

Knowledge Organiser

YEAR
8



David Attenborough



Dina Asher Smith



JK Rowling



David Walliams



Mary Seacole

“ Be the change that
you wish to see in
the world.”

M A H A T M A G A N D H I

THE ENGAGED **MIND STAYS SHARP.**
BE ENGAGED IN THE HERE AND NOW.

THANK YOU FOR YOUR NOMINATIONS!

Knowledge Organisers at Redmoor Academy

WHY?

Why do we have knowledge organisers?

Your knowledge organisers help you to be successful in many ways. Firstly, they make clear the key elements needed in a topic to have an excellent understanding of it. If you know these elements, your teacher will help you to understand them.

WHAT?

What are my teachers' expectations of me?

In year 7 and 8 your teachers will give you homework that means you will be spending 20 minutes a week learning information from your knowledge organiser for each subject. In year 9 this will be 30-40 minutes. Teachers will test you once a week to make sure that you are completing the homework and remembering your knowledge. Your knowledge organiser exercise book is where you will complete your practising. Each time you revise and practise, you should put the subject as the title and the date. Rule off when you have completed your revising for that subject. Teachers and form tutors will be regularly checking that you are revising.

HOW?

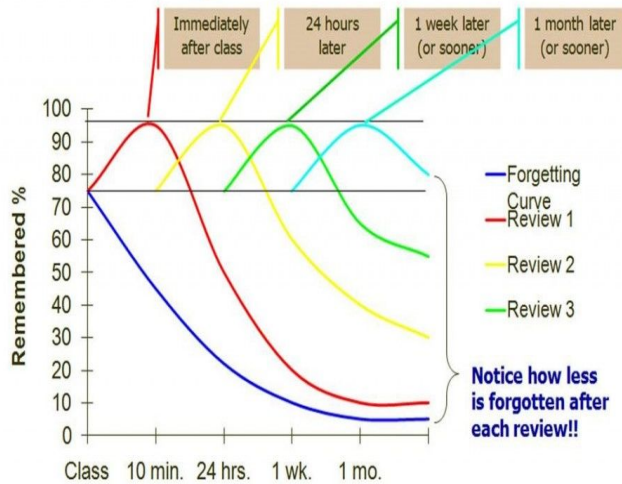
How will my teachers use them?

Each subject will set homework once a week that will help you to learn your knowledge organiser. They will also test you once a week on certain parts to see how well you have remembered it. Research tells us that this practising is a really good way of helping you make sure that the knowledge stays in your memory. Over time you will build on this knowledge to make sure that you know everything you need to for your subject. Sometimes you may have high stakes quizzes, where teachers will set a certain score that you have to reach to be successful.

How will they help me revise?

When it comes to GCSEs, you have lots of information to remember. Your knowledge organisers will gradually build up this knowledge over 5 years to help support you in year 11 so that when you revise, you are just recalling knowledge that you have already stored. Also, you will have practised lots of revision techniques whilst revising your knowledge organisers over the past 5 years, which will help prepare you for the final exams.

How we learn at Redmoor



Why reviewing your learning is so important

As soon as we are told a new piece of information, most of that information is 'lost' and forgotten. Hermann Ebbinghaus found that repeating information helps us remember more of it. So we need to be reviewing and going over what we learn in order for us to remember and be able to use the information after a period of time has passed.

This resource summarises some proven strategies that you can use to review your knowledge.

Common methods of revision that are the least effective:

- Highlighting key points
- Re-reading
- Summarising texts



Retrieval practice

Testing what you know is a powerful tool in revision; the effort to remember something really strengthens your memory. Apps such as Memrise and Quizlet allow you to use or create your own quizzes based on topics. Create them, test yourself or get someone to test you. It works!

Learn more about retrieval practice here: [Link to the Learning Scientists](#)

How we learn at Redmoor

Spacing and interleaving

Don't revise your all topics in one go (cramming). Instead, you should revise 'chunks' of a topic for small amounts of time (15-30 minutes) and then move onto another 'chunk' from a different Topic.

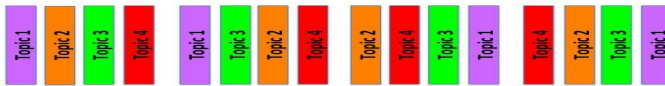
Eg. topic 1 cells, topic 2 digestive system

This will improve your memory!

Massed presentation



Spaced and interleaved presentation



Mind Maps

Mind mapping is simply a diagram used to visually represent or outline information.

It is a powerful graphic technique you can use to translate what's in your **mind** into a visual picture.

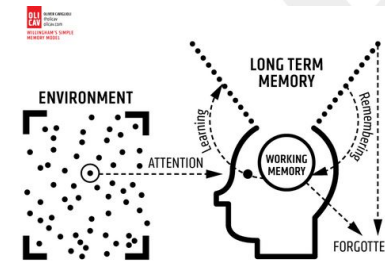
Mind maps help with memorisation of jey knowledge as it helps to organise information and begin to make links and connections to different pieces of information.

The use of visual images helps your brain to memorise the information with simple words next to them - links to dual coding!



Useful links:

- The learning scientists: <https://www.learningscientists.org/>
- Memrise: <https://www.memrise.com/>
- Quizlet: <https://quizlet.com/en-gb>
- Seneca: <https://www.senecalearning.com/>



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Equipment

all students must have...



Mobile phones are not to be used in lessons without staff permission
No photos or videos to be taken without permission
No school related images or videos to be uploaded on to social media

Black or blue pen
Pencils
Ruler - 30cm
Protractor
Compass
Rubber
Pencil Sharpener
Purple pen
Scientific calculator
Coloured crayons
Student Organiser
Knowledge Organiser
Locker Key

REDMOOR ENGLISH DEPARTMENT: WORLD WAR I CONTEXT



World War I: Key Facts

- The war began on August 4th 1914 when Germany invaded Belgium - Britain 'stuck up' for Belgium and declared war on Germany
- Many people believed that the war would be over by Christmas as Britain was so powerful
- By 1915, the opposing sides had created trenches, in some places just 30m apart!
- For the first time, powerful new weapons and vehicles were used, including gas
- Despite there being many volunteers, by 1916 there was a shortage of soldiers and a law was passed to force healthy men aged 18-41 to sign up, this was called conscription
- The largest battle, The Battle of the Somme, was fought in Belgium over five months and over a million men were killed or injured
- By 1918, all men under 51 were being called up - and they had to go even if they didn't want to
- 700,000 British soldiers died
- Over 8 million soldiers in total died
- 8 million horses also lost their lives

The Frontline

It was extremely dangerous to be in the frontline (the place where two opposing armies faced one another). Almost every day, enemy shells would fall on the trenches.

Trenches: On the Western Front, the war was fought by soldiers in trenches. These were long, narrow ditches dug into the ground where soldiers lived.

The conditions were poor. Toilets overflowed, they were muddy, cold and uncomfortable. Many soldiers developed problems like trench foot (an infection of the feet caused by your feet being wet for too long).

A typical day in the trenches involved getting up at 5am to be on high-alert for enemy attack, with a rum ration at 5.30am. When not actively fighting, soldiers would be expected to tidy the trenches and clean their weapons. At night, soldiers would patrol, dig trenches, put up barbed wire or collect stores.

Soldiers did not spend all of their time in the trenches. They would usually spend 8 days in the frontline and then four days in a reserve trench, following by four days at a rest camp built a few miles away from the fighting.

Topic Vocabulary

Accusatory: suggesting that you think someone has done something bad.
Blunt: if you are blunt, you say exactly what you think without trying to be polite.
Condemnation: the expression of very strong disapproval.
Cowardice: the behaviour of someone who is not brave and tries to avoid danger.
Crumps: a crump is a large hit or blow, used to mean the explosion of a shell.
Detachment: the feeling of not being emotionally involved (you are distant and feel cut off).
Enlist: to join up to the armed forces.
Frontline: the area at the front of the territory where the close combat fighting took place and where the trenches were situated.
Futile: if something is futile then it is pointless or useless.
Gas masks: a protective mask used to cover a person's face against poisonous gas.
Home front: Britain was known as the home front as people there felt like they were part of the war.
Jingoism: the extreme belief that your country is always best, often shown by enthusiastic support for war.
Lice: small, wingless insects that feed on your blood.
Naivety: a lack of trust based on a lack of experience.
No man's land: a term used to describe the ground between two opposing trenches.
Nostalgic: a feeling of happiness when you think of the past. You can also be sad as you long for things to be as they were.
Over the top: leaving the trenches to attack the enemy.
Patriotism: showing love for your country and being proud of it.
Pastoral: writing which gives an idealised version of life in the countryside.
Psychological: relating to the human mind and feelings.
Propaganda: information of a biased or misleading nature. In WW1 posters, news stories, songs and poems would be used to persuade men to fight (see the poster on the left).
Romanticise: to talk about something in a way which makes it sound better than it really is.
Shells: a shell is a large weapon (like a large bullet) which would be fired as a projectile (through the air).
Shell-shock: is post-traumatic stress (stress happening after an event). It is now called PTSD.
Suicide: the act of killing yourself intentionally.
Trenches: narrow dugouts in the ground where troops would be partially sheltered from the enemy (see left).

REDMOOR ENGLISH DEPARTMENT: WORLD WAR I POETRY

'Who's for the Game?' by Jessie Pope

Context

- Jessie Pope is an English poet who is best known for her motivational poems published during WW1
- The poem was published in The Daily Mail and was written to encourage men to sign up for war
- Other poets who experienced war, poets like Owen and Sassoon, found her work distasteful

Meaning

The poem is upbeat and is aimed at getting men to enlist for war. It uses lots of comparisons and questions to persuade (even pressurise) men into fighting for England.

The speaker aims at getting men to think about their roles in war, making them feel cowardly if they decide not to fight.

'The Soldier' by Rupert Brooke

Context

- Rupert Brooke was an English poet
- He received a private education at Rugby School
- He is known for his sonnets which write about the beauty of England and the bravery and heroism of British soldiers
- Brooke enlisted at the outbreak of war in 1914 and died of an infection in 1915
- At the start of the war, many poets used a pastoral style which was popular before the war

Meaning

The poem is told from the perspective of a soldier leaving England to go to war. The speaker informs the audience about what to think of him should he die. The soldier, who has been raised in England, says he will go to an English heaven once he dies.

The poem conveys the patriotic feelings of England in 1914 and encourages others not to be fearful of their own death as it will lead to the protection of England.

'Dulce et Decorum Est' by Wilfred Owen

Context

- The poet was a WWI soldier who experienced the horror of war directly
- He directed the poem towards Jessie Pope and those who told lies to soldiers
- He spent time in Craiglockhart Military Hospital and felt the mental effects of war
- He was tragically killed in the final week of the war in 1918

Meaning

The poem describes exhausted and wounded soldiers returning from the front line to rest. They get caught in a gas attack and one soldier tells us his memories of watching a man die in front of his helpless eyes and of the dreams which haunt him afterwards. His experiences cause him to attack those who tell young men that it's right to die for their country.

'Suicide in the Trenches' by Siegfried Sassoon

Context

- Siegfried Sassoon was a British war poet and soldier, and one of the major poets of WWI
- He was decorated for his acts of bravery during the war but decided that he could not support the war after a period of leave
- He spent time for shell-shock at Craiglockhart Military Hospital and he experienced the horrors of war first hand

Meaning

The poem is an angry and blunt tale of a young soldier who commits suicide because of war. The poem shows the psychological effects of war (the effect on men's mental states). The 'simple soldier boy' could be any number of real soldiers.

Through the poem, Sassoon attacks people back home who blindly support war without knowing its effects on the men who fight.

REDMOOR ENGLISH DEPARTMENT: POETIC TECHNIQUES

Language Technique	Example
Biblical imagery: a word or image that references the Bible or has a religious quality.	In 'The Soldier' Rupert Brooke uses religious imagery in order to demonstrate the way regards England as having a holy nature.
Connotation: a feeling or idea which is suggested by a particular word	In 'Who's for the Game?' the poet wants you to think about the connotations of games so that you imagine fun and excitement as a soldier.
Direct address: is when a speaker talks directly to the reader or audience.	In 'Dulce et Decorum Est', Wilfred Owen refers directly to the reader as 'my friend'.
Metaphor: a phrase which describes one thing as if it is something else	In 'Who's for the Game' the poet uses a metaphor by saying that war is a 'red crashing game of a fight'.
Extended metaphor: a metaphor that continues through a series of sentences or over the course of a stanza or more.	In 'Who's for the Game' the poet uses an extended metaphor by saying that war is a game as well as using verbs like 'grip' and 'tackle.' This extends the metaphor over the first stanza.
Imperative: is a command.	In 'Not So Quiet' the narrator uses many imperatives in order to command her mother to watch and listen.
Imagery: descriptive language which creates clear images - this could be religious imagery, natural imagery, bird imagery etc.	In 'The Soldier' Brooke uses religious imagery which makes England sound like a holy place. Examples include 'English heaven'.
Sensory imagery: a description that involves one or more of the senses.	Wilfred Owen uses sensory imagery to present the effects of war on the senses of the soldiers. The writer describes how they are blind, deaf and lame.
Simile: a description comparing one thing to another by saying it is as or like the other thing	In 'Dulce et Decorum Est' the poet compares the gas cloud to the sea - 'as under a green sea I saw him drowning'.
Personification: when you give an animal, thing or object qualities that only a human can have.	Jessie Pope personifies England as a woman who is 'up to her neck in a fight' in order to make her seem more vulnerable and in need of protection.
Symbolism: where an image or object represents something else	John McCrae's poem features poppies, a symbol of remembrance and bloodshed.
Tone: this is the poem's feelings or emotions.	'Suicide in the Trenches' uses an upbeat tone at the start but this changes to anger in the final stanza.

Structural Technique	Example
Caesura: a break within a line of poetry where there is punctuation to create a pause.	In the opening line of Owen's poem, 'Bent double, like old beggars under sacks', the comma in the middle of the line slows down the pace by adding an interruption. This kind of pause in a line is called caesura.
Enjambment: the continuation (spilling over) of a line of poetry onto the next without a pause from punctuation at the end.	In 'Dulce et Decorum Est' the enjambment comes after 'fumbling' and 'stumbling' to show the panic of the soldier stuck in the gas.
Narrative viewpoint: this is the perspective of the narrator speaking in the poem.	'The Soldier' is written in the first person and is autobiographical, told from Rupert Brooke's own perspective rather than that of a character in the poem.
Rhyme scheme: the pattern of rhyme within a poem.	In 'Who's for the Game?' rhyme like 'played' and 'unafraid' creates a bouncy rhyme.
Rhythm: this is the beat of the poem, made up of stressed and unstressed sounds.	The rhythm at the start of 'Dulce et Decorum Est' is slow, created by using many commas. This mimics the pace of the soldiers trudging in the mud.
Sonnet: a poem with 14 lines traditionally about love, usually ending with a rhyming couplet.	'The Soldier' is an example of a sonnet but it is about his love for England rather than a partner.
Stanza: a set amount of lines grouped together in a poem.	'Suicide in the Trenches' has three stanzas and there is a shocking contrast between the positivity of the boy in the first stanza and the boy who commits suicide in the second.
Structure: structure refers to the way something is presented to the reader. This includes things like line length and stanza length, as well as how the poem starts, develops and ends.	Jessie Pope deliberately structures her poem 'Who's for the Game?' as a series of rhetorical questions in order to encourage her readers to think about the roles they might play during the war.
Volta: a turn in the thought or argument of the poem - it can be a dramatic shift in emotion	There is a turning point in 'Suicide in the Trenches' when the mood becomes darker. Sassoon attacks the 'smug faced crowds' back home who encourage young men to fight and die at war.

REDMOOR ENGLISH DEPARTMENT: YEAR 8 IN THEIR SHOES

What is Narrative Writing?
A narrative is a piece of text or prose that focuses on telling a story. We refer to a story as a narrative. Novels are the most common form (type) of narrative writing.

Narrative Voice
<i>Every description has a narrator: someone who exists as the voice of the description. They are not the writer but the writer's construct. Who your narrator is and their feelings will shape their choice of language used to describe different characters and events. Always think about who your narrator is and what their connection to the scene is.</i>

1st person perspective: written as if the narrator is a character, observing or taking part in the scene..
--

2nd person perspective: written as if the narrator is talking directly to the reader. You are unlikely to want to use this in descriptive writing.
--

3rd person perspective: written as if the narrator is talking about the characters and events, but not necessarily a character in them.

Omniscient narrator: a narrator who is god-like, able to move from place to place and character to character, realigning the reader to any perspective they wish to share.

Narrative Structure: Drop, Shift, Zoom, Link
Paragraph One: Drop - drop the reader into your story, in the middle of the action. Think about what will excite, interest or confuse you reader. DROP: <i>Rain hammered down on the windscreen as the Mazda raced down the highway.</i>
Paragraph Two: Shift - Change the focus or mood. You could shift to a different subject, setting, character or time, i.e. with a flashback. SHIFT: <i>“Are we there yet?” a child in the back seat cried. “I’m hungry.”</i>
Paragraph Three and Four: Zoom - zoom in on particular things and describe them at length. This is where you can really explore the setting or characters in your story. ZOOM: <i>The driver of the car yawned deeply. Her tired eyelids drooped heavily. Dark blue, puffy, bags hung below her eyes, showing the extent of her fatigue.</i>
Paragraph Five: Link - Zoom back out and return to the bigger picture. Link back to ideas, settings, characters or actions in the opening paragraph. LINK: <i>The rain gathered forced as the windscreen wipers desperately struggled to keep up. The Mazda began to slow, as it approached the sanctity of the service stations.</i>

Key Topic Vocabulary	Definition
Culture	The ideas, customs, and social behaviour of a particular people or society.
Prejudice	A preconceived opinion that is not based on reason or actual experience.
Racism	Prejudice or discrimination against a person or people on the basis of their ethnicity, race or skin colour.
Social Class	The hierarchy of society based on wealth and status.
Identity	The qualities, beliefs, personality, looks and/or expressions that make a person or group who they are.
Society	The community of people living in a particular country or region and having shared customs, laws, and organizations.

Structural Techniques	Definition
Stream of Consciousness	Writing which follows a character's thoughts as they happen. It is often unstructured.
In Media Res	Starting a piece of writing in the middle of the action, to confuse or excite the reader.
Cyclical	A story's ending which links back to the beginning by repeating words, ideas, settings or actions.
Focus	The topic of each paragraph/ section of a narrative.

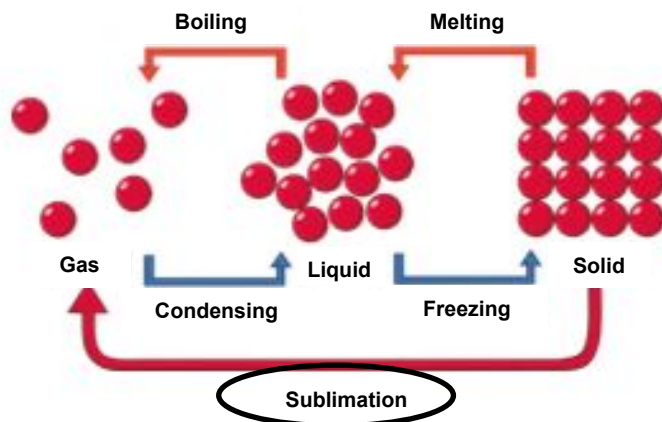


Chemistry → 5.1 – Particle model

Keyword	Definition
Boiling point	The temperature that a substance boils at.
Change of state	The process where a substance changes from one state to another.
Condense (condensation)	The change of state from a gas to a liquid. It can happen at any temperature below the boiling point.
Density	The mass of a material in a certain volume.
Diffusion	The process where particles in liquids or gases spread out randomly from a place where there are many particles to a place where there are fewer.
Evaporation	When the particles at the surface of a liquid turn into a gas.
Gas pressure	The force applied on a certain area, on walls of a container. It is caused by collisions of particles with the walls.
Melting point	The temperature at which a substance melts.
Particle	A very tiny object, such as an atom or molecule, that materials are made from. They are too small to be seen with a microscope.
Particle model	A way to think about how different substances behave in terms of small, moving particles.
Atom	Smallest part of an element that can exist
Compound	Substance made up of two or more elements chemically bonded together.
Element	A substance that cannot be broken down into other substances. They are made up of just one type of atom
Molecule	A group of 2 or more atoms chemically bonded together

Changes of state

When a substance is heated its particles gain kinetic energy and move faster.



The forces holding the particles together get weaker and break.

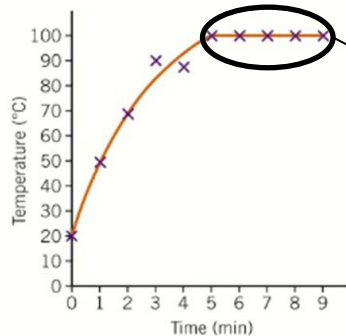
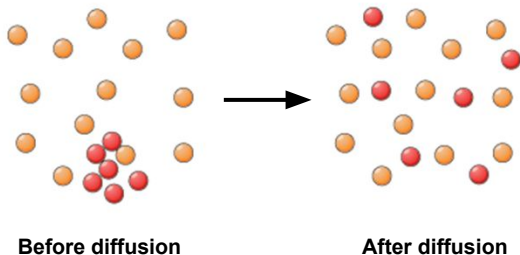
The opposite happens when cooling a substance.

Sublimation is a change of state from a solid to a gas. The reverse is called deposition or desublimation.

Diffusion and factors affecting diffusion

The speed of diffusion is affected by:

- Temperature
- Particle size
- The state of matter of the diffusing substances.

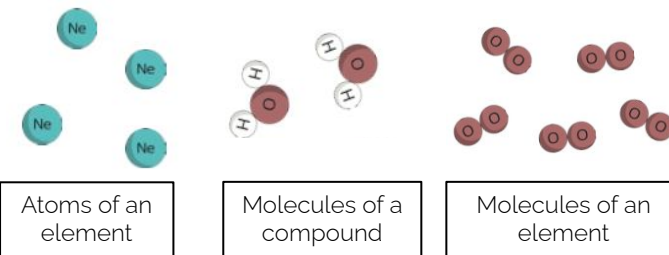


When a substance reaches its boiling point the temperature of the substance remains the same.

This is because all particles must reach the boiling point before the temperature can continue to increase.

Inside particles

Definitions can be found in the table



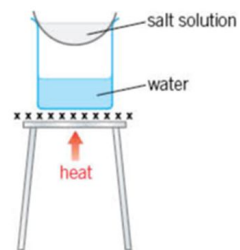


Chemistry → 5.2 – Separating mixtures

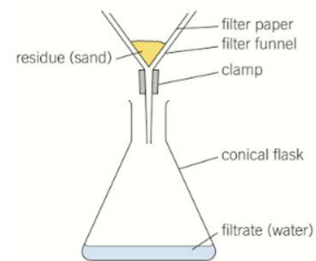
Separation techniques

Keyword	Definition
Chromatogram	An image made from chromatography.
Chromatography	A way to separate mixtures of liquids that are soluble in the same solvent.
Dissolve	When a solute and a solvent completely mix together to make a solution.
Distillation	When a solvent is separated from a solution using evaporation and condensation.
Filtrate	This is the liquid or solution that collects in the container after filtering a mixture.
Filtration	This is a way of separating pieces of solid that are mixed in a liquid by pouring it through filter paper.
Pure substance	A single material with no other substances mixed with it.
Residue	This is the solid that collects in the filter paper during filtration.
Saturated solution	A solution that can dissolve no more solute.
Solubility	This is the maximum mass of solute that will dissolve in a certain volume or mass of solvent.
Solubility curve	This is a graph that shows the change in solubility of a substance as the temperature changes.
Soluble & Insoluble	A soluble substance can dissolve in a given solvent. An insoluble substance cannot dissolve in a given solvent.
Solute	The solid or gas that is dissolved in a liquid.
Solution	A mixture of a solute dissolved in a solvent. All parts of the mixture are the same.
Solvent	A substance, normally a liquid, that dissolves another substance.
Substance	A material that is not a mixture. It has the same properties all the way through.

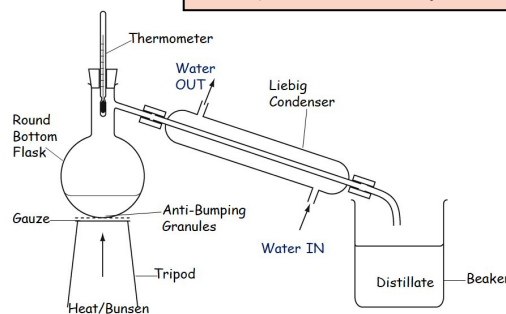
Separating mixtures is physical change so no new substances are formed.



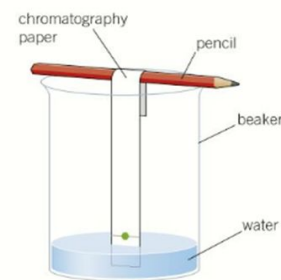
Evaporation or crystallisation



Filtration



Simple distillation



Chromatography

Solutions & Solubility

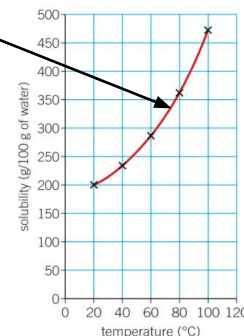


Solute

Solvent

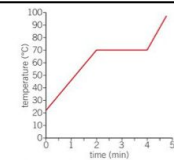
Solution

The solubility of a solute increases with temperature – more solute can dissolve.

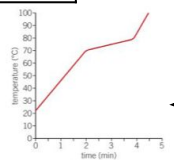


Pure substances & mixtures

The particles in pure substance are all the same. They will change state at the same temperature.



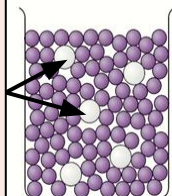
Pure substance



Mixture

Particles in a mixture will change state over a range of temperatures as the particles are different.

When a solute dissolves in a solvent the solvent particles surround each the solute particle.





Chemistry → 6.1 – Acids & Alkalis and 6.2 – Metals & Acids

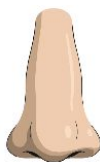
Key words list will be handed out by your teacher at the start of the topic! All keywords lists can be found in the: Science KO keywords lists folder in Google Drive.

Signs of a chemical reaction:

Only when chemicals are reacted



Flames or sparks



New smell



Temperature change



Loud bang or fizzing

All acids and alkalis are irritant and corrosive.



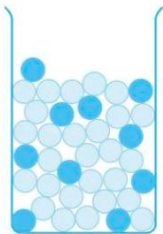
Irritant



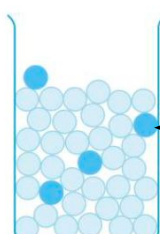
Corrosive

Acids and alkalis can be very dangerous if safety precautions are not followed – wash your hands and protect your eyes.

Concentrated
There are loads of acid particles per unit volume



Dilute
There are fewer acid particles per unit volume.



Metals + acids, oxygen and water

Metal	Reaction with dilute acid	Reaction on heating in air	Reaction with water
potassium	Explode.	Burn vigorously.	React vigorously.
sodium	Products are metal salts and hydrogen.	Products are metal oxides.	Products are a metal hydroxide solution and hydrogen.
lithium			
calcium	React, making bubbles.		React with steam.
magnesium	Products are metal salts and hydrogen.		Products are hydrogen and a metal oxide.
zinc		Do not burn. Form oxide layer on surface.	Do not react.
iron		Do not react.	
lead			
copper	Do not react.		
silver			
gold			

reactive
potassium
sodium
lithium
calcium
magnesium
aluminium
zinc
iron
lead
copper
silver
gold
unreactive

Chemical reactions

Reactants → Products

Remember all keywords can be found in Google Drive!



1. React an acid with an excess of metal, metal oxide, hydroxide or carbonate until no more reacts.



2. Filter the mixture to get a solution of the salt with the excess solid left behind



3. Heat the solution to start evaporating the water from the solution.



4. Turn off the heat and leave until all of the water has evaporated, leaving the solid salt behind.

Acid + base/alkali → salt + water

Indicators & the pH scale

Plant indicators

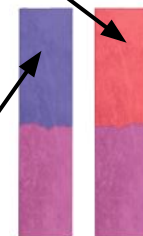
You can make indicators from plants.

Juice extracted from...	Colour in dilute hydrochloric acid	Colour in dilute sodium hydroxide solution (an alkali)
red cabbage	red	yellow/green
hibiscus flower	dark pink/red	dark green
beetroot	red/purple	yellow

Litmus paper

Blue litmus paper turns red on adding alkali.

Red litmus paper turns blue on adding alkali.



Universal indicator & the pH scale

A solution will change colour when universal indicator is added.



Neutralisation & making salts

These are steps for making a salt

Displacement reactions are in 5.4!

Acid + metal → salt + hydrogen

Metal + oxygen → metal oxide

Metal + water → metal hydroxide + hydrogen

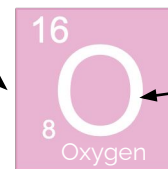
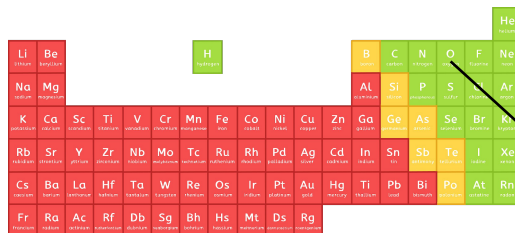


Chemistry → 5.3 – Elements

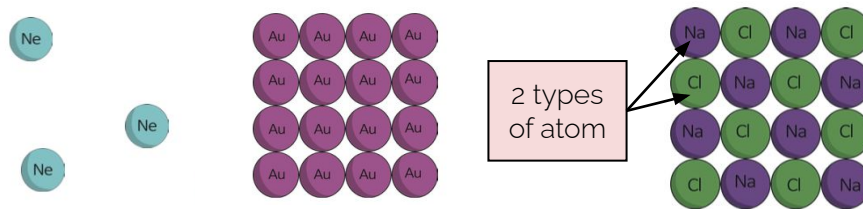
Keyword	Definition
Element	A substance that makes up all other materials Elements contain only one type of atom and cannot be broken down.
Atom	The smallest part of an element that can exist
Compound	Contains two or more different elements chemically bonded together
Molecule	A group of 2 or more atoms chemically bonded together
Mixture	Substance containing 2 or more different atoms or compounds not chemically bonded together.
Hydroxide	A compound that contains OH ⁻ which is then bonded to a metal: NaOH, KOH, Mg(OH) ₂
Nitrate	A compound that contains NO ₃ ⁻ which is then bonded to a metal: NaNO ₃ , KNO ₃ , Mg(NO ₃) ₂
Sulfate	A compound that contains SO ₄ ²⁻ which is then bonded to a metal: Na ₂ SO ₄ , K ₂ SO ₄ , MgSO ₄
Carbonate	A compound that contains CO ₃ ²⁻ which is then bonded to a metal: Na ₂ CO ₃ , K ₂ CO ₃ , MgCO ₃
Polymer	A molecule made by joining up thousands of smaller molecules in a repeating pattern
Natural Polymer	A polymer made by plants or animals
Synthetic polymer	A man made polymer

Elements, atoms & compounds

All elements can be found in the periodic table.



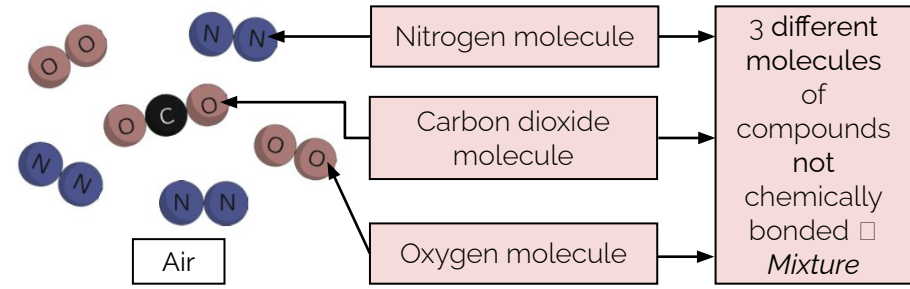
All elements have a chemical symbol.



Only Neon atoms □ *Element*.

Only Gold atoms □ *Element*

Sodium and chlorine atoms chemically bonded together □ *Compound*



Chemical formulae

Capital letters represent an element.

Numbers after an element show the number of atoms of that element.

No spaces between elements mean they are 1 compound

No number after an element means there is only 1 atom of that element

H₂O

SO₂ □ Sulphur dioxide

Number of atoms	Prefix
1	Mono-
2	Di-
3	Tri-

Element	Suffix
Fluorine	-fluoride
Chlorine	-chloride
Bromine	-bromide
Iodine	-iodide
Oxygen	-oxide
Sulfur	-sulfide

Polymers

Natural polymers

Wool, starch, cotton and rubber are made by plants and animals.

LDPE is flexible and strong □ carrier bags

HDPE is harder than LDPE. Smooth and flexible □ artificial knee joints

Synthetic polymers

High melting and boiling points.



Chemistry → 5.4 – Periodic table

Periodic table

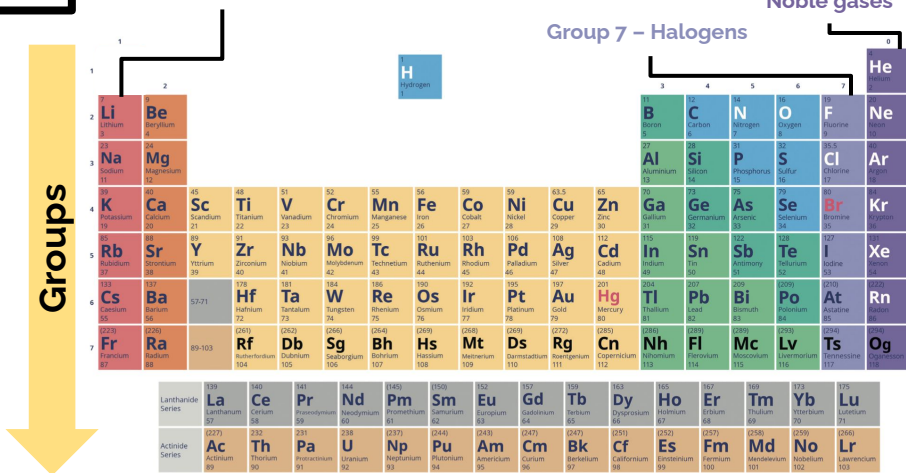
Elements that have similar properties are grouped together.

Keyword	Definition
Physical Properties	Features of a substance that can be observed without changing the substance itself
Period	The rows of the periodic table. Period number = number of electron shells
Group	The columns of the periodic table. Group number = number of electrons on the outer shell
Trend	A pattern in the properties of the elements in the periodic table
Chemical Properties	Features of a substance that can be observed during a reaction
Group 1 (Alkali Metals)	Includes Li, Na, and K. All react with water to form a metal hydroxide and hydrogen
Group 7 (Halogens)	Includes Cl ₂ , Br ₂ , and I ₂ . Undergo displacement reactions
Displacement reaction	A reaction in which a more reactive element takes the place of a less reactive element in a compound.
Group 0 (noble gases)	Includes He, Ne, and Xe. Group 0 elements DO NOT react
Unreactive (inert)	Elements that DO NOT take part in chemical reactions
Physical Properties	Features of a substance that can be observed without changing the substance itself
Period	The rows of the periodic table. Period number = number of electron shells

Group 1 - Alkali metals

Group 0 - Noble gases

Group 7 - Halogens



Periods

Going across a period there are patterns, trends, in elements

Group 7 – Halogens & displacement reactions

Low melting and boiling points. They do not conduct electricity.

At room temperature (25°C): fluorine and chlorine are gases, bromine is a liquid, iodine is solid.

Reactivity decreases down the group.

Elements near the top of the group displace elements near the bottom.

Bromine is less reactive than chlorine so it is displaced.

Chlorine + potassium bromide → potassium chloride + bromine

Group 1 – Alkali metals

Good conductors of heat and electricity, are shiny when cut.

Lithium + water → Lithium hydroxide + hydrogen

All group 1 metals react with water.

These reactions get more vigorous as you go down the group.

All the reactions with water produce hydrogen gas and produce an alkaline solution – changes purple when universal indicator is added

Group 0 – Noble gases

Group 0 includes helium, neon, argon, krypton, xenon and radon. They are unreactive elements. They are found in the Earth's atmosphere.

Melting and boiling points increase down the group.

The elements become more unreactive as you go down the group.



Chemistry → 6.3 – Types of reaction and 6.4 – Chemical energy

Key words list will be handed out by your teacher at the start of the topic! All keywords lists can be found in the: Science KO keywords lists folder in Google Drive.

Types of reaction

Mass in a chemical reaction is always conserved.

Mass of reactants = Mass of products



Reactants

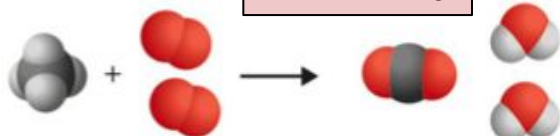
Products

Remember, in a chemical reaction the atoms are rearranged to make a new substance.

Combustion

Combustion is the scientific word for burning.

Fuels containing hydrocarbons are fossil fuels and are non-renewable.



Fuel + oxygen

Carbon dioxide + water

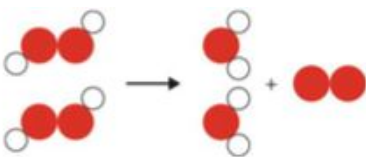
Scientists are developing fuels that burn hydrogen to produce water.

Thermal decomposition

Thermal decomposition breaks down a large compound into smaller ones using thermal (heat) energy.

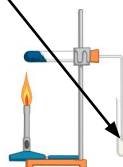
Lime water changes cloudy when carbon dioxide is present

Metal carbonate → metal oxide + carbon dioxide



Large → Smaller

Copper carbonate → copper oxide + carbon dioxide



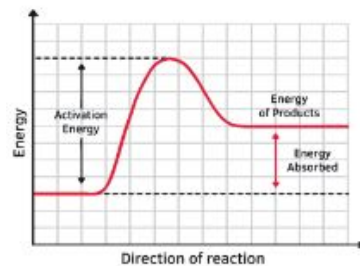
Endothermic and exothermic changes & reactions

Endothermic



Energy is transferred from the surroundings to the substances that are reacting or changing state.

The temperature of the substances decreases.

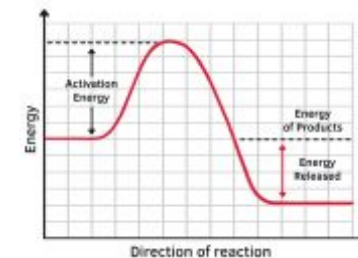


The total energy of the products is greater than the total energy of the reactants.

Exothermic

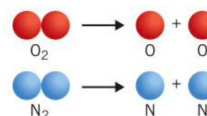
Energy is transferred to the surroundings from the substances that are reacting or changing state.

The temperature of the substances increases.



The total energy of the reactants is greater than the total energy of the products.

Bond energies



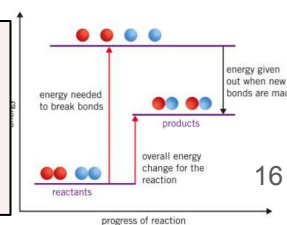
Bond breaking is endothermic



Bond making is exothermic

Endothermic - more energy is needed to break the bonds than is released.

Endothermic - less energy is needed to break the bonds than is released.

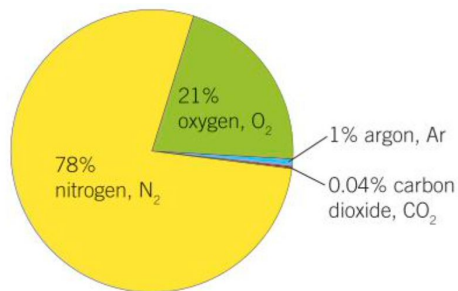




Chemistry → 7.3 – Climate and 7.4 – Earth's resources

Electrolysis

Earth's Atmosphere



Reactivity Series

magnesium
aluminium
carbon
zinc
iron
lead
copper

Recycling

Advantages

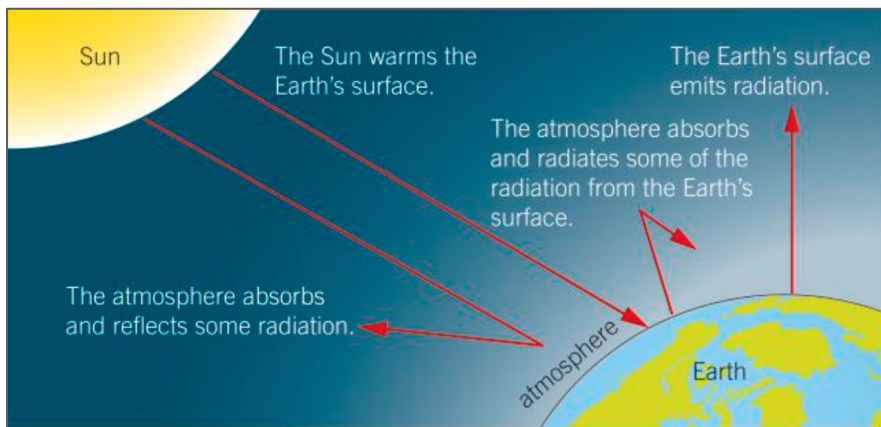
Reduces waste and pollution

Uses less energy

Resources last longer

The more reactive a metal is, the more difficult it is to separate it from its compounds. Aluminium is extracted by electrolysis. Electrolysis is where an electric current is passed through liquid aluminium oxide. The electricity splits up the compound into its elements, aluminium and oxygen. Electrolysis is very expensive and uses a lot of energy.

The Greenhouse Effect and Global Warming



The Sun heats the Earth's surface. The warm surface of the Earth emits radiation. The radiation goes back into space, and some is absorbed by gases in the atmosphere. This keeps the Earth warm. This is called the **greenhouse effect**.

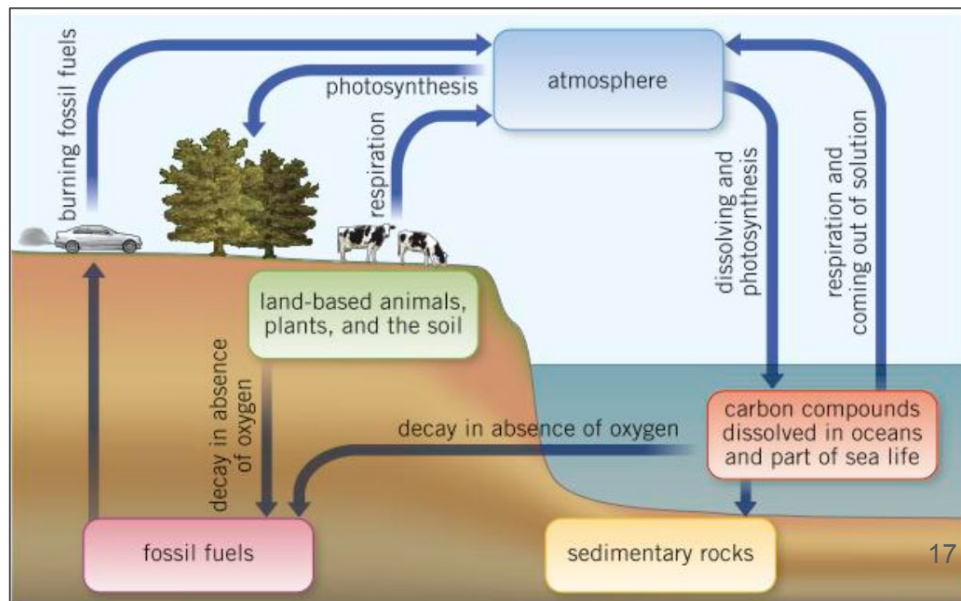
Molecules of carbon dioxide and methane (from burning fossil fuels) store large amounts of energy compared to nitrogen and oxygen. This energy is then reflected back to Earth causing Earth to heat up. This is **global warming**.

The Carbon Cycle

Respiration: oxygen + glucose → carbon dioxide + water

Combustion: methane + oxygen → carbon dioxide + water

Photosynthesis: carbon dioxide + water → glucose + oxygen



French Unit 5 - Ma Ville



Key Vocabulary

Comparatives - words which help us to compare two nouns
Phonics - the link between letters and sounds
Justified Opinions - an opinion with a reason
Tense - the time at which a verb takes place
Infinitives - the form of the verb found in the dictionary, ending in -er/-ir/-re
Conjugate - to take an infinitive and change it into a tense.

Modal verbs - verbs which need another verb after them to make sense.
Conditional tense - used to describe something that would happen in the future
Future tense - used to describe something that will happen in the future.
Subject pronoun - a word that replaces a proper noun in a sentence (eg.he/she)
Intensifiers - words which go before adjectives to make them more interesting

(1) Phonics

oi [wa]	é [ay]
eau [oh]	è [eh]
ui [we]	in [an]
an [on]	ou [oo]
ez [ay]	on [on]
ain [an]	qu [k]
ch [sh]	gn [nyuh]
u [oo]	au [oh]

Tu habites dans quelle sorte de ville? What sort of town do you live in?

Verb + PVS + noun (2)		Adjective (3)	PVS + noun (4)	Quality Vocab (5)	
J'habite I live Tu habites You live Il habite He live Elle habite She lives Nous habitons We live	une grande ville a big town une petite ville a small town un grand village a big village un petit village a small village	industriel(le) industrial pittoresque picturesque touristique touristy multiculturel(le) multicultural moderne modern agricole agricultural bruyant(e) noisy animé(e) lively calme calm	au bord de mer by the seaside à la campagne in the countryside à la montagne in the mountains à la frontière on the border dans le nord in the North dans le sud in the South dans le centre in the centre	qui est connu(e) pour which is known for qui est célèbre pour which is famous for	l'usine Triumph. the Triumph factory. le Cab. the Hansom Cab. la mode. fashion. le vin. wine. la culture. culture.

Tu aimes ta ville? Do you like your town?

Opinion (6)	Noun	Connective	Quality Vocab (7)	Verb	Intensifiers (8)	Adjective (9)
J'adore I love J'aime assez I quite like J'aime beaucoup I really a lot Je n'aime pas I don't like Je déteste I hate Je préfère I prefer Je ne supporte pas I can't stand	ma ville my town mon village my village	car because parce qu' because puisque as	on me dit que people say that il faut admettre que I must admit that heureusement fortunately malheureusement unfortunately	c'est it is ça peut être it can be ce n'est pas it isn't	complètement completely tellement so un peu a bit plutôt rather trop too assez quite particulièrement particularly	grand. big petit. small vieux. old moderne. modern tranquille. quiet sale. dirty pollué. polluted dangereux. dangerous joli. pretty intéressant. interesting

Il y a quels magasins dans ta ville? What shops are there in your town?

Sentence starter	Quality Vocab	Quantity (10)	BAGS adjectives (11) masc/fem/plural	Noun (12)	Adjective (13)
<p>Dans ma ville In my town</p> <p>À Hinckley In Hinckley</p> <p>Là où j'habite Where I live</p>	<p>heureusement fortunately</p> <p>malheureusement unfortunately</p>	<p>il n'y a pas de there isn't</p> <p>on n'a pas de we don't have</p> <p>il y a plein de there's loads of</p> <p>il y a beaucoup de there's lots of</p> <p>il y a assez de there are enough</p> <p>il y a une manque de there's a lack of</p> <p>il y a trop de there are too many</p>	<p>grand(s) big</p> <p>grande(s)</p> <p>petit(s) small</p> <p>petite(s)</p> <p>vieux old</p> <p>vieille(s)</p> <p>nouveau(x) new</p> <p>nouvelle(s)</p> <p>bon(s) good</p> <p>bonne(s)</p> <p>joli(s) pretty</p> <p>joie(s)</p> <p>beau(x) beautiful</p> <p>belle(s)</p>	<p>boucheries (f) butchers</p> <p>boulangeries (f) bakeries</p> <p>pâtisseries (f) cake shops</p> <p>charcuteries (f) delis</p> <p>poissonneries (f) fishmongers</p> <p>pharmacies (f) pharmacies</p> <p>bijouteries (f) jewellers</p> <p>confiseries (f) sweet shops</p> <p>magasins de vêtements (m) clothes shops</p> <p>centres commerciaux (m) shopping centres</p> <p>centres sportifs (m) sports centres</p> <p>cinémas (m) cinemas</p> <p>marchés (m) markets</p> <p>théâtres (m) theatres</p> <p>parcs/ jardins publiques (m) parks</p>	<p>moderne(s) modern</p> <p>énorme(s) enormous</p> <p>impressionnant(e)(s) impressive</p> <p>historique(s) historic</p> <p>animé(e)(s) lively</p> <p>magnifique(s) magnificent</p> <p>tranquille(s) quiet</p> <p>touristique(s) touristy</p> <p>propre(s) clean</p> <p>célèbre(s) famous</p>

Qu'est-ce qu'on peut faire dans ta ville? What can you do in your town?

Sentence starter	Subordinate Clause (14)	Verb	Noun (15)	Modal Verb	Infinitive (16)
<p>Dans ma ville In my town</p> <p>À Hinckley In Hinckley</p> <p>Là où j'habite Where I live</p>	<p>pour les touristes for tourists</p> <p>pour les familles for families</p> <p>pour les jeunes for young people</p> <p>pour ceux qui aiment for those who like</p> <p>pour ceux qui adorent for those who love</p> <p>si vous aimez if you like</p> <p>pour ceux qui s'intéressent à for those interested in</p>	<p>il y a there is</p> <p>on a we have</p>	<p>une église a church</p> <p>une cathédrale a cathedral</p> <p>une gare a train station</p> <p>une bibliothèque a library</p> <p>une boîte de nuit a night club</p> <p>une patinoire an ice rink</p> <p>une piscine a pool</p> <p>un hôtel a hotel</p> <p>un hôtel de ville a town hall</p> <p>un hôpital a hospital</p> <p>un restaurant a restaurant</p> <p>un stade a stadium</p> <p>un musée a museum</p> <p>un parc a park</p>	<p>où on peut where you can</p>	<p>faire du shopping. do some shopping.</p> <p>jouer au foot. play football.</p> <p>regarder un film/un match. watch a film/match.</p> <p>manger un repas. eat a meal.</p> <p>retrouver des amis. meet friends.</p> <p>faire de la natation. do some swimming.</p> <p>se relaxer. relax.</p> <p>lire. read.</p>

YR8 HISTORY: POLITICAL AND SOCIAL CHANGE

REVOLUTIONS AND WARS:

Liberté, Égalité, Fraternité: freedom, equality, fraternity (brotherhood) - the motto of the French Revolution

Guillotine: invention for publically beheading people

Aristocracy: the highest class of people within a society

14th July 1789: the storming of

the Bastille sparks the **The**

French Revolution

1792 September: 1100-1400

prisoners from the nobles and clergy massacred

1793: King Louis XVI is

executed

1793-94: the "Terror" 12,000

guillotined

1799: **Napoleon Bonaparte**

takes over the French

government

1803-1815 Napoleonic Wars:

Major conflicts between the French Empire and a variety of European powers.

1804: Napoleon is crowned Emperor

1805: Battle of Trafalgar

Continental system: a blockade

designed by Napoleon to paralyze Great Britain through stopping their ability to trade.

1807-1814:Peninsular Wars: a

major conflict during the Napoleonic Wars. Spanish, Portuguese, and the British were fighting against the French.

1815: Battle of Waterloo

DEMOCRACY AND PROTEST 1:

Constituency: parliamentary unit elects 1 MP

Rotten boroughs: constituencies that could be bought

Radical: politicians who wanted reform

Reform: make changes to something in order to improve it.

Trade union: organisation to fight for worker rights

Chartists and People's Charter: movement to extend voting and political power to workers

Tolpuddle Martyrs: punished for forming a union

1799/1800 Combination Acts: banned formation of unions

1819 Peterloo Massacre: a peaceful protest but 18 people died & over 700 were seriously injured.

1832: The Reform Act

1839: Newport Rising - Chartists riots

DEMOCRACY AND PROTEST 2

WOMEN'S RIGHTS AND SUFFRAGE:

Suffrage: the right to vote

NUWSS: National Union of Women's Suffrage Societies. Led by **Millicent Fawcett**

WSPU: Women's Social and Political Union. Led by **Emmeline Pankhurst**

Militancy: violent or illegal protesting
Emily Davison: dies during a protest at the **1913 Derby horse race**

Cat and Mouse Act: the Government released hunger striking protesters until they recovered

GROWTH OF TOWNS AND LAW AND ORDER:

Rural to Urban migration: the migration from the countryside to towns

London population: rose from 50,000 to 500,000 between 1500 & 1700

Cholera: Deadly disease caused by poor sanitation

Sanitation: water supply and sewage removal

Workhouses: Where poor people who had no job or home lived in return for 'work'.

Bloody Code: a series of laws ordering a death sentence for minor crimes

Metropolitan Police: the first professional police force in England

Capital punishment: death penalty

Corporal punishment: punishment involving harm to the body, e.g whipping

CIVIL RIGHTS IN USA:

Abraham Lincoln: US President during the Civil War, issues **Emancipation Proclamation** to free all enslaved people

Jim Crow Laws: series of laws to restrict civil rights of black Americans

Segregation: the separation of whites and non-whites in Southern states

Sharecropping: a system of farming where white landowners would rent part of their land to black Americans in return for a share of their crops.

1861-65 American Civil War: States of the South (Confederacy) try and fail to break away from the US

1954 Brown vs Board of Education: Supreme Court ruled that segregated schools are unconstitutional

1955-56 Montgomery Bus Boycott: Protesters refuse to use the town's buses after the arrest of Rosa Parks

1957 Little Rock 9: First black students to attend Arkansas white school

1960 First "sit in" demonstration in Greensboro

1961 Freedom Rides: protesters use segregated facilities on coach services

1963 March on Washington and "I have a dream" speech by **Martin Luther King Jr**

1965 March: **Selma to Montgomery March** to demand an end to voter registration restrictions

1965 August Voting Rights Act: **President Johnson** signs a law to end restrictions on voter registration

CIVIL RIGHTS IN UK

1958: Notting Hill Race Riots

Paul Stephenson: led the Bristol Bus Boycott against a racist public bus company.

Olive Morris: was a Jamaican-born British-based community leader for the Civil Rights movement in London.

Obi Egbuna: founded the British Black Panthers in **1968** in London.

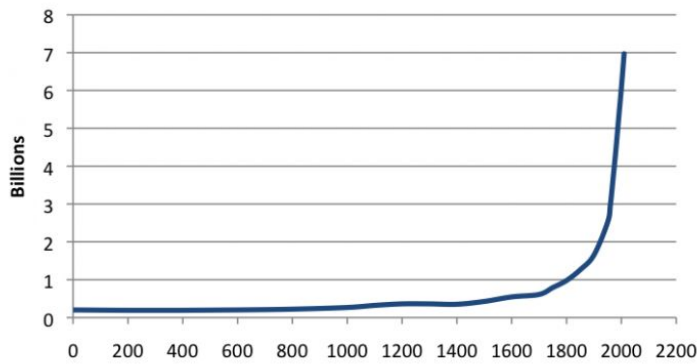
Black Panthers: The first Panther organisation outside the USA. They fought racial injustices in the UK.

Mangrove 9: British black activists tried for inciting a riot at a protest in **1970**.

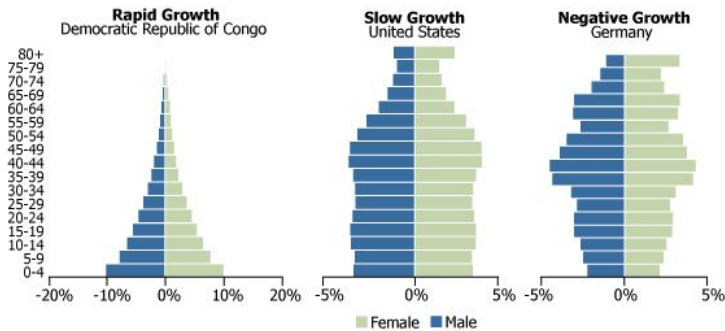


Year 8 Geography: Population and Migration

World Population



You need to be able to explain what has happened to World Population over time. Study the graph above and make some notes.



Population pyramids show the makeup of a country in terms of age and gender. Look at the following website and make comparisons between the population pyramids of poor and rich countries.
<https://www.populationpyramid.net/world/2017/>

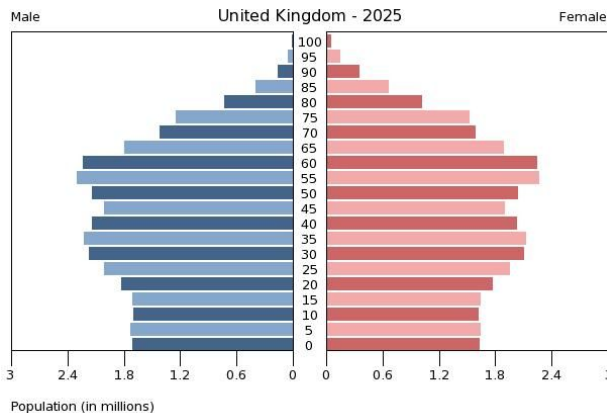
Low life expectancy (LIC's)

- Lack of clean water
- Poor quality housing
- Poor living conditions
- Lack of resources/food
- Poor sanitation
- Lack of healthcare
- Lack of medication
- Lack of education

High life expectancy (HIC's)

- Well governed
- Welfare systems
- Excellent healthcare
- Medication
- Access to food/water
- Well built houses
- Education
- High levels of sanitation

Key Term	Definition
Population	All the inhabitants of a particular place. E.g The population of the UK is just over 65 million.
Migration	The movement of people from one place to another, usually to live or to work.
Life Expectancy	The average period (years) that a person would expect to live. This varies from country to country.
Birth Rate	The number of live births per 1000 people per year.
Death Rate	The number of deaths per 1000 people per year.
Natural Increase	Birth Rate is higher than Death Rate so the population grows.
Natural Decrease	Death Rate is higher than Birth Rate so population lowers.
Immigration	The movement of people in to a country to live or to work.
Emigration	The movement of people out of a country to live or to work.
Exponential Growth	When the rate of growth increases all the time creating an ever steeper upward curve.
Population Density	The number of people living in a given area. E.g 350 people per KM squared.
Sparsely Populated	A low number of people living in a given area. E.g 3 people per KM squared.
Urban	Relating to towns or cities.
Rural	Relating to the countryside.
Push Factor	Factors that make you want to leave an area E.g War, famine, lack of education.
Pull Factor	Factors that make you come to a certain area E.g low levels of crime, better quality housing.



The UK has an ageing population (see pyramid on left). This means there will be a high proportion of the country in the elderly age brackets by 2025.

This could cause the following problems:

- Increased dependency on younger ages
- Higher medical care costs
- Pressure on services such as hospitals
- Retirement age will have to increase
- There will not be enough people in the 'working ages' paying taxes to support the countries development.

Year 8 Geography: Population and Migration

Case Study Mexico-USA migration

Write a fact file about **Mexico** including the following information:

- Continent
- Population
- Capital City
- Currency
- Reasons why people want to leave Mexico
- An example of a Mexico migrant story
- Any other facts



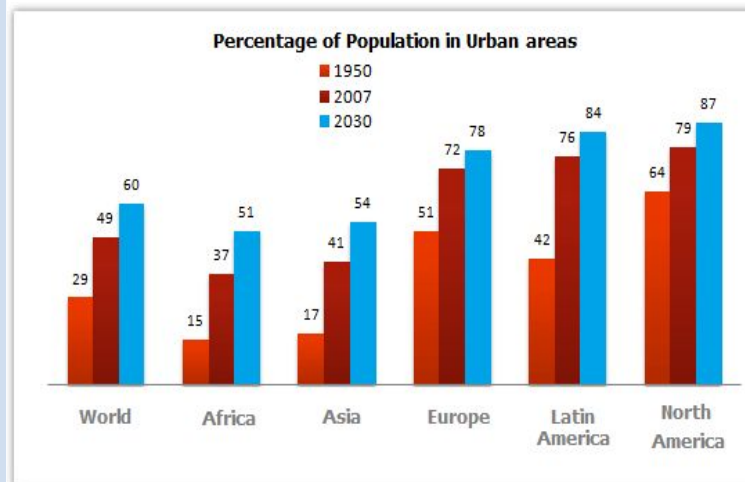
There is a 2000 km border between the USA and Mexico as illegal migration is a huge problem. U.S. Border Patrol guards the border and tries to prevent illegal immigrants from entering the country. Illegal migration costs the USA millions of dollars for border patrols and prisons.

Many Americans believe that Mexican immigrants are a drain on the economy. They believe that migrant workers keep wages low which affects Americans. However other people believe that Mexican immigrants benefit the economy by working for low wages.

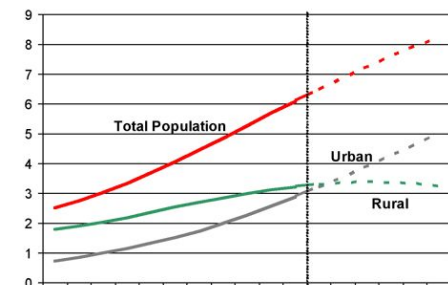
Mexican culture has also enriched the USA border states with food, language and music.

Push Factors	Pull factors
Lack of education	Excellent Healthcare
Lack of sanitation	Good education
Poor Healthcare	High life expectancy
Low Life expectancy	Lots of jobs
No clean water supply	Higher wages
Poor quality houses	Well run government
Infertile soils	Low levels of crime
War	Better social opportunities
Famine and Hunger	More shops and services
Spread of disease	Better Weather conditions
Not enough services	More resources
Religious persecution	Clean water
High levels of crime	Access to electricity
Low wages	Freedom of speech
Unemployment	Good quality housing

Look at this graph. Over time the percentage of the World's population living in urban areas is increasing rapidly. It is happening the quickest in poorer continents such as Africa and Asia and more slowly in North America and Europe.



For the first time in 2014, more of the World's population lived in urban areas as opposed to rural areas.



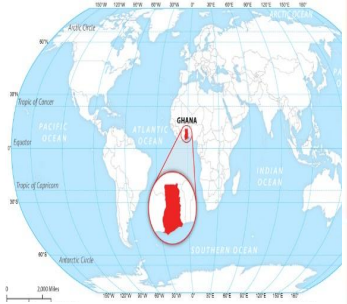


globalisation

Key vocab	Definition
Globalisation	Increased international connections in travel, trade and technology.
TNC	Transnational company
Interdependence	People, companies and countries relying on each other.
Trade	Buying and selling goods between countries.
Fair trade	trade between companies in developed countries and producers in developing countries in which fair prices are paid to the producers.
Sweat shop	a factory or workshop, especially in the clothing industry, where manual workers are employed at very low wages for long hours and under poor conditions.
Culture	The way of life of an area or country often rooted in tradition e.g. food, language, music and entertainment.
Quality of life	How good a person's access to healthcare, average income and housing.



Examples of TNCs



Where are your jeans made



Ghana Fair Trade

Farmers: • grow and care for the cocoa trees for **three to five years** • harvest the cocoa pods in very hot temperatures • remove the beans from the pods • ferment the beans for six days and dry them for ten days • take the sacks of beans to sell to cocoa buyers.

Why isn't chocolate fair?
This bar of chocolate costs £1 Who gets what?

- Farmer 8p
- Cocoa buyers 7p
- Importer 14p
- Chocolate company 28p
- Shops 28p
- Government 15p

Government: • charges tax on the chocolate bars. Tax is the money that the government uses to pay for essential services such as schools and healthcare

Shops: • buy the chocolate bars from the chocolate companies • sell the chocolate bars to shoppers.

Chocolate companies: • buy the cocoa solids and cocoa butter • buy the other ingredients • make the chocolate bars • pay for the chocolate bar wrappers • pay for advertising the chocolate bars

Importers: • arrange transport for the beans from Ghana to the UK and Ireland • turn the beans into cocoa solids and cocoa butter.

Cocoa buyers: • weigh the sacks of beans • pay the farmer for the beans • arrange to take the beans to the port.

Background

Jeans vary in price enormously, from a sale price of less than £10 to designer jeans costing more than £600 ...

but before you buy them, the product will probably have already travelled more than 60,000 km from the farmers' fields to the factory to the high street store.

Read the article at <http://www.tes.co.uk/article.aspx?storycode=368576>.

Countries and components

The denim and the components may have been made in one of a number of countries and they will have passed through several more countries on their journey.

For the a factory in Tunisia, the jeans may have used:

- cotton grown in Berlin in West Africa
 - used to manufacture denim in an Italian factory with synthetic indigo dye from Frankfurt in Germany
- softer cotton for the pockets, grown in Pakistan or Korea
- pumice stone from a Turkish volcano to stonewash the jeans
- cotton thread for sewing the jeans.
 - dyed in Spain but originally grown in Northern Ireland, Hungary or Turkey
- polyester thread manufactured in Japan
- YKK zips produced in Japan
- rivets made with brass from Germany
 - brass from zinc and copper from Australia and Namibia.

Transportation

Many different forms of transport will have been used for the components and the final product. The finished jeans, for example, will have used a ferry across the Mediterranean from the factory in Tunisia and trains to the French warehouse, before the final journey through the Channel Tunnel to the high street shop.

The factory in Tunisia

The jeans will cost approximately £5 per pair to make; these low production costs are mainly due to the low labour costs and poor working conditions found in many similar 'sweatshop' factories.

At a typical jeans factory in Tunisia, 500 women are employed for nine and a half hours on repetitive tasks, e.g. sewing pockets repeatedly. Trained machinists usually earn approximately £110 a month (£8p per hour) with a possible monthly bonus for meeting targets of £15.

Some factories produce around 2,000 pairs of jeans every day!

Transportation costs from Tunisia to France are about 10p per pair.

TNC sweatshop example - Nike



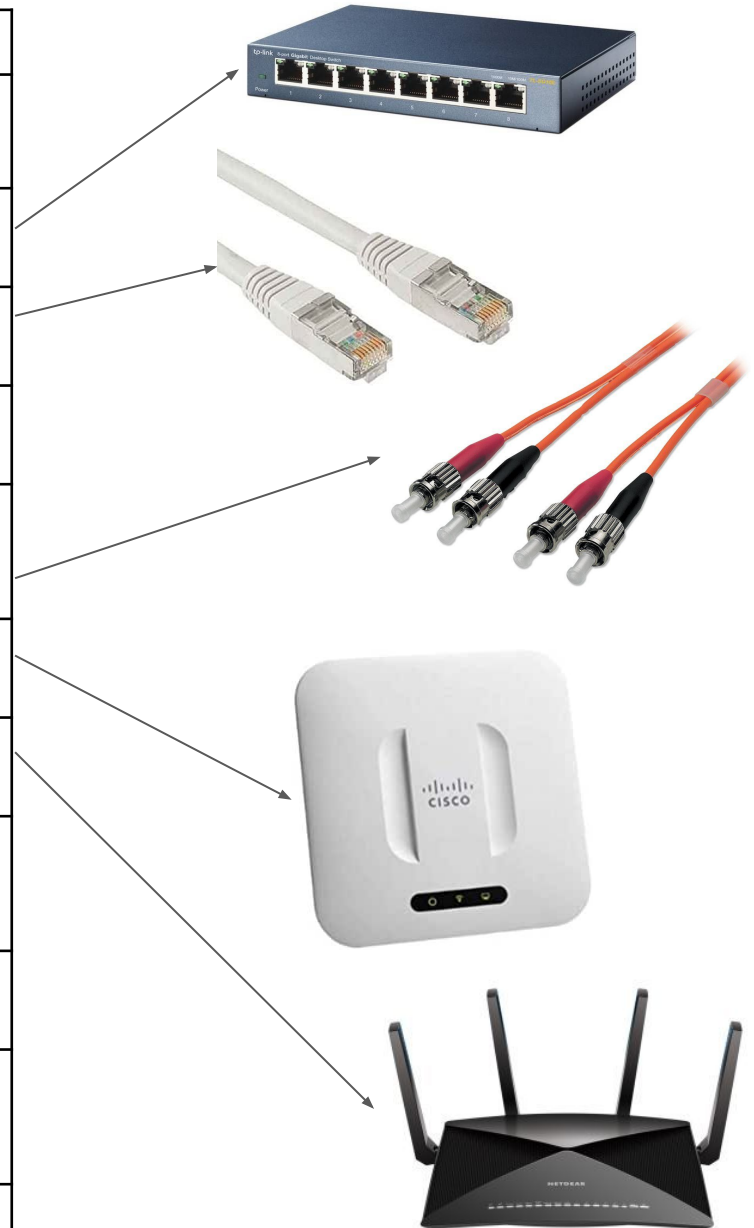
- Nike spends about 1 billion dollars a year on advertising in around 140 different countries.
- It pays top athletes millions of dollars to wear their products – this is another way to advertise their goods.
- Nike goods are made in nearly 40 different countries, most by young women.
- It pays top athletes millions of dollars to wear their products – this is another way to advertise their goods.



Year 8 ICT & Computer Science

Networking

Networking Key Terms	
Computer Network	When two or more computers are connected together, allowing them to communicate with each other.
Network Switch	A computing device that allows two or more computers to be connected together.
Ethernet Cable	A copper cable that is used to connect computers together.
Wireless	When computers are connected together without wires. Examples of this include WiFi and 3G.
Fibre Optic Cable	A type of cable that can be used to connect computers together that uses light to transfer data rather than electricity. It is extremely fast!
Wireless Access Point	A computing device that allows a computer to connect to a network wirelessly.
Router	A device that allows a network to be connected to other networks.
Internet	A network of networks. This involves networks being joined together from all over the world to create the super network we call 'the Internet'.
The World Wide Web	This is all of the web pages, videos, images and other resources that are transported across the Internet.
Web Server	This is a powerful computer with only one job, to store and allow people to download web pages and other resources that are stored on it using the Internet.
Bandwidth	How much data your computer can transfer in 1 second. Usually measured in Megabits.



Year 8 ICT & Computer Science

Web Design

Web Page Design	
Web Page	A document that you can download from the Internet.
Website	A set of web pages that are linked together all provided by one person or organisation.
Web Authoring Software	Software that allows you to create a web site.
Site map	A list of pages on a web site showing which pages connect to other pages.
House style	A set of rules for how all pages on the web site will look to try and keep the same style for each page. E.g. colours used, where the logo is placed, where the navigation bar will be.
Master Page	Provides a template for all other pages to follow.
Visualisation Diagram	A rough sketch of what something will look like, usually drawn by hand.
Version Control	Keeping track of the different changes to a file. Each time the file is changed and saved you would update the version number of a file e.g. version 1.0, version 2.0, version 2.1.
Resources of a website	The information that appears on a website. This can be in the form of: <ul style="list-style-type: none">- Images- Sound- Video- Animation- Text

Components of a Website	
Navigation bar	A set of buttons or images that a user can click on to go to a different page on a web site.
Hyperlink	An image or text that can be clicked on that will navigate you to another page.
Buttons	Images that can be clicked on to navigate you to another page.
Backgrounds	The colour or image that appears behind everything else on a web page.
Banners	A short and wide image at the top of a website. This would usually have the title of the website or the company logo in it.
Text	The writing that appears on a web page.
Fonts	The style of the text that appears on a web page.

Devices that can be used to access web pages
Laptops and PCs
Smartphones
Tablets
Games Consoles
Smart TVs

YEAR 8 ART

Alecks Cruz

5 facts about the designer

1. Born in Chicago in 1984, Alecks is a self-taught visual artist and graphic designer
2. 2011 when Alecks began gaining local recognition by winning design competitions.
3. He explores the composition of individual letters and the unique beauty that each character has to offer.
4. Alecks took his love for graffiti art and constructs cardboard graffiti pieces that quickly became his trademark.
5. His work shows arrows, barcodes and colours that pop out amid hard angles, straight sides and swooping edges.



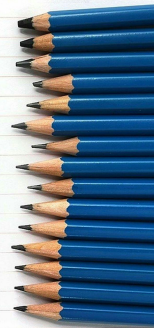
Theme for the Project - Urban Art

Definition:

Tonal pencil drawing

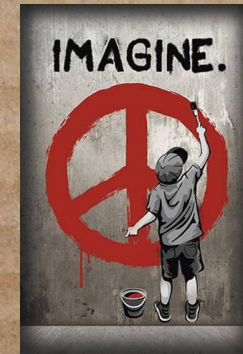
Whether drawing realistic or abstract subjects, an understanding of tone, the variations of light and shade, is important.

A variety of pencils are required to create a tonal study. The B range is soft and dark and more suitable than H pencils for shading and tonal drawings.



Study the different shades of light and dark in your subject. These tones are dependent on where the light source is. Work on your confidence when applying your tones. It is a common mistake to have little difference between the darkest and lightest areas of a drawing. This can make your results seem flat.

Objects are three dimensional, so the tone will change over the surface. Think about the direction and distance between your marks when shading. Diagonal shading or shading against the grain can flatten the appearance of a form. If shading using cross-hatching, think about the closeness of the crossing lines - the closer the lines, the darker the shading.



Design Movement/Art Style

What is Graffiti?

- Graffiti art as a term refers to images or text painted usually onto buildings, typically using spray paint. Graffiti is marks, scratchings or drawings made on a surface in a public place.
- Graffiti art has its origins in 1970s New York, when young people began to use spray paint and other materials to create images on buildings and on the sides of subway trains. Such graffiti can range from bright graphic images (wildstyle) to the stylised monogram (tag).
- Today, many graffiti are very complicated mixtures of writing and pictures. When done without a property owner's permission it is considered vandalism. Sometimes it is just a person's name or a rude word. Sometimes it is as a public political protest.

Drawing Style/Skill/Technique

A **stencil** is device for applying a pattern, design, words, etc., to a surface, consisting of a thin sheet of cardboard, metal, or other material from which figures or letters have been cut out, a coloring substance, ink, etc., being rubbed, brushed, or pressed over the sheet, passing through the perforations and onto a surface.

1900

1910

1920

1930

1940

1950

1960

1970

1980

1990

2000

2010

2020

YEAR 8 NATURAL FORM

5 facts about the Artist

Andy Goldsworthy

- Andy Goldsworthy (born 26 July 1956) is a British sculptor, photographer and environmentalist who produces site-specific sculptures and land art situated in natural and urban settings. He lives and works in Scotland.
- Land art is art that is made directly in the landscape, sculpting the land itself or making structures in the landscape using natural materials such as rocks or twigs.
- He documents extensively through photography
- Most of his work is created outside in remote locations that have been specifically chosen for their personal significance.
- Andy Goldsworthy's sandstone arch is one of his largest sculptures of this type.



Theme for the Project - Mono Printing

Monoprinting is the process of making a print using 'mark making'.

Mark making is any mark made using any material on any surface, such as:

- pencil on paper
- photoshop brush mark on a screen
- scratch in clay
- paint on a canvas

A mark can be a line, a dot, a scratch, a curve, a thumbprint and so on. Using different tools can help create different thicknesses and types of marks.

The colour used to create monoprints is usually water-based ink. A roller is used to apply the ink evenly over the a printing sheet. This is usually an acrylic sheet or other washable flat surfaces



Design Movement/Art Style

What is the Arts and Crafts Movement?

- Arts and Crafts was a design movement initiated by William Morris in 1861 which aimed to improve the quality of design and make it available to the widest possible audience
- Morris emphasised simple functional design often using florals, natural objects or animals in his work. Wallpapers or fabrics were also made and these were also based on natural motifs, particularly plant forms which were then repeated as flat pattern.



Drawing Style/Skill/Technique

Botanical illustration is the art of depicting the form, colour, and details of plant species, frequently in watercolor paintings. They must be scientifically accurate but often also have an artistic component and may be printed with a botanical description in books, magazines, and other media or sold as a work of art

1800s

1900

1910

1920

1930

1940

1950

1960

1970

1980

1990

2000

2010

2020

YEAR 7 CULTURAL UNDERSTANDING

British Values

- The British are the creation of invaders and migrants, including Celts, Romans, Anglo-Saxons, Vikings, and Normans.
- Today we live in a society that should show mutual respect for and tolerance of those with different faiths and beliefs, and for those without faith.
- Sports and literature are among the UK's cultural claims to fame. Soccer, rugby, cricket, boxing, and golf were all invented in Britain.
- Kings once ruled with advice from a council of religious leaders and nobles. Today, the monarch (which can be a king or queen) has no real power.



African



Artwork information

- There are 54 countries in Africa - and 9 territories - with a total of more than 1.1 billion people living on the continent, which is 15% of the world's total population.
- Most of the African people are Christians and Muslims. In North Africa and many West African countries, most people follow the Islam.
- There are also almost 10% of Africans that follow traditional religious rituals which means they have traditional healing rituals such as bone-throwing, 'magic' and herbal medicine and celebrating the spirit of the ancestors.
- In Africa, you will find some of the largest mammals on this planet.



Artwork information

From blacksmithing to basketry, from weaving to woodturning, we have an incredible range of heritage craft skills in the UK and some of the best craftspeople in the world.



There are 5 elements of African art that are used to describe the aesthetics of African art. These are:

1. Resemblance to a human figure.
2. Shiny and unflawed skin.
3. Youthfulness representing vitality and fertility.
4. Reserved demeanor representing a person in control.
5. Balance and proportion through material choices.

Native American

- Native Americans lived in the United States for a very long time before Christopher Columbus discovered America.
- The first people to live in a land are called indigenous peoples.
- The Native Americans were grouped into tribes or nations usually based on the area they lived in and their culture such as their religion, customs, and language.
- The Native Americans did not write down or record their history, so we have to find out about their history in other ways.

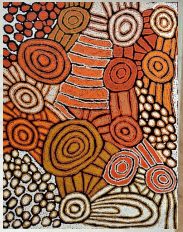


Aboriginal



Artwork information

- Aboriginal Australians is a western term for the people who are from the Australian mainland and many of its islands
- Aborigines have lived in Australia for over 40,000 years, and it is believed that they came from areas of Asia. These original Australians were hunter-gatherers.
- The didgeridoo is one of the world's oldest musical instruments and is made from limbs and tree trunks hollowed out by termites.
- Dream time refers to the Indigenous understanding of the world's creation.



Artwork information

Evolving from simple cave drawings and carvings traditional American Indian art grew to include intricate art in such forms as jewelry, beadwork, weaving, pottery, paintings, carvings, masks, quillwork (embroidery), and totem poles. Throughout their history their art has reflected their culture, lifestyle, and environment.

The earliest Indigenous art was paintings or engravings on the walls of rock shelters and caves which is called rock art. People believe that dots were used in artwork to hide information from white men when the Aboriginal people became afraid that they would be able to see and understand their sacred, private knowledge.

Drama Keywords

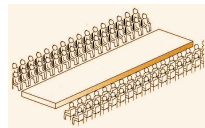
Tableau(x)	A dramatic picture, frozen in time with two or more people.
Levels	Gives a stage more visual interest. They allow different characters the opportunity to communicate different status, locations or the audience to see areas more clearly.
Status	The power difference between two or more characters.
Expression	Use of facial expressions to SHOW how you feel.
Ad Lib	Improvisation by an actor - speaking outside the lines of a script.
Gobo	A thin metal plate which goes into the light to create an effect/shape. E.g. windows, foliage

Drama techniques, skills and lighting.

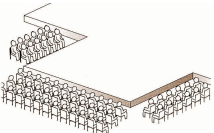
Performance Spaces:

Performance Space:

Traverse - Form of staging where the audience is on either side of the acting area.



Thrust - The stage projects into the auditorium so that the audience is seated on at least two sides of the extended piece.



Year 8 Drama: Unit 3 - WW1 (Jan-Feb)



Key Knowledge:

- Your Research from WW1 (1914-1918)- looking at the trenches (long, narrow ditches where the soldiers lived), the soldiers writing letters "Dear Lorna, I am writing to you on Christmas Day to pray that you are well & to keep strong...", the comradeship (the friendship in Battle, in the Trenches)
- You will be exploring your ideas through comic strip designs with drawings & descriptions of ideas, with character ideas of skills; voice, body language, gesture.
- You will also look at Script work- setting, blocking the dialogue of all the characters. This will organise the space, using split-staging & drama techniques. This is similar to that of setting 'Shipwrecked'.
- Due to not being in the studio, you will develop your imagination, looking at samples of performance work with skills & techniques, for you to describe in your work. You will also receive regular peer feedback & communicate your ideas in class discussions.
- Think about Stanislavski (A Drama Practitioner who wanted actors to be as real as possible as their characters. 'What if?' 'What if I was this soldier, how would I feel fighting for my country? Leaving my family behind & not knowing when I would see them again?' This will create realism.

Practitioners:

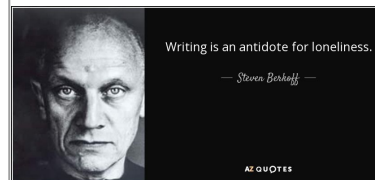
Practitioners:

Stanislavski - According to Stanislavski an actor only portrays a character truthfully if he actually experiences the feelings specific to a scene. Therefore you have to use empathy to create your character and scene.

**WHEN WE ARE ON
STAGE, WE ARE IN THE
HERE AND NOW**

CONSTANTIN STANISLAVSKI

Berkoff- Use the actors themselves to create images. Use of physical theatre, Movement, to create environments And physicality to create character.



Drama Keywords

Physical Theatre	Performances which incorporate dance elements into a dramatic theatre performance.
Soundscape	Using sounds to create the aural environment of a scene. This can be done by the actor vocally by making noise(s) or by repeating words/phrases.
Split staging/ Cross-cutting	Two or more pieces of action on stage at one time. Action freezes on one scene before the next continues.
Physicality	The physical attributes of a person, especially when overdeveloped or overemphasised.
Blackout	The act of turning off (or fading out) stage lighting.

Drama techniques, skills and lighting.

Genres:



Some genres we will cover:

- Fantasy (Fiction- not real. Inspired by the real world, but creating a new universe.)
- Horror (Fiction- not real. Creates a level of fear, dread, terror.)
- Superhero (A speculation story- with adventures, powers & battles with criminals.)
- Silent movie/Comedy (No spoken dialogue, set to music & with funny gestures of jokes & mischief.)

Year 8 Drama: Unit 4 Film Genres (Feb-April)



Key Knowledge

- With this unit, you will explore & learn about different film genres. Genres show the style of a performance or film & this helps to show the story, characters, structure, atmosphere effectively.
- They are: Silent movie (acting through mime, movement, exaggeration of gestures & action with no words) Horror & Fantasy Movie (use of mime, movement, exaggeration but with use of split-staging to show 2 different worlds/time frames to create this illusion). Dialogue will be used in these genres, to tell the audience what is happening.
- Due to not being in the studio, you will explore these genres through sample performance clips, Peer & class discussions to communicate your ideas..
- You will show your ideas for your Plot (a different story/scenario for each genre), characters, structure through different tasks used in previous units,, & also showing different costume, lighting & set design.
- Once you have explored all the genres in lessons & looking at different clips of performances, you will have a Final project- You will choose from one of the genres explored & create a 2-scene piece, showing all the techniques & skills learnt .

Use of Practitioners:



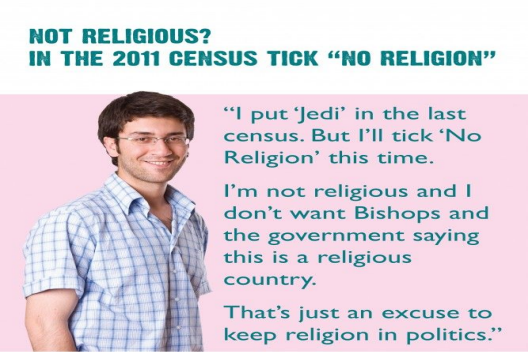
Practitioners:

Berkoff- Berkoff used exaggerated facial expressions, exaggerated and stylised mime and externalising emotions to create theatre. These can be used in genres such as comedy.

Brecht - Brecht used a range of theatrical devices Or techniques so that the audience were reminded throughout that they were watching theatre.

To see the costume/set changes. He called this- Epic theatre, which can be used in genres such as horror and superheroes. It is also 'Multi-role'.

"Art is not a mirror held up to reality but a hammer with which to shape it."
- Bertold Brecht



Some Humanists are quite sure there is no God, which means they are **'atheists'**, while many others honestly do not know whether there is a God or not, which means they are **'agnostics'**. But for all practical purposes no Humanist believes in an active God of any kind.

ME: Humanism

Key Concepts	Definition
Empathy	Trying to consider what it feels like to be in someone else's position.
Humanism	A philosophical worldview that seeks to answer important questions about ethics, meaning and purpose from a non religious point of view.
Philosophy	Thinking about and discussing important questions about purpose and meaning.
Happiness	Being content or fulfilled in your life.
Worldview	The way in which humans interpret the world around them.
Ethics	The rules by which we base our moral decisions.






For Humanists, all beliefs must pass the test of **reason**. Humanists only trust what their reason tells them they can know from their own experience and that of others. In the same way that **scientists** think, Humanists need **proof** for all statements and beliefs.

Key words	Meaning
Atheist	A person who disbelieves or lacks belief in the existence of God or gods.
Agnostic	A person who believes that nothing is known or can be known of the existence or nature of God.
Theist	The belief in the existence of the Supreme Being or deities
Humanist	An advocate or follower of the principles of humanism.
Secular	Unrelated to religion or non-religious.

'Everyone knows how to be good.'



"You don't need religion to have morals. If you can't determine right from wrong, then you lack empathy, not religion."
Anonymous

Religion	A system of faith and worship, usually of an supernatural being	
Cult	A system of religious worship directed toward a specific person or object	
Belief	Acceptance that something is true or exists	
Faith	Belief without proof	
Rituals	A religious ceremony	
Religious Discrimination	Treating someone differently because of their religious beliefs	
Scientology	Religion believing in improving yourself through study and training	
L Ron Hubbard	Founder of Scientology	
Auditing	Scientologist practice of assessing each person's qualities and how to improve themselves	
Rastafarianism	A religion common among black Jamaicans stating the black people will be redeemed and returned to the Promised Land	
Hailie Selassie I	The founder of Rastafarianism, considered to be Christ	
Promised Land	Rastas believe God has promised to gather them all back to the Promised Land in Ethiopia	
Zion	The Promised Land	
Jah	Rasta name for God	
Monotheist	A person who believes in only one god	
Binghi	Means victory and is a Rasta celebration including fasting, singing, dancing and the smoking of cannabis	
Paganism	A religion incorporating beliefs or practices in nature, including worship of nature	
Divine Feminine	Sacred feminine parts of the world– mother nature	
Nature	All things in the natural world– sun, moon, seasons, earth, etc.	
Samhain	A Pagan festival marking the beginning of winter	
Lughnasadh	A Pagan festival marking the beginning of the harvest	
Elements	Earth, wind, water and fire	

PAGANISM




Paganism is a very diverse religion but it all boils down to “celebrating the sacred circle of life and guiding people to live in harmony with the rhythms of nature.” Pagans believe that Nature is divinity (or God.) They don't believe there is a god with an individual personality, but they are NOT atheists. They think everything that exists makes up divinity. All things combined *are* God. This leads them to living an eco-friendly life.

SCIENTOLOGY

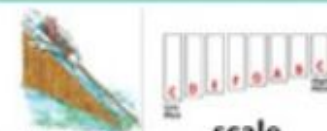
The Church of Scientology was founded by Ron Hubbard, from New Jersey, USA, in 1954. As a young boy, L. Ron Hubbard was very curious and studied philosophy, ethics, religion, history, literature and wildlife survival skills. He was desperate to learn and also desperate to make the world a better place. Scientology is a path to complete understanding of your true spiritual nature and how that relates to yourself, your body, your family, to other humans, other life forms, the universe and the Supreme Being. The fundamental principles are: Man is an immortal spiritual being. Human experience extends beyond a single lifetime. Human capabilities are unlimited but you have to address your weaknesses first.

RASTAFARIANISM

The Rasta movement began with the teachings of Marcus Garvey (1887-1940), a black Jamaican who led a "Back to Africa" movement. He is considered a prophet in the religion today. Rastafarians share many beliefs with Christians. They are monotheists, who believe in the one god called Jah. They think we are all equal and all deserve to be treated equally. They also accept some of the Bible as truth- however, they think God's message written in the Bible has been corrupted and so not all of it is correct. Rastafari believe that all life started in Zion, which for them, is where current day Ethiopia is.


long short

steady pulse
 steady beat

rhythms and word rhythms

 spi-der spi-der bee shh!

high low

ascending
 getting higher
descending
 getting lower

scale
 a set of tuned notes
pentatonic
 a 5-note scale


loud quiet



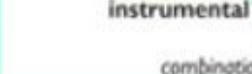


crescendo
 getting louder

diminuendo
 getting quieter


fast slow

accelerando
 getting faster

rallentando
 getting slower


solo

accompaniment

ensemble
 vocal
 instrumental
polyphonic
 combinations of melodies (tunes)

polyrhythmic
 combinations of rhythms

chords
 groups of notes sounding together




shh!


vocal





body percussion

tuned untuned

instrumental

environmental

electric


verse/chorus

round
 "London's Burning"
12 bar blues
 beginning/middle/end

question & answer
ABA - ternary form
 same at the beginning and end

call & response
ABACA - rondo form
 first section keeps coming back


KEY VOCABULARY - ITALIAN TERMS - ELEMENTS OF MUSIC

TONALITY - RELATIONSHIP BETWEEN NOTES, CHORDS AND KEYS

Major- cheerful, bright, joyful sounding

Minor- serious, sad or dark sounding

Modal - various fixed orders of the various notes in an octave

Atonal- music that lacks a tonal centre

STRUCTURE - THE WAY A PIECE IS BUILT UP

Binary form A B - musical form in 2 different but related sections eg Empire of the Ants by Gorillaz and Greensleeves by Henry VIII

Ternary form A B A - musical form in 3 sections, the 3rd section being a repeat of the first eg Twinkle Twinkle Little Star by Mozart and Minuet in G by Beethoven.

Rondo form A B A C A - musical form with a recurring leading theme eg Every Breath you take by The Police and Fur Elise by Beethoven

Verse-chorus form - song writing structure built around 2 repeating sections, a verse and a chorus. eg Chasing Cars by Snow Patrol eg La Donna E Mobile from Rigoletto by Verdi

Strophic form AAA - a song structure form where all verses are sung to the same music. eg Amazing Grace. by John Newton and Silent Night by Gruber

Through Composed - different music for each verse/stanza of the lyrics. eg. Bohemian Rhapsody by Queen and The Erl-King by Schubert

MELODY/PITCH - THE 'TUNE' HIGH AND LOW SOUNDS

Conjunct - a melody that moves smoothly and in small tone or semitone steps

Disjunct - an angular melody with large leaps between notes

Treble clef line notes- E G B D F - Every Green Bus Drives Fast

Treble clef space notes- F A C E

Bass clef line notes - G B D F A - Green Buses Drive Fast Always

Bass clef space notes - A C E G - All Cows Eat Grass

TEXTURE - LAYERS OF SOUNDS

Monophonic - 1 layer, 1 single melody

Polyphonic - 2 or more different melodies played at the same time.

Homophonic - Several parts all moving at the same time

Heterophonic - 1 melody, but different variations of it are being sung or played at the same time.

WORD SETTING - HOW WORDS ARE SET TO MUSIC

Syllabic- each syllable of a word is broken up and given to an individual note. One syllable, one note.

Melisma- a musical phrase of several notes sung to 1 syllable

Vocables - sequence of sounds or letters sung without meaning eg. Ooh, aah, lah,

DYNAMICS - VOLUME

pp - pianissimo - very quiet

p - piano - quiet

mp - mezzo piano moderately quiet

mf - mezzo forte - moderately loud

f - forte - loud

ff - fortissimo - very loud.

< cresc -crescendo -gradually get loud

> dim -diminuendo -gradually get quiet

TEMPO - SPEED

Allegro - fast

Presto - super fast

Vivace - lively

Andante- at a walking pace

Allegretto - quite fast

Lento - slowly

Accel - accelerando - gradually getting faster

Rall - rallentando - gradually getting slower

Rit. - ritardando - gradually getting slower

HARMONY - SIMULTANEOUSLY BLENDING NOTES.

Chord - a group of 3 or more notes played together at the same time.

Triad - 3 notes vertically stacked in thirds and played at the same time

Cadence - the sequence of chords at the end of a musical phrase.

Tonic - 1st note of a scale and tonal centre of a key- I

Dominant - 5th note of a scale- V

Subdominant - 4th note in a scale - IV

Diatonic - notes that belong to a key.

Chromatic- notes not in the scale of a key

Atonal - music with no tonal centre

Dissonant - harshness, clashing, jarring sounds

INSTRUMENTS/TIMBRE/SOUND QUALITY.

Strings -violin, viola, cello, double bass, harp.

Woodwind-flute, piccolo, oboe, cor anglais, clarinet, bass clarinet, saxophone, bassoon, double bassoon

Brass - trumpet, French horn, trombone tuba.

Percussion - hand held eg cowbell, tuned percussion eg glockenspiel, drums and 'kitchen sink' eg rattles, whistles

RHYTHM - THE REGULAR PULSATION OF MUSIC

Time signature 4/4 - a sign to indicate meter. The top number specifies how many beats in a bar and the bottom, which type of note value is to be given one beat.

Compound Time - each beat in a bar is divided into 3 equal, shorter beats

Simple Time - 4/4 or 3/4 or 2/4 or 2/2





















Syncopation - where the strong emphasis in the rhythm falls on a normally weak beat.

Cross Rhythms - two rhythms with different emphases played at the same time.

Triplet - 3 notes played in the time of 2.

DURATION

Note Values

Note	Name	Beats	Rest	Note	Name	Beats	Rest
	Semibreve	4			Dotted Semibreve	6	
	Minim	2			Dotted Minim	3	
	Crotchet	1			Dotted Crotchet	1 1/2	
	Quaver	1/2			Dotted Quaver	3/4	
	Semiquaver	1/4			Dotted Semiquaver	3/8	

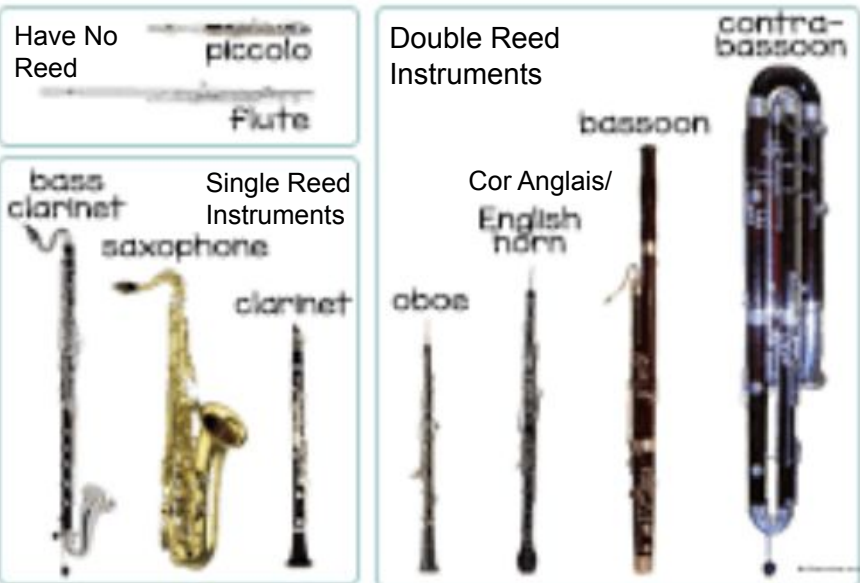
STRING FAMILY



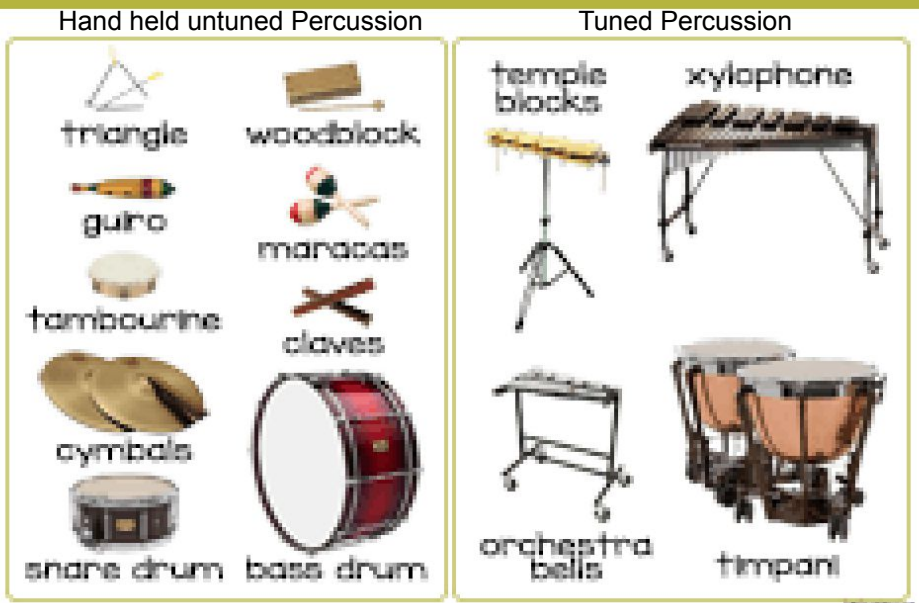
BRASS FAMILY



WOODWIND FAMILY



PERCUSSION FAMILY



MELODIC WRITING DEVICES

REPETITION

Repeating something already written down.

Two staves of music in 4/4 time. The first staff shows a melody starting on A4, with a bracket labeled 'a' covering the first four notes and a bracket labeled 'a' (sequence) covering the next four notes. The second staff shows the same melody starting on A5, with a bracket labeled 'a' covering the first four notes and a bracket labeled 'b' covering the next four notes.

SEQUENCE

A short motif restated at a higher or lower pitch.

A single staff of music in 4/4 time. A red bracket labeled 'Melody' covers the first four notes. A blue bracket labeled 'Melody repeated at higher pitch' covers the next four notes. A green bracket labeled 'Melody repeated at higher pitch' covers the next four notes. A pink bracket labeled 'Melody repeated at higher pitch' covers the final four notes.

IMITATION

A melody is repeated in a different voice.

Two staves of music in 3/4 time. The top staff has the lyrics 'I-mi-tate Me!' under the notes. The bottom staff has the lyrics 'I-mi-tate Me!' under the notes. The melody is repeated in the bass clef.

INVERSION

Turning a melody upside down.

Two staves of music in 3/4 time with a key signature of two sharps. The top staff is labeled 'Original' and the bottom staff is labeled 'Inversion'. The melody is turned upside down.

MIRROR

Music played first forwards then backwards.

Two staves of music in 3/4 time. The melody is played forwards on the top staff and backwards on the bottom staff.

RETROGRADE

Playing the melody backwards.

Two staves of music in 3/4 time with a key signature of one sharp. The top staff is labeled 'Theme' and the bottom staff is labeled 'Retrograde Theme'. The melody is played backwards.

CONJUNCT

A stepwise melody

A single staff of music in 4/4 time. The first four notes are labeled 'conjunct ascending' and the next four notes are labeled 'conjunct descending'.

DISJUNCT

Disjointed melody. Gaps between the notes.

A single staff of music in 4/4 time. The first four notes are labeled 'disjunct ascending' and the next four notes are labeled 'disjunct descending'. There are gaps between the notes.

READING MUSIC

Treble Clef Notes

Line Notes: E G B D F
Space Notes: F A C E

Notes altogether

C D E F G A B C D E F G A B C

Bass Clef Notes

G B D F A C E G

FINGER NUMBERS - HANDS ON - HOW TO PLAY THE KEYBOARD.

Left Hand: 4 3 2 1
Right Hand: 1 2 3 4 5

Mnemonics:

Every Green Bus Drives Fast
F A C E
Green Buses Drive Fast Always
All Cows Eat Grass

Root Chords and their Inversions

Chord triads in Root position
C Dm Em F G Am B^b

C major chord and its inversions.

Root Position First Inversion Second Inversion
C-E-G E-G-C G-C-E

C major chords and its inversions

Root Position 1st Inversion 2nd Inversion

C Major Chord Inversions

Guitar Layout

Key: R = Root Δ3 = Major 3rd P5 = Perfect 5th

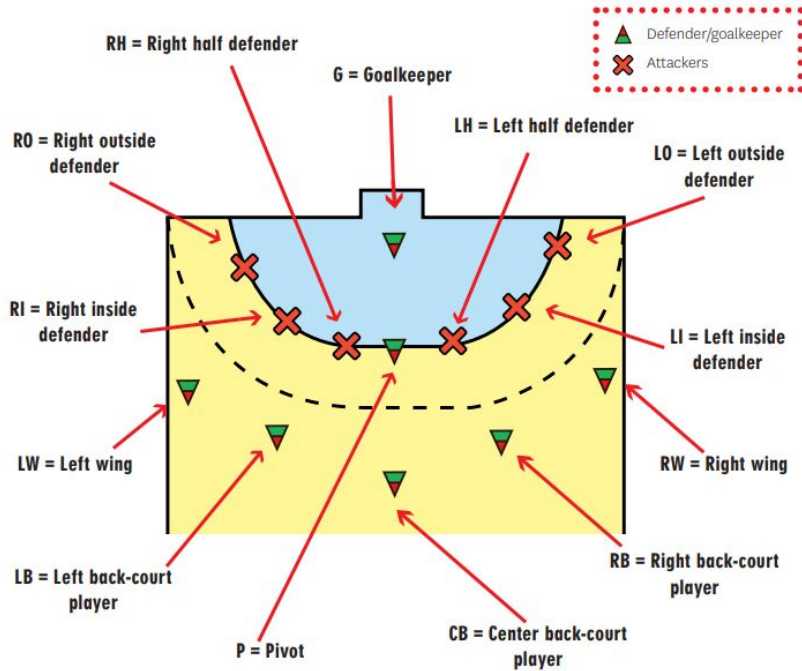
Root Position First Inversion Second Inversion

History of Music Timeline

Date	Baroque 1600's	Classical 1700's	Romantic 1800's	20th Century 1900 's
Instruments	Strings Cello Continuo Harpsichord	Piano Clarinet Small orchestra	Piano Lots of percussion Tuba, trombone Double Bassoon	Saxophone Guitar Electronic Music
Composers	Bach Purcell Vivaldi	Mozart Beethoven Schubert	Tchaikovsky Wagner Grieg	Debussy Holst John Williams
Characteristics	Busy Contrapuntal String orchestra	Very structured balanced phrases and structures	Expressive arts inspired music Nationalistic Music	Minimalist Impressionist Film music

YEAR 8 PE - HANDBALL

Rules and regulations



Goal Keeper - The goalkeeper defends the goal with ever part of the body. They are the only player who can touch the ball with their feet. The goalkeeper can leave the 6 yard/ metre? box if they do not have contact with the ball.

Left/Right Wingers - These are the fastest players on the court and patrol the sides of the court. They counter the opposition wingers in attack in order to create openings for their team mates. They can also shoot from tighter angles.

Left/Right Backs - These are the largest players on the court. When attacking they are responsible for driving at the defence and long range shooting. However, when defending they are used to block opposition shots.

Pivot - The pivot is the creative force in attack. They are expected to stand among the defenders on the 6m line to create space for their team mates or themselves to shoot. When defending, they either play right or left inside defender. Their roles are to ensure there are no spaces in the centre of the defence and that the opposition centre and pivot cannot create chances.

Centre Back - The centre back is a creative handball player also known as the 'playmaker'. They are responsible for setting up the play tactics. When defending they either play right or left inside defender. Their roles are to ensure there are no spaces in the centre of the defence and that the opposition centre and pivot cannot create chances.



- ★ What components of fitness do you need for handball?
- ★ What position are you best suited to and why?

Dribbling: You are permitted one go at dribbling, then must either shoot or pass the ball after you stop dribbling the ball.

Travel: You are permitted three steps once you stop dribbling before you must either shoot or pass the ball.

Passive play: It is not permitted to keep the ball in the team's possession without making any recognisable attempt to attack or to shoot on goal. Prior to a penalty being awarded, a forewarning will be issued by the referee to give the team an opportunity to change its way of attack to avoid losing possession.

Goalkeeper Area: Only the goalkeeper is allowed to enter the goal area.

The goalkeeper throw, awarded when:

- Someone from the opposing team enters the goal area.
- Either the keeper of the attacking team had the last touch of ball before going out behind the goal-area line.
- The goalkeeper has control of the ball inside the goal-area.



Key words

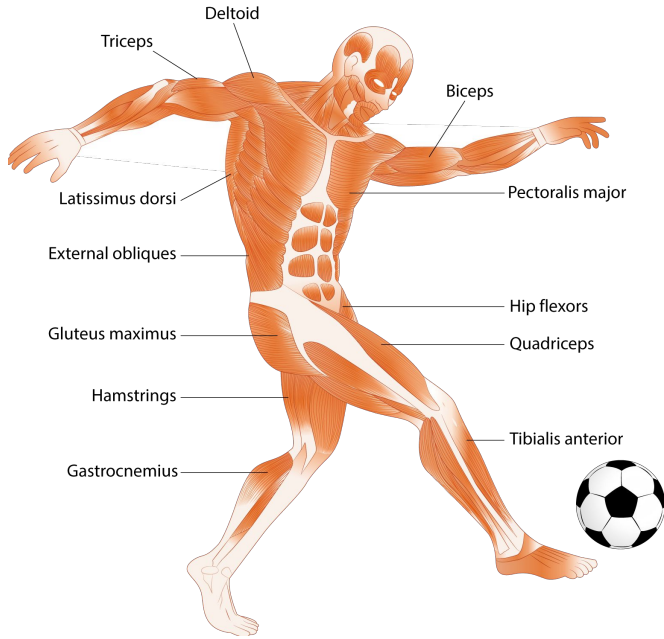
- Dribble
- 3 steps
- Shooting
- Grip
- Jump shot
- Hip pass
- Overhead pass



Skills in Isolation

- Passing
- Catching
- Control
- Footwork
- Evasion
- Shooting
- Defence
- Goalkeeping

Muscular System



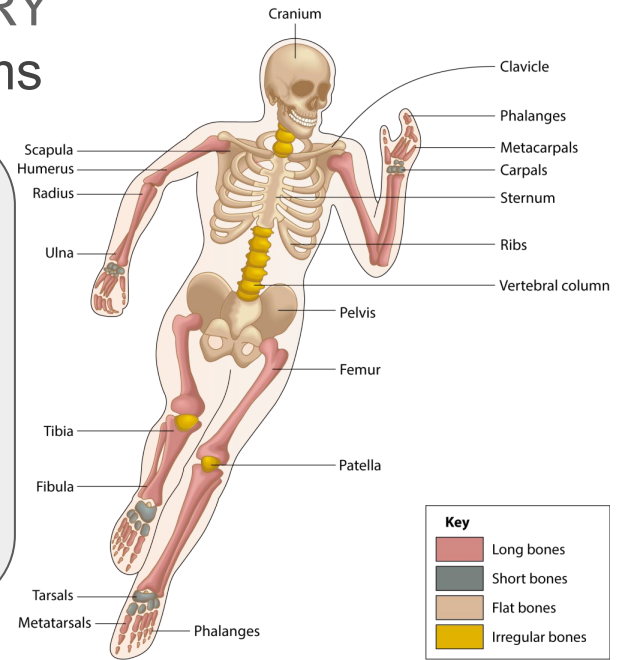
YEAR 8 PE THEORY

The 4 Body Systems

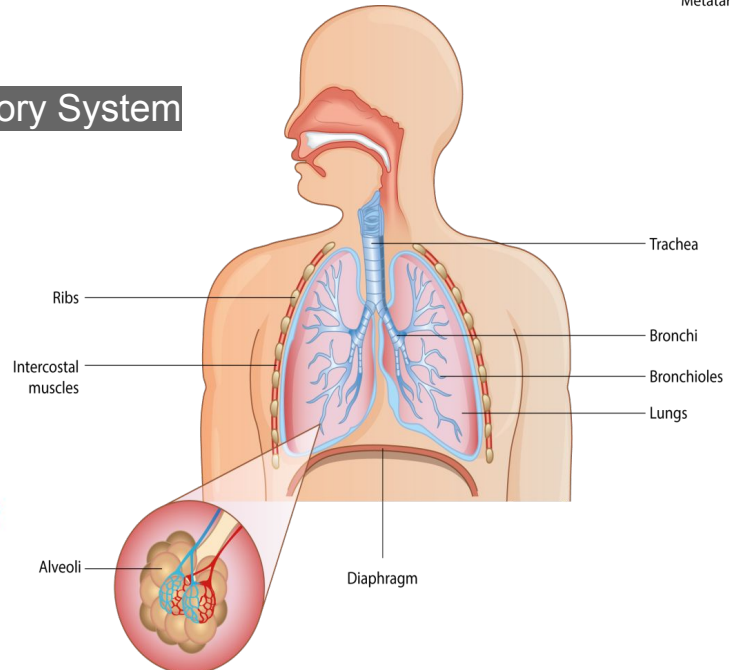
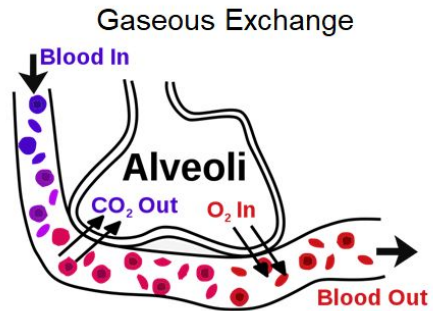
Questions

1. You will need to know the muscles and bones. Get someone at home to quiz you.
2. Name the main gases we breathe in and breath out.
3. How many chambers are in the heart?

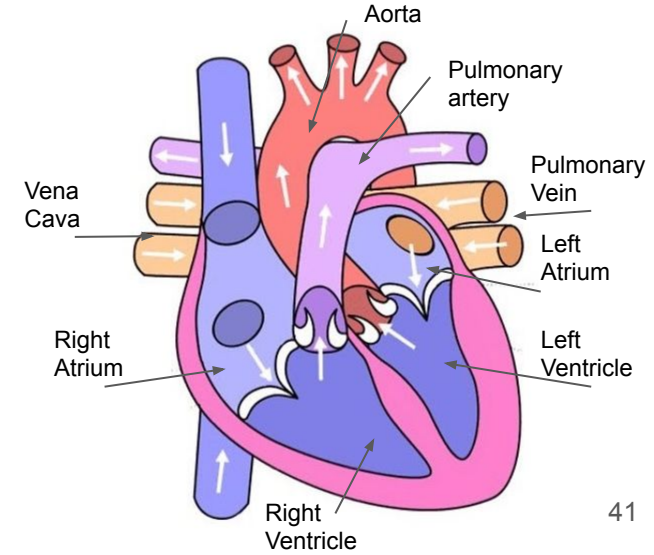
Skeletal System



Respiratory System



Cardiovascular System



READING SKILLS AND LITERACY

KEY VOCABULARY WHEN DISCUSSING A BOOK

Blurb	A short description of a book, usually found on the back cover.
Narrator	A character who recounts the events of a novel.
Subgenre	This is then the style or type of literature within one of the above genres. For example, Horror Fiction is a subgenre of fiction intended to scare the reader.
Protagonist	The main character, or one of the major characters in a novel.
Plot Twist	An unexpected turn of events in a story.
Hook	The opening of a story that grabs the reader's attention and 'hooks' them in.
Recommend	To suggest that a book would be good or suitable for a particular person.
Deduce	What you can understand based on the evidence in the text.
Predict	Based on what has already happened, making assumptions about what will happen next.
Empathise	To put yourself in the shoes of a character and understand how they feel.



QUESTIONS TO BECOME AN ACTIVE READER...

- Which sentences could help you to sum up the entire passage?**
- What do you think is going to happen next?**
- What did you think about as you read?**
- What else do you know about the topic?**
- What questions do you have about the book?**
- Which words do you not know or understand?**
- What clues from the passage help you to remember what has already happened?**
- How could you describe what you have just read to someone else?**

ABC SENTENCE STARTERS

ADD: To add a new idea to what someone else has been saying:

I would like to add to this...

I would have to agree with you because...

We might also consider...

We might also consider...

BUILD: To build on what someone else has been saying:

This could be developed by considering...

This links to...because...

Building onto this...

Taking this one step forward...

CHALLENGE: To challenge someone's ideas and offer the opposite viewpoint:

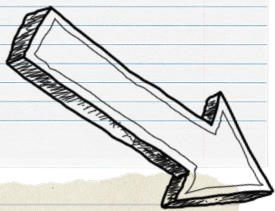
I would challenge this idea because...

From another perspective you might argue that...

Although I can see why ___ thinks... I disagree because...

On the other hand this idea could be challenged because...

ACCELERATION THROUGH DEPTH...



ENGLISH

- Research the writer's context and explain the links between this and the writer's purpose.
- Can you make links between this text and another text you have studied?
- Can you change any words in your writing today using your knowledge organiser?
- Turn the text, or its key ideas, into another form (poem, article, letter, speech, short story, etc)

MATHS:

- Please go to the NRICH postcards and select a problem to solve.

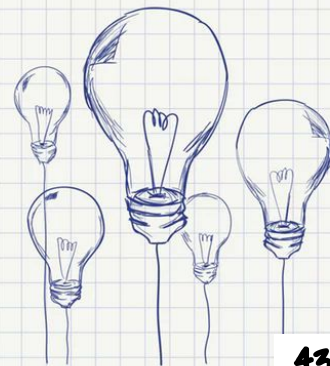
MFL:

Research how to form the present tense in French either by using the link <https://youtu.be/p1RfmaoYZFI> or asking your teacher for a grammar sheet.

- Create a help sheet for other students to explain the rules with step by step instructions.
- Design a worksheet with an answer sheet which can be used in other French classes.

SCIENCE:

- **Content:** Using the topics you have studied so far in science, can you make any links? What understanding from other topics do you need to have for the topic you are studying now? Can you do this across biology, chemistry and physics?
- **Context:** Looking at what you have been covering during the topic you have been covering, can you put the science into a real life context? When would what you understand be important to someone's life? Can you link it to any careers and jobs?
- **Practical skills:** Look at a set of data you have collected in a recent practical. Describe and explain the trend in your data in as much detail as you can. How could you make your data more repeatable and reproducible? Can you find any errors, systematic or random? How could you reduce the error? Is your data accurate and valid? How could you make the data more accurate and improve the validity.



PE:

- What components of fitness apply to your sport and what fitness tests would you do to test them?

GEOGRAPHY

- The answer is Geography. What are 5 possible questions?
- How do you think Geography in school will change over the next 10 years with the development of new technology?
- List words associated with geography (A-Z)

HISTORY:

- Strengthen your evidence; read through your work, can you swap any words for key terms.
- What parallels are there between this topic and what you have previously studied?
- Outline an idea of how could you teach this topic in a different way to either younger, peers or older students?
- Identify how this topic links to any British Values:

Democracy.

Individual liberty

Mutual respect

Tolerance of those of different faiths & beliefs.

ART/DESIGN

- Explore the work of an artist or designer linked to the Art or Design movement on your KO page by producing a mini artist study. (Visit **the Tate** website)
- Investigate 3 different art, modelling or textile techniques. How could you apply these to an end piece?
- Create your own project for a class to study using the current theme of your work.
- Visit **the Tate** website and complete one of the activities they've created.

MUSIC:

- Demonstrate and improve your depth of knowledge and understanding by reading through your written work and swapping normal words for more technical 'musical' words and Italian terms.
- In 'listening library' tasks - extra to the written criteria requested - try and direct your listening to as many of the other different elements of music as well, and include comments and information about them also. Again use Italian terms where possible.

ME:

- Include two quotations from scripture in your answer.
- Create 5 questions that your teacher might ask you about what you have learnt about today.
- Transform today's learning outcomes into questions.
- Select 5 key terms that you have used in your work today.
- Create a sentence using all of these terms.
- Based on what you have learnt today, what do you think that you should study next lesson and why?
- Produce a summary of what you have learnt today. When done, reduce it to either a single sentence of three bullet points

ICT:

Learning programming is about trial and error, experimenting and trying different projects of your own. Try a project of your own or use one of the websites below to give you some inspiration. Attempt to put into practice the techniques learnt in your Computer Science lesson and extend what you can do by using online resources, there are loads available if you carry out a quick Google search.

MicroPy <https://bit.ly/2ychHCi>

DRAMA:

- Discuss and Write the Changes that you would have made to your performance piece, if you could create and perform this again. (Write about the Drama Skills and Techniques used in performance)
- Discuss and Write the audience response and effect to your performance piece. How did they feel? What feedback did they give? Did your story, characters, intention for your piece come through to them?
- After performing your piece and if you could chose a different Performance Space, what would it be? Describe the performance space, what viewpoints would your audience have? How would a relationship between the actor and audience be created?

Year 8 Block 3 Statistical Graphs

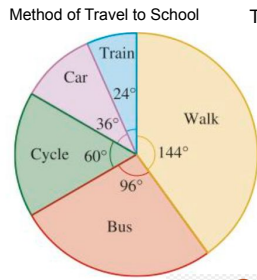
KEY WORDS

Statistics: a branch of maths dealing with the collection, analysis and presentation of data
Frequency Table: a record/table of how often something occurs
Relative Frequency: How often something happens divided by all outcomes
Cumulative: how much/many so far added together
Grouped Data: data that has been put into groups known as classes

Drawing a Pie Chart

1. Find **total frequency** (how many outcomes altogether)
 2. Take each category & ÷ by total frequency
 3. Multiply by 360 (degrees in a circle)
- This gives number degrees per segment

Method of travel to school	Walk	Bus	Cycle	Car	Train
Number of Students	12	8	5	3	2



Angle of Sector

$$\frac{12}{30} \times 360^\circ = 144^\circ$$

$$\frac{8}{30} \times 360^\circ = 96^\circ$$

$$\frac{5}{30} \times 360^\circ = 60^\circ$$

$$\frac{3}{30} \times 360^\circ = 36^\circ$$

$$\frac{2}{30} \times 360^\circ = 24^\circ$$

Frequency = How Many

TYPES OF DATA

Primary Data: data that you collect yourself
Secondary Data: is data that you look up / find, e.g. on the internet or in a book/newspaper

QUANTITATIVE / NUMERICAL DATA

Discrete Data - data that can be counted e.g. number of days
Continuous Data - can be measured - e.g. temperature / height / weight

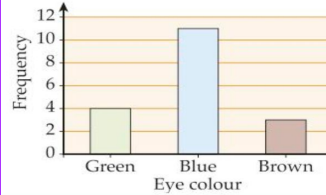
QUALITATIVE / CATEGORICAL DATA

Categories of data which include things like: skills, preferences, food or hobbies



In a bar chart, the height of the bar shows the **frequency** of the result. The bars are evenly spaced.

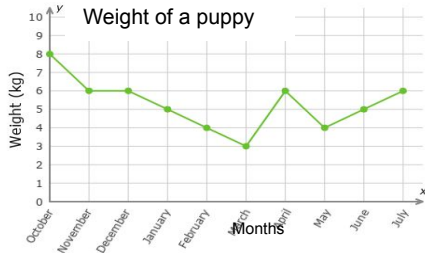
Bar Chart



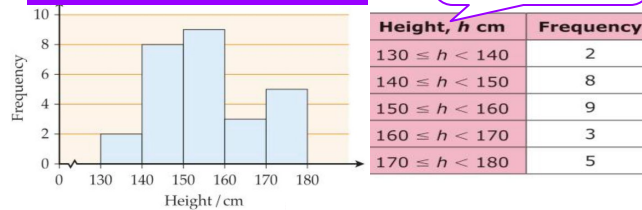
Eye colour	Frequency
Green	4
Blue	11
Brown	3

LINE GRAPH

A line graph is used for using data with **time**. The **time** is always the **horizontal -x-axis**. The points are joined to each other by a line - like dot to dot
 Advantage: see trend in change over time



Grouped Frequency Table & Chart



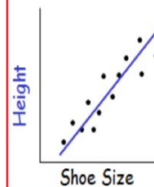
For continuous data you should have no gaps between the bars.

The Modal Class is the class interval / group with the most
 Estimating the **Median** from grouped data
 Work out the total frequency and divide by 2 $27 \div 2 = 13.5$
 So, the estimated Median is where the 13.5th person is. In the 150 - 160th class interval

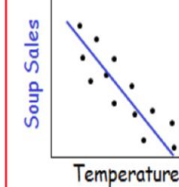
Scatter Graphs

Scatter Graphs are used to represent and compare two sets of data. They are used to see if there is any connection (correlation) between the two sets of data.

Positive correlation as one quantity increases so does the other



Negative correlation as one quantity increases the other decreases



No correlation where both quantities vary and there is no clear relationship.



Line of best Fit is a line on a graph showing the general direction that a group of points seem to follow
 When drawing a line of best fit - try and get as many points above as below the line

median

The median is the middle number in a sequence.

- To find the median:
 - Organize the set of numbers from smallest to largest.
 - Locate the middle number.

2, 3, 5, 6, 7, 8, 10, 13, 14
 The median is 7.

mode

The mode is the number that occurs most frequently.

- To find the mode:
 - Organize the list of numbers from smallest to largest.
 - Locate the number that appears in the list most often.

1, 2, 2, 3, 4, 4, 4, 5, 7, 7, 8
 The mode is 4.

Range

the difference between the lowest and highest values

Subtract the smallest number from the largest number.
 $12 - 3 = 9$

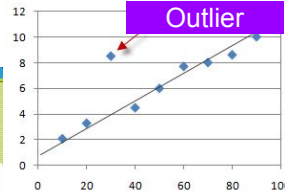
mean

The mean is the average of a set of numbers.

- To find the mean:
 - Add together all of the numbers in the set.
 - Divide the total by how many numbers were added.

$1 + 3 + 6 + 9 + 11 + 12 + 14 = 56 \Rightarrow 56 \div 7 = 8$
 The mean is 8.

Outlier



Year 8 Block 4 EQUATIONS & SEQUENCES

Linear Sequence

A number pattern which increases (or decreases) by the same amount each time is called a linear sequence. Same difference is added + or subtracted -

Term = pattern number

1st 2nd 3rd 4th 5th 6th 7th

4, 8, 12, 16, 20, 24, 28...

Geometric Sequence

2, 4, 8, 16, 32

x2 x2 x2 x2

Use inverse operations to solve linear equations

Solving Linear Equations

Balancing method

$$8a - 5 = 11$$

$$+5 \quad +5$$

$$8a = 16$$

$$+8 \quad +8$$

$$a = 2$$

Function machine method

$$8a - 5 = 11$$

$$a \rightarrow \times 8 \rightarrow -5 \rightarrow 11$$

$$2 \leftarrow \div 8 \leftarrow +5 \leftarrow 11$$

$$a = 2$$

$$\frac{x}{12} - 5 = 4$$

$$+5 \quad +5$$

$$x \div 12 = 9$$

$$\times 12 \quad \times 12$$

$$x = 108$$

$$\frac{x}{12} - 5 = 4$$

$$x \rightarrow \div 12 \rightarrow -5 \rightarrow 4$$

$$108 \leftarrow \times 12 \leftarrow +5 \leftarrow 4$$

$$x = 108$$

Term to Term

8 10 12 14

+2 +2 +2

The amount by which a sequence increases or decreases by is known as the **term to term**.
+2 is the term to term here

Square numbers:

A square number can only end with 0,1,4,6,9,or 25!

4 2² or 2 x 2 = 4

9 3² or 3 x 3 = 9

16 4² or 4 x 4 = 16

25 5² or 5 x 5 = 25

36 6² or 6 x 6 = 36

Find the nth term

nth term formula = **an+b**
n = the position- 1st term etc..
a = difference between terms
b = a + b = the first term

Find the nth term rule:

7 11 15 19

+4 +4 +4

a = 4 4 + b = 7
b = 3

nth term = **4n + 3**

nth term =
The formula to work out any number (n) in a sequence

Term = Each value (number) in a sequence.

Triangular Numbers

1 1+2 1+2+3 1+2+3+4

1 = 3 = 6 = 10

1,1,2,3,5,8

Fibonacci

add two previous terms to get the next term

1, 1, 2, 3, 5, 8

Speed Distance Time

Speed = $\frac{\text{Distance}}{\text{Time}}$

Distance = Speed x Time

Time = $\frac{\text{Distance}}{\text{Speed}}$

Mass Density Volume

Volume = $\frac{\text{Mass}}{\text{Density}}$

Density = $\frac{\text{Mass}}{\text{Volume}}$

Mass = Density x Volume

Solving equations with unknowns on both sides

Solve $4x + 3 = 2x + 9$

Remove 2x by subtracting it from both sides.

Here, $4x - 2x$ just leaves 2x

The equation is then solved just like a normal two-step equation.

$$4x + 3 = 2x + 9$$

$$-2x \quad -2x$$

$$2x + 3 = 9$$

$$-3 \quad -3$$

$$2x = 6$$

$$\div 2 \quad \div 2$$

$$x = 3$$

To avoid getting negative x terms, always remove the smaller number of x's from both sides

Expanding single brackets

To expand a single bracket, multiply whatever is inside the bracket by the number outside.

Here is $x + 2$:

x $1 \cdot 1$

$3(x + 2)$ means 3 lots of $x + 2$ and would look like this:

x $1 \cdot 1$
 x $1 \cdot 1$
 x $1 \cdot 1$

Altogether this is $3x + 6$.
Algebraically, we would write:
 $3(x + 2) = 3x + 6$.

We have multiplied each term inside the bracket by 3.

$4(x + 3) = 4x + 12$ $4 \times x = 4x$
 $4 \times 3 = 12$

$5(2x + 4) = 10x + 20$ $5 \times 2x = 10x$
 $5 \times 4 = 20$

Watch out!
Be really careful with negatives!

$3(x - 3) = 3x - 9$ Remember: $-x \cdot - = +$

$-3(x - 4) = -3x + 12$

Inverse Operations

+	→	-
-	→	+
x	→	÷
÷	→	x
x ²	↔	√x

$$x - 120 = 80$$

$$+120 \quad +120$$

$$x = 200 \checkmark$$

$$y + 14 = 20$$

$$-14 \quad -14$$

$$y = 6 \checkmark$$

Words to Expressions	A number minus 6	n-6	6 minus a number	6-n
	9 less than a number	n-9	9 less a number	9-n
	Subtract 10 from a number	n-10	Subtract 10 from a number	10-n
	A number decreases by 5	n-5	5 decreased by a number	5-n

Maths Block 5 - Algebra

Positive Indices x

$$2 \times 2 \times 2 \times 2 \times 2 = 2^5 = 64$$

2 is the base number
5 is the index number / the power / the exponent
(used when multiplying)

Negative Indices ÷

$$5^{-3}$$

A negative index tells you how many times to ÷ the number by

$$1 \div 5 \div 5 \div 5 = 0.008$$

5⁻³ could also be calculated like:

$$1 \div (5 \times 5 \times 5) = 1/5^3 = 1/125 = 0.008$$

5 ²	1 × 5 × 5	25
5 ¹	1 × 5	5
5 ⁰	1	1
5 ⁻¹	1 ÷ 5	0.2
5 ⁻²	1 ÷ 5 ÷ 5	0.04

ANYTHING to the power 0 is always 1

expression

$$5x - 8 = 17$$

terms

Expression is part of a sum without the = sign
Terms are each part of the sum

Expanding Brackets

$$4(x + 3) = 4x + 12$$

4 × x = 4x
4 × 3 = 12

$$5(2x + 4) = 10x + 20$$

5 × 2x = 10x
5 × 4 = 20

Watch out!
Be really careful with negatives!

$$3(x - 3) = 3x - 9$$

Remember: - × - = +

$$-3(x - 4) = -3x + 12$$

Expanding with Indices

$$x(2x-5) - 6(x-2) = 2x^2 - 5x - 6x + 12 = 2x^2 - 11x + 12$$

Factorising (put in bracket)

Find HCF of both numbers and letters
 $y^2 + 3y = y \times y + 3 \times y = y(y+3)$

FACTORISING
Opposite of expanding brackets

Use BIDMAS with algebra and indices

BIDMAS

$$() \times \div \pm$$

Write out in full **y** is common in both expressions
y stays outside the bracket and the other terms are inside the bracket

Single letter on left side of = sign
s = 10t + 4

Subject



Algebraic Fractions

Follow the same rules as ordinary fractions

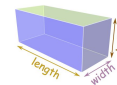
$$\frac{x}{2} + \frac{y}{3} = \frac{(x)(3) + (y)(2)}{(2)(3)} = \frac{3x + 2y}{6}$$

$$5 \times 8 = 40$$

***Product**
The answer to a multiplication problem

Using a Formula

A fact or rule that uses mathematical symbols / letters
It will usually have:
An equals sign =



$$\text{volume} = \text{length} \times \text{width} \times \text{height}$$

$$v = l \times w \times h$$

Simplifying

$$4ab \times 5b^2$$

Write it out in full:
 $4 \times a \times b \times 5 \times b \times b$
Multiply numbers & collect same letters & write in standard form
20ab³

$$\frac{10a^2}{5a} = \frac{10 \times a \times a}{5 \times a} = \frac{2 \times 10 \times a \times a}{5 \times a} = 2a$$

Cancel common factors & divide numbers

2x² & 5x are NOT like terms, they have different powers!!
 $2x \times x \times x = x + x + x + x + x$

Important Information



Substitution

You can substitute a value into an expression (or formula) to find its value

If a = 3
 $4a + a^2 = X$
 $4 \times 3 + 3^2 = 12 + 9$
X = 21