Year 7

Knowledge Organiser

Term 1: 2019

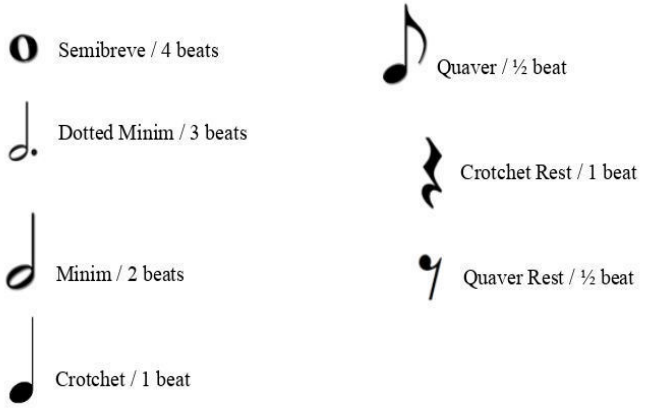
GREENSHAW LEARNING TRUST

Elements of Music

Keywords

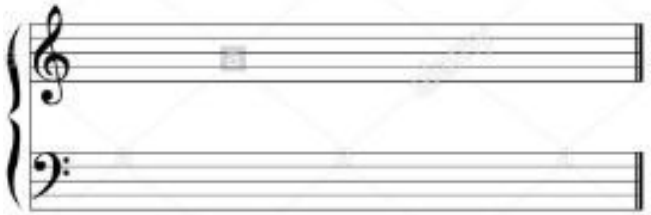
Pitch- highness or lowness in tone
Duration- how long notes last for
Dynamics- the variation in volume of the sound
Timbre- describes the tone or unique quality of the sound
Tempo- the speed of the sound; fast or slow
Rhythm- a pattern of notes which can be made up of notes of different lengths (duration)
Pulse- continual heart beat in the music
Chord- a group of notes which are played together at the same time
Composition- the created piece of music
Composing- the process of creating a piece of music

Note Lengths & Rests

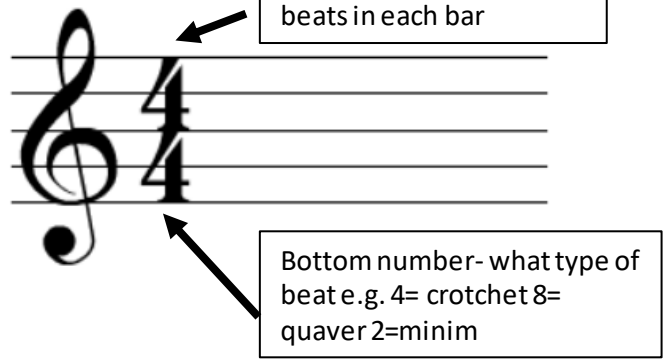


The Stave

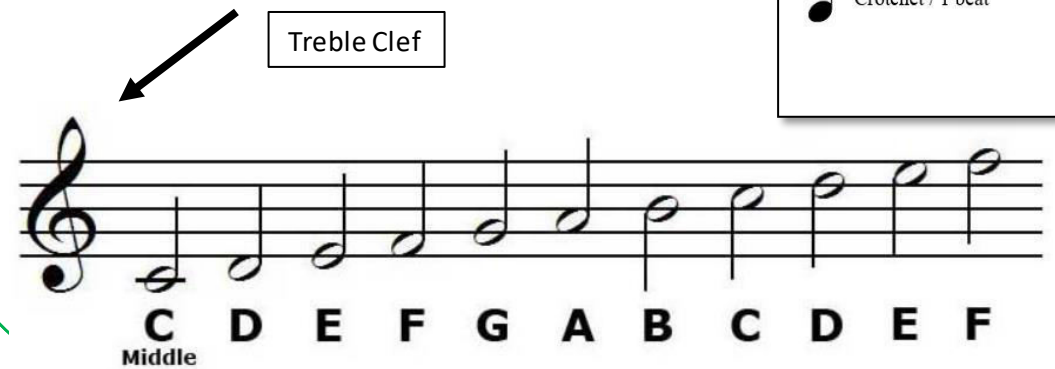
Stave- the 5 lines, 4 spaces where music is written:



Time Signature – tells you how many beats there are in each bar



The Stave Notes



GREENSHAW LEARNING TRUST

Year 7 Knowledge Organiser- Topic 1
Map skills and Ecosystems

The continents and oceans of the world.

Make sure you are able to label and name these.

KPI 1- Continents and Oceans

A continent is a large landmass
A country is a nation with boundaries
An ocean is a large expanse of water
There are 7 continents in the world
There are 5 oceans
There are 196 countries.

KPI 3- Atlas Skills

Using an Atlas is easy… as long as your follow the rules.

1. Look up the place using the Index at the back of the book.
2. The number in bold is the page number and the letter and number after it is the grid reference.
3. Turn to the page and look up the grid reference.
4. Somewhere in that box you will find your place.

KPI 3- Grid References

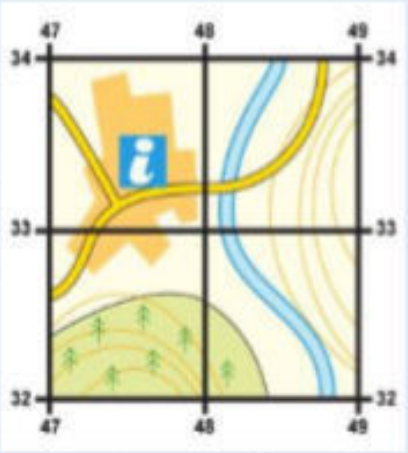
FOUR AND SIX FIGURE GRID REFERENCES

Maps have grid lines on them—we use them to pinpoint locations by using grid reference. A four-figure grid reference is a handy way of identifying any square on a map, six-figure grid references are best for giving exact locations. Grid references are easy, as long as you remember that you always go along the corridor before you go up the stairs.

Step 1: Go along the bottom of the map until you reach the easting which forms

Step 2: Then, go up the side of the map until you reach the northing that forms the bottom side of the square your trying to locate e.g. 33

Step 3: Now put your two answers together e.g. 47 33. There is no need to add brackets, commas, dashes etc.



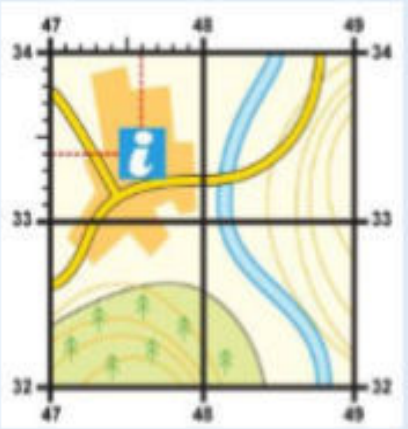
SIX FIGURE GRID REFERENCES…

To pinpoint an exact place on a map, such as a church or farm building, then you will need to use a six-figure grid reference.

Step 1: Find the four-figure reference.

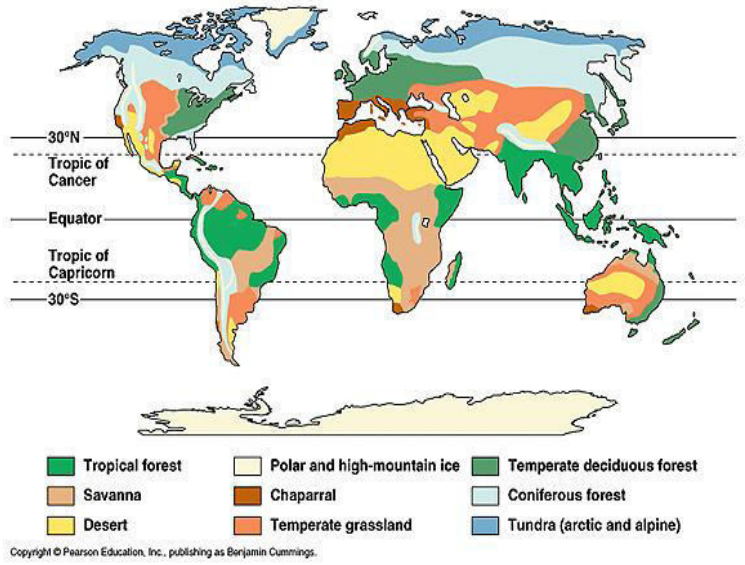
Step 2: Imagine this square is divided up into 100 tiny squares, 10 along the bottom and 10 up the side.

Step 3: Still remembering to go along the corridor and then up the stairs, estimate how far across and then up the square the feature is. 476 334



Key terms

Food chains- show simple relationships between different organisms (what eats what)
Food web -shows more complex interrelationships between organisms (more than one food chain together).
Producer- plants which create their own food using the suns energy
Consumer- are species which eat other species
Herbivore - an animal that feeds on plants
Omnivore- feeds on both plants and animals
Carnivore- eats other animals
Decomposer- break down the remains of dead plants and animals to return nutrients back in to the soil



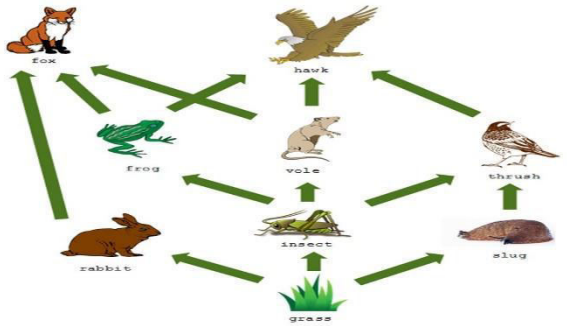
KPI 4- The Worlds biomes
A Biome is an ecosystem that covers a really large area.
An ecosystem is the interaction between living and non-living things

Tropical Rainforest – found along the equator between the tropics, where it is hot and wet all year round.
Polar- found around the north and south poles, where the average temperature of less than 10 °C.
Temperate Deciduous Forest – found mainly in the mid latitudes where there are 4 distinct seasons.
Savannah- are found to the north and south of tropical rainforest biomes and have two distinct seasons - a wet season and a dry season.

KPI 5- Understanding climate graphs
Climate Graphs: - Climate graphs show the temperature and the rainfall of a country over one year. - The average temperature and rainfall are both plotted on the graph. The temperature is shown with a line and the rainfall is shown with bars. - This graphs can be used to describe a locations climate.

KPI 6- Food Chains and Webs

Any changes to the one step of a food web or chain can affect the whole ecosystem. For example if a producer was removed then there would be a shortage of food for the consumers.



KPI 7- living in cold environments
Animal adaptions
Polar bears- white fur to camouflage, excellent swimmers, sense of smell which can travel 20 miles.
Arctic Fox- follow polar bears to find food, bundle together for warmth
Seal- thick blubber to keep in heat
Krill- survive through long periods of starvation (up to 200 days). They have the most developed eyes of any animals in the world, which help them to see their food in the dark. Their organs glow in the dark so that they can see each other

KPI 8- threats to cold environments
Threats
Over fishing- loss of krill supplies affect other animals up the food chain
Tourism- pollutants from ships and aircraft, the possibility of oil spills and the effects of lots of people on the wildlife
Loss of wildlife (biodiversity)- melting ice sheets making hunting difficulty for some animals e.g. polar bears
Oil spills- An oil spill is the worst environmental disaster for cold environments. The damage to the rivers and other natural ecosystems from oil spills is long lasting. Trees are killed, risk of fire, death of river wildlife, habitats on land near the river will become polluted and the vegetation may never recover.

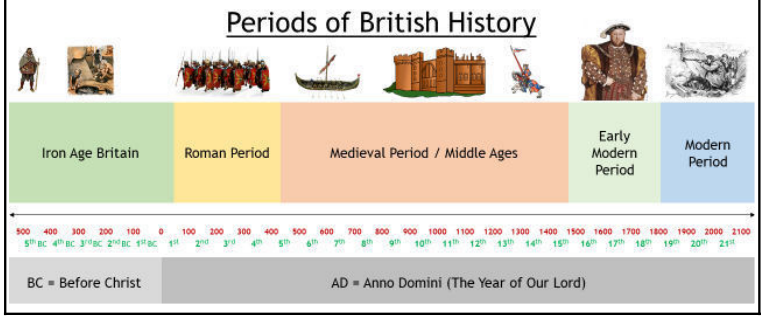
KPI9- managing cold environments
International Agreements- countries come together to protect the environment e.g. banning Whaling, reducing CO_2
Conservation Groups- e.g. Greenpeace, put pressure on Governments to protect the environment
Use of technology- providing environmentally friendly solutions e.g. insulating the oil pipeline to prevent melting the permafrost.

Y7 History Knowledge Organiser: Long Term changes in British History

KPI 1 Chronological Understanding

Historians divide the past into years, **centuries**, and periods to make it easier to understand.

Years after the birth of Jesus are AD (Anno Domini). Years before the birth of Jesus are BC (Before Christ).



What century is that date in?

EXAMPLE: What century is 1451 in?

14 centuries have passed

And we are 51 years into the next century

So, 1451 is in the 15th Century

Or, count the HUNDREDS in the date and PLUS ONE to get the century, so:

HUNDREDS	TENS	ONES
14	5	1

14 + 1 = 15

So, 1451 is in the 15th Century

HUNDREDS	TENS	ONES
4	2	2

4 + 1 = 5

So, 422 is in the 5th Century

KPI 2 Population Change

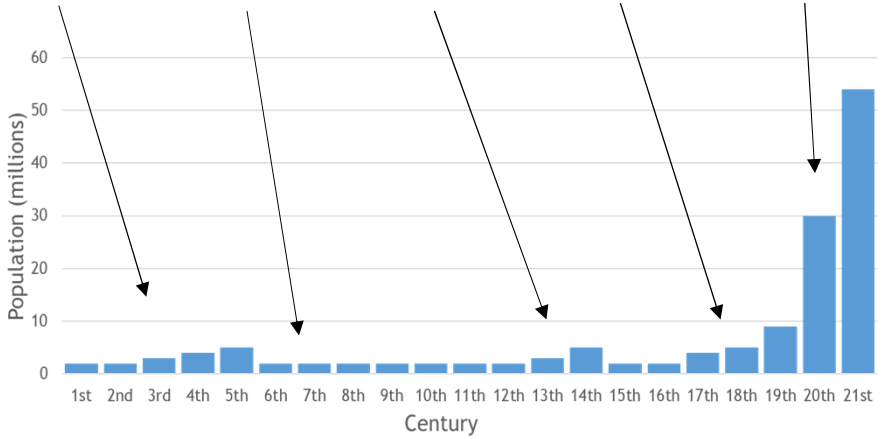
The population of the UK increased gradually from the 1st century to the 5th century.

A population decrease in the 6th century led to a period of **stagnation** that lasted until the 12th century.

Population increased in the 13th and 14th century then fell by the 15th century and remained low.

The population began to increase gradually in the 17th and 18th centuries.

Starting in the 19th Century, the population increased rapidly in the 20th and 21st centuries.



Reasons for population decrease / stagnation in the Middle Ages

- In 1348, the **Black Death** killed 50% of the population
- Changes in the **climate** meant it was harder to grow food
- Shortages of food led to **malnutrition** and **starvation**

Reasons for population increase in Modern Period

- Improvements in technology meant more food could be grown
- New medical knowledge led to increased **life expectancy**
- More hygienic living conditions reduced deadly diseases

KPI 3 Technological Change

Roman	200	**Plough**	**What is it?** A plough turns over a layer of soil to bring **nutrients** to the surface, increasing the amount of crops grown
Medieval	1100	**Stone Castles**	**What is it?** A castle built with tall stone walls, usually including narrow windows for archers and a moat for defence
Medieval	1340	**Cannon**	**What is it?** A cannon is a heavy gun that uses explosive powder to fire heavy metal objects at the enemy
Medieval	1439	**Printing Press**	**What is it?** Carved wooden blocks covered in ink allow the same text to be printed over and over again
Early Modern	1701	**Seed Drill**	**What is it?** Seed drills place seeds in the soil in exactly the right position for them to grow.
Early Modern	1712	**Steam Engine**	**What is it?** Steam engines produce power from the pressure of steam, usually heated by a coal fire.
Early Modern	1770	**Flushing Toilet**	**What is it?** The flushing toilet allowed people to get rid of waste straight to the sewer using flushing water
Early Modern	1796	**Vaccination**	**What is it?** A vaccination is a weak form of a disease that stops a patient getting the stronger, potentially deadly disease
Modern	1847	**Anaesthetic**	**What is it?** Anaesthetic is a substance that numbs pain during operations. Sometimes the patient is put to sleep.
Modern	1850	**Rifle**	**What is it?** Rifles are handheld guns with a spiralled barrel that spins the bullet, making it far more accurate
Modern	1860	**Telephone**	**What is it?** A telephone uses electronic signals to transport the human voice over huge distances
Modern	1880	**Electricity**	**What is it?** Electricity is a form of power produced from electric charge. It can be easily transported in batteries or wires
Modern	1903	**Aeroplane**	**What is it?** Aeroplanes use wings and thrust from a propeller or jet engine to fly. They can travel long distances quickly.
Modern	1942	**Antibiotics**	**What is it?** Antibiotics, such as **Penicillin**, are medicines that kill bacteria, stopping infections
Modern	1945	**Nuclear Weapons**	**What is it?** A nuclear missile uses nuclear fission to create enough power to destroy an entire city
Modern	1990	**Internet**	**What is it?** The internet is a worldwide system of connected computers, allowing sharing of huge amounts of information

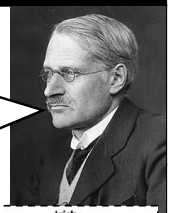
Y7 History Knowledge Organiser: Long Term changes in British History

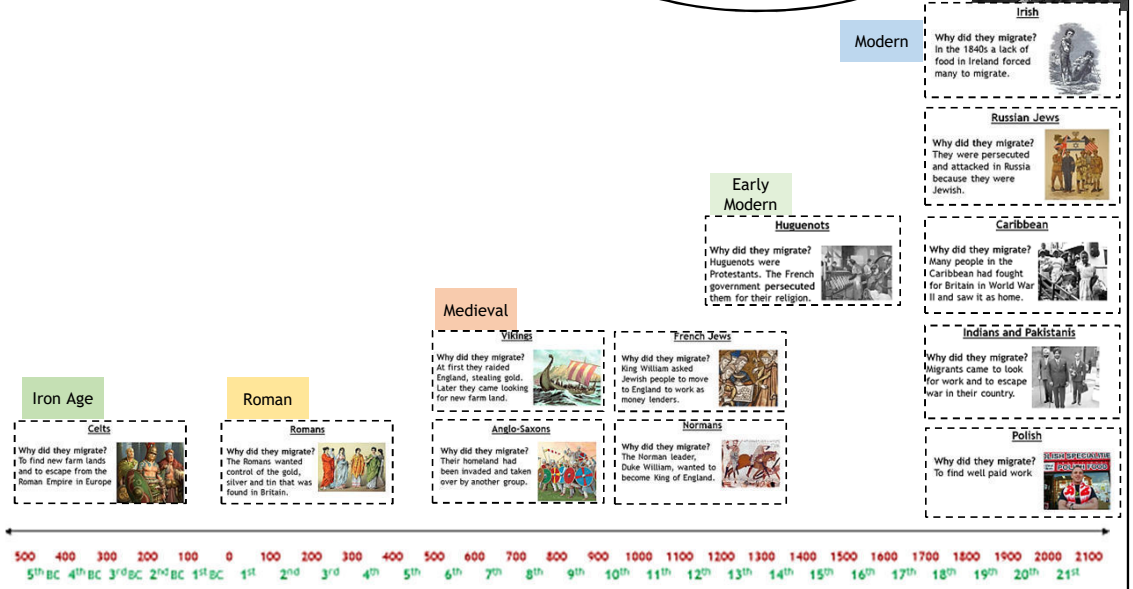
KPI 4 Migration

For all of recorded history, Britain has been shaped by **migration** from Europe and the rest of the world.

In 1926, the historian G.M. Trevelyan commented that:

Britain has always owed her **fortunes** to the **sea**.
Her **destiny** was always decided by the **boats** which floated to her **shore**.





Why have people migrated to Britain?

PULL FACTORS = factors that make people want to move to a country

Better paid jobs **Natural resources**

PUSH FACTORS = factors that make people want to leave a country

War **Persecution**

KPI 5 Living Conditions

IRON AGE

- Buildings were made of wood and straw
- Houses contained just one room where the whole family worked and slept
- There were few opportunities for entertainment

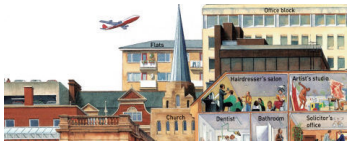
MEDIEVAL

- Buildings were still made of wood and straw, although some were built of stone
- Houses still contained just one room, used for many purposes

19th CENTURY

- Most buildings were built with brick
- Poor families lived in one room whilst the rich had bigger houses
- Factories polluted the atmosphere

20th CENTURY



- Buildings were made of brick, stone, and glass
- There were many opportunities for entertainment
- Streets were clean, although **overcrowding** remained a problem

VOCABULARY

Black Death	A disease carried by fleas and rats that arrived in England in 1348
Century	100 years
Climate	Changes in the weather over a long period of time
Destiny	Future
Life Expectancy	How long people can expect to live for
Migration	Moving from one place to another, permanently
Natural Resources	Gold, oil, tin, coal, etc
Nutrients	Chemicals in soil that help plants grow
Overcrowding	Too many people
Penicillin	An antibiotic that stops infection
Persecution	Treating people badly
Population	The people who live in a country
Stagnation	When something stays the same for a long time

Y7 History Knowledge Organiser: The Norman Conquest

KPI 1 Emma of Normandy

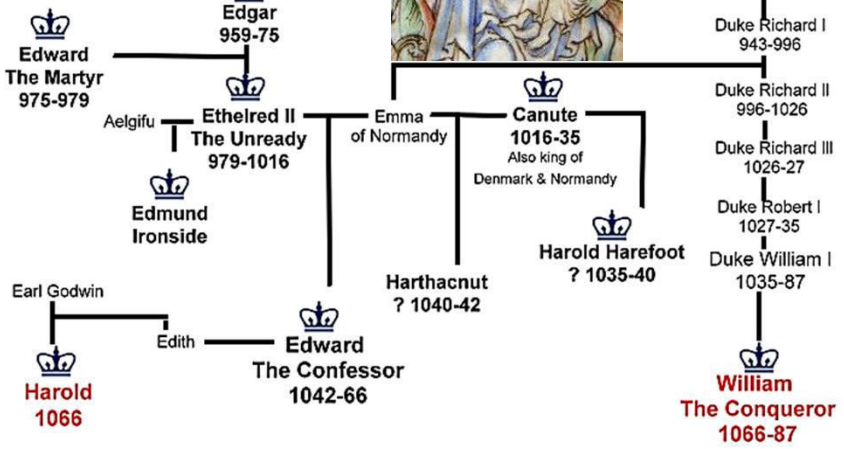
Emma of Normandy was queen of England from 1002 to 1035.

She linked together the three **peoples** trying to control England in the 11th Century.

Norman Connections
Emma was born a **Norman**. She was the daughter of Richard I, Duke of **Normandy**. William the Conqueror was Emma's great-nephew.

Anglo-Saxon Connections
In 1002 Emma married the English King, Aethelred. He was an **Anglo-Saxon** and Emma became Queen of England. Their son, Edward, would later become King.

Viking Connections
In 1016, the **Viking** Cnut invaded England and Aethelred died. Cnut became King of England and decided to marry Emma. Their son, Harthacnut, would also later become King.



KPI 2 Contenders for the throne

In 1066, Emma's son, King Edward the Confessor, died. He had no **heir** and three main **contenders** to the throne emerged:

Name		Strengths	Weaknesses
Harold Godwinson (Anglo Saxon)		• A nobleman with the support of English **earls** • Harold's wife – **Edith of Wessex** – was Edward's sister • Edward had apparently promised him the throne as he lay dying • Had been crowned king already after Edward had died	• Harold had **rebelled** against Edward • No proof that he had promised the throne
Harald Hardrada (Viking)		• King of **Norway** for 20 years • A feared warrior who had won battles across Europe • Claimed that **Emma's** son **Harthacnut** had promised his family the English throne	• Very weak claim to the throne. • Didn't speak English. • Mocked for his nickname: 'William the Bastard'
William, Duke of Normandy (Norman)		• Related to Edward through **Emma** • His wife, **Matilda of Flanders**, was related to Edward • Edward had apparently promised him the throne in 1051 and Harold had agreed • Successful leader in battle and had been Duke of **Normandy** for 30 years	• No proof that he was promised the throne • Didn't speak English

KPI 3 The Build up to Hastings

The Battle of Stamford Bridge

In September 1066, **Harald Hardrada** landed an army of 8,000 **Vikings** in the North of England. **Harold Godwinson** and his army marched 180 miles in 4 days to meet them.

Godwinson defeated the **Vikings** at the **Battle of Stamford Bridge**. **Hardrada** was killed. Almost as soon as the battle was over, **Harold** learnt that **William** had landed and he raced his exhausted army back to the south coast.

Harold's Anglo-Saxon Army


5,500 **fyrd**, untrained farmers fighting with wooden shields and farm tools


3,000 heavily-armoured **housecarls** armed with battle axes.

William's Norman Army


3,000 well trained **infantry** with metal armour and swords


2,000 **cavalry** on large warhorses


800 **archers** who could fire over 100 metres

KPI 4 The Battle of Hastings

1. Harold took a strong position at the top of **Senlac hill**. **Fyrd** and **housecarls** linked shields to form a **shield wall**.

2. William placed his army in three rows: **archers** in front, followed by **infantry**, and **cavalry** protected behind

3. William ordered attacks from his **archers** and **cavalry** but they failed because of the hill and **shield wall**.

4. After a break for lunch, William tried a new **strategy**. He attacked with his **cavalry** who then **feigned** to retreat. Some English soldiers followed the **cavalry**, breaking the shield wall.

5. With the shield wall broken, the Norman **cavalry** could charge at the **fyrd** .

6. **Harold** was shot in the eye and died. Without their leader, the English army was easily defeated.

7. **William** marched to London and was crowned king on Christmas Day 1066.

There were several reasons why William was able to win:


Harold's men were exhausted from their march to Stamford Bridge and back. They were unable to fight effectively


William's **strategy** to **feign** a retreat broke the shield wall and allowed the **cavalry** to charge at the **fyrd**


The Norman soldiers were better equipped than the Anglo-Saxon **fyrd**. Norman **archers** could also attack over a long distance

Y7 History Knowledge Organiser: The Norman Conquest

KPI 5 Securing Power

William's wife, **Matilda of Flanders**, played a crucial role in securing Norman power.

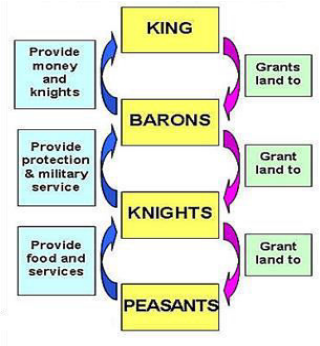
In particular, Matilda:

Ruled **Normandy** in William's absence, making sure there were no rebellions

This allowed William to concentrate on securing control of his new territory: England

Matilda had 10 children, making sure William would have an **heir** to continue Norman control

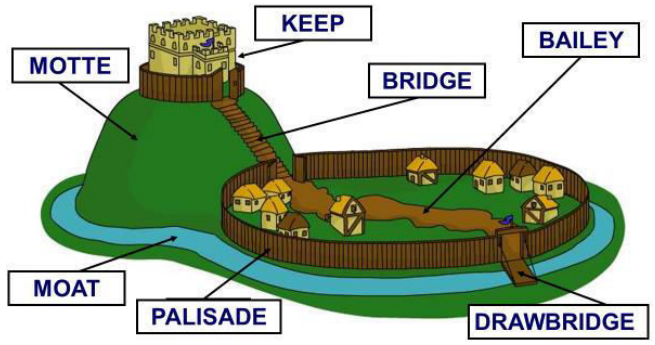
William took land from **Anglo-Saxons earls** and gave it out to loyal Norman **barons**. The **Feudal System** allowed him to keep control:



This **hierarchy** helped William reward loyalty by granting land. He relied on his barons to control the country.

KPI 7 Castles

The Normans built Motte and Bailey castles to control the Anglo-Saxon population:



Advantages

Could be built quickly – in less than 6 days!

Castles were visible for miles and provided a **psychological** reminder to the Anglo-Saxons that the Normans were in charge

Disadvantages

Wooden structures could easily be burned down or would rot over time

Stone keeps were safer and lasted longer but were more expensive and took a long time to build

KPI 6 The Harrying of the North

The Anglo-Saxons did not want to be controlled by the Normans. There were several **rebellions** against William's rule.

Edwin and Morcar's Rebellion

William allowed **Edwin** and **Morcar**, two Anglo-Saxon **earls**, to keep their lands in **Mercia** and **Northumbria** if they agreed to support him as king.

However, when **Edwin** and **Morcar rebelled**, William tried to put a **Norman baron** in charge of **Northumbria**. The **baron** was killed and the rebellion spread.

William was forced to march north. He built **Motte and Bailey** castles to control the rebellion.

The Harrying of the North

In 1069, William punished the North harshly to **deter** future **rebellions**. He:

Destroyed farms and villages, forcing Anglo-Saxons to flee

Burned food stores and killed animals, leading to **starvation** and **cannibalism**

Ploughed salt into the fields, meaning that crops could not be grown

VOCABULARY

11th Century	The 100 years between 1000 and 1099
Archers	Soldiers who fire arrows at the enemy from range
Anglo-Saxons	A people from Germany who settled in England
Barons	Wealthy landowners who control an army
Cannibalism	Eating humans
Cavalry	Soldiers who ride on horseback
Claim to the throne	A reason why someone should be King
Contenders	Challengers
Deter	Use a harsh penalty to stop someone doing something
Earls	Anglo-Saxon noblemen
Edwin	Anglo-Saxon earl of Mercia
Feudal System	William's system of giving out land
Feigned	Pretended
Harrying	Destroying
Heir	Someone to become king or queen after you, usually a son
Hierarchy	A system with the most important people at the top
Infantry	Soldiers who fight on foot
Knights	Loyal soldiers who fight for barons and the king
Matilda of Flanders	William's wife
Mercia	Part of central England
Military	The army
Morcar	Anglo-Saxon earl of Northumbria
Motte and Bailey	A wooden castle used by the Normans
Nobleman	A rich landowner
Normans	A people from northern France
Normandy	Part of northern France
Northumbria	Part of northern England
Peasants	Poor farmers who worked the fields
People	An ethnic group or tribe
Psychological	In the mind
Rebel	To fight back against the King
Rebellion / Revolt	When people fight back against the King
Vikings	A people from Scandinavia
Scandinavia	A northern part of Europe including Sweden and Norway
Starvation	Not having enough food
Shield Wall	Battle tactic involving linking shields together
Strategy	Plan

Y7 History Knowledge Organiser: Medieval Monarchs

Timeline

1066	William I becomes king
1120	White Ship Disaster
1153	Treaty of Winchester
1183	Murder of Thomas Becket
1202	French invasion of Normandy
1215	King John signs Magna Carta
1348	The Black Death
1381	The Peasants Revolt

KPI 2 Royal Touch

Appointed by God

Medieval **monarchs** believed that they had been appointed by God.

People in the Middle Ages obeyed the **monarch** because they believed the king or queen was chosen by God to rule over them.

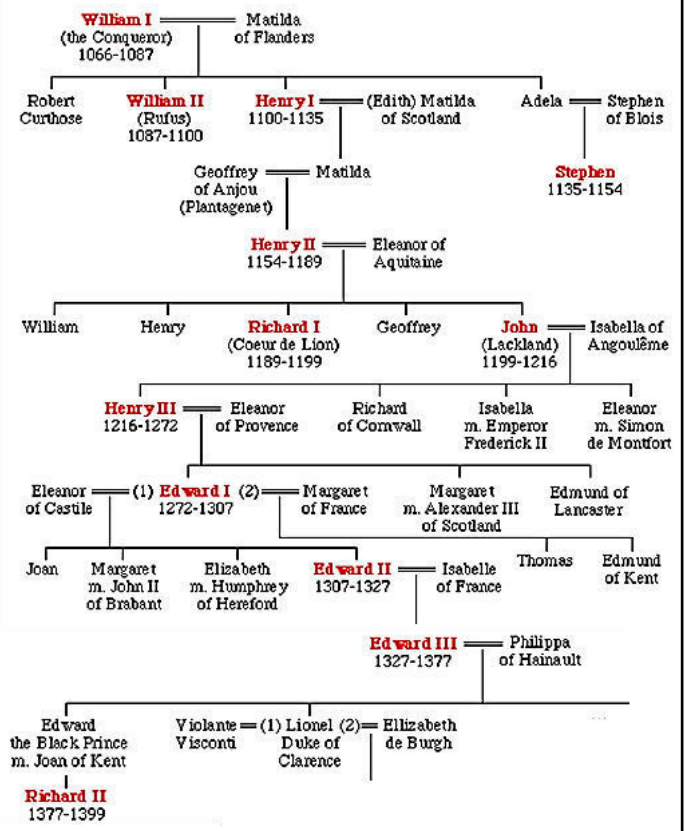
The Royal Touch

This relationship between God and the **monarch** was clear in the Royal Touch.

The Royal Touch was the idea that the monarch's touch could cure a common skin disease called **scrofula**. People believed that monarch's could signal to God to cure the sufferer.

Touch pieces were later used so that the monarch could cure more people.

KPI 1 Medieval Kings



KPI 3 The Anarchy

The White Ship Disaster

In 1120, Henry I's only **legitimate** son - William - died when his ship sunk in the White Ship disaster.

Henry had no other **legitimate** male heirs so he named his daughter - Matilda - as his **heir**.

However, when Henry died, his nephew - Stephen - **seized** the throne. This began **the Anarchy** - a period of chaos in which Matilda and Stephen competed for the throne.

1135 Stephen **seized** the throne

1139 Matilda invaded England

1141 Stephen defeated at the Battle of Lincoln

Matilda rejected by the people of London

1148 Matilda returned to Normandy

1153 **Treaty** of Winchester: Stephen named Henry, Matilda's son, as his **heir**

1154 Stephen died. Henry II king

The Anarchy revealed that the power of medieval monarchs was based on a wide variety of factors:

Monarchs gained **legitimacy** because they **inherited** their power from a previous monarch

Female monarchs were seen as weak because they could not lead an army into battle

Monarchs could gain power and **legitimacy** by showing their military strength by winning battles

Monarchs needed the support of powerful people, such as the **barons** or the **Pope**

Monarchs needed to be popular. Unpopular monarchs could be rejected or face **rebellion**

KPI 4 The Church

Heaven and Hell

People in the Middle Ages believed that heaven and hell were real places.

After death, they believed, angels would decide if you would spend **eternity** in heaven or hell.

Heaven was the kingdom of Jesus. It was reserved for those who had lived a good life.

Hell was the kingdom of the Devil. Sinners were sent here. Living in hell meant an eternity of pain and suffering.

Getting into Heaven

There were several ways to increase your chances of going to heaven and avoiding hell:

Becoming a **nun** or a **monk** and spending life in a nunnery or **monastery**. Nuns and monks dedicated their lives to God, praying eight times a day and serving their community. The rich often gave money to support **monasteries**.

Earning an **indulgence**. These were certificates that forgave sins. They could be bought or earnt by charity work.

Going on **crusade**. Christians and Muslims fought over the holy city of Jerusalem. The **Pope** promised to forgive the sins of crusaders.

Church Hierarchy

The Pope
God's representative on earth. Lived in Rome. Could **excommunicate** kings.

Archbishop of Canterbury
The Pope's representative in England and the most powerful member the Church.

Bishop
The leader of the church in a local area. There were 17 bishops in the Medieval Church, each based at a **cathedral**.

Priest
Each town and villages had a priest to run church services.

KPI 5 The Murder of Thomas Becket

In the Middle Ages, it was unclear whether the King had more power than the Church. This was demonstrated in the story of Thomas Becket:

In 1162, Henry II named his friend Thomas Becket as **Archbishop** of Canterbury.

Henry wanted Becket to force priests to use the **King's Courts**, instead of getting away with light punishments in the **church courts**. He also wanted Becket to help him control the bishops.

When Becket refused to do this, the two men fell out. In a rage, Henry shouted "Will no one rid me of this troublesome priest?". A group of knights overheard him and murdered Becket.

Henry was horrified when he heard of Becket's death and ordered **monks** to whip him to show he was sorry.

Y7 History Knowledge Organiser: Medieval Monarchs

KPI 6 King John

Why was John unpopular?

John was forced to introduce a new land **tax** to repay money that his brother, Richard I, had borrowed to pay for the **Crusades**.

The French invaded English **territory** in Normandy. John tried to win it back but lost the Battle of Bouvines in 1214. He was nicknamed 'Softsword'

John tried to force the Church to accept his choice for **Archbishop**. In response, the Pope **excommunicated** John and stopped church services in England.

Baron's Revolt 1215

In May 1215, 40 English **barons** rebelled against King John.

With support from the French and Scottish, they formed an army and captured London.

John met the rebels at Runnymede, near London and agreed to **Magna Carta**.

Magna Carta

Magna Carta – or 'Great **Charter**' – was a document signed by King John limiting the power of kings. It was the first time that a set of rules had been written for the king.

The most important parts:

Gave all free men the right to **trial by jury**

Limited the amount of **tax** the barons had to pay

Limited the power of the King over the Church

KPI 7 Peasants Revolt

Why did the peasants revolt in 1381?

Most people in England were **peasants**. They grew all the food but owned no wealth and lived in poverty. They were led by John Ball, a priest who questioned this **inequality**.

In 1348, the **Black Death** killed 50% of the population. The few **peasants** who survived could demand higher wages and this led to increasing tension between rich and poor.

In 1381, the government introduced a new tax – the **poll tax**. Everyone paid the same. The peasants thought it was unfair that a rich man should pay the same as them.

What happened in the peasants revolt?

50,000 **rebel peasants** marched to London and camped on Blackheath, south of the River Thames

The 14 year old king, Richard II, took his barge down the Thames to meet the rebels but turned back when he saw the size of their force

In response to this rejection, the **rebels** attacked the city. They broke in to the Tower of London and executed Sir Robert Hales, the king's unpopular advisor, and the Archbishop of Canterbury.

Richard finally met Wat Tyler, the leader of the rebels, at Smithfield. The king agreed to Tyler's demand for a **Magna Carta** for all people – making all men **equal** under the king.

When Tyler was stabbed and the violence seemed ready to start again, Richard calmed the situation by saying "You shall have no other captain but me." The rebels went back home.

Richard went back on his word. He did not make everyone equal under the king. The leaders of the **rebellion** were **executed**

VOCABULARY

Archbishop	Leader of the Church in England
Barons	Powerful landowners
Black Death	A deadly disease killing 50% in 1348
Bishop	Leader of the Church in a local area
Cathedral	A large church
Charter	A contract
Church courts	Places where church men were punished
Crusade	Christian war against Islamic forces
Eternity	Forever
Equal	The same
Excommunicate	Expel from the Church
Executed	Killed
Heir	Someone to become king next
Indulgence	A certificate forgiving sin
Inequality	The gap between rich and poor
Inherited	Passed down from a family member
King's Courts	Places where everyone was punished
Legitimate	Proper and right, accepted by everyone
Legitimacy	Being legitimate
Monarch	A king or queen
Monk	A man who gives up his life to God
Nun	A woman who gives up her life to God
Peasants	Landless poor farmers
Poll Tax	Money that everyone had to pay
Pope	The leader of the Church (lives in Rome)
Rebellion	When ordinary people rise up against govt
Rebels	People who are rebelling
Tax	Money paid to the government
Territory	Land
Trial by jury	When ordinary people decide what happens
Scrofula	A skin disease
Seized	Taken control of
The Anarchy	Period of chaos
Touch Pieces	Coins that had been touched by the King
Treaty	An agreement to stop fighting

Drama Knowledge Organiser – Year 7- 1.1 Introduction to Drama

Learning Aim: To learn basic drama skills and put together a short performance using them

Key Skills	Definition

Techniques	Definition
Still Image	A still image is where a performer or performers use their bodies to create a frozen picture. The picture should communicate a story or emotions without the need for movement or dialogue. It is important to use strong facial expression and body language in a still image.
Mime	Mime is when a performer suggests action, character, or emotion without words, using only gesture, expression, and movement. When using mime, it is important to use precise movements, and exaggerate those movements a little. It is also important that you use your imagination to create the world you want your audience to see, that way you will not make the mistake of walking through walls!
Pitch	Pitch refers to how high or low you are speaking. It is an important vocal technique as it helps a performer to communicate emotion. For example, if a character is shocked, they might exclaim at a high pitch.
Pause	Pause refers to a temporary stop in speech. When performing the use of pause is important as it can help draw attention to an important moment, or express story or emotion, for example that a character is thinking before responding.
Pronunciation	Pronunciation refers to the way in which a word or part of a word is said. It is important to have clear pronunciation so the audience can understand you, but you may wish to pronounce words in a certain way that is relevant to your character.
Placing Emphasis	Placing emphasis is stress given to a word or words when speaking to indicate particular importance. For example, “what on ***earth*** do you think you are doing?”
Projection	Voice projection is the strength of speaking or singing whereby the voice is used loudly and clearly. It is a technique employed to command respect and attention but is also important to ensure a performer can be heard by the audience.

Facial Expression	Using your face to communicate emotion
Body Language	Using your body and movement to communicate attitudes and feelings
Gesture	A movement of part of the body, especially a hand or the head, to express an idea or meaning.
Voice	Speaking in a way that is suitable to your character, and changing your voice to communicate emotion

Year 7 Subject Organiser
Cycle 1: First Aid

Key Terms:

RISK - Risk is about getting into situations where there might be danger. If we take a risk then we are close to danger. The danger might mean getting hurt. This lesson is all about spotting risks and keeping away from danger.

HAZARD - A hazard is an object that presents some kind of danger. E.g. A hole in the ground is a hazard because people can fall into it.

Why is first aid important to learn?

- A recent statistic, released by St John's Ambulance, has revealed that 140'000 people die each year in the UK from incidents where first aid could of possibly saved their lives.
- Thousands of people are dying each year in situations where first aid could have made the difference; this includes nearly 900 people who choke to death, 2'500 who asphyxiate from a blocked airway and 29'000 who die from heart attacks.
- Nearly 9 in 10 teenagers have been confronted with some kind of medical emergency, 4 out of 5 of them say that they would feel safer if they had some basic first aid knowledge to apply to the situation and its circumstances.

Dealing with fractures:

1. Look out for: Swelling / Unnatural range of movement / Immobility. Grating noise or feeling / Deformity. Loss of strength / Shock. Twisting. Shortening or bending of a limb

2. Then: Support the injured limb. Immobilise the affected part.

3. Next: Dial 999 or 112 for an ambulance. Treat for shock

Dealing with burns:

1. Start cooling the burn immediately under running water for at least 10 minutes
2. Dial 999 for an ambulance
3. Make the casualty as comfortable as possible, lie them down
4. Continue to pour lots of cold water over the burn for at least ten minutes or until the pain is relieved
5. Whilst wearing disposable gloves, remove jewellery, watch or clothing from the affected area - unless it is sticking to the skin
6. Cover the burn with clean, non-fluffy material to protect from infection. Cloth, a clean plastic bag or kitchen film all make good dressings

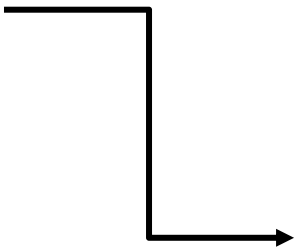
Dealing with cuts:

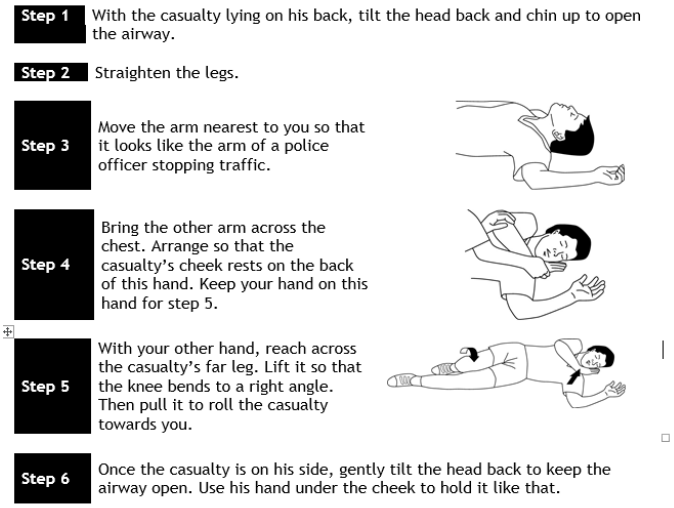
1. Put on disposable gloves.
2. Apply direct pressure to the wound with a pad (e.g. a clean cloth) or fingers until a sterile dressing is available.
3. Raise and support the injured limb. Take particular care if you suspect a bone has been broken.
4. Lay the casualty down to treat for shock.
5. Bandage the pad or dressing firmly to control bleeding, but not so tightly that it stops the circulation to fingers or toes. If bleeding seeps through first bandage, cover with a second bandage. If bleeding continues to seep through bandage, remove it and reapply.
6. Treat for shock.

Dealing with an unconscious casualty

DANGER (Check for danger)
RESPONSE (Check for response – can they hear you?)
AIRWAY (Check airway is free)
BREATHING (Check for breathing – underneath shows you how:

If they are breathing, put the casualty into the recovery position:





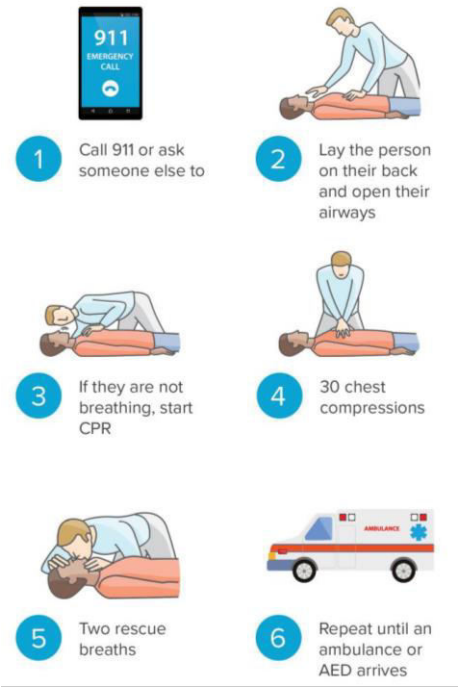
If the person ISNT breathing, perform CPR:

1 Push hard, push fast. Place your hands, one on top of the other, in the middle of the chest. Use your body weight to help you administer compressions that are at least 2 inches deep and delivered at a rate of at least 100 compressions per minute.

2 Deliver rescue breaths. With the person's head tilted back slightly and the chin lifted, pinch the nose shut and place your mouth over the person's mouth to make a complete seal. Blow into the person's mouth to make the chest rise. Deliver two rescue breaths, then continue compressions.

Note: If the chest does not rise with the initial rescue breath, re-tilt the head before delivering the second breath. If the chest doesn't rise with the second breath, the person may be choking. After each subsequent set of 30 chest compressions, and before attempting breaths, look for an object and, if seen, remove it.

3 Continue CPR steps. Keep performing cycles of chest compressions and breathing until the person exhibits signs of life, such as breathing, an AED becomes available, or EMS or a trained medical responder arrives on scene.



Note: End the cycles if the scene becomes unsafe or you cannot continue performing CPR due to exhaustion.

Adolescent changes:

Changes that happen during puberty:

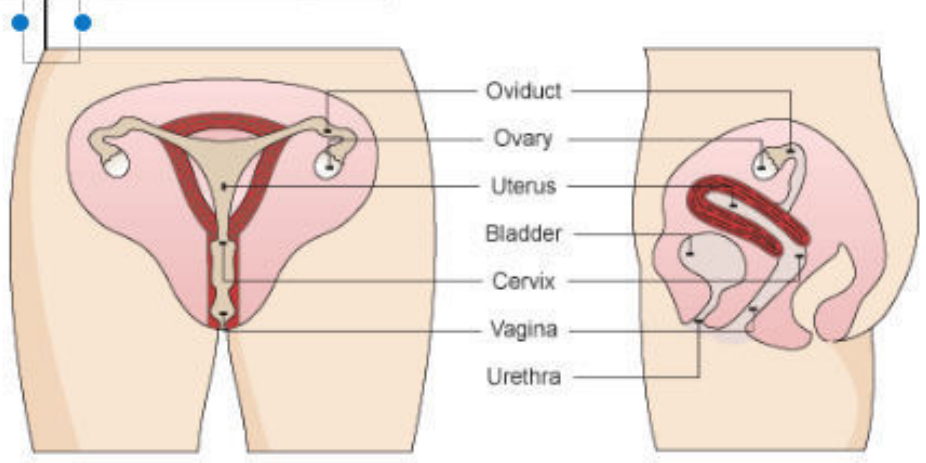
Changes at Puberty	Boys	Girls	Both
The breasts grow larger		X	
The shoulders grow broader	X		
The hips grow broader		X	
Hair grows under the arms			X
The body becomes more muscular	X		
The monthly period starts		X	
Voice breaks and becomes deeper	X		
Hair grows around the sex organs			X
Hair and skin become more greasy			X
Sperm are produced	X		
Ova (eggs) are produced		X	
Begin to develop feelings of attraction to other people			x

Menstruation Cycles:

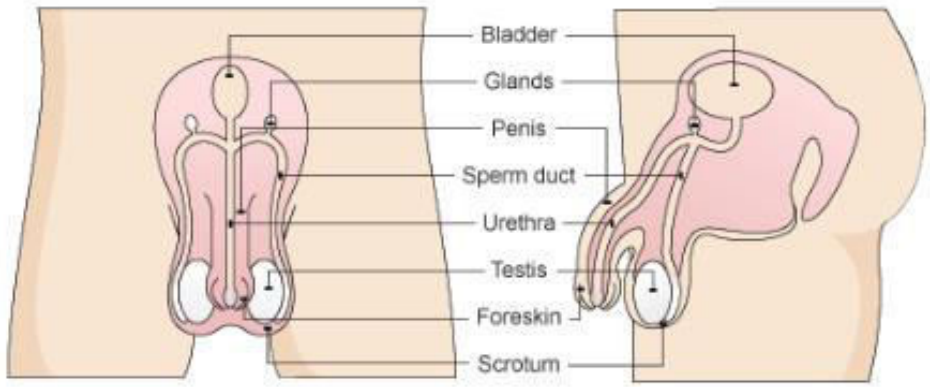
The period starts. The bleeding is the lining of the uterus which is shed because no egg has been fertilised and the lining is not needed. The lasts for about five days.	The lining has been shed and the bleeding stops. An egg is maturing in the ovary.	The egg begins to leave the ovary and hormones tell the body to start lining the uterus again.	The egg travels down the fallopian tube. The uterus is now lined and ready for the egg to embed itself if it is fertilised.	The egg enters the uterus and is not fertilised. The egg and the lining of the uterus are not needed anymore and will slowly disintegrate and move into the vagina.

Year 7 Biology Knowledge Organiser- Reproduction

Female reproductive system

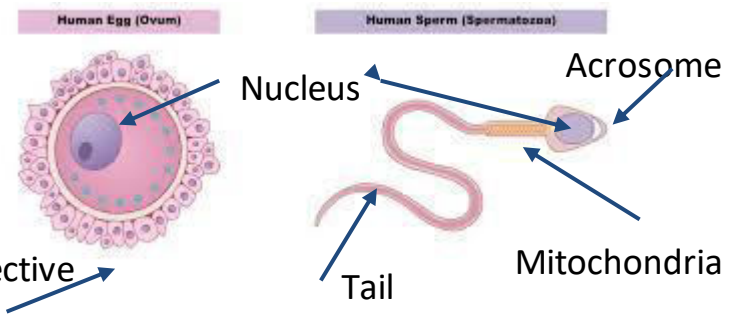


Male reproductive system



Key Terms	Definitions
Reproductive system	All the male and female organs involved in reproduction.
Ovary	Organ which contains eggs.
Testicle	Organ where sperm are produced.
Penis	Organ which carries sperm out of the male
Scrotum	The skin that holds the testes
Urethra	The tube that carries either urine or semen out f the body through the penis
Vagina	Where the penis enters the female sperm is received. This is also called the birth canal.
Oviduct, or fallopian tube	Carries an egg from the ovary to the uterus and is where fertilisation occurs.
Uterus	Where an embryo develops into a foetus and eventually into a baby.
Cervix	A muscular ring that helps keep a foetus in place in the uterus during pregnancy. During birth it dilates to 10cm
Gamete	The male gamete (sex cell) in males is sperm, the female an egg.

Gamet



Year 7 Biology Knowledge Organiser- Reproduction

Adolescence

- Involves both emotional and physical changes.
- These can cause you to become moody, self-conscious and angry.
- During adolescence your body goes through physical changes, this is called puberty.
- Takes place between the ages of 9-14 in most people.
- Most of the changes happen in the reproductive system – your body needs to develop so you can have children if you choose to when you're older.

What happens to girls during puberty?

- Breasts develop
- Ovaries start to release egg cells
- Periods start
- Hips widen

What happens to boys during puberty?

- Voice breaks – gets deeper
- Testicles and penis get bigger
- Testicles start to produce sperm
- Shoulders widen
- Hair grows on the face and chest.

What happens during puberty?

- Your pubic hair and underarm hair grows
- Your body smell becomes stronger – this is often called body odour.
- You experience emotional changes
- You have a growth spurt (get taller)

What causes puberty?

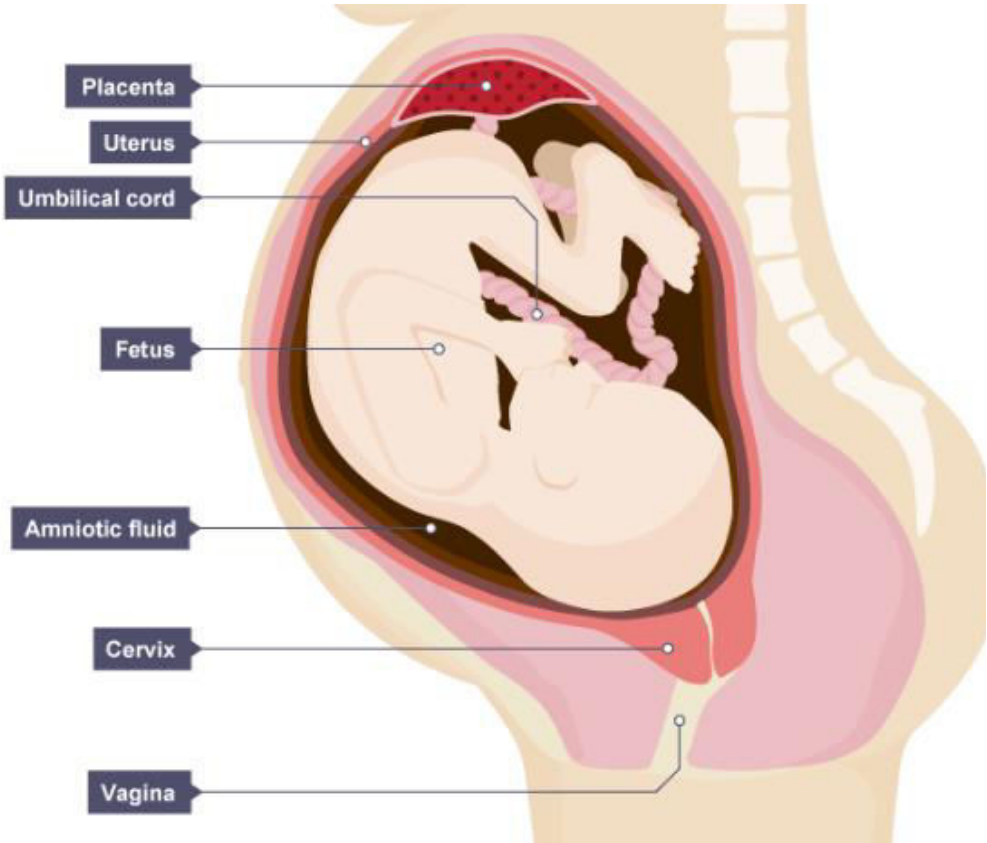
- All the changes that happen in your body during puberty are caused by sex hormones.
- These are chemical messengers that travel around your body in the blood.
- Female sex hormones are made in ovaries.
- Male sex hormones are made in the testicles
- These chemicals trigger different processes, such as egg release in females and pubic-hair growth in both males and females.

Year 7 Biology Knowledge Organiser- Reproduction

How does a baby develop?

What happens during birth?

- **After around 40 weeks the baby is ready to be born.**
- **The mother's cervix relaxes and muscles in the wall of the uterus contract.**
- **This gradually pushes the bay out through the vagina.**
- **When the baby is born it is still joined to the mother by its umbilical cord.**
- **This needs to be cut. The placenta is then pushed out.**

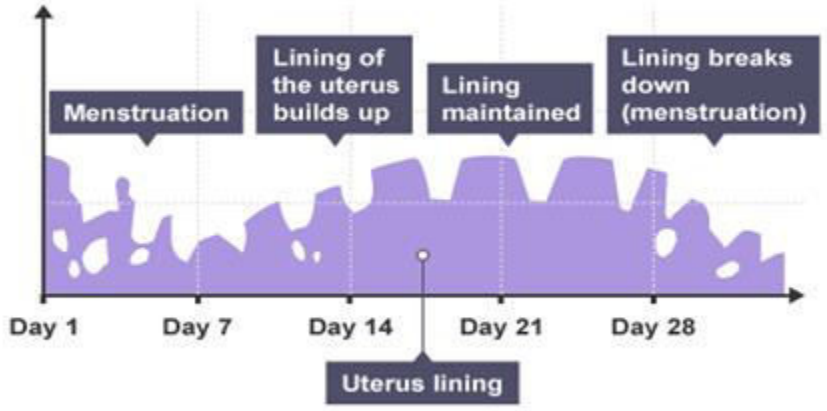


Year 7 Biology Knowledge Organiser- Reproduction

The menstrual cycle

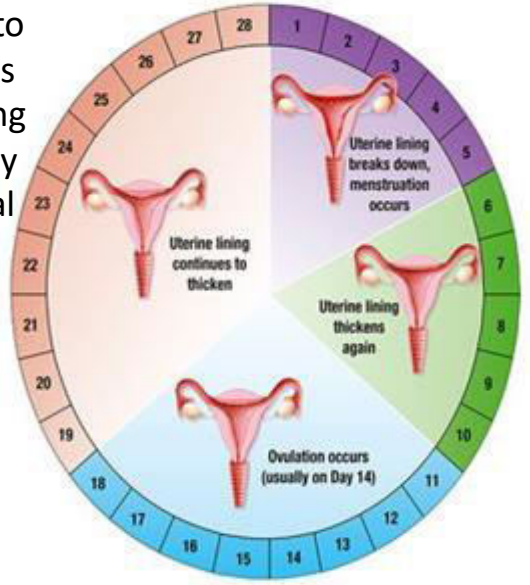
The menstrual cycle prepares the female body for pregnancy by causing eggs (ova) to mature and be released. It lasts for 28 days.

- **Days 1-5**: • 'period' happens (menstruation), where uterus lining breaks down.
- **Days 6-13**: • Uterus lining builds up (thickens) to prepare for pregnancy. The egg (ovum) matures in the ovary
- **Day 14**: • Egg (ovum) released from the ovary and travels down the oviduct
- **Days 15-28**: • Uterus lining stays thick, in case the egg is fertilised



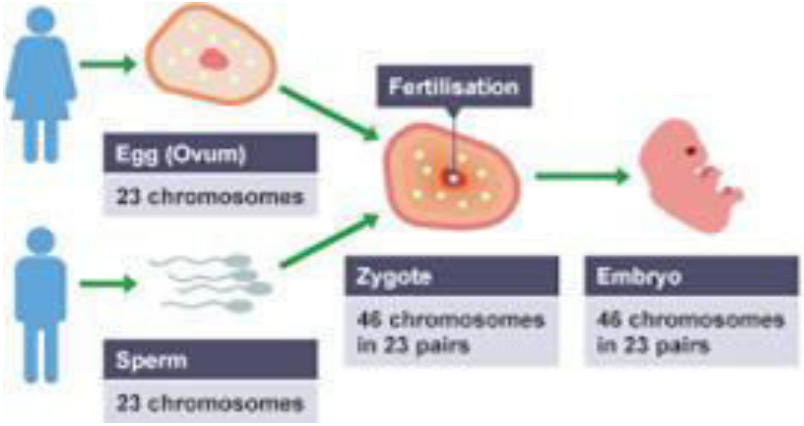
Key Terms	Definitions
Ovulation	Release of an egg cell during the menstrual cycle, which may be met by a sperm.
Menstruation	Loss of the lining of the uterus during the menstrual cycle.
Puberty	The process of physical changes in a child's body matures into an adult that is capable of sexual reproduction.
Adolescence	The period of time, following puberty during which children mature into adults.
Secondary sexual characteristics	Features, such as pubic hair or breasts developing, that appear during puberty.

Changes to the uterus wall during the 28 day Menstrual cycle



Year 7 Biology Knowledge Organiser- Reproduction

Fertilisation



Gestation

After fertilisation the **zygote** begins to divide into a ball of cells called an **embryo.** The embryo grows as cells continue to divide and travels to the uterus. Ciliated cells in the oviduct help it to move to the uterus.
The embryo **implants** into the uterus wall. The woman is now **pregnant.**
The embryo gets oxygen and nutrients from the mother's blood.
From **12 weeks**, we call the growing embryo a **foetus.** It now looks like a tiny human baby and has many specialised cells.
A **placenta** grows. This is a special organ that acts as a barrier between the foetus' and mother's blood. The placenta makes sure that their blood does NOT mix.

Oxygen, nutrients and other substances (including drugs and alcohol) pass from the mother's blood to the foetus.
Carbon dioxide and other waste products from the foetus travel down the umbilical cord to the placenta where they diffuse into the mother's blood.

Key Terms	Definitions
Fertilisation	Joining of a nucleus from a male and female sex cell (gamete)
Implantation	When the growing embryo becomes embedded in the thick, spongy uterus lining.
Gestation	Process where the baby develops during pregnancy. In humans it takes around 40 weeks.
Placenta	Organ that provides the foetus with oxygen and nutrients and removes waste substances.
Amniotic fluid	Liquid that surrounds and protects the foetus.
Amniotic sac	A thick membrane that encloses the amniotic fluid (and developing foetus)
Umbilical cord	Connects the foetus to the placenta.
Embryo	The developing baby from fertilisation to 12 weeks.
Foetus	The developing 'baby' from 12 weeks until it is ready to be born.

Birth

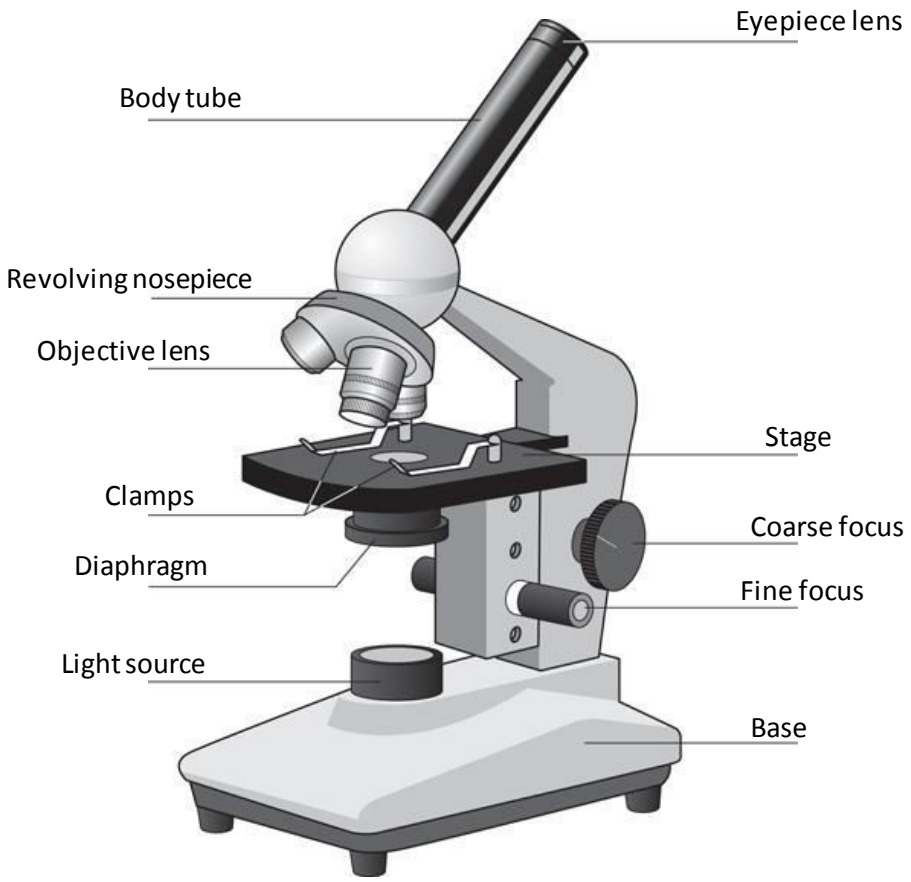
After about 40 weeks of pregnancy, the foetus is ready to be born.

- The muscles in the wall of the uterus contract (**contraction)**
- The cervix **dilates** (gets bigger) to **10cm.** This is big enough for the foetus's head to pass through.
- These contractions get stronger and faster (this is **labour**)
- After some time of labour, the **amniotic sac** breaks, which releases the fluid (this is the **waters breaking)**
- Contractions push the baby headfirst through the **cervix** and then through the **birth canal** - vagina.
- The foetus is now called a **baby.**

Year 7 Biology Knowledge Organiser
8.2.1 Microscopy

Use a microscope to produce an image of a cell in focus.

Parts of a microscope



Key Terms	Function
Stage	Area where specimen is placed
Clamps	Hold the specimen still whilst it is being viewed
Light source	Illuminates the specimen
Objective lens	Magnifies the image of the specimen
Eyepiece lens	Magnifies the image of the specimen
Course/fine focus	Used to focus the specimen so it can be seen clearly
Revolving nosepiece	Holds 2 or more objective lenses

Magnification

We can use the following equation to calculate the magnification of an object viewed through a microscope:

$$magnification = \frac{image\ size}{actual\ size}$$

Using a microscope

Follow the steps below to observe an object using a microscope:

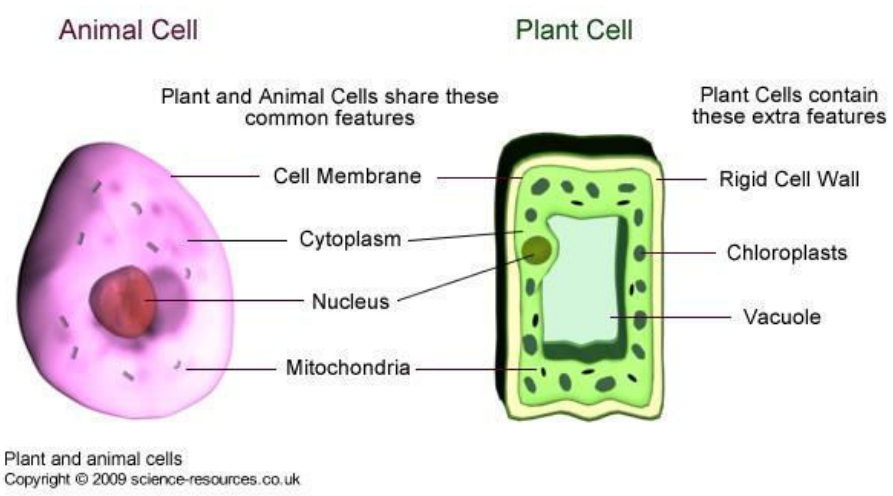
1. Move the stage to it lowest position
2. Place the object you want to observe on the stage
3. Select the objective lens with the lowest magnification.
4. Look through the eyepiece and turn the coarse-focus knob slowly until you see the object.
5. Turn the fine-focus knob until your object comes into focus.
6. Repeat steps 1-5 using an objective lens with a higher magnification to see the object in greater detail.

Year 7 Biology Knowledge Organiser
8.2.2. Cells

Label plant and animal cells; state the function of the organelles and compare plant and animal cells .

Cells

Cells are the building blocks of all living organisms



Preparing a microscope slide

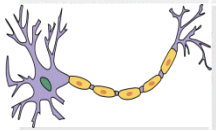
To prepare a slide to view onion cells we can use the following steps:

1. cut open an onion
2. use forceps to peel a thin layer from the inside
3. spread out the layer on a microscope slide
4. add a drop of iodine solution to the layer
5. carefully place a cover slip over the layer

Key Terms	Definition
Cell wall	Made of cellulose, which strengthens and supports the cell
Cell membrane	Controls movement of substances into and out of the cell
Cytoplasm	Jelly-like substance, where chemical reactions happen
Nucleus	Contains genetic information and controls what happens inside the cell. Genetic information is needed to make new cells
Vacuole	Contains a liquid called cell sap, which keeps the cell firm
Mitochondria	Where most respiration reactions happen (glucose + oxygen → carbon dioxide + water)
Chloroplast	Where photosynthesis happens (carbon dioxide + water → glucose + oxygen)

Specialised cells

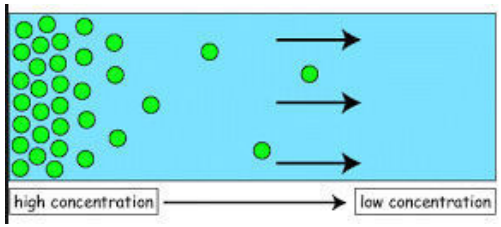
Specialised cells are found in multicellular organisms. Each specialised cell has a particular function within the organism.

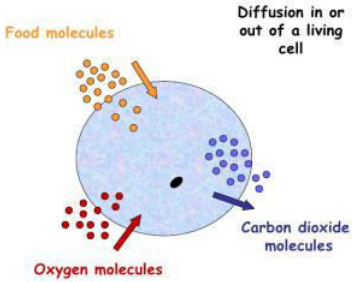
	Type of cell	Function	Special features
Animal cells	 Red blood cells	To carry oxygen	• Large surface area, for oxygen to pass through • Contains haemoglobin, which joins with oxygen • Contains no nucleus
	 Nerve cells	To carry nerve impulses to different parts of the body	• Long • Connections at each end • Can carry electrical signals
	 Male reproductive cell (sperm cell)	To reach female cell, and join with it	• Long tail for swimming • Head for getting into the female cell
Plant cells	 Root hair cell	To absorb water and minerals	• Large surface area
	 Leaf cell	To absorb sunlight for photosynthesis	• Large surface area • Lots of chloroplasts

Year 7 Biology Knowledge organiser
8.2.3 Movement of substances

Diffusion

Diffusion is the **spreading out of the particles** of any substance in solution or a gas from an area of **higher concentration to a lower concentration.**

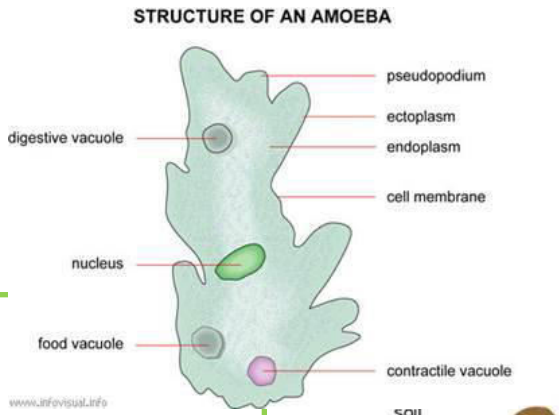


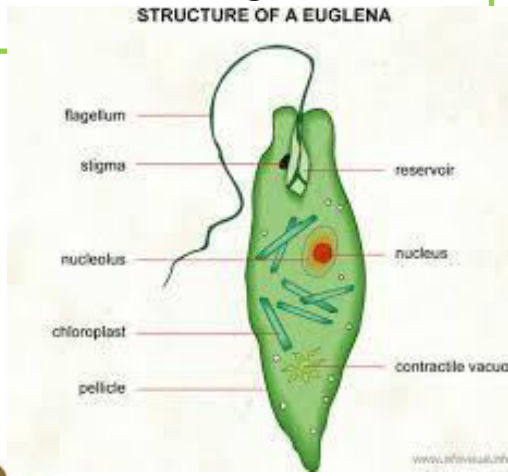


Substances may move into or out of cells across the cell membrane by diffusion.
Oxygen and glucose usually move into cells by diffusion.
Carbon dioxide and waste (urea) usually move out of cells by diffusion.
The bigger the surface area the faster the rate of diffusion.

Uni-cellular organisms

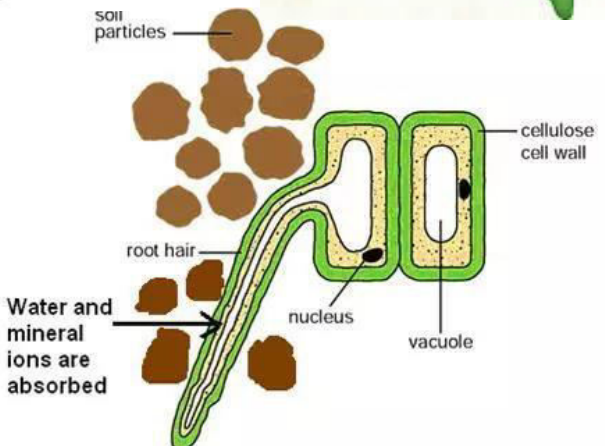
- A uni-cellular organism is made up of just one type of cell.
- It is not a plant or animal as these are made up of lots of cells
- Uni-cellular organisms are adapted to carry out functions that in multi-cellular organisms are done by different types of cells.
- 2 types: **amoeba and euglena**.





Movement of water in plant cells

- Plants need a constant supply of water for photosynthesis. Water diffuses into the plant through the root hair cells.
- The water molecules move from the soil (high concentration of water) into the root hair cell (low water concentration).
- Water then travels to other cells in the plant by diffusion.



Year 7 Physics Knowledge Organiser
Forces

Forces

- A force can be a **push or a pull.** You can not see forces, you can only see what the changes to objects that they cause.

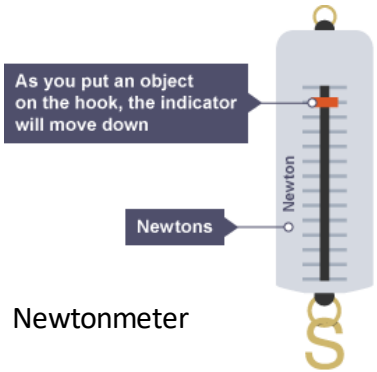
- When a force is applied to an object it can lead to:
- **A change in speed (acceleration)**
- **A change in the object's direction of movement**
- **A change in the object's shape (squash or stretch the object).**

- Forces can also be divided into 2 types, contact forces and non contact forces.

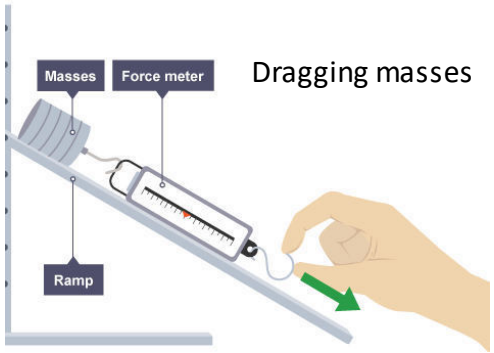
1. **Contact forces** act between objects that are touching. Examples: friction, normal contact force, thrust, upthrust, air resistance (drag). Friction acts whenever an object is moving through a fluid (a fluid is a liquid or gas), or when one solid surface is moving along another solid surface.
2. **Non-contact forces** act between objects even if they are NOT touching. Examples: gravity, weight, magnetic force.

- The unit of force is the **newton (N).**

Key Terms	Definitions
force	An interaction between objects that causes **changes** to objects or how objects are moving.
newton	The unit for force
newtonmeter	A piece of equipment that can be used to measure the size of the force
contact force	A force acting between objects that are physically touching
non-contact force	A force acting between objects that are NOT physically touching
weight	The force pulling an object towards the centre of the Earth, due to gravity.
gravity	The force between any two objects. We only notice gravity's pull if the objects are very large, like the Earth.
upthrust	The upwards force produced by objects pushing down on fluids (liquids and gases).
normal contact force	The push force produced on objects when they push on something solid. Also called 'reaction'.



Newtonmeter



Dragging masses

Measuring the size of forces

The laboratory equipment for measuring forces is also named after Sir Isaac Newton: the newtonmeter (see diagram).

To measure the size of frictional forces on different surfaces you can drag masses along the different surfaces and record how much force is required. For this experiment :

- Independent variable: Type of surface
- Dependent variable: Force
- Control variable: Mass

Year 7 Physics Knowledge Organiser
Introduction to Forces

Force Arrows

Forces have a **size** and a **direction**. This means we show forces with arrows.

- The length of the arrows shows how large the force is.
- The direction the arrow points shows the direction the force pushes or pulls.

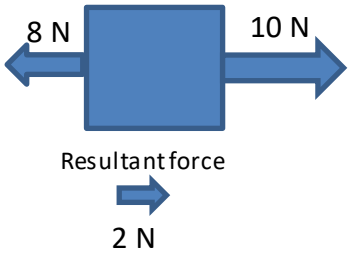
Diagrams that show the forces acting on objects, using arrows, are called **free body force diagrams**.

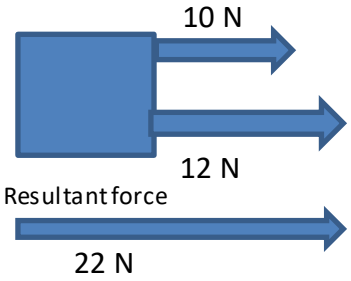
Resultant force and Newton's First Law

- The **resultant** force acting on an object is the single force *resulting* from all the separate forces acting on it. In other words, the resultant force is the single overall force.

To find resultant force:

- Add up forces acting in the same direction
- Subtract forces acting in opposite directions.





- If the forces are **balanced** the resultant force will be 0.
- Newton's first law states that if the resultant force on an object is 0 then the object will either be **stationary or moving at a constant speed**

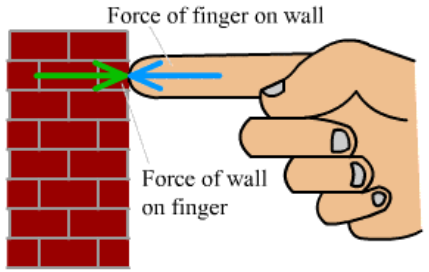
Unbalanced forces and Newton's Second Law

- If the resultant force on an object is not 0 we say that the forces are **unbalanced**
- If the forces on an object are unbalanced then the objects speed will be changing. It will either be accelerating (speeding up) in the direction of the force or decelerating (slowing down) in the direction of the force
- Knowing the resultant force does not tell you which way an object is moving. It just tells you that the speed will change.
- A LARGER resultant force is needed to accelerate an object at a higher acceleration. Also, a larger resultant force is needed to accelerate heavier objects

Key Terms	Definitions
Resultant force	The single overall force acting on an object
Newton's first law	If the resultant force on an object is 0 then it will either be stationary or move at a constant speed
Newton's Second law	If there is a resultant on an object they will either accelerate or deccelerate
Newton's Third Law	for every action there is an equal and opposite reaction
Balanced force	An object that has a resultant force of 0
Unbalanced force	An object that has a resultant force of more than 0

Newton's thrid law

- Newton's third law states that 'for every action there is an equal and opposite reaction'
- In the example below if the person pushes on the wall with a force of 10 N. The wall will push back with a force of 10 N



Year 7 Physics Knowledge Organiser
Speed and gravity

Speed

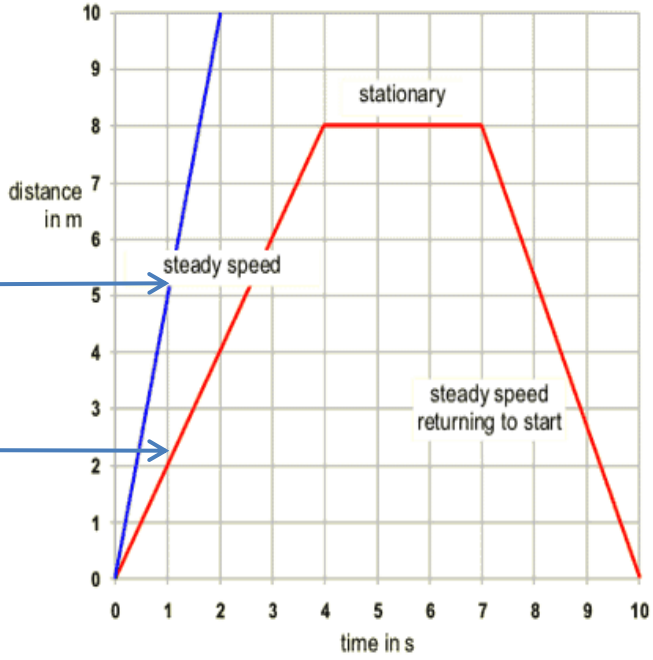
- The speed of an object tells you how long it takes an object to cover a distance. **The unit for speed is m/s** (metres per second).
- Speed is calculated by **dividing distance by the time**
- If the speed of an object is increasing, then it is **accelerating.** If the speed is decreasing it is **decelerating.**

Distance Time Graphs

- A distance time graph has the time on the x axis and the distance on the y axis.
- If an object is stationary (not moving) the line **will be horizontal.**
- If the line is diagonal the object is moving at a constant speed.
- If the line has a larger gradient (steeper), it means the object is moving faster.
- If the line is going back towards the x axis the object is **returning to its starting point**.

Higher gradient = faster speed

Lower gradient = lower speed



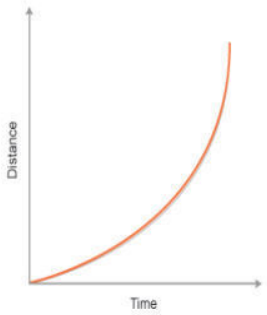
Key Terms	Definitions
Speed	How fast an object is moving, regardless of direction
Velocity	How fast an object is moving, taking direction into account as well
Gradient	How steep the line on a graph is.
Stationary	Not moving
Acceleration	A measure of how quickly the speed of an object is increasing
Deceleration	A measure of how quickly the speed of an object is decreasing

Equation	Meanings of terms in equation
$v = \frac{s}{t}$	*v = speed* (m/s) *s = distance* (m) *t = time* (s)

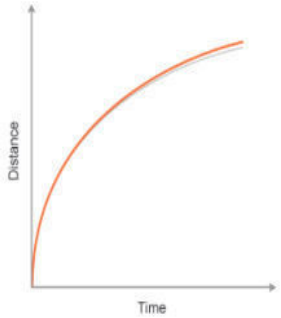
Acceleration and Deceleration

- When an object is accelerating, the distance time graph will **curve upwards.**
- When an object is slowing down an object will **curve towards the horizontal.**

Acceleration



Deceleration



Year 7 Physics Knowledge Organiser
Speed and gravity

- When a diver jumps off a diving board he moves towards the Earth because there is a force on him.
- This is gravitational force of gravity.
- The Earth pulls on the diver, and the diver pulls on the Earth.
- Forces come in pairs.

- The same force acts on the Earth but the Earth does not move because it is much more massive.
- Gravitational force is a non-contact force because the diver and the Earth do not need to touch to exert a force on each other.
- The gravitational force on the diver or on the Earth depends on:
- The mass of the object
- How far apart they are.
- If the mass is larger the force is larger.
- If the distance is larger the force is smaller.

Force fields:

- A field is a special region where something, like a mass, experiences a non-contact force.
- In a gravitational field, a mass experiences a force.
- In a magnetic field, a magnetic material, like iron, experiences a force.
- In an electrostatic field, charged objects experience a force. You can charge an object like a balloon by rubbing it. c

How does gravity keep things in orbit?

- Isaac Newton worked out that the Earth exerts a force on the Moon.
- The force of gravity acting on the moon keeps the moon in orbit around the Earth.
- It is the same force that acts on an apple and pulls it to the ground.
- It changes the direction but not the speed.

What is the difference between mass and weight?

- **Weight** is a force so it is measured in newtons (N)
- **Mass** is the amount of 'stuff' something is made up of.
- It is a measure of how hard it is to get something moving. Mass is measured in kilograms (Kg)
- You can calculate weight using the formula:

Weight (N) = mass (Kg) x Gravitational field strength g (N/Kg)

- Gravitational field strength on Earth is about 10 N/Kg. this is the force that acts on 1Kg in the Earth's gravitational field strength.

Year 7 Computer Technology — Term 1.1 and 1.2

Unit: Communication and Networks 1

Keyword	Definition	Keyword	Definition
School System	When using the school system, you need to be aware of: **Usernames**: This is made up of surname, first letter and year of joining. **Passwords:** These need to be secure and contain capital letters, numbers, and symbols and be 8 characters long. **Folders:** Every file you save needs to be stored in the relevant subject and term folder. E.g. Computing Term 1.	**E-Safety**	When using the internet, you need to follow these **SMART** rules to be safe online: **Safety** is important so be careful not to give out personal information when you're chatting or posting online. Personal information includes your email address, phone number and password. **Meeting** someone you have only been in touch with online can be dangerous. Remember online friends are still strangers even if you have been talking to them for a long time. **Accepting** emails, IM messages, or opening files, pictures or texts from people you don't know or trust can lead to problems – they may contain viruses or nasty messages! **Reliability** means checking if someone online is who they say they are. Always check information with other sources. **Tell** your parent, carer or a trusted adult if someone or something makes you feel uncomfortable or worried, or if you or someone you know is being bullied online.
Risks Online	• **Cyberbullying:** repeated harassment online. • **Inappropriate content**: content that may affect a child's wellbeing. • **Online grooming:** children speaking to and being more familiar with predators online. • **Sexting:** sending nudes or sexual messages to a partner online. • **Privacy and identify theft**: students may have their personal details stolen.	**The Internet** **The World Wide Web** **Web Browsers**	The **internet** is the physical connection of lots of computers connected together () and is the hardware. The internet is used for: • The **World Wide Web** which includes the webpages and is seen as the software. It uses **web browsers** e.g. Google Chrome or Internet Explorer. • Emailing files. • Instant messaging.
Searching the Web	You can access a webpage by typing in www.bbc.co.uk for example. If you want to search for information, you use a search engine e.g. www.google.co.uk	**Quality of Information**	When searching for information, we can ask these questions to decide whether information is trustworthy: • confirmed by other reliable websites/sources • up to date • unbiased, telling the whole story • from a trusted source • accurate

Year 7 Computer Technology

Unit: Communication and Networks 1	A computer system is a complete computer that contains all of the hardware (physical equipment) and software (programs) required to run. It is made up of three parts: • Input data • process data • output.	**Embedded System**	A device that has a computer inside**.** **Advantages:** • As it is written for specific hardware it often uses **low energy consumption** • They are **robust** and durable. **Disadvantages:** • **Difficult to program** and requires specialist knowledge • If a problem occurs with the system it is **difficult to repair** This could include a dishwasher, smart watch, microwave, car.
General Purpose System	A computer that can perform lots of different tasks. This includes desktop PCs, laptops, tablets and smart phones.	**Input, Output and Storage Devices**	**Input Devices**: Give the computer information e.g. microphone, keyboard, mouse, heat sensor. **Output:** Display processed information to the user. **Storage Devices**: Users can save their work long term.
Computer Hardware	**Central Processing Unit (CPU):** The brain of the computer, used to carrying out all instructions. **Motherboard**: Circuit board which connects all parts together. **Random Access Memory (RAM):** stores files and data temporarily. **Read-Only Memory**: Stores BIOS which boots up the computer. **Graphics Card**: decides what will be shown on screen and how powerful they are. **Sound Card**: allows sound to be output from the computer. **Hard Drive**: Stores all of your programs, files and operating system permanently. **DVD Rom Drive:** Reads CDs or DVDs.	**Secondary Storage**	Internal Hard Drive External Hard Drive CD/DVD RAM USB Stick ROM
Software	Programs that tell the computer what tasks to complete.	**Software types**	**Operating Software**: manages and runs the hardware and applications. E.g iOS, Windows 10. **Utility Software**: maintains or improves the computers performance. E.g. Anti-virus, back up. **Application Software:** carries out a specific types of tasks. E.g. Word (writing documents), Facebook (social media.)

YR 7 FOOD TECHNOLOGY KNOWLEDGE ORGANISER BASIC SKILLS

In Food technology you are assessed on everything you do in class. There are 2 assessment objectives.

Assessment one (L01) Healthy living - Understand the importance of nutrition in the diet.

Healthy living is the key to good health. The 'Eatwell guide' is a guide produced to help people choose what to eat to maintain a balanced diet. The information helps when planning balanced meals and making healthy choices. You will also be looking at the different nutrients needed by the body and the effects of deficiency and excess of Macro-nutrients.

Assessment two (L03) Be able to cook dishes safely and hygienically

You will learn a range of techniques such as 'Bridge and Claw' (method of cutting safely), zesting, melting, grilling and using the oven. You will be shown how to work safely and hygienically to make successful dishes. You will be able to explain the difference between personal and food hygiene.

KEYWORDS AND KEY TERMS

- ❑ Balanced diet
- ❑ Healthy living
- ❑ Eatwell Guide
- ❑ Nutrients
- ❑ Nutrition
- ❑ Protein
- ❑ Carbohydrates
- ❑ Fat
- ❑ Vitamins
- ❑ Minerals
- ❑ Fibre
- ❑ 5 a day
- ❑ Grilling
- ❑ Recipes
- ❑ Baking
- ❑ Melting method
- ❑ Portion size
- ❑ Shaping
- ❑ Garnishing
- ❑ Hygiene
- ❑ Personal Hygiene
- ❑ Food Hygiene
- ❑ Contaminate
- ❑ Cross-contamination
- ❑ Food poisoning
- ❑ Danger Zone
- ❑ Bacteria
- ❑ Salmonella
- ❑ E-Coli
- ❑ Temperature probe

Recipes:

Cous Cous Salad
Healthy Pizza Bread
Sweet or savoury Muffins
Oat Cookies
Sweet or savoury scones

Useful websites to embed learning

www.bbcgoodfood.co.uk
www.deliaonline.co.uk
www.bbcbitesize.co.uk

Greetings

Bonjour! Hello!
Salut! Hi!
Au revoir! Goodbye!
Ça va? How are you?
Très bien Very well
Bien Well
Assez bien Quite well
Comme ci comme ça So-so/ OK
Mal Bad
Très mal Really bad
Je suis fatigué(e) I am tired
Je suis content(e) I am happy
J'ai faim I am hungry
Au revoir! Goodbye!

Introductions

Comment t'appelles-tu? What's your name?
Je m'appelle… I'm called…
Mes amis m'appellent,… My friends call me…
Je préfère… I prefer…
Mon surnom c'est… My nickname is….
Moi Me

Age and birthdays

Quel âge as-tu? How old are you?
J'ai… ans. I am … years old.
Quelle est la date de ton anniversaire?
When is your birthday?
C'est le.. It's the..

Where you live

Où habites-tu? Where do you live?
J'habite à Bristol I live in Bristol
J'habite en Angleterre I live in England
J'habite près de Bristol I live near Bristol
J'habite à la campagne I live in the countryside
J'habite à la montagne I live in the mountains
J'habite au bord de la mer I live at the seaside
J'habite dans une ville I live in a town
J'habite dans un village I live in a village

Numbers

1 un	17 dix-sept
2 deux	18 dix-huit
3 trois	19 dix-neuf
4 quatre	20 vingt
5 cinq	21 vingt et un
6 six	22 vingt-deux
7 sept	23 vingt-trois
8 huit	24 vingt-quatre
9 neuf	25 vingt-cinq
10 dix	26 vingt-six
11 onze	27 vingt-sept
12 douze	28 vingt-huit
13 treize	29 vingt- neuf
14 quatorze	30 trente
15 quinze	31trente et un
16 seize	1st le premier

Pets

Tu as un animal?
Do you have a pet?
Oui, j'ai… Yes, I have…
Non, je n'ai pas d'animal
No, I don't have a pet
Je voudrais.. I would like..

Months

janvier January
février February
mars March
avril April
mai May
juin June
juillet July
août August
septembre September
octobre October
novembre November
décembre December

Conjunctions

et and
mais but
parce que because

Yr 7 FRENCH TERM1

JE ME PRÉSENTE

Pets

un animal an animal
une araignée a spider
un chat a cat
un cheval a horse
un chien a dog
un cochon d'Inde a Guinea pig
un lapin a rabbit
un lézard a lizard
un oiseau a bird
un phasme a stick insect
une souris mouse
un serpent a snake
une tortue a tortoise

Colours

blanc white
bleu blue
gris grey
jaune yellow
marron brown
noir black
orange orange
rose pink
rouge red
vert green
violet purple

Indefinite articles

e.g. un chat – a cat
des chats – some cats

une tortue – a tortoise
des tortues – some tortoises

Masculine words	Feminine words	Plural words
un	une	des
a	a	some

Adjectives

In French, most adjectives come <u>after</u> the thing they describe.
e.g. un chat noir – a black cat

If you are describing a feminine word (une,la) you need to add 'e' onto your adjective (unless there is one there already!)
e.g. une tortue verte – a green tortoise

If you are describing a plural word (des,les) you need to add 's' onto your colour
e.g. deux chats noirs – two black cats

Yr 7 FRENCH TERM 2
MON COLLÈGE

Opinions and reasons

Je préfère I prefer
J'adore I love
J'aime (bien) I (quite) like
Je n'aime pas (du tout) I don't like at all
Je déteste I hate
Selon moi in my opinion
A mon avis in my opinion
c'est it is
créatif creative
difficile difficult
ennuyeux boring
facile easy
intéressant interesting
inutile pointless
passionnant exciting
nul rubbish
relaxant relaxing
utile useful
Ma matière préférée c'est… My favourite subject is
Ce que je déteste, c'est… What I hate is…
Je me passionne pour… I'm passionate about…
J'ai horreur de ça! I hate it!

Saying 'it'

le, la, les mean 'it'. They come before the verb.
Je l'aime I like it
Je les adore
I love them

Adjectives

Don't forget, when describing clothes, the colour comes **after** the item of clothing and must change its ending to agree with the gender and number.
e.g. un pantalon bleu
une cravate noir**e**
des chaussures noir**es**

School subjects

l'anglais English
le dessin art
l'EPS PE
l'espagnol Spanish
le français French
la géographie geography
l'histoire history
les maths maths
la musique music
la religion RE
les sciences/SVT science
la technologie technology
le théâtre drama

School rules

les règles the rules
Il faut … We must
porter un uniforme wear a uniform
faire les devoirs do homework
Il ne faut pas We must not
bavarder en classe chat in class
manger en classe eat in class
porter des baskets wear trainers
C'est ridicule! It's ridiculous
C'est stupide It's stupid
C'est important It's important

Uniform

des baskets some trainers
un blazer a blazer
des chaussures some shoes
des chaussettes some socks
une chemise a shirt
une cravate a tie
un jean a pair of jeans
une jupe a skirt
un pantalon a pair of trousers
une robe a dress
un short a pair of shorts
un sweat a sweatshirt
un T-shirt a T-shirt
une veste a jacket

Infinitive phrases

Infinitives are verbs which in English translate to 'to' do something or 'doing' something.
e.g. porter = to wear/ wearing

The infinitive will always end in either **–er, -ir** or **-re**
You can use the infinitive in lots of different ways by putting it **after** another verb.
Eg. J'aime porter.. I like to wear/ I like wearing…
Il faut porter une cravate You must wear a tie

Il faut / On doit We must	bavarder to chat
Il ne faut pas On ne faut pas We mustn't	faire – to do
Je voudrais I'd like to	manger – to eat
J'aime I like	porter – to wear
Je n'aime pas I don't like	

Intensifiers

un peu a little bit
assez quite
plus more
très very
trop too
vraiment really

Conjunctions

aussi also
car because
cependant however
et and
mais but
ou or
parce que because

Knowledge Organiser- Year 7 Term 1 Belief in God

Key words

Belief, Fact, Opinion, Faith, Theist, Atheist, Agnostic, Transcendence, Immanent, Omnipotent, Omniscient, Omnipresent, Omnibenevolent, Gurdwara. monothesits.

KPI3: To investigate Sikh beliefs about God

- Sikhs believe that God: cannot be described and is neither male nor female is eternal truth, timeless.
- God is beyond the cycle of birth and death, and self-existent, is both **sargun** (**immanent** – everywhere and in everything) and **nirgun** (**transcenden**t – above and beyond creation).
- There are many Sikh names for God, yet each is inadequate to express the reality of **Waheguru** (God).
- Belief in one God is central to Sikhism. Sikhs are monotheists.

KPI1: To consider how things are proved to exist

How do we prove that things exist? There are three main ways by which the existence of things is proved:

1- Personal experience- 'I have seen it, so I know it exist.'

2- Reliable evidence- 'I have not seen it but other people have convinced me that they have, so I accept its existence.'

3- Logic- Using a chain of reasoning to reach a conclusion.

KPI2: To be able to examine theist beliefs about what God is like

The nature of the Christian God

- Christians are **monotheists.** This means that they believe there is only one God. It is very difficult to describe God, because everyday language is always about ordinary things but God is not ordinary.
- God is 'holy', meaning special, separate and different.

Christians believe that:

God is eternal, beyond time and space

- God does not have a physical body, and is everywhere at all times **(omni-present**)
- God is the creator of the world and everything in it
- God has a purpose for the world
- God is completely good and completely loving
- God is interested in how people behave, and wants them to treat each other properly
- God is all-powerful (**omnipoten**t) and all-knowing **(omniscient)**
- God judges each individual

KPI5: To understand Sikh beliefs about God

- The **Mool Mantar** means 'basic teaching' and is found at the beginning of every section of the Guru Granth Sahib (Sikh Scriptures).
- It is repeated each day during early morning prayer. The first words of the Mool Mantar are **'Ik Onkar'** meaning 'there is one God.
- The symbol for Ik Onkar is seen in many places such as badges, on the walls of a **gurdwara** (place of worship) and in the home.

Ik Onkar	There is only one God
Sat Nam	Eternal truth is His name
Karta Purakh	He is the creator
Nir Bhau	He is without fear
Nir Vair	He is without hate
Akal Murat	Immortal, without form
Ajuni	Beyond birth and death
Saibhang	He is the enlightener

KPI4: To be able to explain the Sikh 5 Ks and consider the importance of wearing the Ks to Sikh beliefs

- The 5 Ks date from the creation of the Khalsa Panth by Guru Gobind Singh in 1699.

The Guru introduced them for several reasons:

•Adopting these common symbols would identify members of the Khalsa

•Because all members of the Khalsa wear the 5 Ks the members of the community are more strongly bound together

The 5 Ks taken together symbolise that the Sikh who wears them has dedicated themselves to a life of devotion and submission to the Guru.

The 5 Ks are 5 physical symbols worn by Sikhs who have been initiated into the Khalsa.

The five Ks are:

KPI6: To apply key quotes to explain Christin beliefs in the characteristics of God.

- Deuteronomy 32:11-12 Like an eagle that stirs up its nest and hovers over its young
- Psalm 18:2 The Lord is my rock, my fortress and my deliverer
- Exodus 3:2-6 There the angel of the Lord appeared to him in flames of fire from within a bush.

YR 7 DESIGN & TECHNOLOGY *KNOWLEDGE ORGANISER - Toy*

In Design & Technology you are assessed on both the Practical and Theory work.

Health and Safety

Safe and proper use of tools and machinery in the workshop.
Understand the hazards and reduce the risks of incidents occurring

Materials

You will be given the opportunity to use Medium Density Fibreboard (MDF) to produce your product. You will learn how to modify (cut, drill) and finish (smooth and decorate)

Tools and equipment

You will learn to select and use a range of hand and fixed machines for appropriate tasks. These will include Coping and Tenon saw, Files, Pillar drill and Belt sander.

Final Piece

At the end of the project you will present a final product. This will be a finished pull along toy that includes a cam to enable the tail to move when pulled along

KEYWORDS AND KEY TERMS FOR THIS PROJECT

Specification
A detailed list of requirements for a designing and making a product

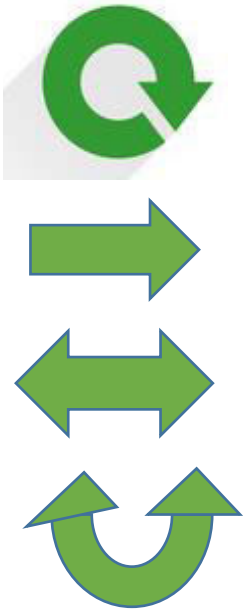
Aesthetics
Features that make something appealing such as colour, pattern, theme.

Evaluation
Considering successful elements or steps that require improvements

Coping saw

Tenon saw

Pillar drill



MOTION - the action or process of moving or being moved.

Using technical words to **describe** FOUR types of movement, **explaining** where they can be seen
Rotary – moves in a circle - clock.
Linear– Moves in a straight line - train
Reciprocating –Moves back and forth in a straight line –Elevators.
Oscillating –Moves back and forth in and arc – windscreen wipers.

Cam Mechanisms A CAM changes the input motion, which is usually rotary motion (a rotating motion), to a reciprocating motion of the follower. They are found in many machines and toys.

YR 7 DESIGN & TECHNOLOGY *KNOWLEDGE ORGANISER – Product Design*

In Design & Technology you are assessed on both the Practical and Theory work.

Health and Safety

Safe and proper use of tools and machinery in the workshop.
Understand the hazards and reduce the risks of incidents occurring

Materials

You will be given the opportunity to use Clay and Card to produce your product. You will learn how to modify (shape, drill) and finish (print and decorate)

Tools and equipment

You will learn to select and use a range of _____ for appropriate tasks. These will include Craft knives _____

Final Piece

At the end of the project you will present a final product. This will be a packeaged, hand made mug that will promote Bristol

KEYWORDS AND KEY TERMS FOR THIS PROJECT

Product Analysis
Analysing existing products to understand what makes them successful

Nets
A 2D shape that can be made .

Evaluation
Considering successful elements or steps that require improvements

Coping saw

Tenon saw

Pillar drill

Types of Clay
Terracotta
Porcelian
Stoneware

Packaging

Sustainability

YR 7 ART AND DESIGN *KNOWLEDGE ORGANISER natural forms*

In Art and Design you are assessed on everything you do in class. There are 4 assessment objectives.

A01 LOOKING AT THE WORK OF ARTISTS - RESEARCH

In each project you will look at and analyse the work of an artist or art movement. In project one you will look at Van Gogh and Piet Mondrian. This research will help you produce your own work.

A02 EXPERIMENTING WITH MATERIALS

You will be given the opportunity to experiment with materials and techniques. You will be expected to select appropriate resources, materials, techniques and processes.

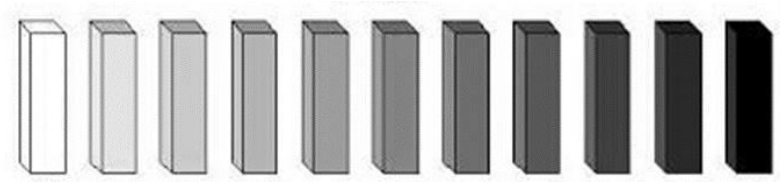
A03 DRAWING AND RECORDING

You will learn a range of mark making techniques such as cross hatch, stipple and feathering. You will be shown how to add tone and contrast to your drawings and how to draw shapes accurately.

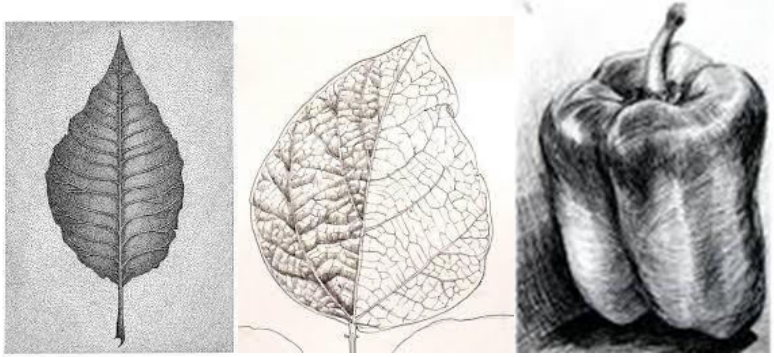
A04 PRODUCING A FINAL PIECE

At the end of the project you will present a final piece of work. This may be a painting, a series of prints or a mixed media piece.

KEYWORDS AND KEY TERMS FOR THIS PROJECT



TONAL DRAWING – Adding a full range of TONES improves your drawings**. FORM SHAPE CONTRAST**



LIGHT HEAVY GRADUAL

HATCH CROSS HATCH LAYER

MARK MAKING TECHNIQUES

These techniques help your drawings by adding texture and form.

Hatching – shading with closely drawn parallel lines.

Cross hatching – To shade an area with intersecting parallel lines.

Stippling - The art or process of drawing or painting using numerous small dots or specks.

Gradual Fading – A shade that gradually fades from dark to light with no definite line.

YR 7 GRAPHICS *KNOWLEDGE ORGANISER*

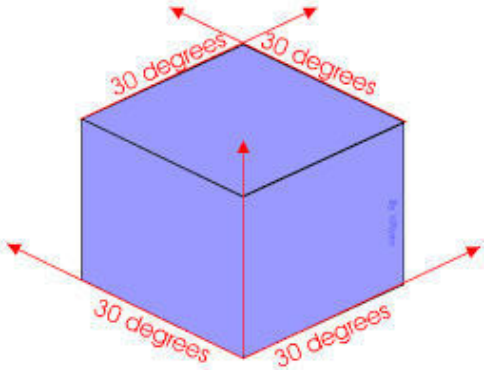
An introduction to 3D drawing

During this project you will be introduced to a series of 3D drawing techniques. You will learn the rules of ISOMETRIC drawing and apply them when drawing shapes, blocks, lettering and objects. You will also learn how to RENDER the shapes so they look like a specific material.

KEYWORDS AND KEY TERMS FOR THIS PROJECT

DEFINITION ISOMETRIC

A pictorial representation of an object in which all three dimensions are **drawn** at full scale rather than foreshortening them to the true **projection**.

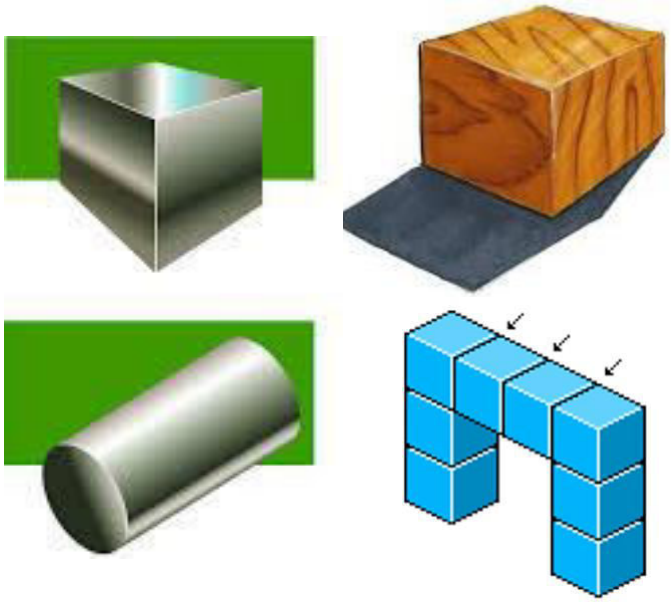


THE RULES OF ISOMETRIC DRAWING

ALL lines are parallel
ALL angles are 30 degrees
There are NO horizontal lines

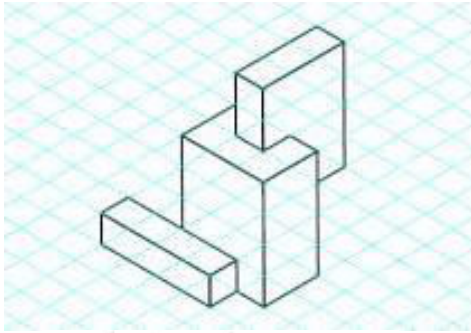
DEFINITION RENDERING

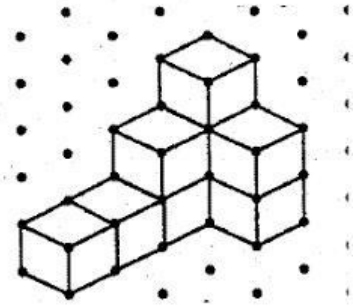
Rendering in visual art and technical **drawing** means the process of formulating, adding colour, shading, and texturing of an image. Example: I rendered the block to look like wood.



Things to try:

You could ask your teacher for some special ISOMETRIC paper and draw a range of shapes using foreground and background.





YR 7 TEXTILES *KNOWLEDGE ORGANISER*

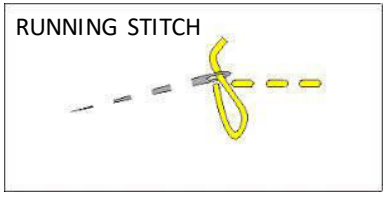
Fabric Owls

During this project you will be introduced to a series of new stitch techniques. You will have the opportunity to stitch using the aid of a piece of BINCA. You will learn techniques in **Applique** and various ways to **Embellish** your work using buttons and beads

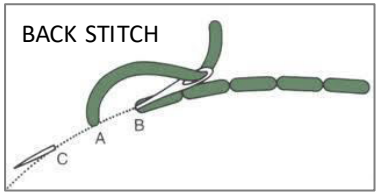
Your final product will be a fabric sugar owl.

KEYWORDS AND KEY TERMS FOR THIS PROJECT

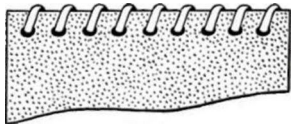
TYPES OF STITCH



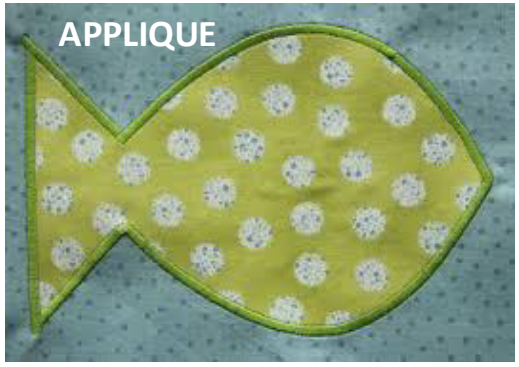
A running stitch has even Gaps and even spaces



A back stitch has no gaps



OVERSTITCH – this stitch fixes The front to the back



EMBROIDERY

DEFINITIONS

APPLIQUE

Applique is a sewing technique that involves stitching a small piece of fabric onto a larger one to make a pattern or design.

EMBELLISH

To make something more attractive by the addition of decorative details or features. You could use buttons, beads or embroidery techniques such as a back stitch or satin stitch.

EMBROIDERY

Embroidery is the craft of decorating fabric or other materials using a needle to apply thread or yarn.

YR 7 DESIGN & TECHNOLOGY *KNOWLEDGE ORGANISER – Product Design*

In Design & Technology you are assessed on both the Practical and Theory work.

Health and Safety

Safe and proper use of tools and machinery in the workshop. Understand the hazards and reduce the risks of incidents occurring.

Materials

You will be given the opportunity to use clay and card to produce your product. You will learn how to coil build, slab build and finish (print and decorate).

Tools and equipment

You will learn to select and use a range of modelling tools for appropriate tasks. These will include craft knives, wooden ribs and metal kidneys.

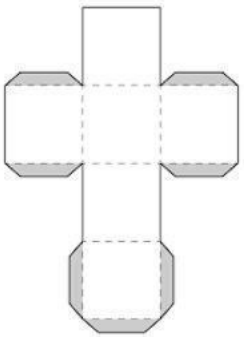
Final Piece

At the end of the project you will present a final product. This will be a packaged, hand made mug that will promote Bristol.

KEYWORDS AND KEY TERMS FOR THIS PROJECT

Product Analysis
Analysing existing products to understand what makes them successful

Net
A pattern that you can cut and fold to make a model of a solid shape.



Evaluation
Considering successful elements or steps that require improvements.

Firing
The process of exposing clay to heat.

Glaze
A glass coating.

Plasticity
The pliability and flexibility of the clay.

Types of Clay
Terracotta
Porcelain
Stoneware

Printing with Lino

Packaging-
What are the legal requirements for a packaging a product.

Sustainability -
Understanding the 6R's
Recycle, reuse, repair, refuse, rethink, reduce.

Knowledge Organiser: Year 7 Dance

Unit title: Introduction to Dance

Big Picture: To understand the four components to create a piece of choreography

The four components to create and evaluate a dance

Actions

WHAT the body is doing

A movement

Six categories:

Jump
Turn
Balance/stillness
Gesture
Weight transference
Travel

Dynamics

HOW the body is moving

The force and speed of a movement

Examples of different dynamics:

Fast
Slow
Sharp
Mechanical
Explosive

Space

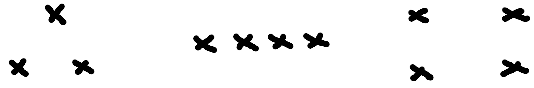
WHERE the body is moving

The area around a dancer. This could be personal or general space

Examples of space:

LEVELS: The height of the action. E.g. High, medium and low

FORMATIONS: Where the dancers stand in a shape.



DIRECTIONS: Where the dancers goes. E.g. forwards, backwards, right, left, up, down and diagonally

PATHWAYS: The patterns created on the floor.

Relationships

WITH WHOM you are dancing with

The interaction between a group of dancers

Examples of relationships:

UNISON: Dancing the same action at the same time

CANON: Dancing one after the other, creating an overlap or ripple effect

Performance skills

TECHNICAL SKILLS (to do with the body)	
POSTURE	The way the body is held when sitting, standing or lying.
FLEXIBILITY	The range of movement around the joints
CONTROL	Performing the movements with strength to hold positions and not fall out of them
CO-ORDINATION	Moving two different body parts at the same time in opposite directions
MOVEMENT MEMORY	Remembering the order of the movements
SPATIAL AWARENESS	Knowing where you are in the space and not colliding with anyone
STAMINA	Being able to keep high energy throughout without tiring
STRENGTH	The force your muscles exert to hold a position for a long time
BALANCE	Put weight on a specific part of the body without falling or wobbling

EXPRESSIVE SKILLS (how you perform it)	
FOCUS	Use of the eyes looking in a specific direction
PROJECTION	Extending the movement with energy
MUSICALITY	Being in time with the beat in the music and the other dancers
FLUIDITY	Smooth transitions from one movement to another to allow them to flow effectively together

The three stages of a warm up:

Pulse raiser

Joint mobility

Stretching

Key words

Choreography - the making of a dance. The dance

Choreographer - the creator of the dance

Motif - A series of dance actions put together to create a phrase

Improvisation - Making movements up on the spot

Chance - A method of choreography created by Merce Cunningham, where the components of a dance are determined by the roll of a dice.

SECTION A – SEVEN STORY TYPES
1. **Rebirth** - The hero 'falls under a dark spell' (sleep, sickness or enchantment) before breaking free and being redeemed. *E.g – The Fall of Man, A Christmas Carol*
2. **Rags to Riches** - At the beginning, the hero is insignificant and dismissed by others, but something happens to elevate them, revealing them to be exceptional. *E.g – Cinderella, Pygmallion.*
3. **Comedy** - A story made up of comedic events, normally involving mistaken identity, misunderstanding or confusion. E.g *A Midsummer Night's Dream*
4. **Tragedy** - A story without the happy ending. Stories usually end with loss or death. *E.g – Icarus, Pyramus and Thisbe.*
5. **Overcoming the monster** - There is an evil force threatening the hero/their world/mankind. The hero must fight and slay this monster, which often isn't easy, but they come out triumphant, and receive a great reward. *Eg – Beowulf, The Epic of Gilgamesh.*
6. **Voyage and return** - The hero travels out of their 'normal world' into the overwhelming and unknown, before escaping back to the safety of their home. This is different to the Quest. E.g – *Alice in Wonderland*
7. **Quest** - In the quest, the hero must set out on a long, hazardous journey, and will battle all obstacles until they are triumphant. *E.g – The Odyssey*

SECTION B – IDIOMS	
1. **Forbidden fruit** – something that is desired because it is not allowed.	7. **David v Goliath –** When a 'small' or unexpected person/organisation defeats a larger one in a surprising way.
2. **To open Pandora's box** – To do something without fully realising unpleasant the consequences.	8. **Down the rabbit hole -** To enter into a situation that is particularly strange, problematic, difficult, complex, or chaotic.
3. **The Pygmalion effect** – Where expectations affect a person's performance.	9. **Mad as a hatter -** used to describe someone who's prone to unpredictable behaviour.
4. **A Cinderella story** – When a person achieves unexpected or sudden success, especially after obscurity, neglect, or misery.	**10. The face that launched a thousand ships -** a snippet of 17th-century poetry that refers to Helen of Troy. It describes the fact that a large scale war was started on her behalf.
5. **To be your brother's keeper** – To be responsible for the well-being of a sibling, or for other human beings in general.	11. **Your Achilles' heel –** An area of weakness/vulnerability, which could lead to your downfall.
6. **Don't fly too close to the sun** - Don't allow ambition to get away with you.	12. **A Trojan horse –** Something which appears harmful, but is secretly vicious.

SECTION C – KEY VOCABULARY				
1. **Allusion** – To hint or refer to something indirectly.	2. Metaphor - A figure of speech containing an implied comparison	3. **Idiom** – A well-known phrase.	4. **Eden** – perfect place/ paradise.	5. **Temptation** – to desire to do something.
6. **Rebellious** – To go against authority.	7. **Defiant** – disobedient.	8. **Sacrifice** – to give up something valued.	9. **Countenance** – facial expression.	10. **Perceptive** – to have a good awareness.
11. **Deceitful** – someone who lies and cannot be trusted.	12. **Vulnerable** – an exposed area or weakness	13. **Lament** – express passionate grief.	14. **Hubris** – excessive pride/self-confidence.	15. **Irrevocably** – A way that cannot be changed, reversed or recovered.
16. **Protagonist** - The leading character	17. **Antagonist** - A person who is actively against the protagonist.	18. **Obscure** – Not discovered or unknown.	19. **Solace** – comfort in a time of great distress of sadness.	20. **Venture** – A risky or daring journey or undertaking.

SECTION D – GRAMMAR

Noun – person, place or thing

1. Proper – a name or a place (capital letter)
2. 2. Concrete – something that can be experienced by the use of the senses
3. Abstract noun – a concept, idea, belief or emotion

Noun phrase - A word or group of words that contain a noun and that work together to form the subject, object or prepositional phrase in a sentence.

Appositive phrase - A noun or noun phrase that renames the noun that comes before it.

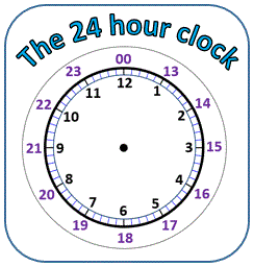
Verbs – An action or state of being

Auxiliary verbs – verbs that help other verbs – E.g , to change the tense (I will go/I was going) or show how likely something is to happen (I may go).

GREENSHAW LEARNING TRUST

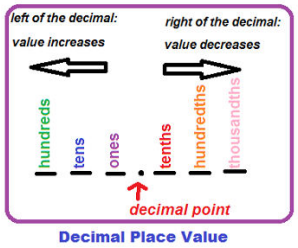
YEAR 7 – AUTUMN TERM

KPI 1 – Time (Hegarty 709 – 711)



1 hour = 60 minutes
1 minute = 60 seconds
24 hours in 1 day
365 days in 1 year

KPI 2 - Add/ Subtract Integers/ Decimals – Place Value and Rounding (Hegarty 18, 19, 47 and 56)



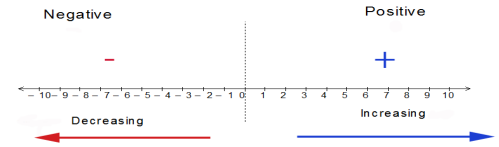
Decimal Place Value

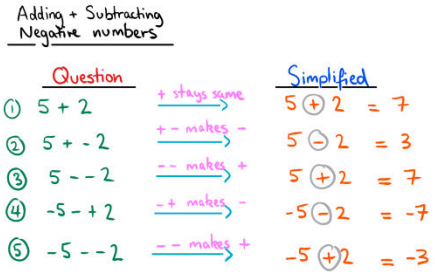
Symbol	Meaning
=	Equal to
≠	Not equal to
≤	Smaller than or equal to
≥	Greater than or equal to
<	Smaller than
>	Greater than

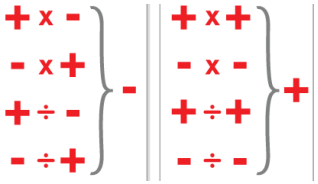
KPI 3 – Multiply/ Divide Integers and Decimals (Hegarty 48, 49, 56)

×	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

KPI 4 – Negative Numbers (Hegarty 37 – 40)





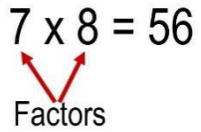


KPI 5 – Primes, Squares, Cubes & Triangular Numbers (Hegarty 28, 99, 100)

Prime	Only have two factors, one and themselves	2, 3, 5, 7, 11, 13, 17, 19
Square	A number times itself (e.g. 3 x 3 = 9) A square root of a number is a value that, when multiplied by itself, gives the number. E.g. 4 x 4 = 16, so a square root of 16 is 4.	1, 4, 9, 16, 25, 36, 49, 64, 81, 100
Cube	A number times itself and times itself again (e.g. 4^3 = 4 x 4 x 4)	1, 8, 27, 64, 125
Triangle	A number that can make a triangular dot pattern	 1 3 6 10

KPI 6 – Factors, Multiples, HCF, LCM (Hegarty 32, 35)

Factor – a number that is multiplied by another to give a product, e.g.



Multiple – the result of multiplying by a number, e.g. the multiples of 7 are 7, 14, 21, 28 and so on.

HCF – Highest Common Factor – the largest factor 2 or more numbers share. E.g. the HCF of 16 and 24 is 8.

LCM – the smallest positive number that is multiple of two or more numbers. E.g the LCM of 3 and 5 is 15.

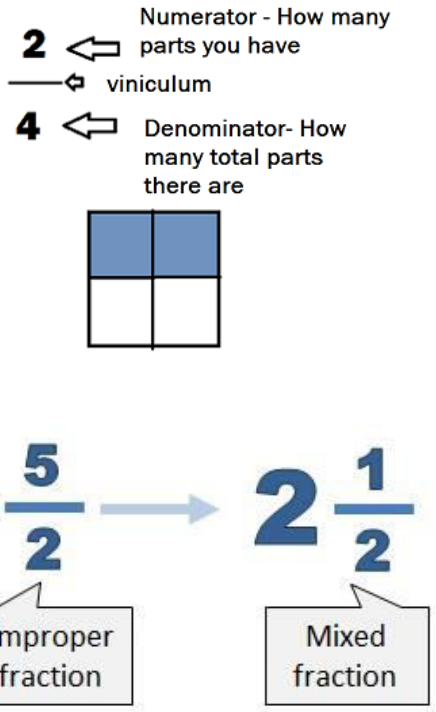
Prime Factors – A factor that is a prime number.

Your knowledge organiser contains all the key facts you need to learn for the Autumn Term. Refer to the Hegarty Clips to practice the skills and processes taught this term.

GREENSHAW LEARNING TRUST

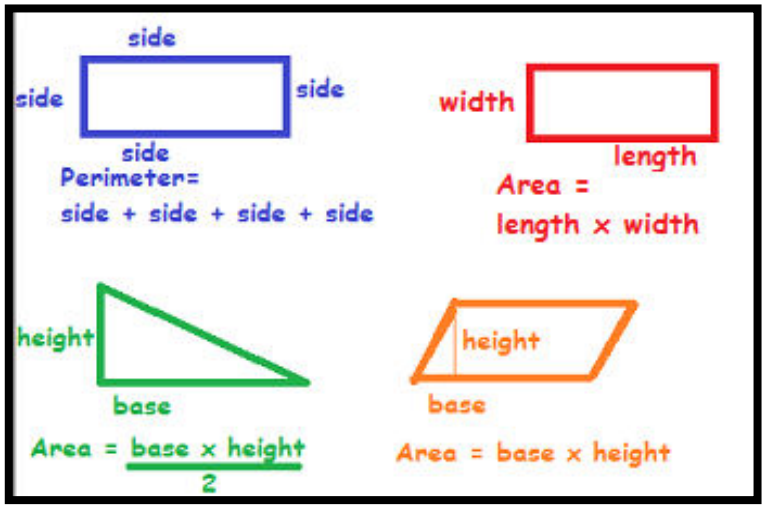
YEAR 7 – AUTUMN TERM

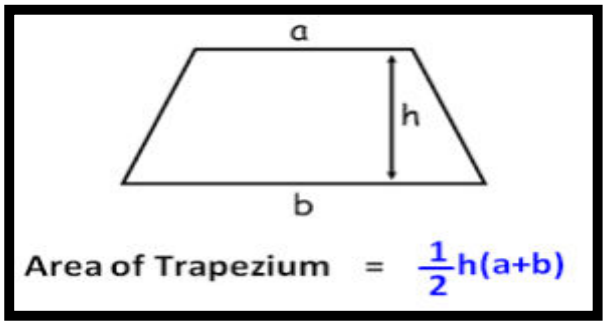
KPI 7 – Equivalent Fractions, Add/ Subtract Fractions (Hegarty 59,65,66)



KPI 8 – Perimeter and Area (Hegarty 548-552, 557, 559)

Area – the amount of space inside the boundary of a 2d shape
Perimeter – the distance around the outside of a 2d shape





Your knowledge organiser contains all the key facts you need to learn for the Autumn Term. Refer to the Hegarty Clips to practice the skills and processes taught this term.