Year 9
Term 1A - 2023-2024

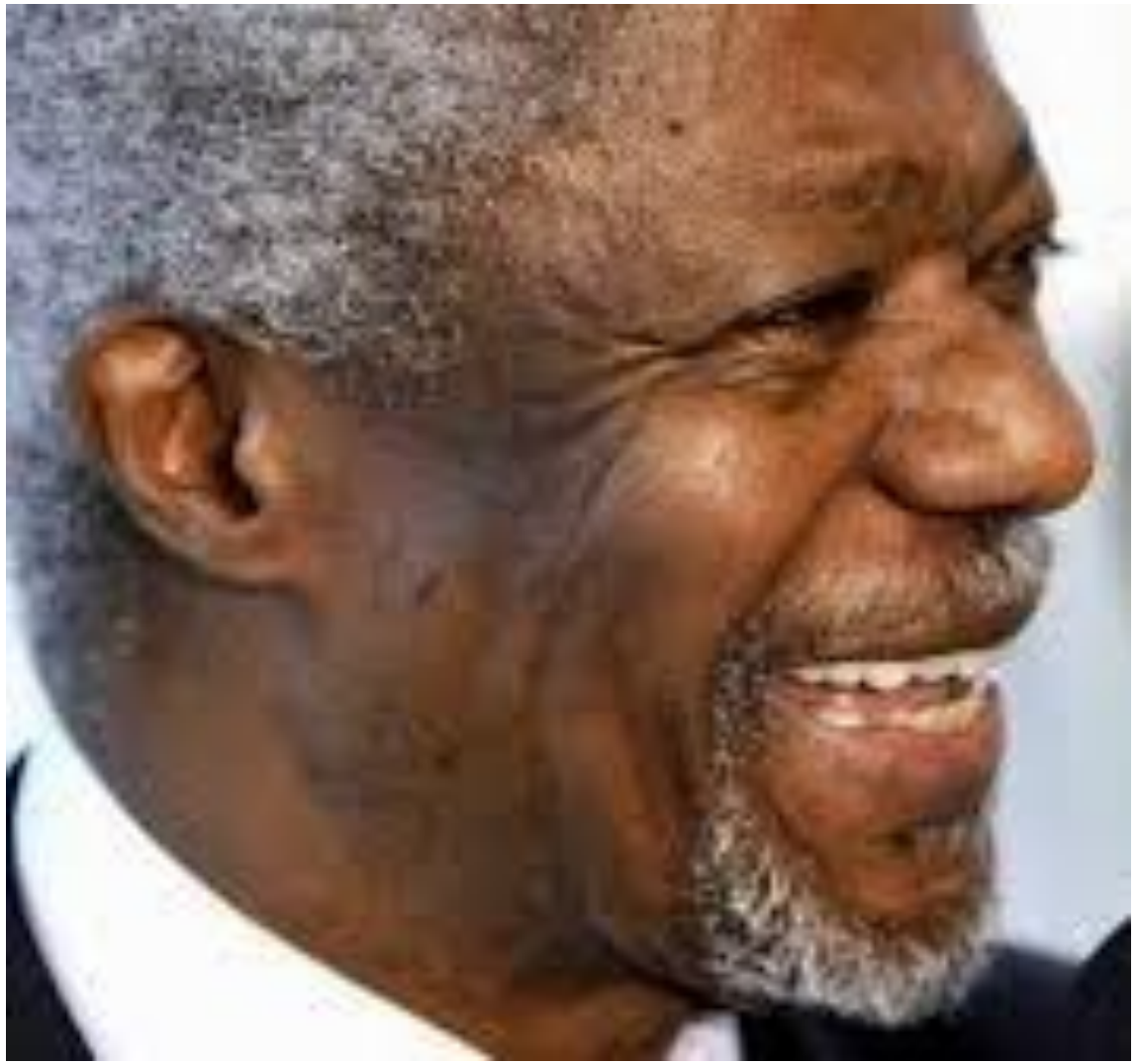
Name _____

Form _____

St Cuthbert's Catholic High School

MORE THAN A SCHOOL

St Cuthbert's
Catholic High School
Live life in all its fullness



"Knowledge is power. Information is liberating. Education is the premise of progress, in every society, in every family"

Kofi Annan
(research who he is)

Year 9 Knowledge Organiser:
Term 1A 2023-2024

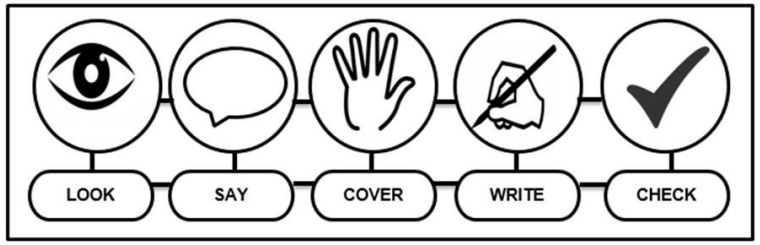
Instructions for using your Knowledge Organiser

The timetable on the next page tells you which subjects you should be studying on which days (it doesn't matter if you have that subject on that day or not, you should follow the timetable).

You are to use your exercise book to show the work you have done. Each evening you should start a new page and put the date clearly at the top.

You need to bring your KO and exercise book with you EVERY DAY to school. Your KO and exercise book will be checked regularly in form time.

You will also be tested in your lessons on knowledge from the organisers.



You must use the revision strategy Look – Say – Cover – Write - Check to learn the knowledge. You can also use your KOs and book in a number of different ways but you **should not just copy** from the Knowledge Organiser into your book.

Presentation

You should take pride in how you present your work:

- Each page should be clearly dated at the top right hand side with the **Subject** written in the middle.
- Half way down the page a line should divide it in two with **Next Subject** written above the dividing line.
- Each half of the page should be neatly filled with evidence of self-testing. There should be an appropriate amount of work.
- Failure to show pride in your presentation or wasting space on your page with large writing or starting a number of lines down will result in a **negative AtL.**

Year 9 Knowledge Organiser Homework Timetable

You are expected to study the subjects shown on your timetable each day. You need to spend 20 minutes on each subject and you will need to evidence your work in your exercise book.

WEEK A	Subject 1	Subject 2	Subject 3
MONDAY	English	MFL	Geography
TUESDAY	Science	Maths	PD
WEDNESDAY	History	Music	Science
THURSDAY	RE	Maths	Food
FRIDAY	Computing	Technology	English

WEEK B	Subject 1	Subject 2	Subject 3
MONDAY	English	Drama	Geography
TUESDAY	Science	Maths	RE
WEDNESDAY	History	PE	Science
THURSDAY	RE	Maths	MFL
FRIDAY	Computing	Art	English

Reading Log

"The more that you read, the more things you will know. The more that you learn, the more places you'll go"

Dr Seuss

Use this reading log to record the books you read and how long you have spent reading.

Week	MON	TUE	WED	THURS	FRI	SAT	SUN	Book(s) read (title and author)	Time spent reading	Parent comment/signature
04/09/2023										
11/09/2023										
18/09/2023										
25/09/2023										
02/10/2023										
09/10/2023										
16/10/2023										
23/10/2023										

Year 9 English Term 1A: Novel – Animal Farm

Plot Summary:

1. Old Major's speech - Mr Jones, the owner of Manor Farm falls asleep in a drunken stupor. All the animals of Manor Farm meet in the big barn where Old Major delivers a speech arguing for a rebellion against the men. The Animals sing 'Beasts of England', a song from Old Major's dream.
2 The rebellion - Old Major dies and the pigs adapt his speech, forming the principles of Animalism. The pigs plan the rebellion even though some animals (like Mollie) are concerned. The rebellion happens faster than expected after Mr. Jones forgets to feed the animals. The animals of Mr. Jones house and leave it as a museum. Napoleon steals milk.
3 The pigs emerge as leaders - The animals complete the harvest faster than ever. Snowball sets up the Sunday assemblies where Napoleon and Snowball often argue. Snowball's committees fail, yet he is able to bring literacy to the animals with minor success. Napoleon teaches the sheep 'four legs good two legs bad' and takes the dogs for 'education'. Cow's milk and windfall apples are given to pigs, Squealer convinces the animals that this is a good idea.
4 Battle of the Cowshed - News of the rebellion spreads, Frederick, Jones and Pilkington complain about Animal Farm's success. In October, a group of men try to seize the farm. Led by Snowball's brilliance, the animals repel the attack, which is names 'The Battle of the Cowshed'.
5 Snowball's expulsion - Mollie deserts the farm. The pigs grow in influence, suggesting ideas on which the animals must vote. Snowball and Napoleon continue to disagree, especially over the construction of a windmill. When the Windmill is put to vote, Snowball is expelled from animal farm. Later, Napoleon announces that the Windmill will be built.
6 Building the windmill - The animals work harder than ever, Boxer proves himself to be an inspiration. Napoleon begins trading with humans and hires Mr Whymper. Jones gives up trying to reclaim the farm. The animals begin sleeping with beds, and Muriel and Clover notice a change in the commandments 'with sheets'. Squealer persuades the animals that this is acceptable. In November, a storm topples the half complete windmill. Napoleon blames this on Snowball.
7 Rebuilding the windmill and the executions - The animals struggle against starvation. After learning that they must sacrifice their eggs, the hens stage a demonstration. Napoleon denies their rations and 9 hens starve as a result. The animals are led to believe Snowball has been returning to the farm – his role at the battle of the Cowshed is adapted by Squealer. In spring, Napoleon calls a meeting and several 'traitors', who confess to being in league with Snowball, are executed, including protesting hens and pigs. Beasts of England is outlawed.
8 Trading with humans and the destruction of the windmill - Clover and Benjamin notice a change in the commandments: 'killing without cause'. The next year brings more work and less food, despite Squealer's figures and statistics to the contrary. More executions occur. Napoleon's is seen in public less often. Napoleon trades Frederick and Pilkington off against each other, and sells a pile of timber to Frederick, who tricks Napoleon with forged banknotes. Napoleon pronounces the death sentence on him. Frederick, with 14 other men, attack the farm and blow up the windmill, which rallies the animals to fight back. Several animals die, Boxer is injured but Squealer convinces the animals of their victory. The pigs find a crate of whiskey, Napoleon fears he is dying and proclaims that drinking alcohol is punishable by death. He then recovers and orders the retirement paddock to be planted with barley.
9 Boxer's fate - Once again, the animals are faced with rebuilding the windmill. 31 pigs are born, and Napoleon orders for a schoolhouse to be built for their education. Rations are yet again reduced. Animal Farm is proclaimed a republic with Napoleon as president. Boxer is injured working and Napoleon sends for a vet. A van arrives, Boxer is taken away but Benjamin reads the its side and learns that Boxer is being slaughtered. Squealer manages to convince the animals otherwise. Boxer is never seen again.
10 Pigs and humans come together - Years pass. Muriel, Jessie, Pincher are dead. Clover is 14. No animal has ever retired. The farm has grown in size and population. Two windmills are complete. Clover notices the pigs walk on two legs. The commandments are deleted and replaced with "All animals are equal but some are more equal than others." The pigs start carrying whips and wearing Mr Jones' clothes. In the final scene, human farmers visit the farm and meet the other pigs. Toasts are exchanged and Napoleon changes the farm's name back to Manor farm. The pigs and humans play cards. A quarrel brakes out. On looking animals can not discriminate between pigs and humans.

Year 9 English Term 1A: Novel – Animal Farm

Key Characters:

Mr Jones - Drunken owner of Animal Farm. Embodies the tyranny of man
Mr Pilkington - Owner of Foxwood . Sells land to Napoleon and praises his methods.
Mr Frederick - Cutthroat businessmen. Trades with & manipulates Napoleon
Mr Whymper - Sly, greedy and self interested. Solicitor who aids Napoleon's tyranny
Moses - Tamed raven of Jones. Spreads the idea of Sugarcandy Mountain
Snowball - Devoted to animalism and the education of lesser animals. Hero at the battle of the cowshed.
Squealer - Mouthpiece of Napoleon. Uses propaganda to control the animals.
Boxer - Devoted citizen and immensely strong. Innocent and naïve.
Clover - Maternal , caring and loyal. Senses hypocrisy but cannot articulate it.
Mollie - Shallow and childish. Craves ribbons and sugar. Deserts the farm
Benjamin - Stubborn, cynical & apathetic. Only stirred to passion by Boxer's removal
Napoleon - Expels Snowball. Executes animals. Establishes himself as dictator. Controls with fear. Becomes Jones.
Old Major - Wise, old pig. Inspires the rebellion with his rhetoric.

Key Vocabulary:

Context
Allegory
Propaganda
Tyranny
Commandments
Suppressed

Key Themes:

- Leadership and Corruption
- Control over the intellectually inferior
- Lies and deceit
- Foolishness and naivety
- Violence
- Pride and Ceremony
- Dreams, hopes and future plans

Context:

- An allegorical tale with direct links to the history of the Soviet Union in the early 20th century.
- The book charts the corruptions of Communist ideals of equality, where workers are promised equality and freedom and are eventually repressed and treated as bad, if not worse, as under the previous rule of the capitalist 'Tsar'.
- Old Major represents Karl Marx, putting forward the communist ideals which will free them from the tyranny of capitalism (represented by Jones).
- Snowball represents Trotsky, a passionate component of Animalism (Communism) who is expelled by Napoleon (Stalin).
- Napoleon follows a similar rise to power as Stalin, using fear and propaganda to control the masses, including show trials and executions.
- By the end of the novel, the ideals of communism have been so far abused and forgotten, that Napoleon meets and forms agreements.

Year 9 Maths – Term 1A

Problem Solving at St Cuthbert's

K Key Information - Highlight or pick out the important things that you will need

L List the Maths - What Maths topics will you need? Can you write down any rules?

A Attach Numbers -
- Assign numbers to help
- Relate the problem to one you can already do eg.. 3 x 4 = 12

P Picture -
- Annotate the diagram given with any information
- Draw a picture to help you visualise

S Sensible - Does your answer make sense?

Don't forget

Always show your working out

Never round half way through a question

Key Words

Take care with your spellings of these key words

Linear

Parallel

Gradient

Intercept

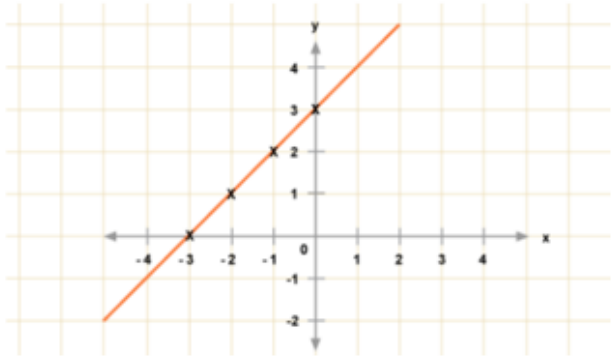
Equation

Drawing a Straight Line Graph from a table of Values

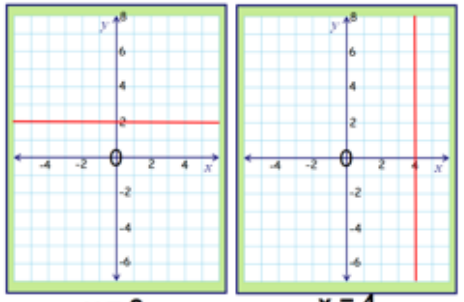
We might be given the rule y = x + 3, and asked to draw from x values from -3 to 3.
A table of values can help us to find the co-ordinates that would be needed

x	-3	-2	-1	0	1	2	3
y= x +3	0	1	2	3	4	5	6

Take a look at the graph y = x + 3 and see how the values are plotted.



This function gives us a diagonal line, but there are some functions that give us lines parallel to the x and y axis:



y = 2

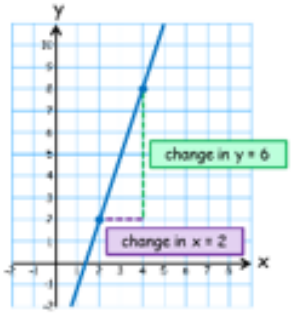
x = 4

Year 9 Maths – Term 1A

Finding the Gradient

The gradient of a straight line is its steepness.

Draw a right-angled triangle on the graph. This triangle can be whatever size you like, but look for "easy" points with whole numbers.



To calculate gradient, divide change in y by change in x.

$$\text{gradient} = \frac{\text{change in y}}{\text{change in x}}$$

These are the lengths of the two straight sides of the triangle.

Here, change in y is 6 and change in x is 2.

So the gradient $= \frac{6}{2} = 3$.

This means that as x increases by 1 step, y increases by 3 steps.

You can also find the gradient by picking out two co-ordinates from the straight line graph and finding the difference between the y co-ordinates and the x co-ordinates.

The only way that you can determine if the gradient will be positive or negative is by looking at the sketch. This is why it is useful to draw a sketch of the graph.

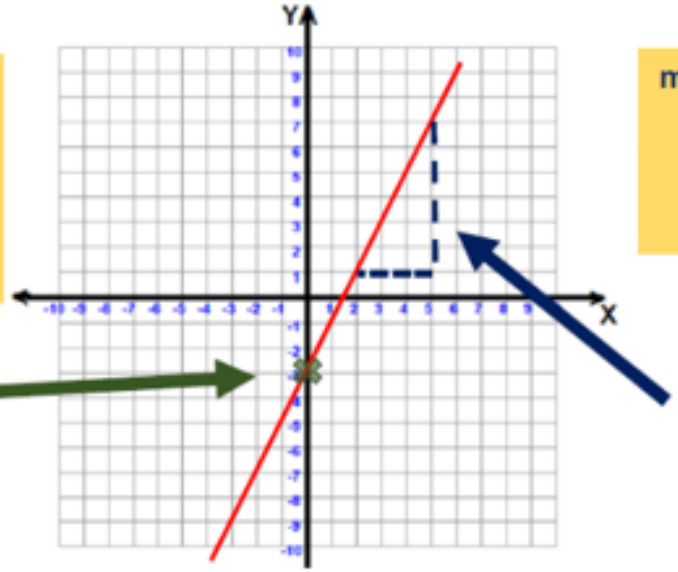
Using the Equation y = mx + c

The general form of any straight line graph is y = mx + c
The 'm' represents the value of the gradient
The 'c' represents the value of the intercept with the y axis

Look at the example below:

c represents the y intercept i.e. where the line crosses the y axis

m represents the gradient i.e. $\frac{\text{change in y}}{\text{change in x}}$



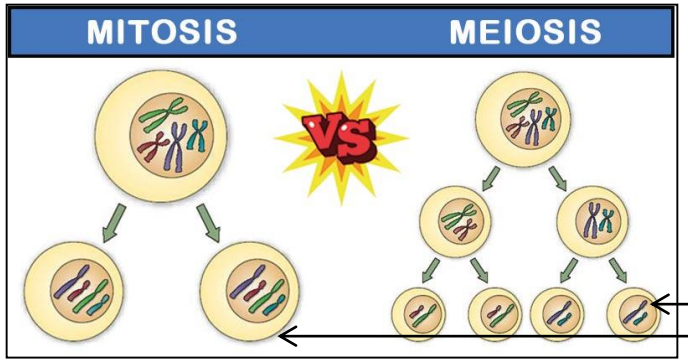
So this is the graph for:

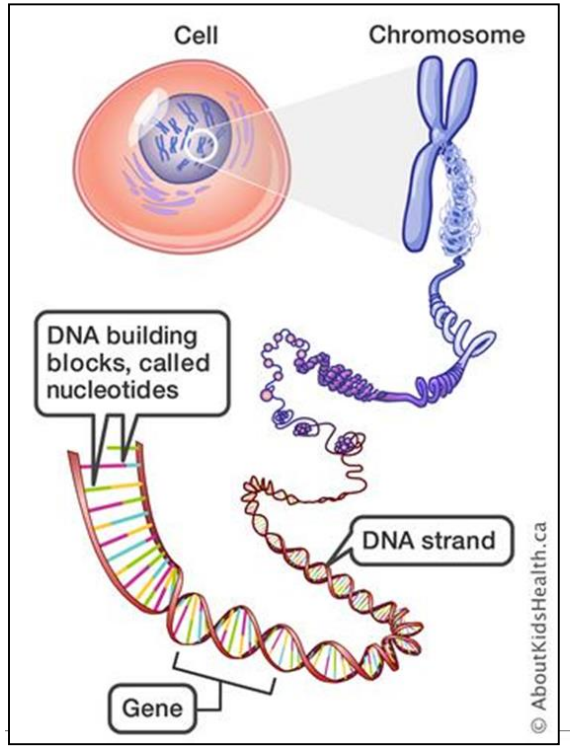
y = 2x - 3

Year 9 Science – Term 1A

Uses of DNA Technology

- Paternity testing
- Crime Scene Investigation – DNA profiling
- Human Genome Project – Mapping the entire sequence of the human genome
- Medicine – to detect genetic disorders and assist in gene therapy advances
- Agriculture – Genetic modification of plants to improve desirable traits such as increased crop yield.



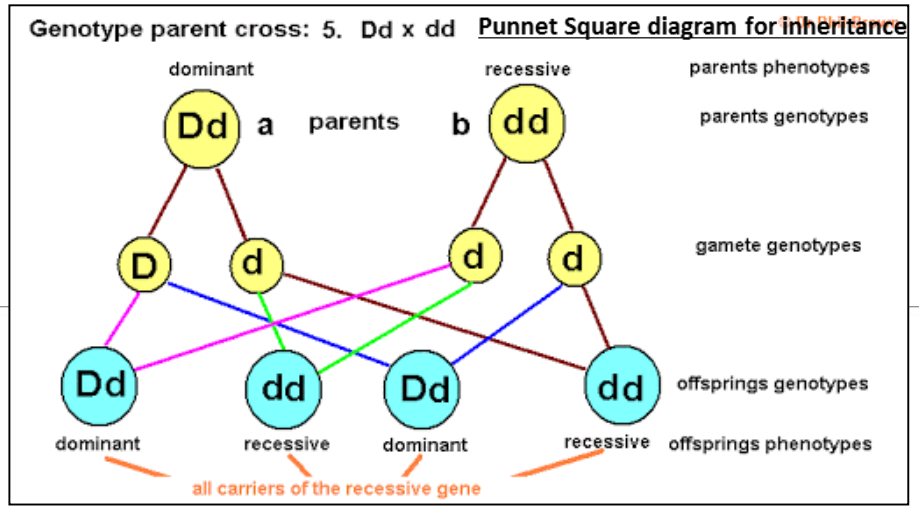


Discovery of DNA

DNA was first discovered in the mid-19th century, but its function remained a mystery. In the early 1950s two scientists, Rosalind Franklin and Maurice Wilkins, studied DNA using X-rays.

Franklin produced an X-ray photograph that allowed two other researchers, James Watson and Francis Crick to work out the 3D structure of DNA. The structure of DNA was found to be a **double helix**.

Crick and Watson's model served to explain how DNA replicates and how it carries genetic information in humans. This set the stage for the rapid advances in molecular biology that continue to this day. Molecules carry the genetic instructions used in the growth, development, functioning and reproduction of all known living organisms.



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Live life in all its fullness

Key Words

Allele	Different forms of the same gene e.g. the gene for eye colour could be brown, green or blue
Chromosomes	Long, coiled molecules of DNA
DNA	Chemical that contains genetic material
Dominant allele	A type of allele where only one copy of the allele needs to be present for the phenotype to be displayed
Gamete	Sperm or egg cell with only half the number of chromosomes a normal (somatic) cell
Gene	A small section of DNA that codes for a protein. Each gene codes for a sequence of amino acids (and amino acids make up a protein)
Genome	The entire set of genetic material in an organism
Genotype	The two alleles you have for a certain characteristic e.g. the genotype for brown eyes could be Bb
Heterozygous	The dominant and the recessive allele are present e.g. Bb
Homozygous	Both alleles are the same e.g. BB or bb
Mutations	Change to the sequence of bases in the DNA - insertions, deletions and substitutions
Nucleotides	DNA is formed from repeating units of nucleotides. Nucleotides are made from a sugar, a phosphate and a base
Phenotype	The actual characteristic that is shown because of the genotype e.g. brown eyes is a phenotype
Proteins	Made from amino acids
Recessive allele	A type of allele where two copies of the allele need to be present for the phenotype to be displayed
Ribosomes	Where proteins are made

Year 9 Science – Term 1A

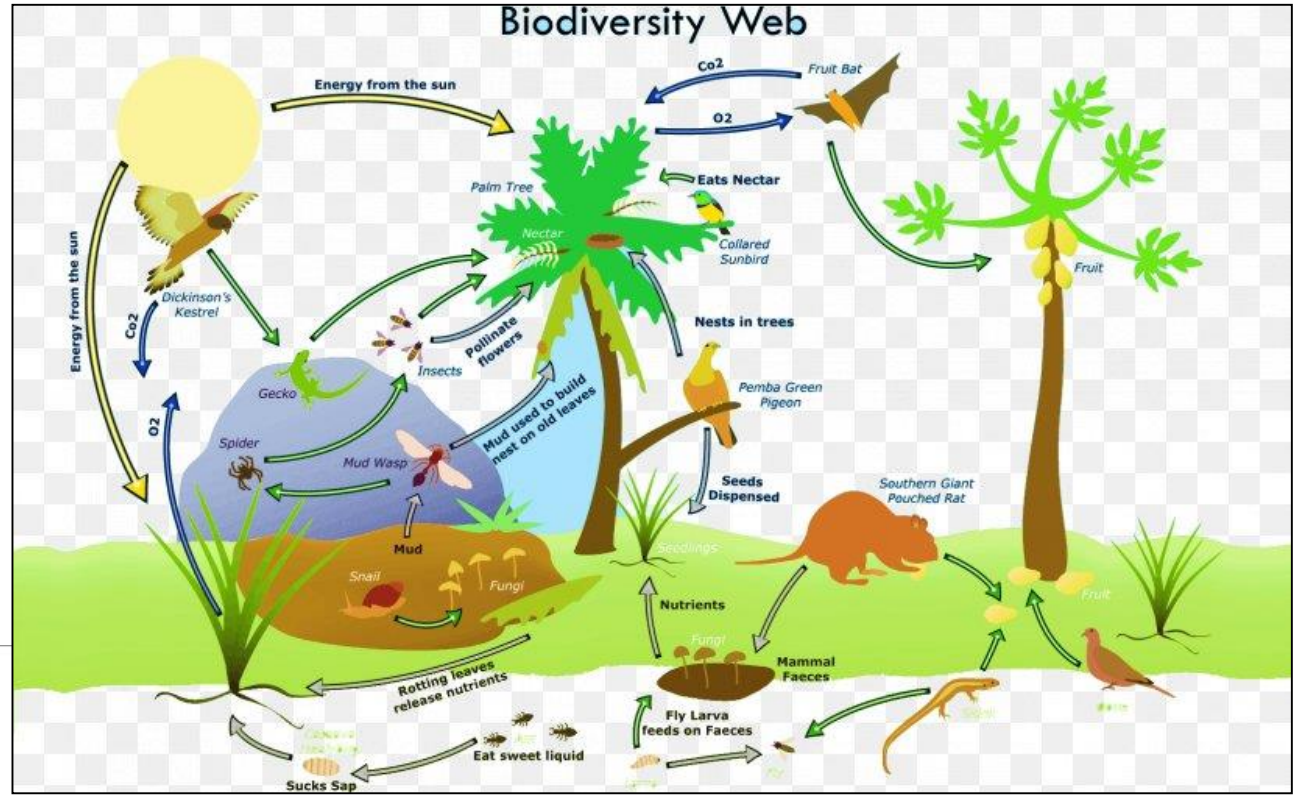
Areas like tropical rainforests have millions of different **species** and are very **biodiverse**. Other areas like the Polar Regions have far fewer species and are less biodiverse.
Biodiversity is specifically the number of different species. An area with large **populations** of few species is not biodiverse.
Interdependence - If the numbers of one species are affected, there are almost always knock-on consequences. A simple **food chain** is: algae → zooplankton → sand eel → puffin → arctic skua.
If the numbers of zooplankton are reduced by pollution, such as plastic waste, then more algae will grow and the population of other consumers will fall potentially resulting in extinction.
Ecosystems with higher biodiversity have fewer species that depend on just one other for food, shelter and maintaining their environment. With the example above, puffins could also eat molluscs and worms. Ecosystems with higher biodiversity are more stable as they can easily adjust to changes.
We are slowly realising that the future of our species on Earth depends on maintaining high biodiversity. Activities that create air and water pollution, are reducing biodiversity in many ecosystems. Conservation of species and habitats by charities, governments and individuals helps to maintain the range of biodiversity.

Key Words

abiotic	a non-living part of an ecosystem that shapes its environment
biodiversity	the variety of plant and animal life in the world or in a particular habitat, a high level of which is usually considered to be important and desirable
biotic	the living components of an **ecosystem**
ecosystem	a biological community of interacting organisms and their physical environment

There are five major **causes of extinction**:
- habitat loss
- a newly introduced species
- pollution
- population growth
- overconsumption e.g. deforestation or hunting of a species

Importance of biodiversity
Biodiversity is important to humans for many reasons. ... Ecological life support - biodiversity provides functioning ecosystems that supply oxygen, clean air and water, pollination of plants, pest control, wastewater treatment and many ecosystem services



Year 9 RE – Term 1A

Why are we here?

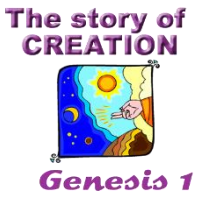
1	To explore God's existence by examining philosophical arguments and our purpose in life as Catholics.

Key Events

2	**God is the creator** as stated in **Genesis 1.**
3	Humans have **dominion and stewardships** towards God's creation.
4	God is **outside of time & space**, God is the cause and designer of everything.
5	Sin keeps human beings from being saved but humans **can achieve salvation through following Christ & Christ's death.**

Key Scripture

6. Genesis 1	Creation of the universe in 6 days
7. Genesis 2	Creation of Adam and Eve
8. Romans 5	'Glory in our sufferings'



Why are we here?

WORDS

Key Words

9.	**Well grounded**	Based on good evidence or reasons.
10.	**Evidence**	Facts or information indicating a belief is true.
11.	**Reveals**	Makes known to others.
12.	**Unbiased**	Impartial, showing no bias towards something.
13.	**Creation**	The belief that God created the world.
14.	**Dominion**	Humans have power and control over God's creation.
15.	**Stewardship**	To look after God's creation for future generations.
16.	**Big Bang Theory**	Theory on how the universe came into existence.
17.	**Evolution**	Theory that humans have evolved over time.
18.	**Design**	The argument that everything has a design.
19.	**Causation**	The argument that everything has a cause.
20.	**First Cause**	God is the 'First Cause'.
21.	**Sin**	Something that goes against the will of God.
22.	**Salvation**	Being saved from sin.
23.	**Redemption**	Promise from God to save us from sin.
24.	**CAFOD**	Catholic agency for overseas development.

Year 9 Geography – Term 1A: Glaciation

Key Terms:

Ice Age – A time period when ice advances from the north and south poles towards the equator.

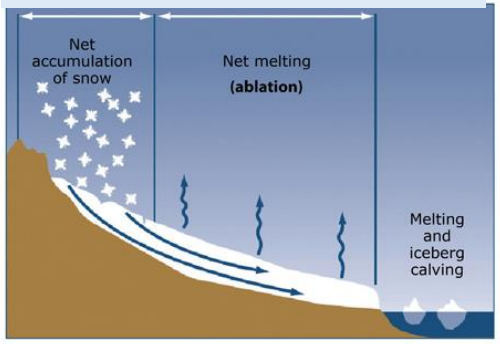
Ice Sheet – A large, expansive body of ice, 1-2 miles thick which covers a land surface, covering continental areas.

Glacier – A frozen land-based river like feature, flowing from the upland areas down towards the low-lying coastal areas.

Accumulation – the build up of snow in layers which is compressed into ice.

Ablation – the melting or breaking up of the ice.

Mass Balance

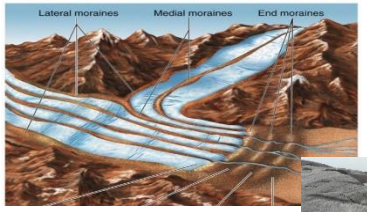


Mass balance is the difference between accumulation and ablation.
If there is more accumulation than ablation the glacier advances.
If there is more ablation than accumulation the glacier retreats.

Glacial Landforms

A **corrie** is an armchair-shaped hollow found on the side of a mountain. This is where a glacier forms. Plucking and abrasion deepen the corrie into a deep hollow with a higher rock lip at the front. When the glacier melts this lip traps the water and creates a lake called a **tarn.**

An **arête** is a knife-edge **ridge**. It is formed when two neighbouring corries run back to back. A **pyramidal peak** is formed where three or more corries and arêtes meet.



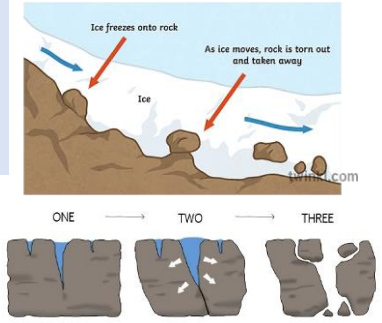
Moraines are accumulations of dirt and rocks that have fallen onto the glacier surface or have been pushed along by the glacier as it moves.

Glacial Erosion

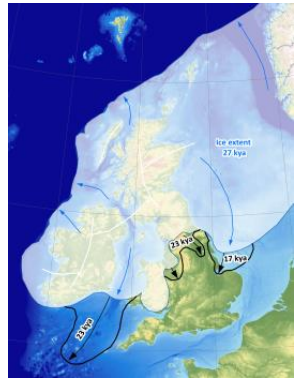
Abrasion – When the ice wears away the bedrock using the rock and pebbles being carried in the base of the glacier.

Plucking – When the base of glaciers freezes onto bedrock and pulls up large pieces of bedrock as it flows over the land surface.

Freeze-thaw weathering – The action of water flowing into cracks, freezing as ice and widening the cracks so much that rock breaks apart.



10, 0000 years ago the UK was covered in Ice. This means a lot of our landscape has been shaped by glaciers. We can see cories, arêtes, tarns and moraines in the UK today despite there not being any glaciers now.



How is Climate change effecting glaciers around the world?

Global warming is resulting in glaciers melting all over the world.
This is resulting in water shortages for those people who rely on melt water and is creating sea level rise.

Benefits of glaciated areas

Tourist Attractions – **People visit these places to enjoy the beautiful landscape created by glaciation.** This environment is popular with tourists because it provides opportunities for **walking, cycling, sailing and kayaking.**

Agriculture - Fertile soils of lowland areas provide good opportunities for arable and livestock farming. This also **creates jobs** and provides a boost for the economy. When glaciers melt in summer their **meltwater** flows into rivers and onto floodplains.

Hydro-electric Power - energy that uses the **power of water to generate electricity. Glacial areas are perfect because**

-Steep sided mountains

-Reliable meltwater in the spring and summer.

Drawbacks of living in glaciated areas

Flooding - When glaciers melt rapidly or a glacial lake floods it releases a huge volume of water. This can flood the valley below destroying homes, business and killing people.

Avalanches are masses of ice moving or falling downhill. They can destroy habitats, homes and kill people.

Lake District Case Study

15 million tourists visit the lake district every year.
People visit to walk, climb, swim and cycle in the glaciated landscape. This brings in money to the local economy however it results in congestion, littering and footpath erosion.

Tasks…

1. What was the extent of the ice in the UK during the last Ice Age?
2. Describe and explain the formation of a glacier.
3. What is mass balance?
4. How does a glacier erode the landscape?
5. Explain the formation of a corrie, arête and pyramidal peak.
6. Why is the soil fertile in glacial environments?
7. Explain how climate change is affecting glaciers and ice sheets around the world.
8. Why is it important as a geographer to understand glaciation?

Do you research…….. Choose a named glacier and research what is happening to it, how it is changing and the impacts this is having on the surrounding area and people

Prepare for your extended write

Question: 'Evaluate the benefits and drawbacks of living in a glacial environment.

1. BUG the question by boxing the command word and underlining the content you need to write about.
2. List the key vocabulary you will use.
3. Create a plan of what you would write in each paragraph.
4. Practice writing your answer from memory.

Homework Activity…

Write a newspaper article discussing the evidence of glaciers in the Lake District. Use google maps to help find more evidence.

Year 9 History– Term 1A: Women and World War One

1. suffrage / franchise	the right to vote
2. suffragist	woman who campaigned peacefully for the right to vote
3. suffragette	a suffragist who may have used violence
4. tactics	actions or strategy
5. militant	using violent methods
6. campaign	a series of actions towards and end goal
7. martyr	person who is willing to die for their beliefs
8. hunger-strike	refusing to eat in prison, as a protest to gain media attention
9. force-feeding	forcing hunger-strikers to eat

1

Key dates: 3

1918 Representation of the People Act: All women over 30 gain the right to vote.

1928 The Equal Franchise Act: All women over the age of 21 gain the right to vote.

Patricia Woodlock was a Liverpool born Suffragette. She was imprisoned seven times, including serving the longest suffragette prison sentence in 1908; she was awarded a Women's Social and Political Union Hunger Strike Medal for Valour/courage. 4

Democracy = A government that is run by the people.

Key Suffragette Leaders

Millicent Fawcett. Leader of suffragists. Peaceful campaigner. President of the NUWSS

The Pankhurst Family.
Emmeline, Christabel and Sylvia all campaigned for votes for women.
Emmeline and Christabel founded the WSPU a militant group). 2

Emily Wilding Davison. She joined the WSPU in 1906 and took part in militant action. Davison is best remembered for her final protest, which caused her death. At the Epsom Derby in June 1913, she threw herself in front of the King's horse. She died of her injuries four days later. It is not known whether she intended to commit suicide.

The First World War: 1914-1918 5

- Sparked by the assassination (murder) of Archduke Franz Ferdinand.
- The M.A.I.N causes of WWI were: Militarism, Alliances, Imperialism and Nationalism.
- The Allies (The Entente Powers): Great Britain, France, Belgium, Russia and the USA.
- Central Powers: Germany, Austria, Hungary, Bulgaria and Turkey.
- Men were recruited into the army in 'Pal's Battalions' which were groups of men who were friends and who signed up together and then fought and died together.
- 8 million soldiers were killed and 21 million injured.
- Fighting happened on the Western Front along the boarders of France and Belgium.
- Germany's Schlieffen Plan led solders to fight on the Western Front. Trenches developed over time in which soldiers lived and fired from.

The Armistice

The Armistice was the ceasefire/truce that ended hostilities between the Allies and Germany on the 11th of November 1918.
The Treaty of Versailles was created in June 1919 by the victors (winners) Britain, France and America. Germany were forced to sign the treaty (agreement) and it was bitterly hated by the Germans. 7

The St Helens Pals

The battalion (division) was formed in September 1914 as the result of a public meeting held by Lord Derby at the Theatre Royal, St. Helens. After training at Bangor, Grantham and Larkhill they landed in France on 6 November 1915.
In 1916 they took part in the Somme Offensive when 30th Division succeeded in their objective of capturing Montauban.
In 1917 they saw action at Arras, Messines and Passchendaele.
In 1918 the battalion was effectively destroyed when the German attack in March cost over 400 men killed, wounded and missing. The battalion was reduced to a small unit, training newly arrived Americans, with most of the survivors being transferred to 19th Lancashire Fusiliers. 6

Militarism is a belief that a strong military force should be maintained and used aggressively to defend or promote national interests.
Alliances are a relationship in which people, groups, or countries agree to work together.
Imperialism is the idea of expanding one's territory by taking over another country.
Nationalism is a strong attachment to a particular country, or nation. It is also called patriotism.
Recruitment is the process of actively seeking out, finding and hiring candidates for a specific position or job. 8

Year 9 PD – Term 1A: Equality and Diversity

What do we mean by equality and diversity?

It's making sure everyone is treated equally no matter what their differences are.

Watch this – about gender equality

The Equality Act (2010) was introduced to offer legal protection to those people with one or more 'protected characteristics'. The protected characteristics are:

- Age
- Disability
- Gender reassignment
- Marriage and civil partnership
- Pregnancy and maternity
- Race
- Religion or belief
- Sex
- Sexual orientation

What does Diversity do for us?

- Allows us to be global citizens and learn about the world.
- Helps everyone to feel included.
- Provides us with a richer life experience surrounded by different cultures.
- Helps us to grow as we take on board different perspectives and opinions which challenge our thinking

Hate Crimes:

A hate crime is defined as 'Any criminal offence which is perceived by the victim or any other person, to be motivated by hostility or prejudice based on a person's race or perceived race; religion or perceived religion; sexual orientation or perceived sexual orientation; disability or perceived disability and any crime motivated by hostility or prejudice against a person who is transgender or perceived to be transgender.' (Metropolitan Police)

Year 9 Art – Term 1A: Looking at Art

Artists and designers often record ideas, observations and insights that come to them as they produce their work. These insights can help them to analyse and evaluate the effectiveness of the work that has been produced.

Being able to analyse a work is an essential part of evaluating it. Recording this evaluation ensures that the creative process is communicated clearly.

'art is crucial for young people, as a medium for expression, passion and emotion, and a means of challenging ourselves and the world around us' - Anon

Key Words and Specialist Vocabulary:

Media: the materials and process used to create the Art work.

Opinions: a view or judgement formed about something, not necessarily based on fact or knowledge.

Genre: a style, especially in the arts, that involves a particular set of characteristics.

Composition: is the placement or arrangement of the visual elements, such as figures, trees, and so on in a work of art, as distinct from the subject or the style with which it is depicted.

How to do visual Art analysis.

The following is a basic guide or checklist that you can use to help breakdown and talk about Art that you like.

1. Describe what you can see. In the picture
2. Scale: size of the picture or sculpture
3. Composition and space in the picture
4. Formal elements like LINE, COLOURS, TONE, TEXTURE, PATTERN
5. Materials or media used. This could be anything, pencil, paint or even video
6. Context: is there a meaning; whether political, religious or cultural
7. How does the picture make you feel? Your opinion is subjective and could be totally different to someone else's

Can you name the Artist. What can you find out about your favourite picture?

Legislation and Presentation Software

Legislation relates to a set of laws put in place by a governing body. In the UK we have 3 laws which relate to Computer Science, these are:

- The Copyright, Designs and Patents Act 1988
- The Computer Misuse Act 1990
- The Data Protection Act 2018

The Computer Misuse Act 1990

Attempts to discourage people from using computers for illegal purposes. There are three separate parts to the Act:

1. It is illegal to access data stored on a computer unless you have permission to do so. Unauthorised access is often referred to as hacking.
2. It is illegal to access data on a computer for further illegal activity, such as fraud or blackmail.
3. It is illegal to make changes to any data stored on a computer when you do not have permission to do so.. This includes installing a virus or other malware.

The maximum punishment for breaking this law is a £5000 fine or several years' imprisonment.

*However, one key part of the law is that **intent** must be proved. If a computer is not well protected, someone could accidentally access its data without meaning to. Someone might also accidentally change a document without realising it.*

The Data Protection Act 2018

Personal data is private and should only be accessible by authorised people. Digital files stored on computers can be easy to access, copy and share. Protection is needed to make sure that our personal data is kept private and not altered or deleted.

The Data Protection Act exists to ensure our data is properly looked after

The Data Protection Act is built around 8 principles which state how personal data should be treated:

1. Personal data must be fairly and lawfully processed.
2. Personal data must be obtained for specified and lawful purposes.
3. Personal data must be adequate, relevant and not excessive.
4. Personal data must be accurate and up to date.
5. Personal data must not be kept for longer than is necessary.
6. Personal data must be processed in line with our rights.
7. Personal data must be held securely.
8. Personal data must not be transferred to other countries outside the European Economic Area, unless those countries have similar data protection laws.

Copyright, Designs and Patents Act 1988

An original piece of work is automatically covered by copyright. It could be a piece of music, a play, a novel, photos or a piece of software.

Copyright can be enforced by law. It is against the law to copy and distribute copyrighted material without the copyright owner's permission.

Software is covered by copyright. It prevents:

copies being made and given to friends and family for free, or being sold for profit

using software on a network, where multiple users can access it (unless the license permits it)

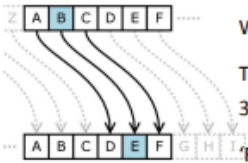
lending the software to friends or family

There are exceptions. Some copyright owners allow their work to be copied and distributed for educational use or for non-profitable use. The copyright owner will make this clear.

You should also know how to protect data

Encryption is the process of changing data or information into a code so that it prevents unauthorised access.

A simple method of encryption is the Caesar Cipher. The letter of each word in a message is 'shifted' along so that the original message can no longer be read.



With a shift of 3, 'BAD' becomes 'EDG'.

To decrypt the message you would count 3 backward through the alphabet. E.g.

'FDE' is decrypted to "CAB' by counting back 3 letters each time.

Creating a presentation

Checklist:

- Be aware of your target audience
- Limit the pictures and range of colours/fonts
- Be consistent with your style across all slides if possible
- Always check it over
- Embed music and video where appropriate
- Don't overdo the animations—are they being used to good effect?

Target Audience
The group at which your presentation is aimed

Embed
Incorporate within the presentation (rather than linking to an external source eg hyperlink)

Year 9 Design and Technology – Term 1A: Cam Toy

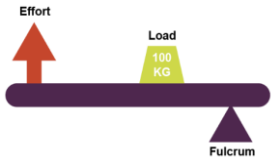
Tech Health and Safety

- Wear an APRON at ALL times.
- ALWAYS follow instructions and rules.
- Do not take shortcuts.
- Ask for help if you need it.
- When using machinery ALWAYS wear EYE PROTECTION & MACHINE GUARDS.
- Do not TOUCH machines or equipment unless you have permission.
- NEVER run in the workshop.

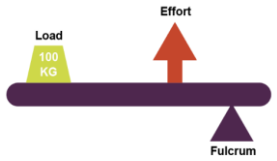
Scan the QR codes to watch a video about health and safety.

Key vocabulary	Definition
Isometric drawing	This is a form of 3D drawing, which is set out using 30-degree angles.
Linkage	Is the stored energy possessed by a system.
Lever	Plastic can be heated and shaped many times.
Equilibrium	High-density polyethylene, a thermoplastic.
Driver	Plastic that can not be reheated or remoulded.
Mechanism	Anything that can cause harm or danger.
Kinetic energy	Is the force which is faced by the vehicle as it moves through the air.
Revolution	Is the push that lets something move up.
Tolerance	The difference between the maximum and minimum dimensions of error.
Marking Out	Measure in mm and mark using a pencil and steel ruler for accuracy.

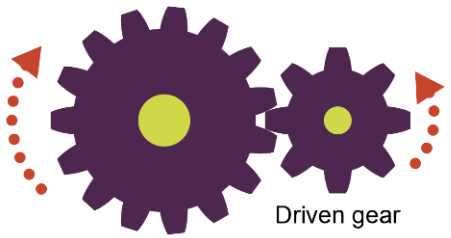
1st Order



2nd Order



3rd Order



Measuring

Materials are measured in different ways depending if they are small or large quantities. Here are some of our most used measurements and their abbreviation. Centimetres (cm) Millimetres (mm)
Angles are measured in Degrees, 90°

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Most used measurements
Centimetre = 10mm
cm x 10 = mm
Right Angles = 90°

$$MA = \frac{\text{Load}}{\text{Effort}} = \frac{300N}{100N} = \frac{3}{1}$$

Mechanisms in life and industry

Scan the QR codes to watch a video about Mechanisms in life and industry. .

Product Analysis.

A product analysis is where we look at a product in greater detail and break it down to help us understand certain aspects of the product to help further generate design ideas.

Aesthetics: What does it look like?

Client: Who is it for?

Environment: How does it impact?

Safety: How safe is it?

Size: How big is it?

Function: What is it used for?

Material: What is it made from?

Design specification: is what your product must have in order to meet the clients needs

Design brief: outlines what you are going to make.

Year 9 Drama– Term 1A: Bertolt Brecht – Epic Theatre

WHO
Bertolt Brecht was born in Germany in 1898 and died at the age of 58 in 1956. He is one of the most famous people in the world of theatre. He was a playwright, a director, an actor and developed many ideas and theories about theatre and acting which means he is considered to be a theatre practitioner. His plays are still performed around the world and his theories are still used in the performances of other plays.

WHERE AND WHEN
After serving as a medic in the First World War and appalled by the effects of the war, he went first to Munich and then to Berlin in pursuit of a career in the theatre. That period of his life came to an end in 1933 when the Nazis came to power in Germany. Brecht fled and during this period the Nazis removed his citizenship, so he was a stateless citizen. By the time of his death in 1956, Brecht had established the **Berliner Ensemble** and was regarded as one of the greatest theatrical practitioners.

WHAT
Brecht made many changes to the theatre of his day. He disagreed with the fact that an audience should be swept along with the emotion of a production. Before Brecht, the theatre of the day would use realistic story lines and high emotion, it would expect the audience to believe in the characters and the situations.
Brecht felt that the theatre should be something that made the audience feel more than simple emotion –he wanted it to make the audience **think** or **learn** something and to **make a change for the better** as a result.

THE V EFFECT

Songs–to remind the audience that they are watching a performance and to change the tone or atmosphere.
Spass–fun –making the audience laugh and then making them question why they are finding serious things funny.
Design–The audience were reminded that they were in a theatre watching a performance as the house lights were left on, all of the set was visible from the start and the actors did all of the set changes. Costumes were also changed on stage and the actors played the instruments used for the songs on stage.
Placards–Signs were held up to tell the audience the title of the scene and even what was going to happen in them, this was to take away suspense and emotion and allow the audience to think about the scene instead.
Direct address –The actors speak directly to the audience, sometimes in the form of questions, this reminds the audience that what they are seeing isn't real and forces them to think about what they are watching. This is called **'breaking the fourth wall'**.
Multi role-play –The actors play more than one part in the performance, changing characters in front of the audience's eyes and reminding the audience that they are actors and not the characters. This technique also stops the audience from becoming too emotionally involved with the characters.
Representational costume –The actors would simply put on one item of clothing, or an accessory such as a hat or glasses to represent that they were a particular character –they didn't try to 'become' the character.

Year 9 Food – Term 1A: Food safety/hygiene and carbohydrates

Food hygiene and safety

FATTOM is a mnemonic device that is used to describe the six aspects that contribute to the growth of foodborne pathogens.

Food - Microorganisms need a constant source of nutrients to survive. Moist, protein-rich food are potentially hazardous (meat, seafood, eggs, dairy, cooked rice).
Acidity - Bacteria grow best in a slightly acidic environment (pH 4.6 - 7.5).
Time - Food should not be in the temperature danger zone for more than two hours.
Temperature - Bacteria grow best between 5°C to 63°C the 'temperature danger zone'.
Oxygen - Almost all foodborne pathogens are aerobic, that is, requiring oxygen to survive and grow.
Moisture - Water is essential to bacterial growth. Microorganisms grow faster in foods that are moist and not dry (meat, dairy)

Scan the QR codes to watch a video about food safety and complete your homework quiz.

SCAN TO WATCH

SCAN FOR QUIZ

Key vocabulary	Definition
Aeration	Air is trapped in a mixture. Fat and sugar creamed together traps air.
Amino acids	The basic components of proteins, each has a specific function in the body.
Blind baking	Baking a pastry case without the filling to ensure it is properly baked.
Carbohydrate	A macronutrient that supplies energy and essential dietary fibre.
Fat	A macronutrient which supplies a concentrated source of energy (1g = 9kcals)
Obesity	Being very overweight. A body mass index of over 30 is classed as obese.
Protein	A macronutrient made up of building blocks called amino acids.
Roux	A mixture of melted fat and flour, which is used as a base of a sauce
Shortening	When fats give biscuits, shortbread and pastry a crumbly texture.
Symptom	Sign of an illness, e.g., food poisoning symptoms of diarrhoea/vomiting/nausea

Cooking term - Gelatinisation

Starch has a very useful property which is to thicken mixtures.
The process in which moist heat is applied to starch grains, which swell, increase in size and then break open. This releases amylose which thickens the mixture around boiling point.
Stirring is needed to prevent lumps forming.
Starches can be made to make sauces, custards, gravies, batters and glazes.

SCAN TO WATCH

Scan the QR codes to watch a video about gelatinisation and complete your homework quiz.

SCAN FOR QUIZ

Carbohydrates

Exist in many forms; they can be divided into three groups: sugars, starches and dietary fibre. Sugars are the simplest form of carbohydrate, starches and dietary fibre are more complex.
Examples of starchy carbohydrates are below.

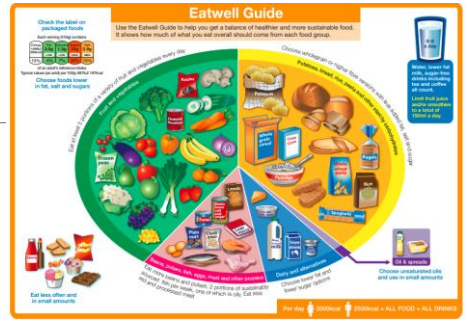
Scan the QR code to watch a video about this section of the Eatwell guide.

SCAN TO WATCH

Cooking term - Baking blind

A pastry base is baked prior to the filling being added.
· Pastry is rolled out.
· The baking tin is lined with pastry.
· Baking parchment placed on top for the baking beans to sit on.
· Even layer of baking beans added to prevent the pastry rising.
· Pastry is baked to seal before adding the filling.

Baking beans are ceramic so get very hot.
Baking blind prevents a soggy base.



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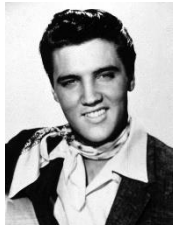
Year 9 Music – Term 1A: Decades – Keywords

50s – Rock and Roll	60s – The British Invasion	70s - Disco	80s
Music in the 1950s was dominated by the birth of **rock and roll**. Rock and roll was a powerful new form of music that combined elements of **rhythm and blues (R&B), pop, blues, and hillbilly** music to create a sound that truly shook America. 	On February 7 the **Beatles** arrived in New York for their inaugural U.S. visit, and two days later played on The Ed Sullivan Show to hysterical response and record viewership, thereby effecting a cataclysmic cultural shift and triggering a musical movement that would come to be known as the **British Invasion.** 	Disco is a genre of dance music and a subculture that emerged in the 1970s from the United States' urban nightlife scene. Its sound is typified by four-on-the-floor **beats, syncopated basslines, string sections, horns, electric piano, synthesizers, and electric rhythm guitars.** 	Synth-pop (also known as electropop or technopop) is a music genre that uses the synthesizer as the dominant musical instrument. What does synth pop sound like? Early synth-pop has been described as "**eerie, sterile, and vaguely menacing", using droning electronics** with little change in inflection. Common lyrical themes of synth-pop songs were **isolation, urban anomie, and feelings of being emotionally cold and hollow.**

90s - Britpop

Britpop, movement of British rock bands in the 1990s that drew consciously on the tradition of **melodic, guitar-based British pop music** established by the Beatles. Like nearly all musical youth trends, Britpop was about **songs, guitars, jackets, and attitudes**—though not necessarily in that order. Lyrics written by Britpop bands were made to be relevant to young people in Britain, and the **songs released during this movement embraced and emphasised 'Britishness'.** Britpop sparked a period of greater pride in the culture of the United Kingdom, in a cultural movement known as **Cool Britannia**.

Year 9 Physical Education – Term 1A

Practical Sports

Netball Positions – Find out what the role of each is.

Goal Shooter	Goal Defence
Goal Attack	Goal Keeper
Wing Attack	
Centre	
Wing Defence	

Badminton Shots – When would you use each one?

Overhead Clear
Underarm Clear
Dropshot
Smash

Football – Find out what these terms mean:

Low-block
High-block
Third-person run

Gymnastics – Find videos to watch the following vaults:

Straddle vault
Through vault
Head spring
Hand spring

Skeletal System: Joints

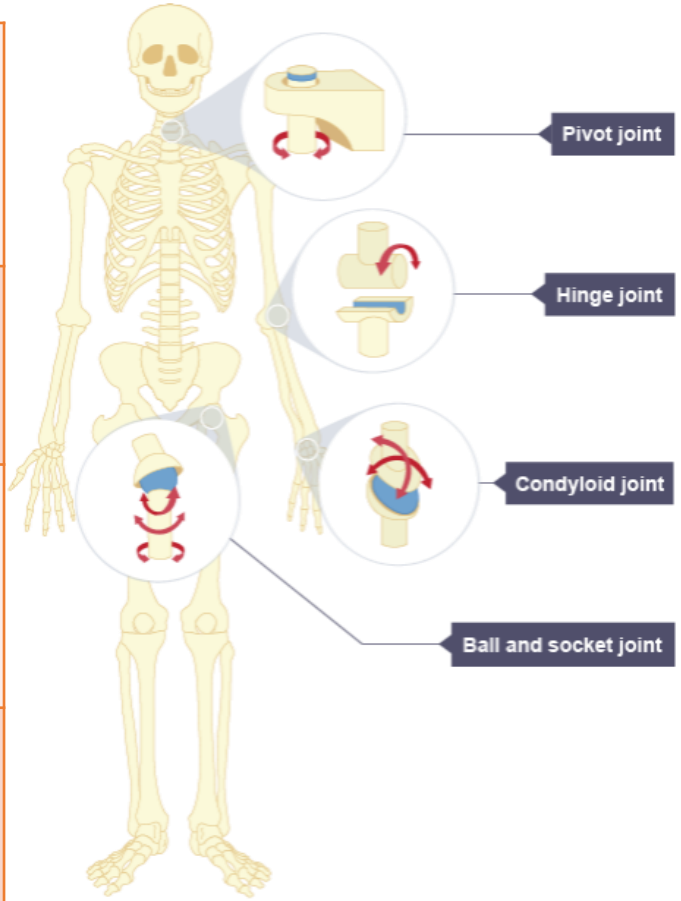
Synovial joints (freely movable joints) allow us the free movement to perform skills and techniques during physical activity.

Hinge - these can be found in the elbow, knee and ankle. Hinge joints are like the hinges on a door, and allow you to move the elbow and knee forwards and backwards.

Ball and socket - these types of joint can be found at the shoulder and hip and allow movement in almost every direction.

Pivot - this joint can be found in the neck between the top two vertebrae. It allows only rotational movement such as moving your head from side to side as if you were saying 'no'.

Condyloid - this type of joint is found at the wrist. It allows you to flex and extend the joint, and move it from side to side.



Year 9 Spanish – Term 1a: Mi familia y las relaciones

Los miembros de mi familia		Opiniones		Adjectivos	
El padre	Dad	En mi opinión	In my opinion	Contento/a	Happy
La madre	Mum	Creo que	I believe that	buen sentido del humor	Good sense of humour
El hermano	Brother	Pienso que	I think that	Divertido /a	Fun
La hermana	Sister	Me parece	It seems to me that	generoso /a	Generous
El abuelo	Grandad	A mi ver	From my way of seeing it	egoísta	Selfish
La abuela	Grandma	(no) Estoy de acuerdo con la idea de que…	I agree with the idea that…	Travieso /a	Naughty
El tío	Uncle	Es verdad que…	Its true	alegre	Cheerful
La tía	Auntie	Es la culpa de…	Its the fault of	Honrado /a	Honourable
El primo	Cousin (boy)	Por un lado… por otro lado…	One the one hand	Especial	Special
La prima	Cousin (girl)			cariñoso /a	Caring
El hijo	Son	Me llevo bien con	I get on well with	Abierto /a	Open
La hija	Daughter	Discuto con	I argue with	Triste	Sad
El padrastro	Stepdad	Peleo con	I fight with	comprensivo /a	Understanding
La madrastra	Step mum	Me ayuda	He / she helps me	tradicional	Traditional
El hermanastro	Step brother	Me apoya	He / she supports me	Sincero /a	Sincere
La hermanastra	Step sister	Me escucha	He / she listens to me	feliz	Happy
Los padres	Parents	(No)me critica	He / she does (not) criticises me	Hablador /a	Chatty
Los hermanos	Siblings			Serio /a	Serious
Los abuelos	Grandparents	**Adverbos de frecuencia**		Amable	Likeable
Los tios	Uncles and aunties	Nunca	Never	trabajador /a	Hard working
Los primos	Cousins	Siempre	Always	Formal	Formal
Los hijos	Children	Muchas veces	Many times	Perezoso /a	Lazy
		A veces	Sometimes	decepcionante	Deceiving
Mi	My (singular)	A menudo	Often	Activo / a	Active
Mis	My (plural)	Generalmente	Generally	parecido /a similar	Similar
		Con frecuencia	Frequently	orgulloso /a	proud
Se llama	Is called	De vez en cuando	From time to time		
Se llaman	Are called	Raramente	Rarely		
Este es	This is (masculine)	Una vez a la semana	Once a week		
Esta es	This is (feminine)	Dos veces al mes	Twice a month		
		mucho	A lot		

Notes

Notes

Notes

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