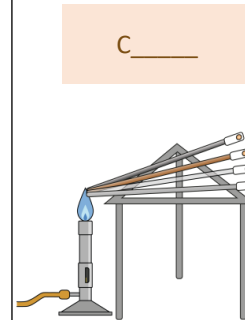
- a force acts over a ____
- a **surface area**
- a ____ **force** acts.

Density

$$\text{density (g/cm}^3\text{)} = \frac{?}{?}$$

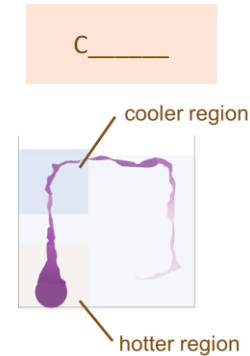


Heat can be transferred in 3 ways:



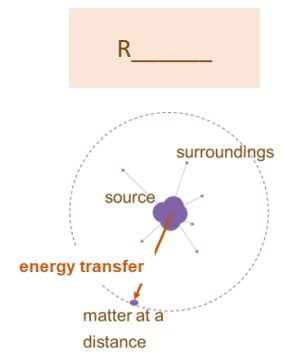
Energy transferred through particles v ____ and c ____ with each other.

Fastest in ____



Energy transferred due to particles vibrating, reducing d ____ in certain areas causing **convection c ____**.

Only in ____ (liquids and gases)



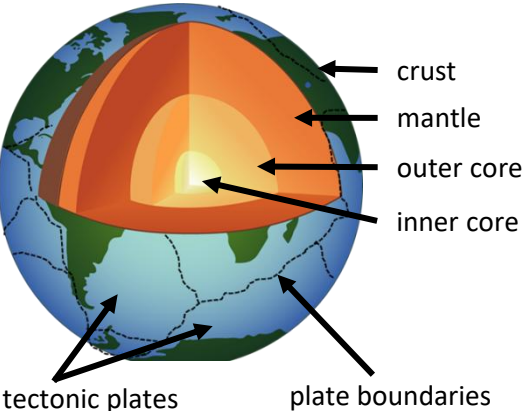
Energy transfer to or from a thermal store by a ____ or e ____ of light, normally i ____.

Fastest in a ____

(an area with no particles)



Composition and structure of the Earth

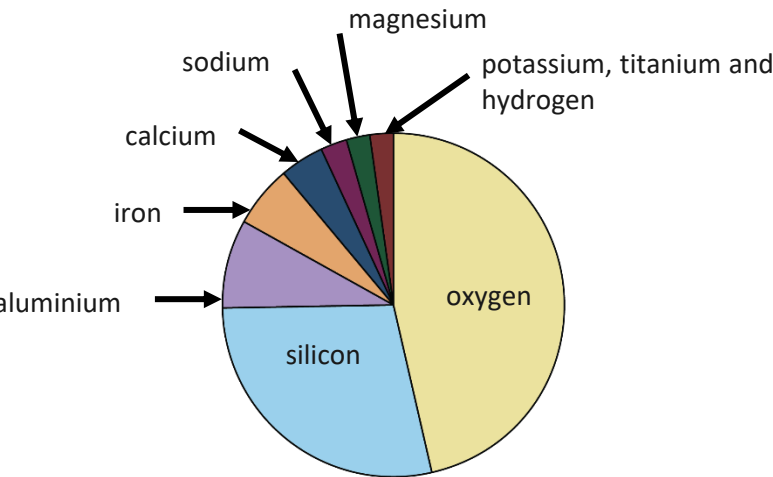


Layer	State	Composition	Thickness (km)	Temperature (°C)
crust	solid	rocks and minerals	5 to 70	0 to 30
mantle	solid	rocks and minerals	2900	1400 to 3000
outer core	liquid	molten iron and nickel	2200	4400
inner core	solid	solid iron and nickel	1200	5430

The two types of crust are continental crust, which is found beneath landmasses, and oceanic crust, which is found below the oceans.

Continental crust is the thickest.

Earth's crust is broken up into tectonic plates that meet at plate boundaries.



The most common elements that make up the minerals of Earth's crust.

Scientists can't explore deep inside Earth, so they use models to show what it's like. These models have limitations and can change when new evidence is found.

An apple



- +** has a thin outer layer
 - has a thick middle layer
 - has a core
-
- not spherical
 - the outer layer is the same thickness all around
 - the inner and outer cores are not clear

A layer cake

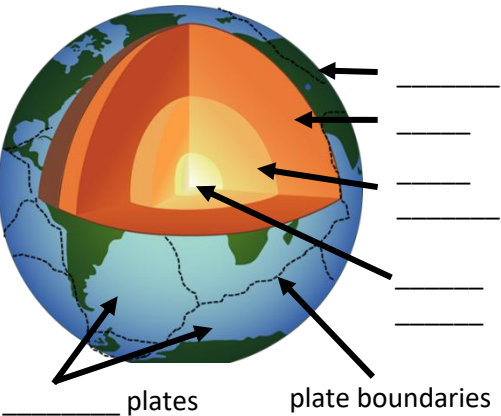


- +** has a thin outer layer
 - has thicker middle layers
 - has four layers
-
- not spherical
 - doesn't show the difference in layer thickness
 - the core is not hot





Composition and structure of the Earth

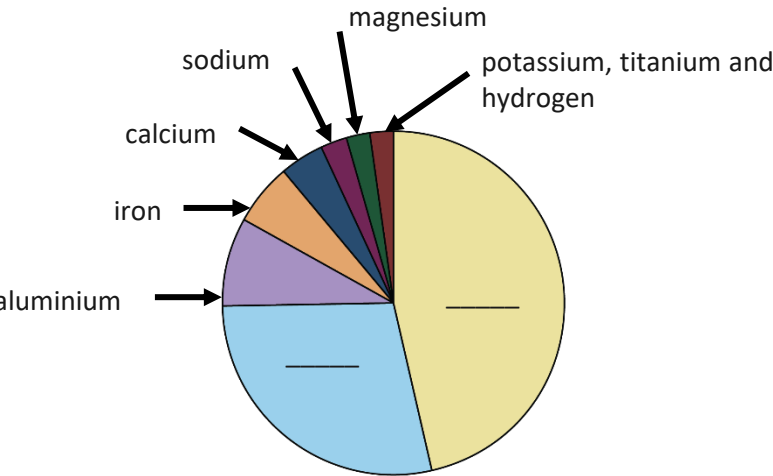


Layer	State	Composition	Thickness (km)	Temperature (°C)
crust		rocks and minerals	5 to 70	0 to 30
	solid	rocks and minerals	2900	1400 to 3000
outer core			2200	4400
inner core			1200	5430

The two types of crust are _____ crust, which is found beneath landmasses, and _____ crust, which is found below the oceans.

_____ crust is the thickest.

Earth’s crust is broken up into _____ plates that meet at plate boundaries.



The most common elements that make up the minerals of Earth’s crust.

Scientists can’t explore deep inside Earth, so they use models to show what it’s like. These models have limitations and can change when new evidence is found.

An apple



- + ● _____
- _____
- _____

- ● not _____
- the outer layer is the _____ thickness all around
- the inner and outer cores are _____

A layer cake



- + ● has _____
- has _____
- has _____ layers

- ● _____
- doesn’t show the difference in layer _____
- the core is _____



8.02: Earth and the Atmosphere

Year 8 Sets 1 -6Term 1



Scientific theory: continental drift

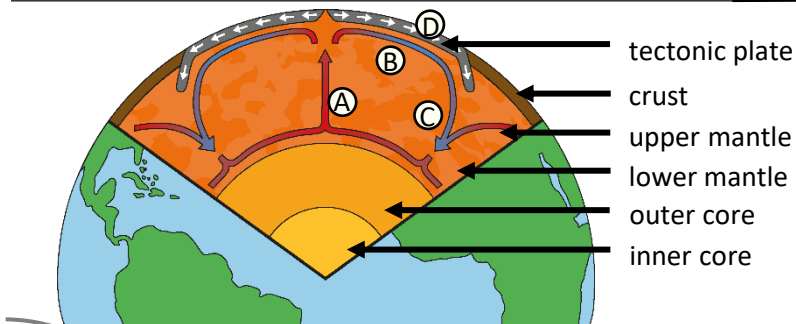
After data collection, scientific thinkers propose a scientific theory; it is based on a body of facts and is repeatedly confirmed by observation (and experiment).

The theory of continental drift is the theory that the continents were once connected in a land mass (Pangaea) but have broken apart and drifted away over time.

Three pieces of evidence that support the theory are:

- The coastlines of many continents appear to fit together like a jigsaw puzzle.
- There were similar types of rocks across continents that are now far apart.
- There were identical plant and animal fossils found on different continents that are now far apart.

Convection currents cause continent movement

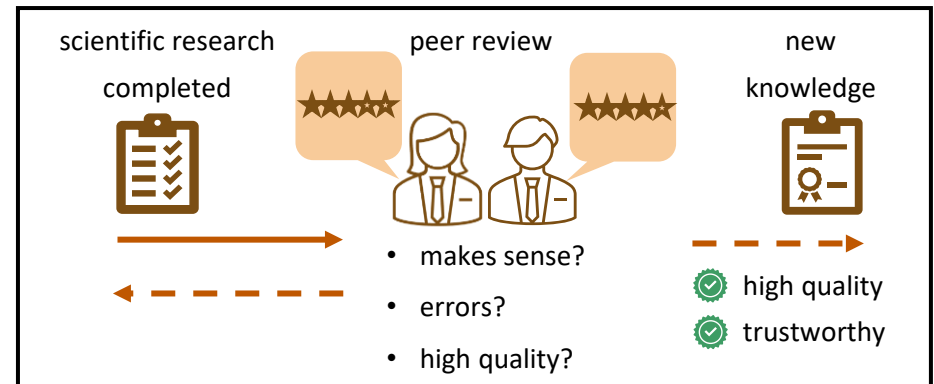


- Hot, less dense rock rises towards the upper mantle.
- In the upper mantle, the hot rock spreads and moves sideways.
- As it cools, it becomes more dense and sinks back down, creating convection currents.
- These convection currents cause the tectonic plates above to shift. As a result, the continents slowly change position over millions of years.

Peer review

Scientific thinkers present evidence to their peers in order to support an opinion and explain their reasoning.

Peer review is when researchers submit work for peer feedback. Peer review is important because it helps to make sure that the research is trustworthy and of high quality.



8.02: Earth and the Atmosphere

Year 8 Sets 1 -6Term 1



Rocks and the rock cycle

Igneous rock

- Igneous rocks are formed when molten rock crystallises.
- Molten rock above the Earth's surface is called **lava** and forms **extrusive** igneous rock when it cools and crystallises.
- Molten rock below the Earth's surface is called **magma** and forms **intrusive** igneous rock when it cools and crystallises.
- If molten rock cools **slowly**, it will form rock with **large** crystals.
- If molten rock cools **quickly**, it will form rock with **small** crystals.

Metamorphic rock

- Metamorphic rocks form from existing rocks, deep within the Earth's crust due to high temperature and pressure, causing chemical changes in minerals.
- Over millions of years, sedimentary and igneous rocks transform into metamorphic rocks, often near tectonic plate boundaries.

Sedimentary rock

Sedimentary rocks are formed through:

weathering → transportation → deposition → sedimentation → compaction → cementation

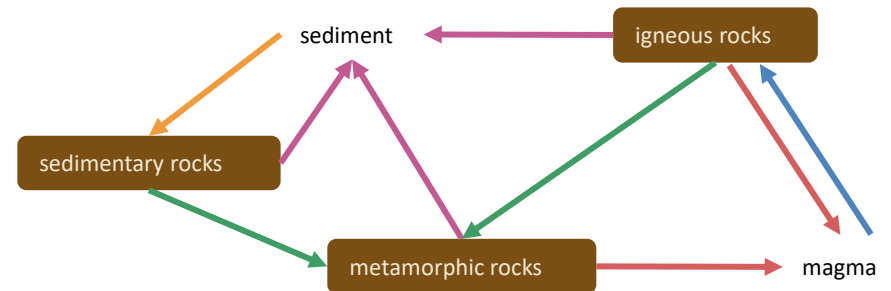
Layers, called **strata**, can be seen in sedimentary rock.

Weathering is the slow breakdown of rocks while they are in place. It can be **biological** (by living organisms), **chemical** (by chemical reactions) or **physical** (by forces e.g. freeze-thaw).

Erosion is the movement and carrying away of rock fragments.



The rock cycle involves the recycling of rocks, during which rocks can change into different types.



Key:

- | | |
|---|-----------------|
| weathering and erosion | melting |
| sedimentation, compaction and cementation | crystallisation |
| heat and pressure | |

Fossils

Fossils are the preserved remains or traces of a dead organism that was alive millions of years ago. Fossils can be **trace fossils** (preserved imprints or evidence), **body fossils** (actual remains) or **mineralised fossils** (when hard parts are replaced by minerals).

Fossils are found in sedimentary rocks. High temperatures and pressures destroy fossils, so they are not found in metamorphic or igneous rocks.



Rocks and the rock cycle

Igneous rock

- Igneous rocks are formed when molten rock _____.
- Molten rock above the Earth's surface is called _____ and forms _____ igneous rock when it cools and crystallises.
- Molten rock below the Earth's surface is called _____ and forms _____ igneous rock when it cools and crystallises.
- If molten rock cools _____, it will form rock with _____ crystals.
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Metamorphic rock

- Metamorphic rocks form from _____ rocks, _____ within the Earth's crust due to _____ temperature and _____, causing chemical changes in minerals.
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Sedimentary rock

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_____ → transportation → _____ → sedimentation → _____ → cementation

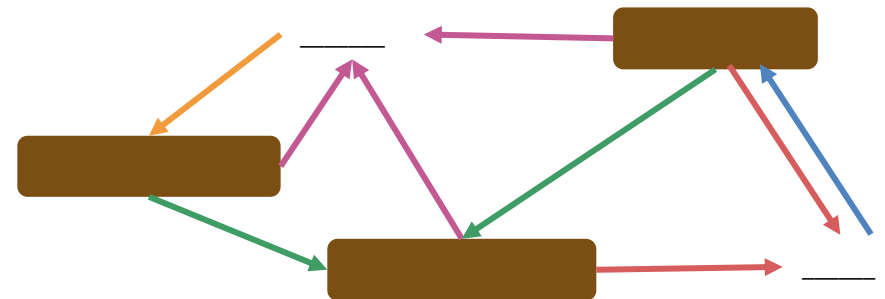
Layers, called _____, can be seen in sedimentary rock.

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Key:

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Fossils

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Fossils are found in _____ rocks. _____ temperatures and _____ destroy fossils, so they are not found in _____ or i _____ rocks.

8.02: Earth and the Atmosphere

Year 8 Sets 1 -6Term 1

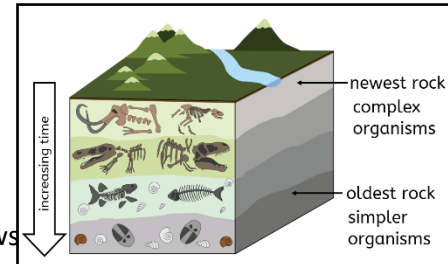


Fossils continued

Fossilisation process:

Organism dies → buried in sediment → soft parts rot, hard parts stay → pressure compacts layers → minerals replace hard parts → fossil forms → uplift exposes fossil

The fossil record is a collection of fossils documenting the history of life on Earth. It shows how organisms and environments have changed over time.

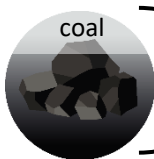


More complex fossil organisms are found at the top in newer rocks. Simpler fossils are deeper in older rocks.

Fossil fuels

Fossil fuels are natural resources formed over millions of years from the remains of dead organisms, such as plants and animals. Fossil fuels are **non-renewable** energy resources because they take a very long time to replenish.

Fossil fuel extraction provides energy, products, and jobs, but causes pollution, habitat loss, resource depletion, and global social inequality.



Swamp plants die → buried in mud and sediment → form peat → more burial → heat & pressure → peat turns to coal

Coal is extracted through surface and underground mining.

Uses: heating, generating electricity, steel production.



Plankton die → sink → buried in sediment → pressure and heat → oil and gas form → trapped under impermeable rock



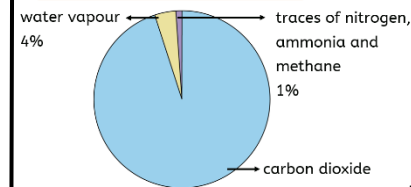
Crude oil and natural gas are extracted by drilling wells through impermeable rock.

Uses of crude oil: refined to make petrol, diesel, plastics. Uses of natural gas: cooking, generating electricity, industry.

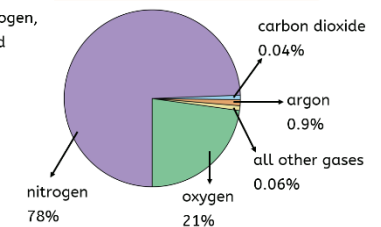


Earth's atmosphere

Earth's early atmosphere

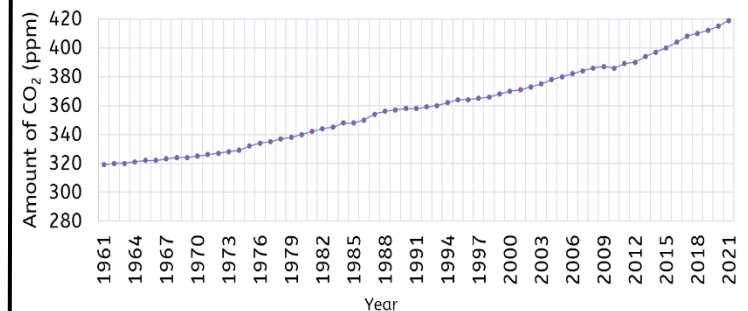


Earth's atmosphere today



Human activities, such as the combustion of fossil fuels, which release large amounts of CO₂ into the atmosphere, result in an increase in atmospheric CO₂ concentration.

Carbon dioxide in the atmosphere between 1960 and 2021



8.02: Earth and the Atmosphere

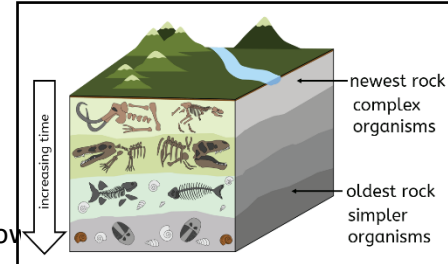
Year 8 Sets 1 -6Term 1



Fossils continued

Fossilisation process:

The fossil record is a collection of fossils documenting the history of _____ on Earth. It shows how organisms and environments have _____.

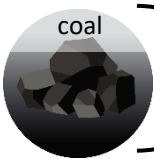


More complex fossil organisms are found at the _____ in newer rocks. Simpler fossils are _____ in older rocks.

Fossil fuels

Fossil fuels are natural resources formed over millions of years from the remains of dead organisms, such as plants and animals. Fossil fuels are _____ energy resources because they take a very long time to replenish.

Fossil fuel extraction provides energy, products, and jobs, but causes _____, habitat _____, resource depletion, and global social inequality.



Swamp plants die →

Coal is extracted through _____ and _____ mining.

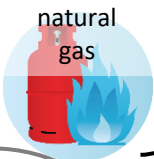
Uses:



Plankton die →

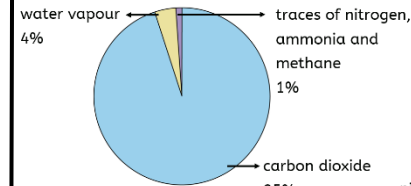
Crude oil and natural gas are extracted by drilling through impermeable _____.

Uses of crude oil.

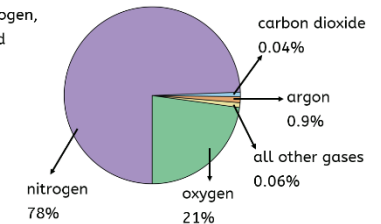


Earth's atmosphere

Earth's early atmosphere

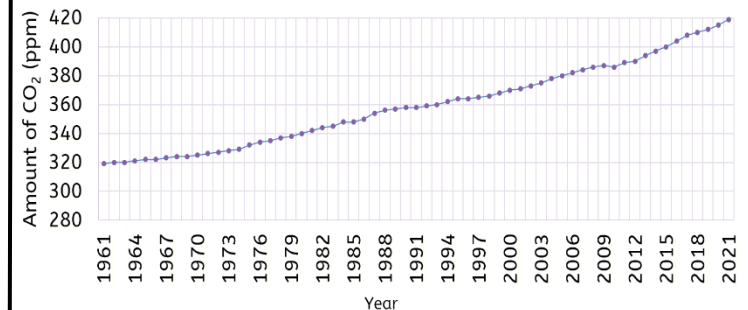


Earth's atmosphere today



Human activities, such as the combustion of fossil fuels, which release _____ amounts of CO₂ into the atmosphere, result in an increase in atmospheric CO₂ _____.

Carbon dioxide in the atmosphere between 1960 and 2021



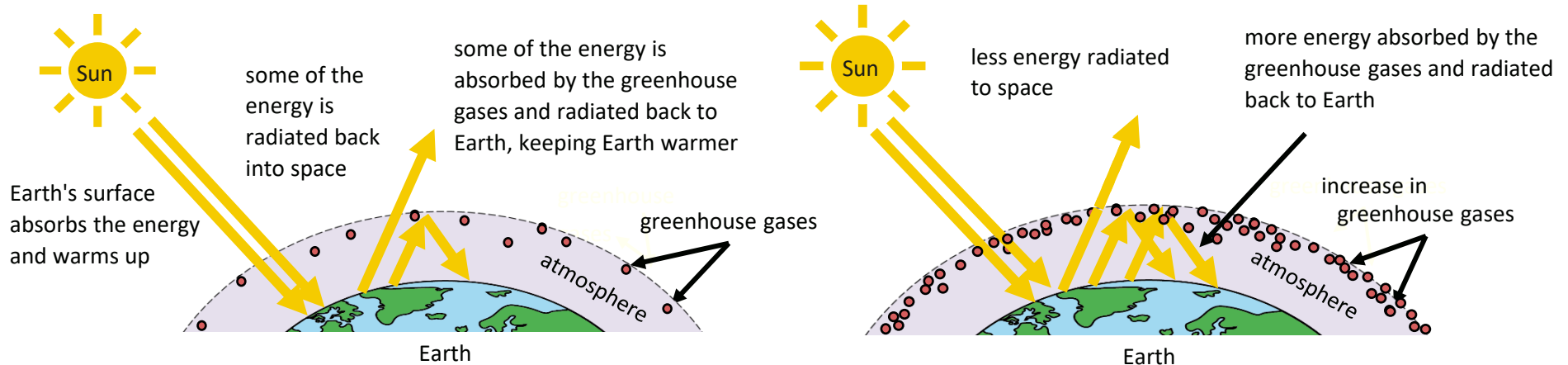
8.02: Earth and the Atmosphere

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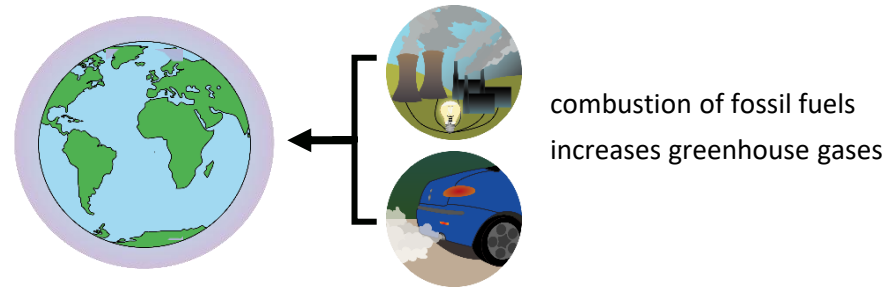


The greenhouse effect, global warming and climate change

Earth's atmosphere contains greenhouse gases (carbon dioxide, methane, water vapour), which keep Earth warmer than it would be without them. The greenhouse effect is the natural warming of the planet to habitable temperatures, caused by greenhouse gases. The enhanced greenhouse effect is the unnatural warming of the Earth due to increased greenhouse gases in the atmosphere.

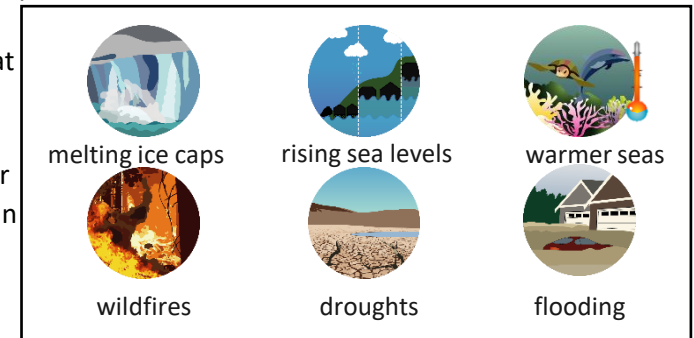


Global warming is the increase in Earth's average temperature, caused by the enhanced greenhouse effect.



Climate change is the change in the Earth's long-term weather patterns, including precipitation, wind and temperature. It leads to social, economic and environmental impacts.

Environmental impacts cause habitat loss, food shortages, wildlife threats, farming issues, water problems, and human displacement.



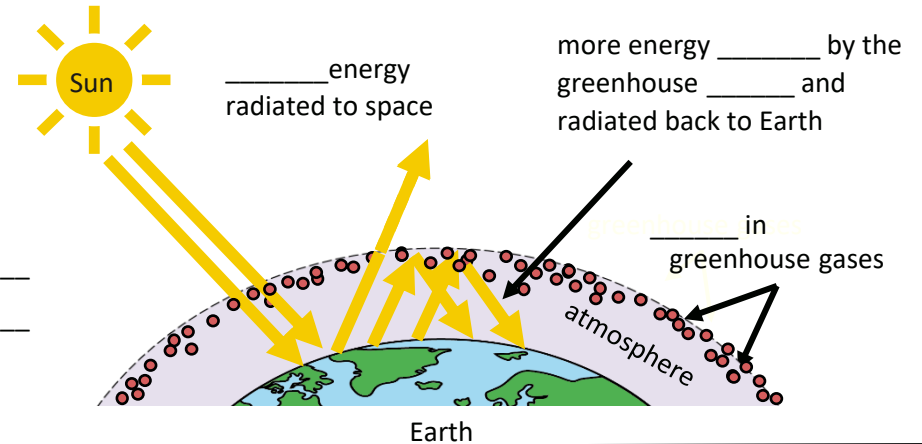
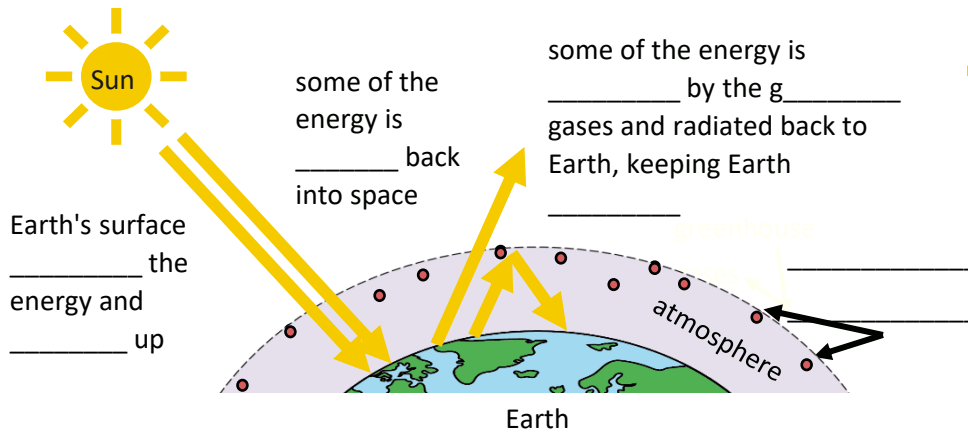
8.02: Earth and the Atmosphere

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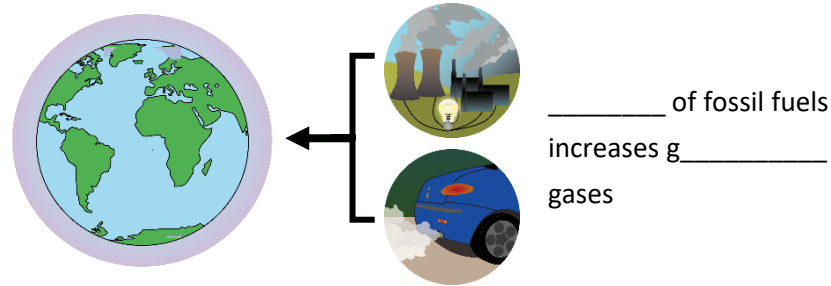


The greenhouse effect, global warming and climate change

Earth's atmosphere contains _____ (carbon dioxide methane water vapour), which keep Earth _____ than it would be without them. The greenhouse effect is the natural w_____ of the planet to habitable temperatures, caused by greenhouse g_____. The enhanced greenhouse effect is the _____ warming of the Earth due to i_____ greenhouse gases in the atmosphere.

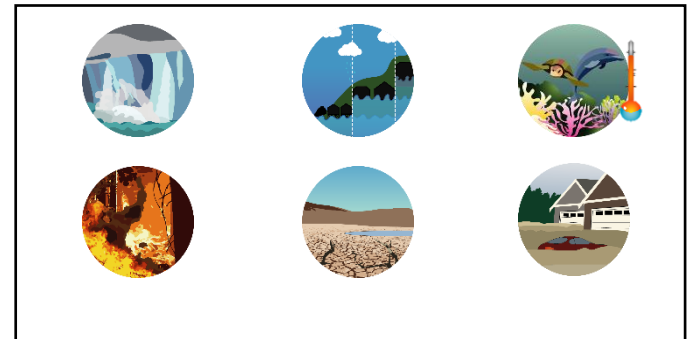


_____ is the increase in Earth's average temperature, caused by the enhanced _____ effect.



_____ is the change in the Earth's long-term weather patterns, including precipitation, wind and temperature. It leads to s_____, e_____ and e_____ impacts.

Environmental impacts cause _____ loss, food shortages, wildlife threats, farming issues, w_____ problems, and _____ displacement.



8.01: Population



Population distribution

1	population density	(n) the number of people who live within one square kilometre (km ²).
2	population distribution	(n) how people are spread out over a particular area.
3	densely populated	(n) many people per km ²
4	sparsely populated	(n) few people per km ²

Population change

1	birth rate	(n) the number of live births per 1,000 people in a population per year.
2	death rate	(n) the number of deaths per 1,000 people in a population per year.
3	natural increase	(n) the difference between the birth rate and death rate.
4	population explosion	(n) the rapid increase in the world's population since the 1950s.
5	overpopulation	(n) when the number of people in a region exceeds the capacity of that region's resources to support them.

Managing population

1	ageing population	(n) A population with a high and increasing proportion of people aged 65 and over, often due to low birth rates and longer life expectancy.
2	youthful population	(n) A population with a high proportion of young people (typically under the age of 15), often found in countries with high birth rates and lower life expectancy.

Population structure

1	population structure	(n) The number/ proportion of people in each age range, for each gender.
2	population pyramid	(n) a graphical representation of a country's population structure, showing the distribution of different age groups and sexes.
3	working age population	(n) The group of people typically aged 15 to 64 who are considered old enough to work and support the economy.
4	young dependents	(n) Children and young people aged 0 to 14 who are usually not working and depend on others for care and support.
5	elderly dependents	(n) Older adults, usually aged 65 and over, who are often retired and may rely on others or the government for financial and healthcare support.

Migration

1	voluntary migration	(n) When people choose to move to another place, often for reasons like better job opportunities, education, or lifestyle.
2	forced migration	(n) When people are made to move due to conflict, natural disasters, persecution, or other dangers beyond their control.
3	international migration	(n) When people move from one country to another.
4	internal migration	(n) When people move within the same country e.g., from rural areas to cities.
5	push factor	(n) Factors that make people want to leave an area.
6	pull factor	(n) Factors that make people want to leave an area.
7	source country	(n) The home country of a migrant.
8	host country	(n) The destination country for a migrant.

8.01: Population



Population distribution

1	population density
2	population distribution
3	densely populated
4	sparsely populated

- 1 population structure
- 2 population pyramid
- 3 working age population
- 4 young dependents
- 5 elderly dependents

Population structure

Population change

1	birth rate
2	death rate
3	natural increase
4	population explosion
5	overpopulation

Managing population

1	ageing population
2	youthful population

Migration

- 1 voluntary migration
- 2 forced migration
- 3 international migration
- 4 internal migration
- 5 push factor
- 6 pull factor
- 7 source country
- 8 host country

8.01: Population



Factors influencing population distribution

1 physical	1. Relief of the land. 2. Availability of natural resources. 3. Climate. 4. Fertility of soil. 5. Access to freshwater.
2 human	1. Transport network. 2. Job opportunities. 3. Investment in basic and wider services.

Factors affecting birth and death rate

1 Birth rate	1. Cost of childcare. 2. Access to contraception. 3. Children seen as an economic asset. 4. Average age of marriage.
2 Death rate	1. Access to safe drinking water. 2. Access to food.
3 both	1. Access to healthcare. 2. Infant mortality rate. 3. Access to education. 4. War.

Population structure and development

1 developing countries	1. High birth rates, so a large young dependent population. 2. A lower life expectancy, so a small elderly dependent population.
2 developed countries	1. A declining birth rate, so a small young dependent population. 2. A rising life expectancy, so a large elderly dependent population.

Ageing population

1 Advantages	1. The grey pound 2. Family support with childcare. 3. Jobs in health and social care.
2 Disadvantages	1. Pressure on the public services including healthcare. 2. Strain on housing supply. 3. Increased tax revenue required for pensions.
3 Management strategies	1. Increase the retirement age 2. Increase tax for the working age population. 3. Access to free or funded childcare.

Youthful population

1 Advantages	1. Large future workforce. 2. Increased tax revenue in the future. 3. Future business development.
2 Disadvantages	1. Strain on natural resources. 2. Overpopulation. 3. Education requirements.
3 Management strategies	1. Invest in healthcare. 2. Family planning. 3. Investment in education. 4. Improving women's rights.

Factors affecting migration

Push factors	Pull factors
War and conflict	Peace (no war)
Low wages	Higher wages
Education is difficult to access	Good education system
Droughts and water scarcity	Better access to healthcare
Gender inequality	Good job opportunities

8.01: Population



Factors influencing population distribution

1 physical

2 human

Factors affecting birth and death rate

1 Birth rate

2 Death rate

3 both

Population structure and development

1 developing countries

2 developed countries

Ageing population

1 Advantages

2 Disadvantages

3 Management strategies

Youthful population

1 Advantages

2 Disadvantages

3 Management strategies

Factors affecting migration

Push factors

Pull factors

What we are learning this term:		C. Why did Henry decide to Break with Rome?		
The factors that contributed to Henry VIII’s Break with Rome and the Protestant Reformation in England. The reign of Elizabeth I, her successes and challenges.		1. The Succession	2. The state of the Church	3. Money
		Catherine of Aragon was too old to bear any more children and had only provided Henry with a daughter, Mary I. Henry needed to divorce Catherine so he could remarry to produce a son.	The church was very corrupt – priests were gambling, drinking and getting married/having children. This went against their vows of poverty, chastity and obedience.	The church was a very powerful institution at the time. They owned over a third of the land in England – if Henry broke with Rome and became head of the Church he would have control over this land (could sell it, rent it, use it)
		Henry thought Mary wouldn’t have a strong enough hold on the throne and was determined to have a son so that the Tudor Dynasty would safely continue.	The church was selling indulgences as a way to get into heaven or reduce time in purgatory – using peoples fear of hell to exploit them.	
		To try and secure his divorce, Henry argued that God was punishing him by not giving him a son as he had married his brothers widow. He even found an extract from the Bible that supported his argument.	Anti-clericalism - ordinary people especially merchants and lawyers who felt let down by the Catholic Church primarily due to the corruption of the church	
		Henry had fallen in love with Anne Boleyn who was much younger and able to bear children. He hoped that she would give him the son he desperately wanted.	Richard Hunne – His baby son died and he could not afford the funeral fees and so was arrested and charged with owning Protestant literature. Later found dead hanging in his cell - suspicious circumstances. People suspected the clergy were involved.	All clergy paid a tax called Annates. If Henry broke with Rome he would be able to benefit financially - use this money to help to pay off his extensive war debts and to fund ongoing wars
		B. What changes did Henry make to the Church and what opposition was there?		

B. What changes did Henry make to the Church and what opposition was there?
<u>Change and Opposition</u>
Dissolution of the Monasteries (from 1536) – Henry VIII closed the monasteries to try and gain the monks loyalty. Also gave him land and money.
The Pilgrimage of Grace – 2 rebellions in the north of England (Lincolnshire and Yorkshire) led by Robert Aske. People were not happy with the dissolution of the monasteries as they now had no access to education/shelter/healthcare if they needed it. They also resented Cromwell for his influence in the dissolution and wanted to weaken his power at court. Ultimately, after negotiations with the king, the rebellion was unsuccessful as the rebels achieved none of their aims. However, it is still significant as it was the largest uprising of the Tudor period and they forced the king to negotiate.
Oath of Succession (1534) - Individuals must take an oath to support Anne Boleyn as the rightful Queen, those who refused would be punished as a traitor and would be executed
Treason Act (1534) – This act was changed so that anyone who spoke out against Henry as Head of the Church could be executed for treason

C.	Elizabeth's Middle Way
Catholic (stayed the same as under Mary I)	- Churches can be run by bishops - Churches should be decorated and some ceremonies should be allowed - Bright robes should be allowed
Protestant (changes made by Elizabeth after becoming queen)	- Priests are allowed to marry - A person can be saved by faith alone (no need for prayers/indulgences) - There should be no Mass (no transubstantiation) - Church services and the Prayer Book should be in English - Saints should receive no special prayers.

D. What were the religious policies /beliefs of these Tudor monarchs and what changes did they make?		
1. Edward VI (1537-1553)	2. Mary I (1516-1558)	3. Elizabeth I (1533-1603)
- Strong Protestant - Two very strongly Protestant advisors (Dukes of Northumberland and Somerset) that influenced him	- Strong Catholic - Made the Pope head of the church once again. - Made priests choose between the church and their families - Burned nearly 300 people at the stake – majority were Protestants (heretics)	- Protestant (mild/moderate) - Did not want any more major religious change and upheaval. - She introduced the Middle Way – this was a comprise of both Catholic and Protestant features - The Middle Way leaned more towards Protestantism as this was Elizabeth's own belief. - Tolerant of Catholics at the start of her reign but after numerous plots to depose and kill her and the threat of Mary Queen of Scots her toleration of Catholics lessened. - Known as the 'Virgin Queen'- never married/ never had an heir. - Dealt with many challenges throughout her reign including the Spanish Armada which was successfully defeated. 'Golden Age' in society- lots of exploration, theatres and leisure activities, but for many people, life was challenging with much poverty and rising prices.

Year 8 History : The Tudors

What we are learning this term:

The factors that contributed to Henry VIII's Break with Rome and the Protestant Reformation in England. The reign of Elizabeth I, her successes and challenges.

A.	Can you define these key words?
Reformation	
Catholicism	
Protestantism	
Heretic	
Excommunicated	
Armada	
Puritan	
Monasteries	
Dissolution	

C. Why did Henry decide to Break with Rome?

1. The Succession	2. The state of the Church	3. Money

B. What changes did Henry make to the Church and what opposition was there?

Change and Opposition

Dissolution of the monasteries-

The Pilgrimage of Grace -

Oath of Succession (1534)-

Treason Act (1534) –

C.

Elizabeth's Middle Way

Catholic (**stayed the same** as under Mary I)

Protestant (**changes made** by Elizabeth after becoming queen)

D. What were the religious policies /beliefs of these Tudor monarchs and what changes did they make?

1. Edward VI (1537-1553)

2. Mary I (1516-1558)

3. Elizabeth I (1533-1603)

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Key Vocabulary

1	Abu Bakr	The first Caliph chosen by Sunni Muslims after Muhammad's death
2	Ali	Muhammad's cousin and son-in-law, considered by Shia Muslims as his rightful successor
3	Allah	The Arabic word for God in Islam
4	burqa	A full-body covering worn by some Muslim women for reasons of modesty
5	caliph	A leader in Sunni Islam who succeeded Muhammad in leading the Muslim community
6	charity	Giving to those in need, especially through zakat
7	Constitution of Medina	A document created by Muhammad to establish peace and cooperation in Medina
8	Eid-al-Fitr	A festival marking the end of Ramadan
9	Fatima	Muhammad's daughter, especially respected in Shia Islam
10	Hadith	Recorded sayings and actions of Muhammad
11	Hajj	A pilgrimage to Makkah that Muslims aim to complete once in their lifetime
12	hijab	A headscarf worn by some Muslim women as a sign of modesty
13	Hijrah	The migration of Muhammad and his followers from Makkah to Medina
14	imam	A leader in Shia Islam or someone who leads prayer in Sunni Islam
15	Islam	A monotheistic religion revealed to the Prophet Muhammad
16	Jahannam	Hell; a place of punishment after death for those who reject faith or do wrong
17	Jannah	Paradise; a place of reward after death for the righteous
18	Kaaba	The sacred cube-shaped structure in Makkah that Muslims face during prayer
19	Khadija	Muhammad's first wife and the first person to accept Islam
20	Makkah	The birthplace of Muhammad and the holiest city in Islam

Religious Authority	
Qur'an	The holy book of Islam, believed to be the literal word of God
Surah	A chapter of the Qur'an
Muhammad	The final prophet in Islam, believed to have received the Qur'an
Sunnah	The example of Muhammad's life used as a guide by Muslims

Tools for Studying Religion

Theology is the study of God and ideas about God. Theologians look at how ideas about God influence beliefs in religions and the actions people will do.



Social Scientists use evidence to see how people are influenced by society. Social Scientists look at patterns in what people believe about God and how this may change due to time and place.





Key Vocabulary

1	Abu Bakr
2	Ali
3	Allah
4	burqa
5	caliph
6	charity
7	Constitution of Medina
8	Eid-al-Fitr
9	Fatima
10	Hadith
11	Hajj
12	hijab
13	Hijrah
14	imam
15	Islam
16	Jahannam
17	Jannah
18	Kaaba
19	Khadija
20	Makkah

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Tools for Studying Religion

Theology is the study of God and ideas about God. Theologians look at how ideas about God influence beliefs in religions and the actions people will do.



Social Scientists use evidence to see how people are influenced by society. Social Scientists look at patterns in what people believe about God and how this may change due to time and place.





Key Vocabulary

21	Medina	The city where Muhammad established the first Muslim community
22	modesty	A principle in Islam often expressed through clothing and behaviour
23	Muhammad	The final prophet in Islam, believed to have received the Qur'an
24	niqab	A face veil worn by some Muslim women as part of modest dress
25	prophet	A messenger chosen by God to deliver His message
26	Qur'an	The holy book of Islam, believed to be the literal word of God
27	Ramadan	The ninth month of the Islamic calendar, observed with fasting
28	salah	Ritual prayer performed five times a day
29	sawm	Fasting from dawn to dusk during Ramadan
30	Seal of the Prophets	A title for Muhammad, indicating he is the final prophet
31	shahada	The Islamic declaration of faith
32	Sharia	Islamic law derived from the Qur'an and Sunnah
33	Shia	A branch of Islam that believes Ali was Muhammad's rightful successor
34	shirk	The sin of associating partners with Allah
35	Sunnah	The example of Muhammad's life used as a guide by Muslims
36	Sunni	The largest branch of Islam, following the elected caliphs
37	Surah	A chapter of the Qur'an
38	tawhid	The belief in the oneness of Allah
39	ummah	The global Muslim community
40	wudu	Ritual washing before prayer
41	zakat	Compulsory act of charity, for those who can afford it





Key Vocabulary

21	Medina	
22	modesty	
23	Muhammad	
24	niqab	
25	prophet	
26	Qur'an	
27	Ramadan	
28	salah	
29	sawm	
30	Seal of the Prophets	
31	shahada	
32	Sharia	
33	Shia	
34	shirk	
35	Sunnah	
36	Sunni	
37	Surah	
38	tawhid	
39	ummah	
40	wudu	
41	zakat	





ART: Year 8 Term 1 & 2 - Topic = Day of the Dead



What we are learning during these term:

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

6 Key Words for this project

- Sugar Skull
- Mexican Day of the Dead
- Symmetry
- Armature
- Papier Mâché
- Outcome



Keywords for this project in detail:

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

B. How to use the Grid Method for accurate drawing.

- Use a ruler to draw an equally spaced grid onto your image.
- Draw an identical grid **LIGHTLY** onto paper.
- Draw in the main **outlines** of your image, focusing on one square at a time Use a ruler to help you **measure** the positioning of lines if needed.
- Add main details before erasing the grid on the paper.
- Add fine **details** and build in **tone**.



D. How to make a positive/negative collage.

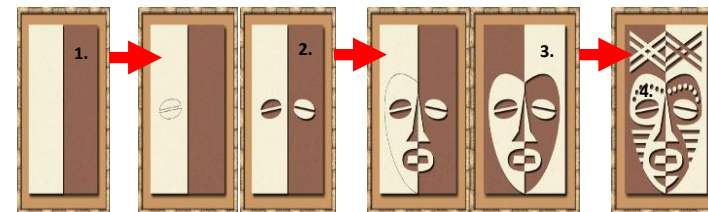
Collage is a form of art by cutting and ripping paper to create interesting artworks.

Steps for making your collage:

- Cut a piece of light A4 piece of paper in half and place one half over the top of the darker A4 piece of paper.
- Draw and cut out one facial feature at a time from the light piece of paper and flip it over onto the dark piece of paper. **DO NOT cut into the dark piece of paper, only the light. Remove the dark piece of paper from underneath the light piece before cutting.**
- Draw the shape of the face on the light piece of paper and flip it over to the dark piece of paper, aligned with the rest of the face.
- Add additional details on the face and in the background, following the same technique as step 2.

What each tool is used for:

Cutting mat	To protect the table from damage.
Craft knife	To precisely cut shapes from paper.
Glue stick	To cleanly stick the shapes onto paper.



E. How to make a papier mâché sugar skull.

Papier mâché is made from newspaper and PVA glue, which hardens solid once dry.

Steps for making your sugar skull:

- Roll two balls of white tissue, one slightly bigger than the other and tape it to a piece of A4 card. This is the armature, the bare bones of starting the sculpture.
- Apply the first layer of papier mâché using newspaper as smoothly as possible using PVA glue.
- Mould the facial features with papier mâché using white tissue and PVA glue, building it up to make it three dimensional and as smooth as possible.
- Apply a final thin layer of newsprint and PVA papier mâché for a smooth and even finish.
- Paint the sugar skull with white emulsion paint and allow to dry. Apply colourful poster paint in the background and use acrylic paint and pens to add the final details.



A. About Day of the Dead, Mexican Holiday.

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

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

- How?
- Different things happen on each day....
- DAY 1:
- Relatives put flowers on graveyards or in vases.
 - They create an altar somewhere in the house with pictures of the dead, along with favourite objects. The rest of this day is spent making the favourite foods of the person(s).
- DAY 2:
- Families have big celebrations at their homes. They serve all the food they made the day before. They eat candies shaped like skeletons. Friends stop by and people dance and sing.
- DAY 3:
- The holiday expands to the town. There are parades and floats and characters in costume.

C. DOTD artists: Thaneeya McArdle and Laura Barbosa.

Thaneeya McArdle



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

Laura Barbosa



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

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

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

6 Key Words for this project

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

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

- 1
- 2
- 3
- 4
- 5

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

Collage is:

Steps for making your collage:

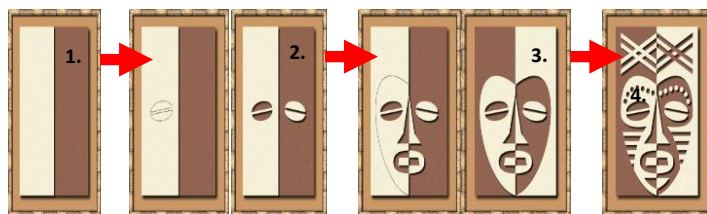
- 1
- 2
- 3
- 4

What each tool is used for:

Cutting mat

Craft knife

Glue stick

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

Papier mâché is:

Steps for making your sugar skull:

- 1
- 2
- 3
- 4
- 5

**Keywords for this project in detail:**

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

A.	About Day of the Dead, Mexican Holiday.	C.	DOTD artists: Thaneeya McArdle and Laura Barbosa.
What?	- It is a Mexican Christian holiday. - It began as a day of thanks for the harvest. - The festival lasts 3 days. It Occurs 31st October – 2nd November every year.	Thaneeya McArdle 	- Inspired by Indian Art. - Works with a range of materials including acrylic. paint and various programmes on the computer. - Her work shows a creative and personal. interpretation of Day of the Dead and has Indian like qualities. - Designs are vibrant, symmetrical and include the use of intricate patterns.
Why?	It is a festival that celebrates the lives of those who have died.	Laura Barbosa 	- Self-taught painter - Produces artwork based on the theme Mexican day of the dead - Uses fluorescent and vibrant colours that also have contrasting areas. - Her brush strokes are dominant in her work and - Her use of patterns are simplistic.
How?	Different things happen on each day.... DAY 1: - Relatives put flowers on graveyards or in vases. - They create an altar somewhere in the house with pictures of the dead, along with favourite objects. The rest of this day is spent making the favourite foods of the person(s). DAY 2: - Families have big celebrations at their homes. They serve all the food they made the day before. They eat candies shaped like skeletons. Friends stop by and people dance and sing. DAY 3: - The holiday expands to the town. There are parades and floats and characters in costume.		

Y8 Food technology

What we are learning this term:

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

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

c. Storing food safely

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

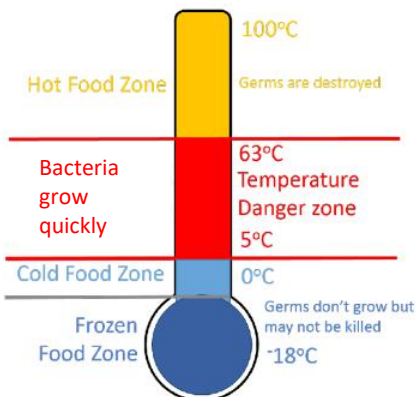
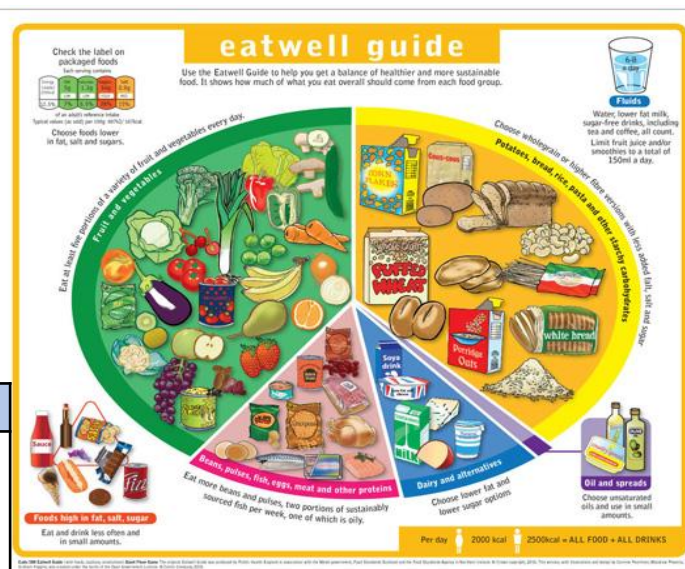


Image: TAFE NSW

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

- 1 **Fruit and Vegetables** – provides minerals, vitamins & fibre
- 2 **Carbohydrates** – provides carbs and fibre
- 3 **Protein** - provides protein, omega 3, come vitamins
- 4 **Dairy** - provides vitamins, minerals (calcium)
- 5 **Fats and Oils**



c. Food related waste

Reasons for wasting food:

- Confusion over best before dates and other date marks
- Too much food was cooked
- Preparing food incorrectly
- Food is spoiled

Reducing Waste:

- Plan meals and correct portion sizes
- Correctly storing food and paying attention to use by dates
- Use up contents of your fridge before buying more food
- Use leftovers in meals the day after or freeze them
- Use the whole food e.g. bones for stock
- Choose products with recyclable packaging
- Bring your own shopping bags
- No single use plastic i.e straws
- Buy food loose i.e apples

E. Keywords

Cross contamination	The transfer of contaminants onto food through either the hands, the equipment or the surfaces. Causes food poisoning.
Spoilage	When food becomes unsafe to eat i.e rot, mould.
Use-by date	A date that informs you when the food will have spoiled .
Best-before date	You can still eat the food after this date but it may be worse quality.
Fibre	Foods that keep your digestive system healthy and avoid constipation.
Allergen	A substance (sometimes food) that causes an immune system response that can be fatal i.e throat swelling up. Nuts are common allergens.
Intolerance	When the body cannot digest a food and rejects it i.e vomiting, diarrhea. Many people are lactose intolerant (milk intolerance).
Celiac	When someone cannot eat gluten (wheat), similar to an intolerance but more dangerous.
Vegan	When someone does not eat anything that comes from an animal including eggs, milk, honey.

c. Influences on food choice

- A person's **physical activity level (PAL)**
- Whether they want to **eat healthily**
- The **cost** of the food vs their income
- Whether they are influenced by **peer pressure** or online trends
- Their cooking skills (**culinary skills**)
- Their **lifestyle** and how much time they have to cook/eat
- Whether they have rules in their **religion, culture or ethical rules**
- Whether the food is **available** in that season
- Whether they **enjoy** that food
- Whether there is a **special occasion** with special food

Y8 Food technology

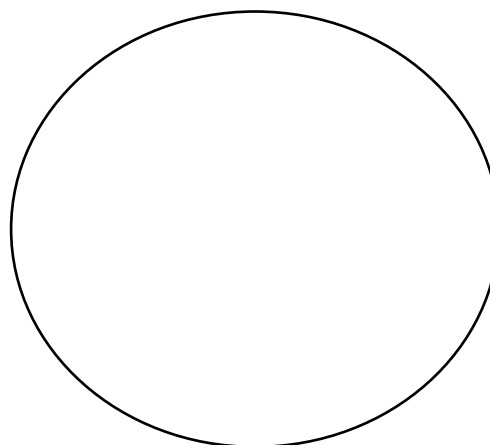
What we are learning this term:

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

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

- 1 F _____ and _____
- 2 C _____ provides _____
- 3 _____
- 4 _____ - provides vitamins, minerals (calcium)
- 5 **Fats and Oils**

Divide the circle below into 5 sections as on the eatwell guide and annotate it with one healthy eating guideline .



E.	Keywords
Hygiene	A method of keeping yourself and equipment clean
Cross contamination	
	When food becomes unsafe to eat i.e rot, mould.
Perishable food	Food that spoils if not kept in the fridge or freezer e.g ham.
Fibre	
Allergen	
	When the body cannot digest a food and rejects it i.e vomiting, diarrhea. Many people are lactose intolerant (milk intolerance).
Coeliac	When someone cannot eat _____ (wheat), similar to an intolerance but more dangerous.
	When someone does not eat anything that comes from an animal including eggs, milk, honey.

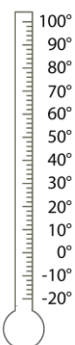
A. What are the nutrients required in the diet?

Carbohydrates	To give the body _____ e.g bread.
Protein	To _____ the body, and to give energy e.g eggs.
Fats	To insulate your body, give you _____, and protect your organs i.e butter.
Vitamins	For general body health and function i.e carrots for _____.
Minerals	For general body health and function i.e iron to make _____.

c. Storing food safely

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

Annotate the thermometer to show key food safety temperatures.



c. Food related waste

Reasons for wasting food:

- Confusion over best before dates and other date marks
- Too much food was cooked
- Preparing food incorrectly
- Food is spoiled

Reducing Waste:

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

c. Influences on food choice

- A person's **physical activity level (PAL)**
- Whether they want to **eat healthily**
- The **cost** of the food vs their income
- Whether they are influenced by **peer pressure** or online trends
- Their cooking skills (**culinary skills**)
- Their **lifestyle** and how much time they have to cook/eat
- Whether they have rules in their **religion, culture or ethical rules**
- Whether the food is **available** in that season
- Whether they **enjoy** that food
- Whether there is a **special occasion** with special food



Year 8 PRODUCT DESIGN Rotation Knowledge Organiser



What we are learning this term:

A. Workshop Tools B. Materials C. Key words D. Art Deco Design Movement

A. Workshop Tools

Steel Rule	Wooden Vice	Clamp	Bench Hook	Tenon Saw	Pillar Drill	Bandfacer
						

B. Materials

Timbers come from **trees**

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

Softwoods come in planks and boards

Manufactured Boards come from **wood pulp**

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

Manufactured Boards come in sheets

Polymers come from **crude oil**

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

Polymers come in sheets, graduals and filament

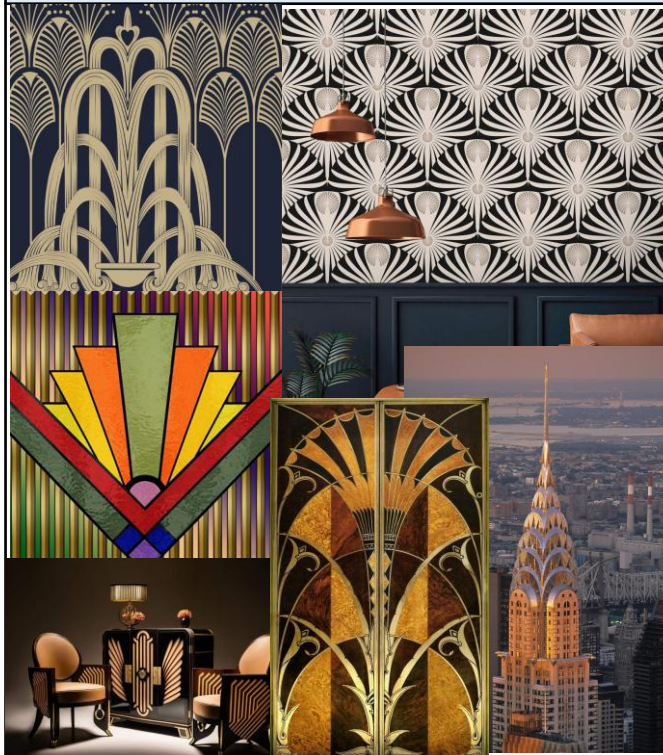
C.

Key Words

Research	An investigation of resources and materials to help inspire ideas
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
component	Part of a whole
Manufacture	The degree to which the result of a measurement, conforms to the correct value

D. Art Deco Design Movement

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



Key Designer

Émile-Jacques Ruhlmann



Key Features:

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

Colours:

Rich, bold, contrasting colour palettes
Key colours include; red, blue, green often contrasted with black, gold or silver.

Line Styles:

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



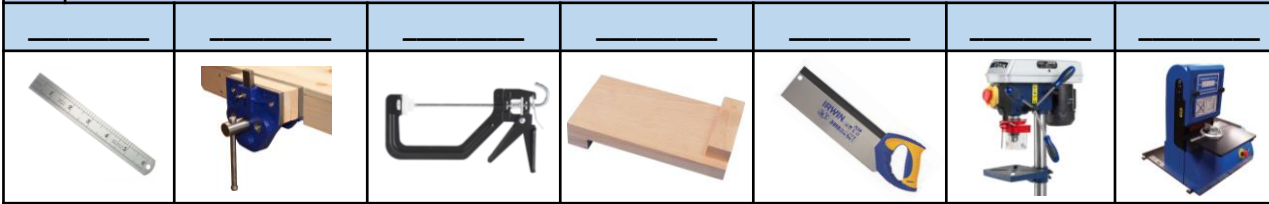
Year 8 PRODUCT DESIGN Rotation Knowledge Organiser



What we are learning this term:

A. Workshop Tools B. Materials C. Key words D. Art Deco 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 _____

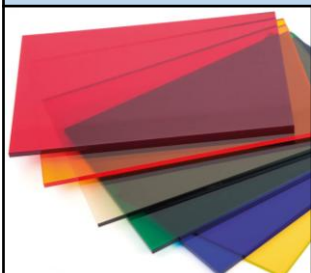
Manufactured Boards come from _____



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

Manufactured Boards come in _____

Polymers come from _____

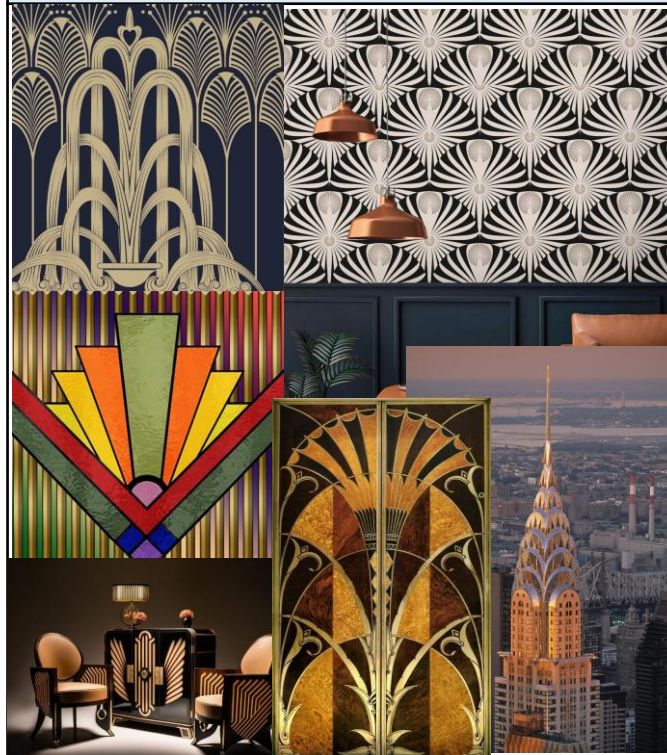


Acrylic – which you used as your Memphis shapes – is a **polymer**

Polymers come in _____, _____ and _____

D. Art Deco Design Movement

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



Key Designer



Key Features:

_____ shapes and _____,
_____ colours and contrasting _____,
_____ and rectangular forms
_____ and elongated forms
Stepped or _____

Colours:

Line Styles:

YEAR 8 GRAPHIC COMMUNICATION

What are we learning this term?

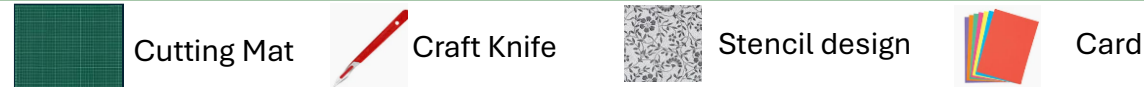
A Stencil design	B Step up card	C Accordion card	D Key words	E Evaluation
---------------------	-------------------	---------------------	----------------	-----------------

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

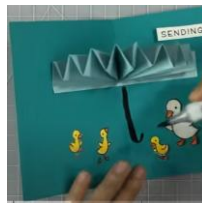


Coloured paper to add to the design
Cut any incisions

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

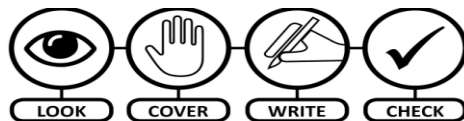
Evaluation: To judge or give an opinion

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

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A	What we are learning about this term...
1	Pulse and Rhythm, including triplets and 6/8
2	Polyrhythms
3	Music in West Africa
4	Call and Response



C	African Drumming Techniques

Bass

Tone

Slap

D	Analysing music from West Africa (Listening)
---	--

Listen and watch this video... Which West African instruments are being used? Can you hear the **call and response** being played by the **master drummer** and the rest of the performers?

Listen for the **fast tempo (allegro)**, as the music is designed for dancing and social gatherings. Because of gatherings being outside the dynamics are usually loud = **forte (f) or fortissimo (ff)** however, the master drummer can indicate changes in both dynamics and tempo if they want!



Mamady
Kéita: Kuku ->



Bolokada Conde

Ladysmith Black
Mambazo

E	African Drums and Melody Instruments

Djembe

dununba

sangban

kenkeni

BALAFON	MBIRA	FLUTE	GOURD	MARACAS	KORA

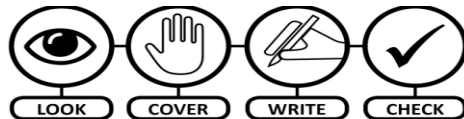
F	Basic Note Values
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Basic Rhythm Values in 4/4 time				
	Beat 1	Beat 2	Beat 3	Beat 4
Technical name SEMI BREVE (4 beats)				
Remember it... Hold for 4 beats				
Technical name Minim (2 beats)				
Remember it... L - ong				
Technical name Crotchet (1 beat)				
Remember it... tea				
Technical name Quavers (1/2 beat)				
Remember it... Cof - fee				
Technical name Semi quaver (1/4 beat)				
Remember it... Ca - pu - cci - no				

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

**A What we are learning about this term...**

- 1 Pulse and Rhythm, including triplets and 6/8
- 2 Polyrhythms
- 3 Music in West Africa
- 4 Call and Response

**B****Keywords****C African Drumming Techniques****B** _____**T** _____**S** _____**D****Analysing music from West Africa (Listening)**

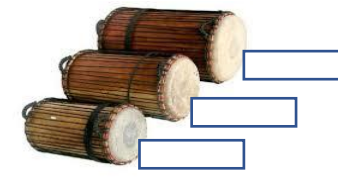
Listen and watch this video... Which West African instruments are being used? Can you hear the _____ being played by the _____ and the rest of the performers?

Listen for the _____, as the music is designed for dancing and social gatherings. Because of gatherings being outside the dynamics are usually loud = _____ (**f**) or _____ (**ff**) however, the master drummer can indicate changes in both dynamics and tempo if they want!

Mamady
Kéïta: Kuku ->



Bolokada Conde

Ladysmith Black
Mambazo**E African Drums and Melody Instruments****D** _____**F****Basic Note Values****Basic Rhythm Values in 4/4 time**

	Beat 1	Beat 2	Beat 3	Beat 4
Technical name				
Remember it...				
Technical name				
Remember it...				
Technical name				
Remember it...				
Technical name				
Remember it...				
Technical name				
Remember it...				

G**Describing music – MAD T SHIRT****M****A****D****T****S****H****I****R****T****M** _____**A** _____**D** _____**T** _____**S** _____**H** _____**I** _____**R** _____**T** _____



What we are learning this term:

- A. How to create short improvisations and perform Lazzis in the style of Commedia Dell'arte
- B. How to perform the key characters from Commedia Dell'arte.
- C. How to respond to performances, analysing and evaluating how people have used Commedia Dell'arte techniques.

Commedia Dell'arte Techniques- this term's key words

Lazzi	Rehearsed 'gags' or stock jokes which could be added into a performance
Mask	Most important characters have distinctive masks that represent their personalities
Stock-characters	stereotypical fictional characters who audiences recognise from their frequent recurrences.
Comedy	A genre in drama.
Marking the moment	Using a range of techniques such as a still image, slow motion, thoughts aloud or lighting and sound to highlight a key moment in a scene.
Exaggeration	Over the top gestures or facial expressions
Gesture	An expressive movement of the body, or something that is said or done to show a feeling, i.e. a wave.
Still image	This is a frozen picture which communicates meaning.
Mime	Using gesture and bodily movement without the use of words

C.	Who are the key characters?
Pantalone	Venetian Merchant, rich and mean
Il Dottore	The Doctor, a fat windbag.
Columbina	Only female servant, clever.
Arlecchino	The best-known of the zanni or comic servant characters

The History of:	Commedia Dell'arte
	

Mask work and movement are key in Commedia dell'arte, an Italian comedy tradition that was popular in the Renaissance period. There were several stock characters, eg Pantalone and his servant Arlecchino from the play, *The Servant of Two Masters*.

The relationship between Basil Fawlty and Manuel in the BBC sitcom, *Fawlty Towers*, is reminiscent of the master-servant relationship in the Commedia dell'arte. The plots were arguably vehicles for several comic routines known as Lazzi. These were either based on an individual's habits or on interactions between characters that the audience would come to expect. The lazzi were hugely, if not entirely dependent on movement, such as Arlecchino catching and eating a fly in an exaggerated way, pretending to be a statue as a way of hiding or getting beaten round the head by his master.

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Commedia Dell'arte Techniques- this term's key words

Lazzi	
Mask	
Stock Character	
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Gesture	
Still image	
Mime	

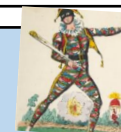
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Arlecchino

The History of:**Commedia Dell'arte**

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#AIMHIGH CHALLENGE TASKS Y8

Hard Work ... Kindness... Responsibility



Subject	Reading	Watching	Other Opportunities
English	Read: https://www.theguardian.com/childrens-books-site/2014/jan/06/book-doctor-sherlock-detective-novels-teens	Watch: https://www.bbc.co.uk/iplayer/episodes/b018ttws/sherlock	https://co-decode.co.uk/
Maths	Read: What do Runway Numbers Mean. 	Listen: The Golden Ratio 	Try the N-Rich Activity below: 
Science	Read The Astronomy Book- big ideas simply explained	Watch The reason for seasons https://www.youtube.com/watch?v=tX3Y5bzNDiU	Look at the different constellations you can spot https://www.twinkl.co.uk/teaching-wiki/constellations And see if you can see them
Geography	Read Rainforest Rough Guide: Age 10-11, average readers - White Wolves Non Fiction	Watch: BBC One - Planet Earth II - Available now	Coate water. Write down all the ways this area is different to your home street. This shows the comparison between urban and rural areas.
History	Read Y8 Term 1 Reading.pdf	Watch: https://www.youtube.com/watch?v=3ozlZXGBW2E	Visit: Steam museum of the Great Western Railway. SN25 2DA
Spanish	Read: the Spanish and English whilst watching this video of a tour of Barcelona: https://www.youtube.com/watch?v=I7bHX9Wkr0E	Watch this clip: about Spanish people and their holidays: https://www.youtube.com/watch?v=n1MRm83KDWY	Check out how many Spanish destinations EasyJet Fly to. Find out a little bit about each destination: https://www.easyjet.com/en
Art	Read: Using shape in art https://www.bbc.co.uk/bitesize/guides/z3ssgdm/revision/1	Watch: Recognizing shapes in art https://www.youtube.com/watch?v=sb-U6U2V87Q	Try visiting an art gallery to see how an artist has created artwork in real life. The Tate website is an amazing tool to find 100's of established artists https://www.tate.org.uk/art

SWINDON ACADEMY READING CANON

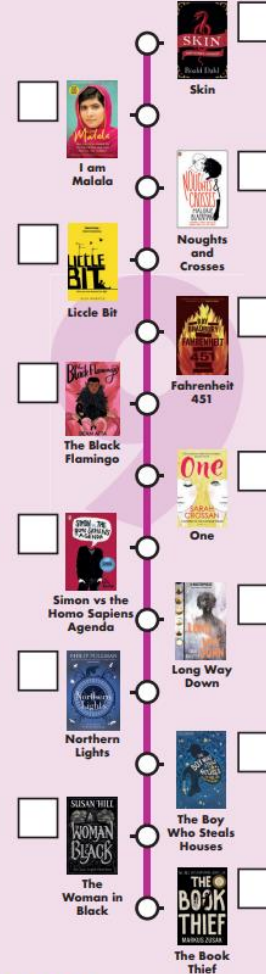
Year 7



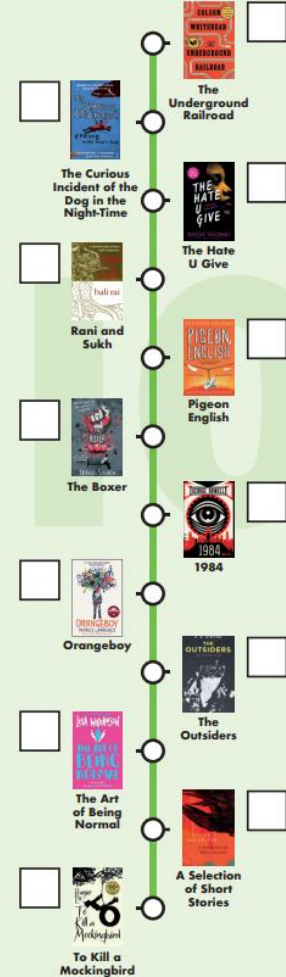
Year 8



Year 9



Year 10



#ReadingisPower