



**Lionheart Educational Trust** 

# Knowledge Organiser Booklet

Year 7 Spring Term

# Ways to use your knowledge organiser

	Look, Cover, Write, Check	Self Quizzing	Mind Maps	Paired Retrieval	Definitions to Key Words
p 1	Look at and study a specific area of your knowledge organizer.	Use your knowledge organizer to create a mini quiz. Write down questions using your knowledge organizer.	Create a mind map with information from your knowledge organiser.	Like self quizzing, use your knowledge organizer to create a quiz.	Write down the key words and definitions.
Step					
Step 2	Cover or flip the knowledge organizer over and write down everything you remember.	Cover or flip the knowledge organizer over and answer the questions and remember to use full sentences and key words/vocabulary.	Add pictures to represent different facts, knowledge. Try to categorise different areas in different colours.	Ask a family member to ask you the questions and tell you which ones you get right and which ones you get wrong.	Try not to use your knowledge organiser to help you.
3	Check what you have written down. Correct any mistakes in a different coloured pen and add anything you missed. Repeat.	Check your answers. Correct any mistakes in a different coloured pen and add anything you missed. Repeat.	Try to make connections that link information together.	Following the quiz, summarise which areas you got wrong and need to revise further.	Use a different coloured pen to check you work and correct any mistakes you may have made.
Step 3			$\mathcal{F}$		



Thunder

God

sea

dead

the harvest

love

poetry and

art

wisdom and

warfare

the Gods

forge

# Unit 2 - Epic Poetry, and Greek and Norse Myths



Greek Myths:		Norse My	Norse Myths:			British F	British Folklore:				
The first written record of Greek mythol		The Vikings believed that human beings inhabited Middle Earth, above Middle Earth (or Midgard) lived the gods in Asgard and below Midgard was the world of the dead.				The British Isles are rich with ancient legends of magic, monsters, warrior kings and noble outlaws.					
The twelve great Olympian gods are named because the live on Mount Olympus and they are led by Zeus, king of the gods.			main Norse god	ls are Odin, Loki a	and Thor.			brought		s are Germanic in or g invaders. Beowulf	
Greek mythology also tells the story of the heroes of the great Greek quests: Hercules, Theseus, Jason, Odysseus and Perseus.			s the name of Od	lin's massive mea	ad hall, home to the g	reat falle	n Viking war		The most famous British myths are the Arthurian legends of King Arthur and the knights of Camelot.		
One of the most famous Greek epics is t Achilles and the Trojan war.	The Valky	The Valkyries are beautiful young female warriors who bring the fallen Vikings to Valhalla.				Glastonbury Tor and Stonehenge are two sites associated with Pagan British myths.					
Idioms Derived from Myths and Legends Mythical Beasts											
<ul> <li>A Herculean task – this refers to a near impossible challenge because in order to redeem himself after accidentally killing his family, Hercules had to complete twelve 'impossible' labours (or tasks).</li> <li>Describing a problem as hydra headed, means that it is a complicated problem where one problem leads to another, just like the Hydra who grew another head each time one was chopped off.</li> <li>A Trojan Horse is a person or a group trying to overthrow something or someone from within, it refers to the wooden horse full of soldiers which was wheeled into the city of Troy to break the siege.</li> <li>Achilles heel – this refers to a person's weak point, so named after the spot on Achilles that was vulnerable, this same point is also called the Achilles tendon.</li> <li>The Midas Touch refers to King Midas for whom everything he touched turned to gold. A person with the Midas touch is a person who has the ability to succeed in every venture.</li> <li>Opening Pandora's Box – refers to Pandora whose curiosity led to her letting all the evils of the world out of a jar. When people talk of opening Pandora's box, they mean a situation is unpredictable.</li> <li>The face that launched a thousand ships – this refers to the beautiful Helen of Troy for whom a thousand ships were launched, in order to reclaim her for Troy.</li> </ul>				f enormous s for hair. ion and the the head of a							
Jupiter Neptune Plu	des/ Hera/ Juno luto Queen of of the the Gods	Demeter/ Ceres Goddess of	Aphrodite/ Venus Goddess of	<b>Apollo</b> God of music,	Artemis/ Diana Goddess of the hunt	м	t <b>hena/</b> inerva ddess of	Dionysus/ Bacchus God of wine	Hermes/ Mercury Messenger of	Hephaestus/ Vulcan God of the	Ares/ Mars God of war



## Year 7 Epic Poetry and Classical Narratives Vocabulary Lists

wily	pursuit	prophetic	hubris
roams	brutal	irresistible	mercy
petrify	realm	wisdom	consequence
magnificence	pity	sacrifice	taunt
subdue	heir	wondrous	eternal
labyrinth	nymphs	sacred	toiled
noble	dismal	insatiable	loathsome
feats	metamorphosis	pride	recoiled
boisterous	radiant	accomplished	grim

# Multiplication The repeated addition of the same number. Also called scaling and timesing. E.g. $3 \times 5 = 3 + 3 + 3 + 3$ Area The amount of space inside the boundary of a two-dimensional shape.

Factor				
Natural Number	Positive integers.			
Multiple	To be in the times-table of. E.g. In the examples to the right; 15 is a multiple of both 3 and 5.	Factor	Factor ↓	Product
Product	The answer to a multiplication calculation.	3	$\times \dot{5} = 3$	15

Reciprocal	The multiplicative inverse of a number, which is found by dividing one by the number. Also called the <b>Multiplicative Inverse.</b> The product of a number with its reciprocal is always 1. For example $2 \times \frac{1}{2} = 1$ , $\frac{1}{3} \times 3 = 1$ , $\frac{2}{3} \times \frac{3}{2} = 1$
Identity	Values, calculations or expressions that always have the same value.

The reciprocal of 5 is 
$$\frac{1}{5}$$
 and the reciprocal of  $\frac{1}{5}$  is  
5  
5 and  $\frac{1}{5}$  are multiplicative inverses.

The reciprocal of  $\frac{3}{4}$  is  $\frac{4}{3}$  and the reciprocal of  $\frac{4}{3}$  is  $\frac{3}{4}$  $\frac{3}{4}$  and  $\frac{4}{3}$  are multiplicative inverses.

Maths	

## **Block 3 – Multiplicative Relationships**



Negative number	A number less than zero.	
Additive Inverse	The number with the same absolute value but opposite direction. E.g. 5 and -5 -0.7 and 0.7	
Scale factor	A number used as a multiplier in scaling to show the relationship between one quantity and another.	
Proportion	When two or more quantities are made bigger or smaller by the same scale factor they are in proportion.	

## **The Properties of Multiplication**

#### The **Distributive** The Commutative **The Associative** property of multiplication property of multiplication property of multiplication $a \times b \equiv b \times a$ $a \times (b \times c) \equiv (a \times b) \times c$ $a \times (b + c) \equiv (a \times b) + (a \times c)$ E.g. E.g. E.g. $5 \times 3 \equiv 3 \times 5$ $\mathbf{2} \times (\mathbf{3} \times \mathbf{5}) \equiv (\mathbf{2} \times \mathbf{3}) \times \mathbf{5}$ $2 \times (3+5) \equiv (2 \times 3) + (2 \times 5)$

## **Block 3 – Multiplicative Relationships**

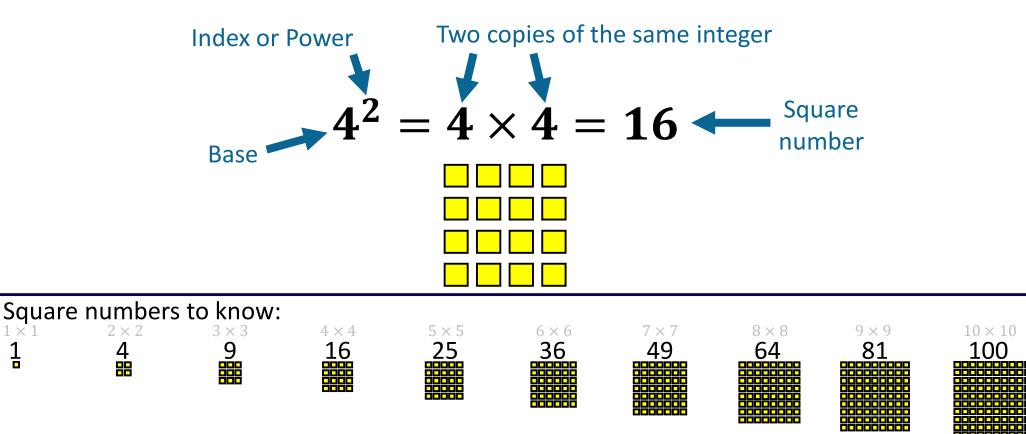
Maths

 $1 \times 1$ 

1



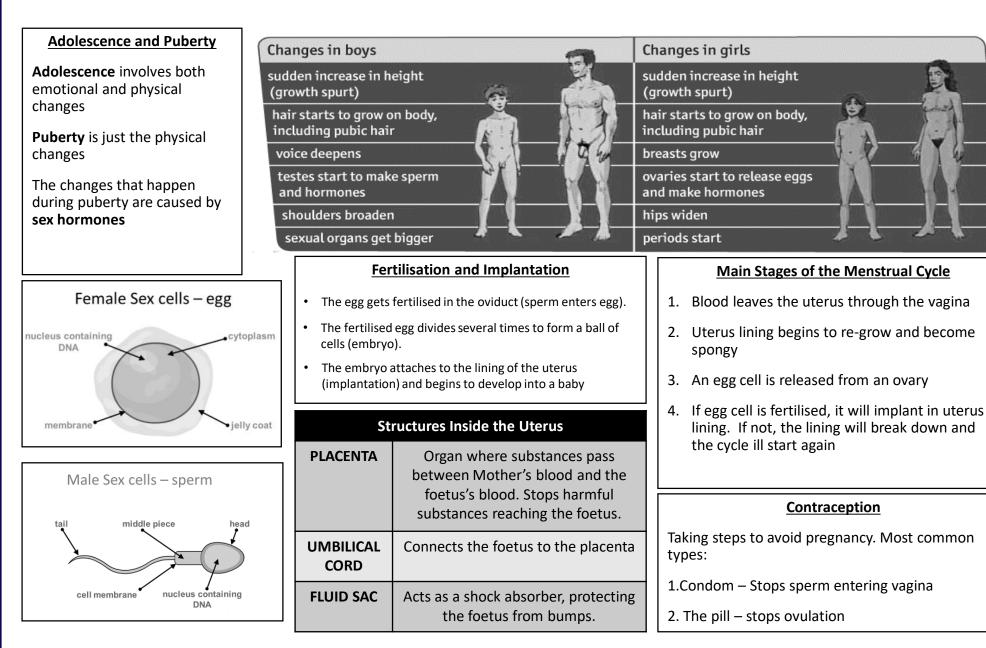
Squaring	The process of multiplying two copies of a number.
Square number (perfect square)	The <b>result</b> of multiplying two copies of an integer. Often just called 'square number'.
Cubing	The process of multiplying three copies of a number.
Power / Index	The power (also called index) of a number tells you how many copies of the number should be multiplied. It is written as a small number to the right and above the base e.g 5 <sup>3</sup> or a <sup>2</sup> .
Base	The number or term that is raised to a power.



#### Maths **Block 3 – Multiplicative Relationships** LIONHEART EDUCATIONAL TRUST Division The inverse of multiplication. Dividend • 12 The number that is divided in a division calculation. Dividend Divisor The number that is doing the dividing. Divisor . The answer when we divide one number by another. Quotient Quotient Indices & Roots Order of priority Brackets (and other groups) Where operations have Brackets & change the priority of the equal priority, we work Multiplication & Division other from left to right. operations. grouping Addition & Subtraction The sum of a set of numbers, or quantities, Mean divided by the number of terms in the set. Share the total equally 8 3 4 5 5 5

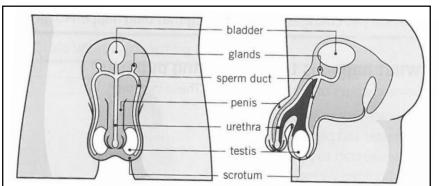
# Science





# Science





Testes	Produce sperm cells. Contained in a bag of skin called the scrotum.
Glands	Produce nutrients to help keep sperm alive.
Sperm Ducts	Tubes that carry sperm from testes to penis.
Urethra	Tube that carries urine from bladder out of the body or sperm from the sperm duct.
Penis	Carries urine and semen pout of the body. Swells with blood and stiffens during intercourse.

cervix urethra vagina
-----------------------

Ovaries	They contain egg cells. One is released each month.
Oviducts	Carry egg to the uterus.
Uterus	Where the baby develops until it is born.
Vagina	Receives the sperm during sexual intercourse.
Urethra	Tube that carries urine from the bladder out of the body.
Cervix	Ring of muscle at the entrance to the uterus. Keeps baby in place during pregnancy.

Parts of the Female Reproductive System

#### Parts of the Male Reproductive system

ſ

Science		Biology: Eco	systems – plan	t reproduction		LIONHEART EDUCATIONAL TRUST
Keyword	Definition		Insects are important in	Main steps in	1 <sup>st</sup> leaf appears,	
Pollen	Contains the plant male sex cells found	the plant male sex cells found on the stamens.		plant plant	plant begins to photosynthesise	V A
Ovules	Female sex cells in plants found in the	ovary.	are currently threatened and			A
Pollination	Transfer of pollen from the male part part of a plant. Pollen is usually carried one flower to another.	•	e plant to the female nsects or wind from Without them, we		A	
Fertilisation	The process by which the male (poller cells meet. This develops into a seed a into a fruit.		would have issues with growing our food.	Seed adsorbs Root grows	余余了	More leaves appear, plant
Germination	If a seed has the correct resources (wa will start to grow. The period of time to grow is known as germination.			coat splits	he shoot arts growing	now produces its own food using photosynthesis
Seed	Structure that contains the embryo of	a new plant.	Four methods of	ur	pwards	
Fruit	Structure that the ovary becomes after contains seeds.	r fertilisation, which	<ul> <li>seed dispersal:</li> <li>Wind</li> <li>Animal</li> </ul>		The Pistil or Carpel The female part of the flower is called	<u>The Stamen</u> The male parts of the flower
Carpel	The female part of the flower, made u the pollen lands, style and ovary.	p of the stigma where	<ul><li>Water</li><li>explosive</li></ul>		a pistil. <u>Stigma</u> The top of the	are called Stamens.
Adaptations of	of insect pollinated flowers	Adaptations o	f wind pollinated	flowers	Carpel is called the Stigma. What do you notice when you touch it?	Anther The top of the Stamen is called the Anther.
often sweetly scent	ed with nectar - to attract insects	no scent or nectar -	no need to attract insec	ts	Style The Style acts in	Filament
large, brightly colou	ired petals - to attract insects	small petals, often b	small petals, often brown or dull green - no need to attract insects		the same way as a stem and holds up the Stigma.	The Filament acts in the same way as a stem and holds
pollen often sticky or spiky - to stick to insects		pollen light and smo	ooth - wind can blow it a	nd stops it clumping together	Ovary The ovary contains the eggs.	up the Anther.
moderate quantity pollination	of pollen - less wastage than with wind	pollen produced in g	great quantities as most	of it doesn't reach other flowers		
anthers firm and inside flower - to brush against insects anthers loose			ched and dangle out - to	release pollen into the wind		
stigma inside the flo	ower - so that the insect brushes against	it stigma hangs outsid	e the flower - to catch tl	ne drifting pollen		
stigma has sticky co	pating - pollen sticks to it	stigma feathery or n	et like - to catch the dri	fting pollen		



Key word	Definition
Element	a substance that cannot be broken down in to other substances
Atom	smallest part of an element. Every element is made up of one atom/ all atoms in an element are the same
Compound	is made of two or more elements chemically combined. E.g. carbon dioxide & water.
Mixture	is made of two or more elements/ compounds not chemically combined
Molecule	a group of two or more atoms strongly joined together e.g. $O_{2}$ . Weak forces hold molecules together
Pure	A material that is composed of only one type of particle e.g. elements or compounds
Impure	A material that is composed of more than one type of particle e.g. a mixture
Solution	A mixture of a solute dissolved in a solvent
Solute	The solid or gas that's dissolved in a liquid
Solvent	The substance, usually a liquid that dissolves other substances
Evaporation	The change of state from liquid to gas that occurs when particles leave the surface of the liquid only
Distillation	A process for separating the parts of a liquid solution. The solvent is heated and the gas is collected and cooled
Filtration	The act of pouring a mixture through filter paper, in attempts to separate pieces of a solid that are mixed with a liquid or solution
Chromatography	A technique used to separate mixtures of coloured compounds

Pure substa	nces and m	ixtures		
A pure eleme	ent	$\infty$	Pure substances have a fixed	
A pure compound			melting and boiling point.	
Mixture of ele and compoun		∞ • \$ \$ ₽ •		
Mixture of elements			Mixtures (impure substances) do not have a fixed melting point.	
Mixture of compounds				
Solutions				
Solutions	Sugar is soluble in water. This means it dissolves in water. The resulting mixture of the solute (sugar) and solvent (water) particles is called the solution.			
Dissolving	During dissolving, the solvent particles surround the solute particles and move them away so they are spread out in the solvent.			

# Science



Solubility A saturated solution is a solution which no more solute will dissolve. The solution contains the maximum mass of a substance that will dissolve. There is always some undissolved substance in the container.	Add more copper sulfate Dilute copper sulfate solution Add more copper sulfate Concentrated copper sulfate solution Saturated copper sulfate solution
Insoluble	Substances that cannot dissolve in water
Solubility	The maximum mass of solute that dissolves in 100g of water.
Solubility curves Every substance has a different solubility as shown by the solubility curve opposite. Most substances get more soluble as temperature increases.	100 900 900 900 900 900 900 900

Separating techniques	
<b>Filtration</b> If you have a mixture of an insoluble solids and a liquid then the mixture can be filtered.	Filter paper Residue (sand) Filter funnel flask Filtrate (water)
<b>Evaporation</b> Evaporation separates salt from sea water. Once all of the water particles have left the <b>surface of the solution</b> , solid salt remains.	evaporating basin gauzo
Salt has a much higher boiling point than water. You can use the difference in properties to separate the two substances by <b>distillation</b> . Uses boiling and condensing to separate substances with different boiling points.	
Simple <b>chromatography</b> is carried out on paper. It can be used to separate dyes in food colourings. A spot of the mixture is placed near the bottom of the chromatography paper. As the solvent soaks up the paper it carries the mixtures with it. Different components of the mixture will move at different rates which separates the mixture out.	chromatography paper solvent

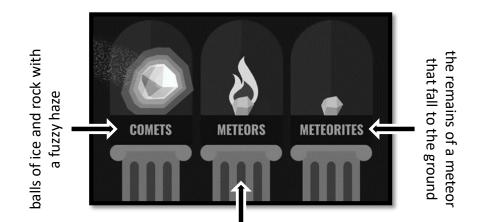
Science



## **Objects in the Night Sky**

**Satellites** are anything that orbit the Earth, they can be **natural** or **artificial**.

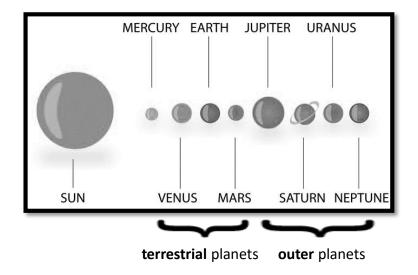
There are five **planets** that we can see from Earth with the naked eye: Mercury, Venus, Mars, Jupiter and Saturn.



small balls of dust or rock that burn up in the Earth's atmosphere producing streaks of light

Most of the lights in the sky are **stars** in our **galaxy**, the **Milky Way**. We can talk about their distances from Earth in terms of **light years**: the distance light travels in a year.

There are billions of stars in each galaxy. The Milky Way is just one of billions of galaxies in the **universe**.



## **The Solar System**

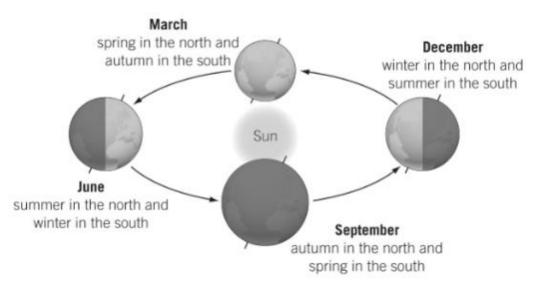
There are eight planets in our solar system, which orbit the Sun in an **ellipse** shape.

The **asteroid belt** is between Mars and Jupiter. It contains thousands of pieces of rock.

The terrestrial planets are made from **rock**, whereas the outer planets are **gas giants**.

The solar system was formed when **gravity** pulled gas and dust together to first form our Sun about 5 billion years ago. Planets formed in a similar way afterwards.





## The Moon

The same half of the Moon is always lit up by the Sun, but how much we see from Earth depends on where it is in its orbit (see diagram to the right).

The light from the Sun can be blocked when the Earth comes between the Sun and the Moon. This is called a **lunar eclipse**.

When the Moon comes between the Sun and the Earth, sunlight cannot reach parts of the Earth's surface. At these points there is a **solar eclipse**.

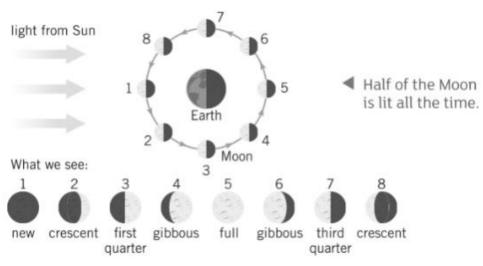
## The Earth and Seasons

The Earth spins on its **axis**, tilted at 23.4°. It takes 24 hours (one day) to fully rotate.

This spin gives us **day** and **night**: day when you face the Sun, night when you face away.

The Earth orbits around the Sun approximately once every 365 days (one **year**).

The tilt gives us **seasons**: it's summer when a hemisphere tilts towards the Sun and winter when it tilts away. Its hotter in the summer as the days are longer and the Sun warms the Earth for longer. The rays from the Sun are more concentrated than they are in winter.



## 1. Life in Medieval England



Religion and the Church	Life in villages and towns	Women in Medieval England
<ul> <li>What did people believe?</li> <li>Almost everyone in England were Christians and believed in God, heaven and hell</li> <li>People were scared of going to Hell and huge Doom paintings showed the horrors that awaited sinners</li> <li>The Pope was the head of the Catholic church and seen as God's representative on earth</li> <li>Most people would attend church regularly to take part in mass or confess their sins to the priest</li> </ul>	<ul> <li>Medieval villages</li> <li>Most people in medieval England were poor peasant farmers (villeins) who lived in villages</li> <li>The lord of the manor was the most powerful man in the village and owned most of the land</li> <li>Villeins would have to work on their local lord's land for three days per week</li> <li>Villages usually included a manor house, church, mill and workshops for a blacksmith and carpenter</li> <li>Villeins were not allowed to leave the village as they were owned by their lord</li> </ul>	<ul> <li>Women were usually under the control of men, young women were controlled by their fathers and once married their husbands took over</li> <li>Girls married at a young age and could be trapped in a violent marriage if they were unlucky</li> <li>Many women had 5-6 children by their mid-20s and teenage pregnancies were encouraged</li> <li>Many women died during childbirth and many children did not survive into adulthood</li> </ul>
Key PeoplePriests –head of the local church in villages and towns. Performed important ceremonies such as baptisms, marriages and funerals. Collected charity. Helped organise community events.Monks and Nuns –Lived separately from society and dedicated their lives to God. They lived simple lives. Monks were able to read and write and speak Latin. Both monks and nuns provided charity to those in need.		<ul> <li>Advantages for women</li> <li>Women would not have to fight for the king in times of war</li> <li>High-ranking women could inherit their husband's land and title</li> <li>Women who beat their husband were rarely taken to court as it was too humiliating</li> <li>When husbands and wives commit a crime together she can escape punishment by claiming she was just obeying her husband</li> </ul>
<ul> <li>Importance of religion</li> <li>Religion dominated medieval peoples' lives and many people attended mass every day</li> <li>Before Science developed religion helped to explain matters people did not understand</li> <li>The Church had its own courts where people could be fined for non-attendance</li> <li>People gave one-tenth of their crops or earnings to the church as a tithe (tax)</li> </ul>	<ul> <li>Life in medieval towns</li> <li>By the late 14<sup>th</sup> century there were about 20 towns in England with a population over 3,000</li> <li>London was the largest town with about 40,000 people</li> <li>A wall surrounds the town with a gatehouse at its entrance</li> <li>Towns were busy places with plenty of shops and merchants, knights and noblemen</li> </ul>	

## 2. Problems for medieval monarchs



	Matilda – the forgotten queen (1135)	King John and Magna Carta (1215)		Eleanor of Aquitaine
• • • •	Matilda was the daughter of king Henry I and heir to the English throne She was experienced and multi-lingual but faced opposition due to being a woman When her father died in 1135 her cousin Stephen raced to crown himself king There followed years of conflict between the supporters of Matilda and Stephen Matilda was criticised for being arrogant and refusing to listen to advice but this was probably because she was a woman Eventually a deal was struck, Stephen would be king but Matilda's son Henry would inherit the throne after Stephen's death When her son, Henry II, was on the throne Matilda	<ul> <li>John is now viewed as one of the worst kings in English history</li> <li>The English barons revolted against John due to the high taxes they were being forced to pay and his tyrannical rule</li> <li>In 1215 they forced John to sign the Magna Carta where he promised to give noblemen a fair trial before they were imprisoned and not to impose unfair taxes</li> <li>The rights protected by the Magna Carta only applied to freemen so many Englishmen were not affected by the charter</li> <li>However, the Magna Carta provided the basis for many of the rights and freedoms we now enjoy in England</li> </ul>	•	Eleanor was queen of both France and England during her lifetime In 1137 she was married to the king of France but this marriage was annulled in 1152 after she failed to produce a male heir Eleanor then married Henry (Count of Anjou) who was the heir to the English throne Henry became king of England and he and Eleanor had eight children together between 1152-66 Eleanor was involved in a revolt against her husband in 1173 and was imprisoned for 16 years as a result When Henry died, Eleanor was released and continued to play an important role during her son's (Richard and John) reign
•	ruled Normandy very effectively Thomas Becket and the murder in the Cathedral (1170) King Henry II (1154-89) was frustrated by the		•	The Black Death (1348-51) The Black Death arrived in England carried by rats
	power of the church in medieval England Henry appointed his friend Thomas Becket as Archbishop of Canterbury to increase his influence over the church	R. IOLN.	•	and people from ships in Europe The disease spread quickly across England and 70% of its victims never recovered The population of England reduced from 5 million
•  •	However, as Archbishop Becket became very religious and refused to obey Henry Eventually, Henry flew into a rage and said 'Will no-one rid me of this troublesome priest'		•	to 3 million within just a year There were fewer workers following the Black Death so peasants were able to ask for higher wages
•	Four knights overheard Henry's outburst, rode to Canterbury and murdered Becket Becket became a saint and Henry was humiliated and had to beg for forgiveness	King John who was forced to sign the Magna Carta in 1215	•	The feudal system broke down as peasants left their manor in search of higher wages Some lords moved from growing wheat to raising sheep on their land as this required fewer expensive workers



The Peasants' Revolt (1381)	Joan of Arc (1412-31)	Problems for medieval monarchs
<ul> <li>Key causes of the revolt</li> <li>1. The Statute of Labourers (1351) had tried to prevent peasants asking for higher wages</li> <li>2. Villeins (poorer peasants) were angry that they had to work on their local lord's land for free and pay rent as well</li> <li>3. A new Poll tax had been introduced which the peasants hated and could not afford</li> <li>4. John Ball, a radical priest, began to preach that all men were created equal challenging the feudal system</li> </ul>	<ul> <li>Joan was born into a poor farming family in 1412 in north-east France in the midst of the Hundred Years War between the French and the English</li> <li>At the age of 16 she claimed that religious saints had visited her and told her to go to the French Dauphin (Charles) and tell him to let her lead an army to drive the English out of France</li> <li>1428 Joan meets with Charles and convinces him to let her lead an army to relieve the town of Orleans which had been under siege from the English for six months</li> </ul>	<ul> <li>rule as queen in medieval England as most people believed that women were too weak</li> <li>Matilda should have become queen in 1135 but the prejudice and sexism of the time meant that her cousin Stephen became king</li> <li>2. THE CHURCH – medieval monarchs had to share power with the Catholic church which was rich and powerful</li> <li>Henry II tried to control the church by placing his friend Thomas Becket as Archbishop of</li> </ul>
<ul> <li>Key events in 1381</li> <li>The revolt began in May 1381 in Fobbing, Essex when villagers attacked tax collectors</li> <li>Riots spread across south-east England and by June 1381 thousands of peasants were marching on London to protest to the king</li> <li>The rebels ran riot burning buildings and murdered the Archbishop of Canterbury, Simon Sudbury</li> <li>When the king met the peasant army their leader Wat Tyler was killed but Richard promised to listen to their demands and persuaded them to return home</li> </ul>	Joan of Arc	<ul> <li>Canterbury, but this was a disaster ending in Becket's murder</li> <li><b>3.</b> THE BARONS – wealthy noblemen might challenge the power of the king and refuse to obey his commands</li> <li>King John was one of the worst English kings in history and was forced by the barons to sign the Magna Carta in 1215 promising to respect their rights</li> <li><b>4.</b> THE BLACK DEATH – killed millions of people in England during the 14<sup>th</sup> century which led to a shortage of labour and higher wages</li> </ul>
<ul> <li>Consequences</li> <li>Richard II did not keep his promise and instead he ordered the ringleaders of the revolt to be arrested and executed</li> <li>John Ball was captured and cut to pieces in front of the king and his head was stuck on a spike on London Bridge</li> <li>However, the revolt frightened the rich and the Poll tax was scrapped and within a hundred years most peasants were freemen</li> </ul>	<ul> <li>After arriving in Orleans Joan inspired the French troops to defeat the English within four days</li> <li>Joan won a number of other battles and when Charles was crowned king in 1429 she stood by his side holding her banner</li> <li>However, in May 1430 she was captured and sold to the English by the Burgundians</li> <li>Joan was put on trial for heresy for dressing like a man which was against Church law, she was found guilty and burnt at the stake in May 1431</li> </ul>	<ul> <li>5. THE PEASANTS – the lower classes could also cause problems for the king if they rose up and refused to accept their role within the feudal system</li> <li>1381 Peasants' Revolt saw thousands of peasants march on London threatening royal authority, burning the houses of the rich and</li> </ul>

## Saladin and the Third Crusade



1. Background – The Crusades	2. Saladin	3. Battle of Hattin (1187)
<ul> <li>The Holy Land – the area including Jerusalem and the surrounding area is an important religious site for three world religions (Christianity, Islam and Judaism)</li> <li>First Crusade – was an attempt by Christians to seize control of Jerusalem and the Holy Land at</li> </ul>	<ul> <li>1137/38 – Saladin was born in Tikrit in modern day Iraq</li> <li>1148 – witnesses the major battle between Muslim forces and the 2<sup>nd</sup> Crusade at Damascus</li> <li>1168/69 – now part of the Syrian army of Nur al-Din he helps his uncle Shirkuh to conquer Cairo</li> </ul>	<ul> <li>By 1187 Saladin was powerful enough to challenge the Crusaders for control over the Holy Land</li> <li>There had been increasing tension between Christians and Muslims partly due to the behaviour of Reynald of Chatillon</li> </ul>
<ul> <li>Siege of Jerusalem (1099) – the First Crusade captured Jerusalem massacring its inhabitants and pillaging the city</li> <li>Crusader States – following the success of the First Crusade four crusader states were established in the Holy Land to consolidate Christian control over the region</li> </ul>		<ul> <li>Reynald had enraged Saladin and many other Muslims by attacking pilgrims journeying to the Holy city of Mecca</li> <li>Saladin gathered a huge army of 30,000 men, half of which was made up of cavalry, he was determined to drive the Christians out of the region</li> <li>Saladin successfully lured the Crusaders into an ambush at the battle of Hattin in July 1187. The</li> </ul>
Second Crusade (1147-49) – was launched after the Turkish general Zenga captured the city of Edessa in the Holy Land. However, this crusade was much less successful and failed to recapture Edessa Saladin – as a young boy growing up in Damascus Saladin witnessed the major defeat of the Second	1170 – following the death of his uncle he is chosen as the	<ul> <li>Crusaders army which consisted of 20,000 men was almost completely destroyed</li> <li>Saladin personally cut off the head of his greatest enemy, Reynald of Chatillon</li> <li>Jerusalem was now at the mercy of Saladin and he was able to advance upon the city ready to seize it back from the Crusaders almost 100 years after its</li> </ul>
Crusade. His older brother Shahanshah was killed in the fighting.	new leader (vizier) of Egypt 1174 – Nur al-Din, Syrian leader, dies and Saladin sees an opportunity to unite the Muslims of the Middle East in a Holy War against the Crusaders	capture during the First Crusade

1174-83 – Saladin takes over cities in Syria ready for his confrontation with the Christians



1. Retaking Jerusalem	2. The Third Crusade	3. Why was Saladin so successful?	
<ul> <li>20<sup>th</sup> September 1187 – Saladin arrives outside the city walls of Jerusalem</li> <li>Siege of Jerusalem – Saladin's forces attacked the city walls using Mangonels and burning underneath their foundations</li> </ul>	Launching the crusade – the news that Jerusalem had fallen to Saladin was greeted with great shock in Europe -Pope Gregory VIII launched the Third Crusade to retake the Holy City and the kings of Germany, France and England all agreed to participate	<ul> <li>a) Trust – Saladin kept his word which helped to build trust from his followers</li> <li>b) Ruthlessness – although his reputation suggests tha Saladin treated his enemies with respect he could be ruthless when required, e.g. he had two of his enemies crucified in Cairo</li> </ul>	
Map of the Holy         Land at the time         of the Third         Crusade    Negotiations – by October 1187 the city walls had been breached and Saladin began negotiations for the surrender of Jerusalem Saladin the merciful – Saladin was keen to avoid the bloodshed that had occurred when the crusaders had taken Jerusalem almost one hundred years before Ransom – after a ransom of 30,000 dinars was paid the	<ul> <li>Richard vs Saladin</li> <li>The Third Crusade became a battle between Richard the Lionheart (English king) and Saladin</li> <li>Richard arrived in the Holy Land in 1191 and helped the Crusaders to take the city of Acre</li> <li>Richard then attempted to march south and take back Jerusalem for Christianity but his path was blocked by Saladin's army</li> <li>The winter of 1191-92 developed into a stalemate with Richard unable to advance on Jerusalem, eventually an exhausted Richard decided to return back to Europe on 9<sup>th</sup> October 1192</li> <li>The Third Crusade was over and Jerusalem remained under the control of Saladin</li> <li>Saladin was also exhausted after years of conflict with the Crusaders and on 4<sup>th</sup> March 1193 he died</li> <li>The legend of Saladin suggests that he died virtually penniless</li> </ul>	<ul> <li>c) Luck – the death of his uncle, Shirkuh, and the ruler of Syria, Nur al-Din, were both fortunate for Saladin and helped him to build his power base</li> <li>d) Merciful – following his victories Saladin was careful not to slaughter and plunder his enemies he understood that if you humiliated your rivals you would turn them into a permanent enemy</li> </ul>	
inhabitants of the city were allowed to leave without harm			



1. Reasons for the success of the Mali Empire	2. The Great Hajj (1324)	3. Timbuktu
<b>Geography</b> – Mali was a fertile country and its people could grow enough food for themselves and have	1324 – Mansa Musa sets out on a religious pilgrimage to Mecca, the journey covered about 3,000 miles	Mansa Musa wanted the city of Timbuktu to be his greatest legacy He paid the architect Al-Sahili to build a
surplus to trade. They learned how to use weapons from iron and horses for transport. This helped them to	The emperor took 60,000 followers (including 8,000 soldiers) , 80 camels and 300lbs of gold with him	new mosque in the city Timbuktu became a centre for learning
create powerful armies <b>Trade</b> – Mali sold Gold and Salt to	Mansa Musa	with thousands of manuscripts in its famous libraries
North African traders and bought silks from China, spices from India and Persian fabrics		The city became like a medieval European university and attracted students and academics from across West and North Africa
<b>Islam</b> – a common religion helped to tie the different peoples who were part of the empire together		Timbuktu became known as the 'pearl of Africa'
Security – Mansa Musa protected his	In July 1324 he spent the summer in Cairo and gave so much gold away as gifts that the	4. The Decline of the Empire
people and traders from attack helping to increase the flow of trade	precious metal started to lose its value in Egypt	Following Mansa Musa's death the Mali Empire broke apart losing territory
<b>Propaganda</b> – Mansa Musa used griots (musicians and poets) to spread stories about the empire across West Africa	During his time in Mecca he spent time with other worshippers and met great Islamic scholars and Imams. He invited some of them to return to Mali with him.	including Timbuktu Eventually West Africa was taken over by European powers and Mali became a French colony

## Unit 2: How does weather and climate affect our lives?



#### <u>Key words:</u>

Weather: The short term state of our atmosphere which can vary on a daily basis, e.g. sunny, rainy, windy. Climate: The long term average temperature and precipitation for a specific location., normally measured over a 30 year time period.

**Climate change**: significant changes in temperature, rainfall and wind as a result of a warmer atmosphere.

#### Why is studying the weather important?

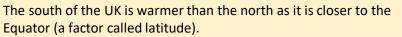
- Farmers study the weather so they know whether rain is forecast for their crops.
- Extremes of weather can lead to flooding which can damage homes and cost money.
- Changes to weather can disrupt transport e.g. roads can become icy which can be dangerous.

#### How do we measure the weather?

Weather measurement	Units	Instrument
Air temperature	°Celsius	Thermometer
Rainfall	mm	Rain gauge
Wind speed	m/s	Anemometer
Wind direction	Compass directions	Wind vane
Humidity	% water in air	Hygrometer

#### How do temperature and rainfall vary across the UK?

The western side of the UK receives more rainfall (shown in blue on map) than the east (shown in brown) as the UK's weather comes from the Atlantic Ocean so the air contains more moisture. The air is forced to rise over higher ground forming relief rainfall in western areas. The clouds have then lost their moisture so the east is much drier.



The UK has 4 distinct climate zones. The higher relief upland areas are also colder as temperature decreases with altitude (height above sea level).

#### Why does climate vary around the world?

**Global Circulation System:** The Equator receives the most energy from the Sun and so the global circulation system works to redistribute the heat around the world. Air rises in some places (Equator and 60°N and S) creating high rainfall, whereas air sinks at other places (30°N and S and 90°N and S), creating dry conditions or deserts.

**Ocean circulation**: Water also moves around the oceans to help spread heat around the world. This ideas was seen when a container of ducks opened and the ducks floated all around the world.

#### How does climate influence the world's biomes?

There are 7 main climate zones as shown on the map – these are areas with distinct temperatures and rainfall totals. The climate in these areas influences the plants and animals that are found there and the location of biomes.

**Biomes**: A large scale community of plants and animals occupying a particular habitat.



#### <u>What are the main features of the major</u> <u>biomes?</u>

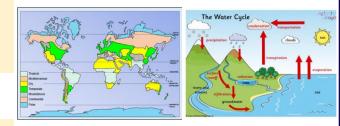
**Polar:** Very low temperatures and low rainfall. Animals are adapted e.g. polar bears have thick fur. Few plants grow here due to cold, e.g. Arctic.

**Temperate:** Moderate temperature and rainfall, range of animals and plants found here, good conditions for plant growth, e.g. UK.

**Mediterranean:** Warm temperatures and moderate rainfall, plants such as olive trees found here, e.g. southern Spain.

**Hot desert:** Very high temperatures and v. low rainfall, few plants can survive except cacti, animals are adapted, e.g. Sahara desert, north Africa.

**Tropical rainforest:** High temperatures and high rainfall, rapid plant growth, many animals found here, e.g. Amazon rainforest, Brazil.



#### How much water is available?

- There is a fixed volume of water on the Earth which has not changed over time.
- 97% of water is salt water and 3% is fresh water.
- However, the demand for water has increased by 600% as population has increased and people use more water in their daily lives.

## How does weather and climate affect our lives?

#### What is water scarcity?

- Water scarcity occurs when there is more demand for water than there is water available leading to a shortage of water.
- This can be due to lack of rainfall physical water scarcity.
- Or lack of money to provide clean drinking water for people – economic water scarcity.

#### What is drought and what are the causes?

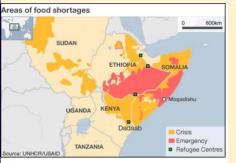
- Drought is a prolonged period of unusually low rainfall that can lead to water shortages.
- The main physical cause of drought is a lack of rainfall, but it can be made worse by human actions such as building dams and deforestation.

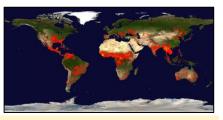
#### **Drought in the Horn of Africa**

**Causes**: the area only received 30% of the normal rainfall totals in 2011 and 2012.

**Social impacts (people):** 12 million people needed food aid, 920 000 people left Somalia as there was so little food available.

**Economic impacts (money):** price of food went up by 68% and \$2.48bn was requested to help. **Environmental impacts:** too much grazing of animals harmed the soil and trees were cut down.



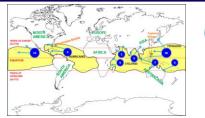


# Why are wildfires becoming more common?

- A wildfire is a large, destructive fire that spreads quickly over scrubland (type of trees) or bushes.
- Heat, fuel and oxygen are needed for wildfires to burn.
- Climate change is increasing the size, frequency, intensity and seasonality of wildfires.
- While climate change might not ignite (start the fire burning) the fire, it is giving fires the chance to turn into large, dangerous blazes.
- It creates warmer temperatures, increasing the amount of fuel (dried vegetation) available, and reduces water availability.

#### What causes flooding?

- River flooding occurs when there is too much water in the river so some of the water overflows onto the land around.
- Some of the main causes of flooding:
- Extreme rainfall too much rainfall for the river to hold.
- Steep slopes rainfall reaches river faster so flooding more likely.
- Deforestation soil not held together by roots so blocks river.
- Urbanisation impermeable surfaces mean water cannot soak in and reaches the river quickly.



## LIONHEART EDUCATIONAL TRUST

#### What are tropical storms?

Tropical storms are powerful low-pressure systems which create heavy rainfall of 25cm a day and very strong winds of 120km/hr

- They occur in tropical waters (shown in map to left) as this provides more energy so the water evaporates and forms large rain clouds.
- Tropical storms cause damage as flooding destroys homes and the strong winds can damage vegetation, homes and power lines.

#### How do urban areas influence climate?

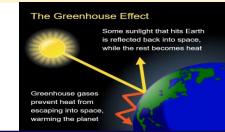
Urban areas: these are towns and cities with lots of buildings and higher population densities.

Rural areas: these are the countryside and small villages – lots of green open spaces, fields etc.

- Urban areas have warmer temperatures than rural areas as the darker surfaces absorb more heat from the sun and there is less water and bare ground which cools air.
- Urban areas have more rainfall as the pollutants that are produced allow water droplets to form around them which forms clouds which creates rainfall.

#### How is the climate changing?

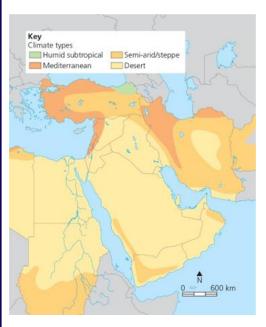
- There are natural and human reasons why the climate is changing.
- Greenhouse gases trap more of the Sun's radiation which increases temperature.
- Human activity is producing more greenhouse gases such as carbon dioxide and methane.
- Trees and plants are able to absorb greenhouse gases.



#### Year 7 Unit 3: Middle East







#### Middle East's physical geography

• The Middle East is a transcontinental region, located where Asia, Africa and Europe meet.

- This region is rich in oil
- There are two seasons. Winter and summer. Even winters are hot.

•The climate can be described as arid. There is little rainfall in the region.

• The northern countries receive the most rainfall including Turkey and Syria.

#### Natural resources – oil and gas

The Middle East is the source of the world's largest and most important reserves of **crude oil.** 

The Arabian plate currently holds 48 per cent of the world's **oil** reserves and 43 per cent of the world's **natural gas**.

This wealth of oil and gas is the result of the slow continual movement of the Arabian plate. The Arabian plate experienced around 570 million years of nearly uninterrupted sedimentation, an ideal setting for the creation of hydrocarbons, the compounds that make up crude oil.

#### Climate in the Middle East The south

The Arabian Peninsula is predominantly desert. Rain comes mainly between May and September but there is only light, brief rainfall in most of the region and in some areas it never rains at all.

A **Mediterranean climate** has two distinct seasons: hot dry summers when the weather is similar to a desert and warm and wetter winters.

#### Water stress and drought

• Many countries are facing water stress including Saudi Arabia, Yemen and Oman. **Water stress** is where the demand for water **exceeds** the availability (**Exceeds** means to go above)

• Population growth and falling rainfall is causing an increase in water stress. The level of water in underground **aquifers** is falling. In some

places this decreasing by 6 metres per year

(An **aquifer** is an ancient supply of water deep beneath the ground)

• Water stress will impact on the **social** and **economic** development of countries in the Middle East. Farmers will not be able to grow crops or rear animals. This could lead to a rise in food prices and eventually food shortages. In the future water shortages could lead to conflict in the region.

#### How can we improve water supply in the region? Pivot irrigation

This uses water which is buried deep in the ground. They reach this water through drilling into the ground and creating a sprinkler which waters the land and crops above in a circular motion. Due to their shape, they do waste space and are expensive to create (\$5 billion). However, they allow crops to grow in dry places and they do not need a lot of workers to take care of them.

#### Desalination

Desalination is turning sea water into fresh water. It is a heavily used technique in the Middle East. However, it is creating brine, a salt material that when pumped back into the sea can kill animals. It is very expensive to do and creates a lot of pollution to complete the process.







Causes of war/conflict – key terms			
<ul> <li>Economic gain</li> </ul>	(to take control of another country's wealth)		
<ul> <li>Territorial gain</li> </ul>	(to take control of land)		
<ul> <li>Nationalism</li> </ul>	(to prove your country is superior/better than another country)		
<ul> <li>Civil war</li> </ul>	(fighting between different groups of people within the same country)		
<ul> <li>Revolutionary war</li> </ul>	(when large numbers of people in a country tries to topple the		
	government or leader of a country)		
<ul> <li>Refugee</li> </ul>	(a person fleeing from war, persecution or natural disasters. They are		
	protected by law. People have to prove they are a refugee if they want		
	a safe country to accept them)		
<ul> <li>Asylum seeker</li> </ul>	(someone who claims to be a refugee, looking for a safe place to live;		
	but whose case has not yet been proven)		
<ul> <li>Migrant</li> </ul>	(is a person who moves from one place to another. Refugees are a		
	type of migrant)		
<ul> <li>Economic migrant</li> </ul>	(Someone who moves to another country for a job there. Refugees are		
	very different to economic migrants)		

#### How has the United Arab Emirates developed?

- UAE was formed in 1971. It is a group, or federation, of seven emirates – land ruled by a monarch called an emir.
- Abu Dhabi, the largest and most important emirate, covers 85 per cent of the country.
- Dubai is the most populated: 35 per cent of UAE's population.
- Oil reserves are the seventh largest in the world.
- Natural gas reserves are the seventeenth largest in the world.
- Second largest economy in the Middle East.
- Since its formation the economy has grown 231 times.

#### How is the UAE diversifying their economy?

A strong and consistent government, since 1971, has been very successful at diversifying the economy to reduce the dependence on oil exports. Dubai has been particularly successful at this, becoming a global city. Oil revenue has been invested in developing modern ports, airports and airlines, turning Dubai into a world communication hub. Dubai promotes itself as 'a gateway to global trade, as a dynamic and diverse economy at the crossroads of the world'. The city's assets, including its architecture, modern transport system, highclass hotels, shopping malls, theme parks, yearround sunshine, beaches and deserts are all the result of economic investment using oil revenue. As a consequence, the city has developed into the fifth largest world tourist destination.

#### **Conflict in Yemen**

The conflict in Yemen has caused a **humanitarian crisis**. It is threatening people's health, safety and well-being on a large scale. It has a number of social and economic consequences for the people of Yemen.

1. At least 10,000 people have died in the 3 and a half years since the conflict begun.

This is an estimate figure and it is expected to be more.

2. Around 20 million people are **food insecure. Food security** is having reliable access to food at an affordable price.

3. Hospitals and schools have been destroyed by air strikes.

4. Transport infrastructure has been destroyed by air strikes making it difficult for **aid** to get to the places it is needed most.

5. 50% of the population struggle daily to get enough water to drink and grow food

#### Yemen - why so poor?



Climate - desert - difficult to grow crops, so food unreliable.

**Water stressed** – seventh most water stressed country in the world, mismanaged. In the capital city, Sana, tap water is available once every four days for 2 million people.

**Politics** – politically unstable, government corruption, it has misused nation's wealth

**Economy** – no products exported, agriculture poorly developed so reliant on food imports. Yemeni men worked in Saudi Arabia as migrant workers and sent money home, but with the outbreak of war they were sent home. Oil now running out, gas has been discovered but country is too unstable to develop it.

**Inaccessible** – no railways, so difficult to transport basic services to people.

**War** – regular outbreaks of civil war, oil wealth spent on military rather than developing the country. Now infrastructure damaged, economy falling apart, disease spreading, people reliant on aid.

**Population** – due to double in next 20 years, two thirds of the population under 24, unemployment among young is at 60 per cent.

**Gender inequality** – women have few rights and less education than men, girls often taken out of school to marry young or care for relatives, approximately 49 per cent of women are illiterate, half the potential of the country not used.

Access to education and healthcare – this was already poor before the current war. Potential of the country for economic development – gas reserves and tourism – beautiful and unique landscape and historically important buildings, but war and instability mean these cannot be developed. RS

## What is the purpose of Jesus in Christianity? Knowledge Organiser



Explanation Jesus was born in approximately 4BCE in Bethlehem. Christians	Concept Symbolism	Explanation	
	Symbolism		
believe that he is God incarnate and that he is the teacher, sav- iour and judge of all people.	of the gifts at the Nativity	Gold— a precious metal often associated with royalty. This shows that Jesus is King of the World Frankincense— this is used by Priests and shows that Jesus is holy Myrrh— an embalming fluid used on dead bodies. This shows that Jesus will die for the sins of mankind.	
All powerful. For example, Jesus' first miracle of turning water into wine at the Marriage at Cana	Monotheism	Belief in one God.	
All knowing. For example, God knew the Job would not turn his back on God despite God allowing the devil to test Job.	Holy Trinity	The belief that there is one God who can be seen in three per sons- <b>Father, Son</b> and <b>Holy Spirit</b> . Each of these is wholly Go but they are not the same.	
nnipres- Everywhere. God is everywhere. t		The Father– the creator The Son– Jesus The Holy Spirit– God in the world today who guides, helps and	
All loving. For example, Jesus died on the cross to make up for the sin that humans have committed. Jesus forgave an adulter-	Spin	teaches people	
The Fall The event where Adam and Eve disobeyed God by eating the forbidden fruit from the Tree of Knowledge. They were ban- ished from the Garden of Eden and brought sin, evil, death and		The parable of the Lost Son. A boy takes his inheritance early and wastes it. He returns home, expecting his father to reject him, but instead, his father welcomes him with open arms. The forgiving father represents God. The lost son represents all people or sinners who can return to God.	
	Agape	Unconditional love for all people	
Jesus is God in human form. He is fully God and fully human.	Dr. John Sentamu	The Retired Archbishop of York who wrote a book called 'Agape Love Stories' that show Jesus' love in action.	
Jesus was born without sin to a virgin mother and was placed in her womb by God. He was born in poverty but visited by roy- alty and shepherds, showing that he came for all people. He has all of the characteristics of a human e.g. feels pain, grows old; but also of God e.g. is omnipotent and omnibenevolence.	Damilola Taylor Trust	A charity set up by Richard Taylor to give opportunities to dis- advantaged and under privileged young people. He is inspired by agape and does this in memory of his son, Damilola, who was tragically murdered by a gang.	
	<ul> <li>into wine at the Marriage at Cana</li> <li>All knowing. For example, God knew the Job would not turn his back on God despite God allowing the devil to test Job.</li> <li>Everywhere. God is everywhere.</li> <li>All loving. For example, Jesus died on the cross to make up for the sin that hum ans have committed. Jesus forgave an adulterous woman.</li> <li>The event where Adam and Eve disobeyed God by eating the forbidden fruit from the Tree of Knowledge. They were banished from the Garden of Eden and brought sin, evil, death and suffering into the world.</li> <li>They broke the relationship bet ween hum ans and God. This is hereditary, meaning that it is passed on to all hum ans.</li> <li>Jesus is God in hum an form. He is fully God and fully hum an. Jesus was born without sin to a virgin mother and was placed in her womb by God. He was born in poverty but visited by royalty and shepherds, showing that he came for all people. He has all of the characteristics of a human e.g. feels pain, grows</li> </ul>	Into wine at the Marriage at CanaHoly TrinityAll knowing. For example, God knew the Job would not turn his back on God despite God allowing the devil to test Job.Holy TrinityEverywhere. God is everywhere.All loving. For example, Jesus died on the cross to make up for the sin that humans have committed. Jesus forgave an adulter- ous woman.Parable of the Lost SonThe event where Adam and Eve disobeyed God by eating the forbidden fruit from the Tree of Knowledge. They were ban- ished from the Garden of Eden and brought sin, evil, death and suffering into the world.Parable of the Lost SonJesus is God in human form. He is fully God and fully human. Jesus was born without sin to a virgin mother and was placed in her womb by God. He was born in poverty but visited by roy- alty and shepherds, showing that he came for all people. He has all of the characteristics of a human e.g. feels pain, growsDamilola Taylor Trust	

# French



	FRENCH	ENGLISH
1	les yeux	eyes
2	les cheveux	hair
3	la taille	size
4	mon frère	my brother
5	mon oncle	my uncle
6	ma tante	my aunt
7	ma soeur	my sister
8	mes grand-parents	my grandparents
9	grand	tall
10	mince	thin
11	gros	fat
12	petit	small
13	mon école	my school
14	l'anglais	English
15	le français	French
16	les sciences	Science
17	les maths	Maths
18	la cuisine	Cooking
19	l'histoire	History
20	violet	purple
21	gris	grey
22	marron	brown
23	amusant	fun
24	ennuyeux	boring

	FRENCH	ENGLISH		
25	formidable	great		
26	nul	rubbish		
27	génial	great		
28	normalement	normally		
29	d'habitude	usually		
30	souvent	often		
31	cependant	however		
32	le matin	the morning		
33	le soir	the evening		
34	l'après-midi	the afternoon		
35	je préfère	l prefer		
36	vraiment	really		
37	un peu	a bit		
38	je pense que	I think that		
39	à mon avis	in my opinion		
40	combien?	how much/many?		
41	comment?	how?		
42	de temps en temps	from time to time		
43	quelquefois	sometimes		
44	parfois	sometimes		
45	avoir	to have		
46	j'ai	l have		
47	je n'ai pas de	I don't have		
48	être	to be		
49	je suis	l am		
50	je ne suis pas	l am not		

# Spanish



	SPANISH	ENGLISH		
1	los ojos	eyes		
2	el pelo	hair		
3	la estatura	size		
4	mi hermano	my brother		
5	mi tío	my uncle		
6	mi tía	my aunt		
7	mi hermana	my sister		
8	mis abuelos	my grandparents		
9	alto	tall		
10	delgado	thin		
11	gordo	fat		
12	bajo	small		
13	mi colegio	my school		
14	el inglés	English		
15	el francés	French		
16	las ciencias	Science		
17	las matemáticas	Maths		
18	la cocina	Cooking		
19	la historia	History		
20	morado	purple		
21	gris	grey		
22	marrón	brown		
23	Gracioso	fun		
24	aburrido	boring		
25	genial	great		

	SPANISH	ENGLISH		
26	malo	rubbish		
27	estupendo	great		
28	normalmente	normally		
29	generalmente	usually		
30	a menudo	often		
31	sin embargo	however		
32	la mañana	the morning		
33	la noche	the evening/night		
34	la tarde	the afternoon		
35	prefiero	l prefer		
36	realmente	really		
37	un poco	a bit		
38	pienso que	I think that		
39	en mi opinión	in my opinion		
40	¿cuánto?	how much/many?		
41	¿cómo?	how?		
42	de vez en cuando	from time to time		
43	a veces	sometimes		
44	algunas veces	sometimes		
45	tener	to have		
46	tengo	l have		
47	no tengo	l don't have		
48	ser	to be		
49	soy	lam		
50	no soy	l am not		

## Unit 3: Fitness



Fitness component	Description
Cardiovascular endurance	The ability of the heart, lungs and blood to transport oxygen during sustained activities.
Speed	How quickly you can move the whole body or part of a body.
Muscular endurance	To perform repeated muscular contractions over a sustained period of time.
Strength	The maximum force a muscle can apply.
Agility	The ability to change direction at speed
Power	Speed x strength
Flexibility	The range of movement around a joint.

## Key terminology

Key word	Description			
Heart	A muscle which pumps blood around your body			
Lungs	Organs which breathe in oxygen and breathe out carbon dioxide			
Oxygen	A gas needed for creating energy			
Anaerobic	High intensity exercise			
Acceleration	An increase in speed			
Repetition	Each time a movement is repeated			
Contraction	A muscle producing a force			
Balance	Remaining stable. Centre of mass stays over base of support			
Force	A push or pull that changes that causes an object to speed up or slow down.			
Suppleness	Moving and bending with ease.			

## Unit 4: Leadership



Roles within physical activity	Description of roles	Qualities
Performer	Takes part in the activity Executes skills and tactics	<ul><li>High effort levels</li><li>Fair</li><li>Can-do attitude</li></ul>
Coach	Plan and lead warm up & activities Give instructions and demonstrate Give coaching points Time activities and whole session	<ul> <li>Organised</li> <li>Good communicator</li> <li>Confident</li> <li>Knowledgeable</li> <li>Enthusiastic</li> </ul>
Official	Time a competition Enforce the rules Risk assessment Start and stop the game	<ul> <li>Knowledgeable</li> <li>Confident</li> <li>Good communicator</li> <li>Good decision maker</li> </ul>

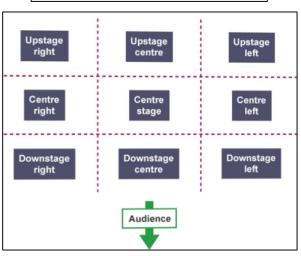
#### Warm up ideas:

- Stuck in the mud
- Cups and saucers with cones (one team turn cones right way round, the other team turn them upside down)
- Truck and trailer (can be dribbling a football/ basketball etc)
- Piggy in the middle
- Obstacle course

# Topic 2 Chicken! by Mark Wheller



Areas of a stage



Stage directions are written from an actors point of view on stage not from the audiences point of view.

# Features of a script



What is a script?	The story that has been written for actors to perform
What is the name given to the writer of the script?	Playwright
Acts in a play are broken up into a number of?	Scenes
The words an actor speaks in the script is called?	Dialogue
The parts of the script describing the actions, setting and characters are called?	Stage directions— usually written [in brackets] or <i>italics</i>
What is the name given to the person responsible for setting the play on stage?	Director
A person written about in a script is called a?	Character

<u>Vocabulary</u> <u>test</u>

Learn the spellings below:

- 1.) playwright
- 2.) dialogue
- 3.) script
- 4.) character
- 5.) theatre
- 6.) audience
- 7.) director
- 8.) actor
- 9.) role
- 10.) scenes



**Theatre in Education** was created as a way to **help students learn about** a topic in an exciting way. A 'TIE' play is written for a target audience this means the plays are written with a certain year group in mind.



**Cross cutting** is when two or more scenes are performed on stage at the same time. The final scene of Chicken!

'The accident' uses this drama technique.



**Playwrights intention** means what were the script writers aims of the play. What do they want the audience to learn from reading or watching their play. In Chicken! The intention is to raise awareness about road safety and peer pressure.

**Theatre in the round** is when the audience is seated on all sides of the stage. Think about how fans sit at a football or rugby match.

**Physical skills** These skills are linked to the ways an actor **uses their body** to communicate their **character.** They are all non verbal communication skills, meaning you do not talk or make any sound!

**Body Language- Posture Body Language – Gestures Facial expressions** 







Vocal skills These skills are linked to the ways an actor uses their voice to communicate their character. There are **3 key elements** you are going to explore: Pace, Volume, Tone.



:)



# **USING STIUMULUS IN DRAMA**

Every good performance starts with an idea, and every idea comes from a stimulus. There are lots of different stimuli available, and in this unit we will be exploring how we can use them to create engaging performances. The stimuli we will use are;

- Photographs
- Poems
- Newspaper articles
- Music
- Props
- Costume

#### KEY WORDS

#### Stimulus

A stimulus is a starting point or trigger to generate ideas.

#### Devising

Working as part of a group in response to a stimulus leading to the creation of an original performance.

#### Expression

Vocal and physical skills used to portray character during performance.

#### Rehearsal

The practice or trial performance of a play or other work for later public performance.

#### Character

A person, animal, being, creature, or thing in a performance.





# **USING SCRIPT IN DRAMA**

From comedies to tragedies, horror to action, romance to sci-fi, the basis of most performances is a script. It is the job of actors and directors to bring this script to life, taking the dialogue and stage directions from page to stage and creating a world for the audience to peer into.

In this unit we will develop our own script writing skills, perform duologues, and create monologues. We will examine characters, delve into storylines, and explore emotion through performance with a focus on;

- Blood Brothers
- World War One
- The Five Senses
- Slapstick

#### KEY WORDS

#### Accent

A particular way of talking and pronouncing words and is associated with a geographical area or social class.

#### Pitch

The highness or lowness of the voice. For example, when a person is excited or nervous their pitch may become higher.

#### Pace

The speed at which someone speaks. For example, if someone is tired, they may speak slowly.

#### Volume

How loud or quiet your voice is. For example, if someone is angry, they may shout.

#### Stage directions

An instruction written into the script of a play, indicating stage actions, movements of performers, or production requirements.





# **DEVELOPING PERFORMANCE SKILLS**

To become a successful actor, you must develop your performance skills. This means you need to carefully consider how you will portray your character on stage. In this unit you will think about the following questions and begin to understand how to create character.

- Does your character have an accent?
- What is the tone of their voice like?
- How quickly do they speak?
- What does your character's movements and way of using their body says about them?
- Are they very nervous and stressed so may fidget a lot or have their shoulders hunched up tight to indicate tension?
- Does your character move their face a lot?
- What does their facial expression say about their character?
- Do they have a very expressive face or do they try not to give much of themselves away?

## KEY WORDS

#### CHARACTER

A person, animal, being, creature, or thing in a performance.

#### VOCAL EXPRESSION

The use of voice to show the emotion of a character, including tone, pace, pitch, and volume.

#### FACIAL EXPRESSION

A non-verbal way to convey emotions and communicate the feelings and thoughts of the characters to the audience.

#### GESTURE

the actions used by an actor to show what the character is feeling or what they are doing.

#### POSTURE

the position that a character is sitting or standing in to show their feelings or status.



Music

## Introduction to Ukulele

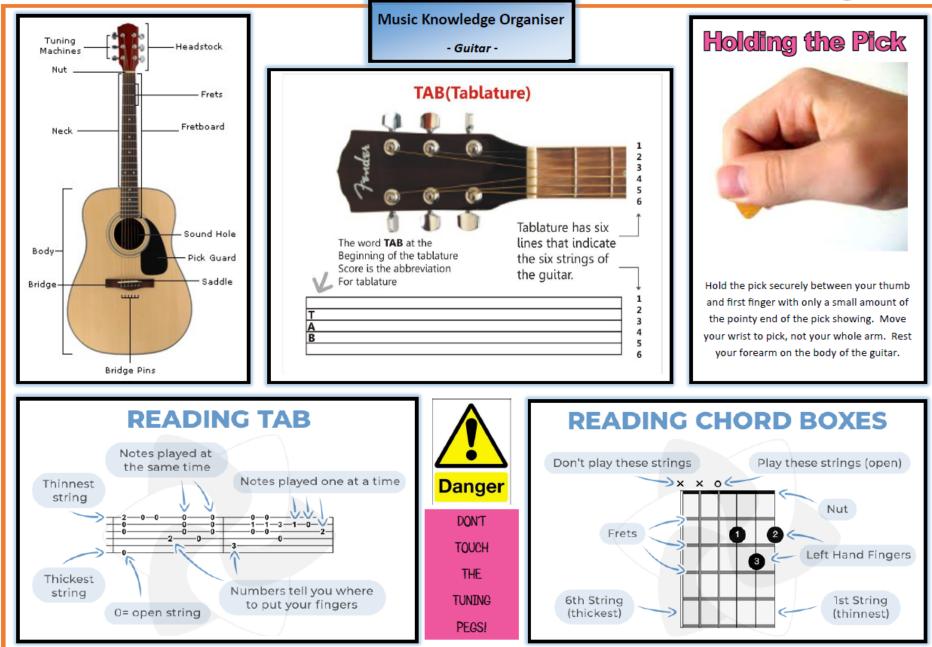


	The ukulele is a small guitar-like instrument with nylon strings, from Hawaii. Uku-lele					
Ukulele translates to 'Jumping Flea'			•			
Holding a				le Chord Diagrams	Ukulele	
	Ukulele		(A chord is 2 or	more notes heard together)	Skills	
1	90°	The back of the ukulele must be against your belly.	<b>C</b> C Major		<ul> <li>Timing &amp; Accuracy</li> <li>Tap your foot along to the pulse to help with timing.</li> <li>Prepare chords ready to be played.</li> </ul>	
2		Hold your elbow away from your body with the wrist bent.	<b>G</b> G Major		<ul> <li>Strumming Technique</li> <li>Using the Thumb: Flesh Down, Nail Up</li> <li>Using the Index Finger: Nail Down, Flesh Up</li> </ul>	
3		Place the thumb of your hand behind the neck.	<b>Am</b> A Minor	Am 0000	<ul> <li>Projection – the volume and clarity of your playing.</li> <li>Don't softly stroke when you strum. 'Dig in' to the strings to project the sound.</li> </ul>	
Posture		The diagram will help you with use the correct fingers for the chords above.		Even Tone Quality		
	4. Your back to the back of the chair.       5. Sit on the front edge of your chair.       fingers for the chords above.		<ul> <li>Strum in a straight line (up and down)</li> <li>Strum in the same position</li> </ul>			

Music

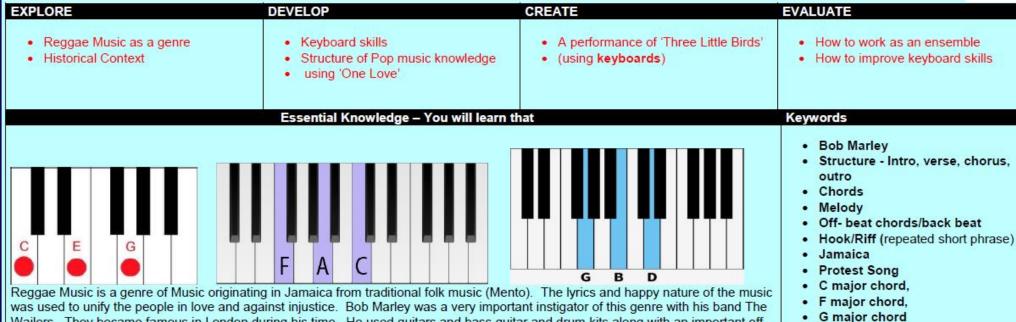






Music





Wailers. They became famous in London during his time. He used guitars and bass guitar and drum kits along with an important off beat chord technique called a Back Beat.

#### Skills:

Chords are 2 or more notes played at the same time.

A melody is one note at a time and can also be called the tune.

Playing together means keeping the same tempo and listening together to fit the two parts in an ensemble.

A riff repeats over throughout the song:





triad

shutterstock.com · 1877234956





# Y7 Art & Design- NF Creatures

EXPLORE	Ē	DEVELOP		CREATE		EVALUA	<b>ATE</b>
elements th	xplore the A&D the formal hrough the work of others and written and practical activities.	<b>Develop</b> an underst photography paintin	tanding of drawing, ng and 3D techniques.	Create a range of outcome tasks. Such as Tonal Portra mask.		c each outcor Will comple	valuate their progress and effectiveness of ne they produce using Ebi & www activities te written critique of the work of other k in the lesson and for homework.
ESSENTIAL	_ KNOWLEDGE- You will Lear	n That	Recording from Observation is a	Techniques and Proce	sses- You wi	ll learn how	
Formal Elements are the Key to Art and design in understanding and making <b>KEY WORDS &amp; FORMAL ELEMENTS ART GENRE</b>		Primary source observational	Grades of Pencils		TECHNIQUE DEFINITIONS		
		drawing: drawing something real in	Pencils come in different grades.	balance	The even spread of the design	and spacing of the shapes across	
Word composition	Definition The position and layout of images on the		front of you. Secondary source	The softer the pencil the darker the tone.	orientation		a shape has been put on the I, horizontal and diagonal
line tone shape	<ul> <li>Defines shape, the outer edges of someth</li> <li>How dark or light a shape is</li> <li>The outline of the still life objects</li> </ul>	ung	observational drawing: drawing	H = hard, B = black (soft) In Art the most useful	scale	The different size of design	of shapes used within the print
form	Appearing three-dimensional		something from a picture.	pencils are B, 2B and 4B.	bleed	a blending techn	ique used with water
texture	A repeated shape or line     The feel or appearance of a surface, how     or smooth it is	rough	6B 4B 2B B	НВ Н 2Н	Cross hatching	Lines are placed of to build up areas	over each other at different angles of tone
Designet Ihemes Natural I living cre natural f seeds, p creature	Forms: objects or eatures in their form, leaves, flowers, ine cones, sea es, shells	CERAMIC	diums/ Techniques C TECHNIQUES	TOPIC TERForegroundFront of pictureMiddle groundMiddle area of piceBackgroundAppears in distancePrintingMethod of repeatilayeringAdding different suMediumMaterial art is madePrimary3 base coloursSecondaryMix of 2 primaries.TertiaryMix of 3 primary	cture. ce in picture ing an imag urfaces on to	space.	<ul> <li>Proportion the relationship of the size of one element when compared to another.</li> <li>Symmetry has identical parts mirroring each other across a line of symmetry.</li> <li>Observation drawing from life &amp; looking closely.</li> </ul>



# Y7 Food – Preparing Food Safely & The Eatwell Guide

<u>· · · ·</u>		1.EV			
EXPLORE         DEVELOP           PLORE         DEVELOP           whore how to keep safe when preparing food redients and how to ensure that you work in greinic and methodical way.         DEVELOP           Applies all principles of food safety and hygiene when preparing and cooking ingredients.         Name the correct cutting methods and know when to use the Bridge method and when to use the Claw methods appropriately.		CREATE	EVALUATE		
		CREATE Select and use a range of ingredients to make a couscous salad, bread rolls, apple crumble, Cheese Scones and Vegetable stir fry Use correct preparation methods and correct equipment with care.	EVALUATE Reviews practical work with detailed responses. Sentences are well written and most prompt questions are considered throughout responses		
ontain. Essential Knowledg	e – You will learn that	Techniques and Proces	ses – You will Learn how		
What is the Eatwell Guide? Comprises 5 main food groups. Is suitable for most people over 2 years of age. Shows the proportions in which different groups are needed in order to have a well-balanced and Shows proportions representative of food eaten more. Why is the Eatwell Guide important? The Eatwell Guide shows you how much (proportions) of food you need for a healthy balanced diet. What are the consequences of a poor die! A poor diet can lead to diseases and can't st us from fighting off infections. What are the sections on the Eatwell Guide Fruit and vegetables Potatoes, bread, rice, pasta and other starch food Dairy and alternatives Beans, pulses, fish, egg, meat and other proteins Oils and spreads	healthy diet. over a day or	Weighting md         1. Make sure good seales are get to measure get			



Washing up

these to the knife block straight away.

Step 3: Wash each item with a dish cloth or brush.

#### Key Practitioners – Artists, Designers, Movements and Themes

Step 1: Put the plug into the sink. Fill the sink up with hot water to about haif way. Add a few squirts of washing up ilguid while it is filling up.

Step 2: Scrape your plates and then pile your washing up in the order you are going to wash it next to the sink - Always start with knifes, dry and return

#### Materials/ Mediums/ Ingredients – Origins and Properties

#### Step 4: Dry the dishes with a tea towel. Step 5: Wipe down the sink area using a dish cloth and remove any food from the plug hole. Step 6: Put the washing up liquid, brush and sponge back in the silver pot next to the sink. MY WASHING UP KEEP 'EM SEPARATED. AVOID CRCSS CONTAMINATION GUIDE Feod Storage I MARK UP WE WART TO KEEP OUR WATER AT OFFICE ID ME CTART WITH THE LEAST DUTY OF WITH THE REALLY DUTY AND CREASY FEMS START OFF WITH CUPS AND CLASSES HEXT WARR THE UTTLERY AND UTENELS NOW WASH THE DOWLS AND 6 inches PLATES REMEMBERING TO WASH THE LEAST DIRTY ONES Cleaning& Sanitizing AFTER WASH UP THE FINALLY WASH THE CREASEST IND DIRTIEST ITEMS SUCH AS Cross Chilling Cooking Cleaning



Subject & Topic Terminology

The Eatwell Guide: A healthy eating model showing the types and proportions of foods needed in the diet.

Hydration: The process of replacing water in the body. Energy: The power the body requires to stay alive and function.

Macronutrients: Nutrients needed to provide energy and as the building blocks for growth and maintenance of the body. These are fat, Carbohydrates and fats.

Micronutrients: Nutrients which are needed in the diet in very small amounts. These are called vitamins and minerals.

Evaluation: the making of a judgement about the amount, number, or value of something; assessment.

Bridge Cutting method: This method of cutting is safe and can be used for lots of different ingredients, such as tomatoes, potatoes, peppers and strawberries.

Claw Cutting method: This method of slicing is safe, and can be used for lots of different ingredients, such as peppers or courgettes or celery

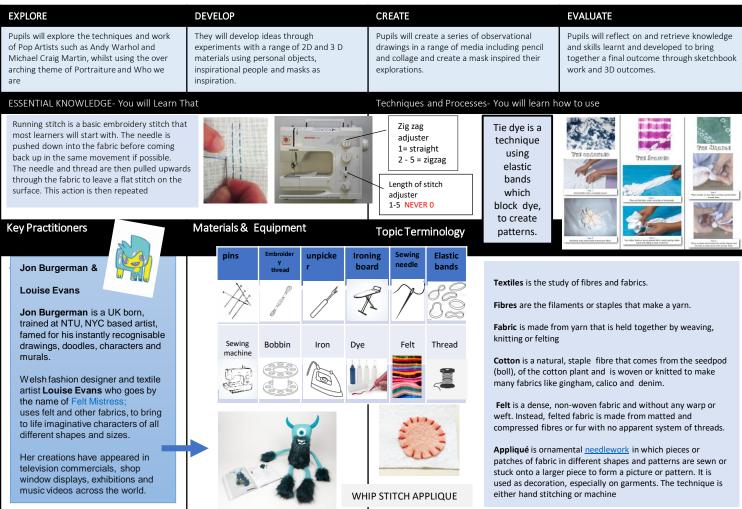


## Y7 Product Design – Wooden Puzzles

(PLORE			DEVELOP		CREATE		EVALUATE		
as a subject and explore the properties of d Wood, Deforestation and Is Compostable K			Will develop their own designs inspired by the designs of patterns and colour in the work of Karim Rashid. They will adapt these to a wood based product that is eye catching to children.		Design a thick wooden Jigsaw puzzle for young children. This will be a personal response to the work of Karim Rashid and will meet the brief and consumer profile.		others as well a nd understanding e. will inform the	Pupils will reflect and analyse the work of others as well as their own to develop an understanding of the design process. This will inform their evaluation of the project and it's success rate.	
SENTIAL KN	OWLEDGE- Y	ou will Learn Th	<sup>lat</sup> ligs &		Techniques ar	nd Processes- Y	ou will learn how	/	
	copy of jig help or sand improv	f the original. It he os you drill in the r d at a perfect angl es <b>accuracy</b> and <b>s</b> <b>neasuring</b> . <b>Designers</b> ,	plate to get an exact elps with accuracy. A right place every time e every time. It aves time marking Materials/ Mediums/ In Origins and Properties	ngredients –	sc po clu ty	baking into the surfact prous materials e.g. oth. It <b>plasticises</b> as pe of plastic – does othes.	wood, paper, card, it dries (turns into a	the drill bit in the chuck	
Egyptian-born and Canadian				l Woods	Keywords – you must know what these all mean and be able to spell them:			0.11-	
raised Karim Rashid is an industrial designer. His		Softwoods Hardwoods					Motor housing Pillar		
			Softwoods	Hardwoods			Moto	or housing	
ndustrial desi esigns includ	gner. His e furniture,		Softwoods	Hardwoods			Moto	or housing	
ndustrial desi esigns includ ghting, surfac	gner. His e furniture, ce design, brand		Softwoods	Hardwoods	to s	pell them:	Moto	or housing	
ndustrial desi esigns includ ghting, surfac dentity and pa	gner. His e furniture, ce design, brand ackaging. His		Softwoods	Hardwoods	to sp PVA glue	pell them: Chipboard	Moto	Guard	
ndustrial designs includ ghting, surfaction dentity and particular olour and particular olour and particular ospire your over over over over over over over ove	gner. His e furniture, ce design, brand ackaging. His tterns will wn designs for a	1	Softwoods	Hardwoods	PVA glue Glass paper	pell them: Chipboard MDF	Moto		
ndustrial designs includ ghting, surfaction lentity and pation plour and pationspire your on	gner. His e furniture, ce design, brand ackaging. His tterns will wn designs for a	1	Softwoods	Hardwoods	PVA glue Glass paper Deciduous	Pell them: Chipboard MDF Plywood	Scroll saw	Guard	
dustrial desi esigns includ ghting, surfac entity and pa blour and pat spire your o	gner. His e furniture, ce design, brand ackaging. His tterns will	1	Softwoods	Hardwoods	PVA glue Glass paper Deciduous Evergreen	Pell them: Chipboard MDF Plywood Laminated		Guard Chuck	
dustrial desig esigns includ ghting, surfac lentity and part olour and part ispire your or olourful jigsa	gner. His e furniture, ce design, brand ackaging. His tterns will wn designs for a W. Manufactured bo	ards	Softwoods	Hardwoods	PVA glue Glass paper Deciduous Evergreen Pillar drill	Chipboard MDF Plywood Laminated Glass paper		Guard	
dustrial desig esigns includ ghting, surface entity and part olour and part spire your or olourful jigsa	gner. His e furniture, ce design, brand ackaging. His tterns will wn designs for a W. Manufactured bo	ards	Have large, broad leaves Grow in warmer countries -	Have small needles for leaves Can survive in colder countries	to si       PVA glue       Glass paper       Deciduous       Evergreen       Pillar drill       Drill bit       Coniferous	Pell them: Chipboard MDF Plywood Laminated Glass paper Dowel		Guard Chuck Table	
dustrial desig esigns includ ghting, surfac lentity and part olour and part ispire your or olourful jigsa	gner. His e furniture, ce design, brand ackaging. His tterns will wn designs for a W. Manufactured bo	ards	Have large, broad leaves	Have small needles for leaves Can survive in colder countries with long winters Have cones – they are	to si       PVA glue       Glass paper       Deciduous       Evergreen       Pillar drill       Drill bit       Coniferous       Scroll saw       Jig	Pell them: Chipboard MDF Plywood Laminated Glass paper Dowel Wood finish		Guard Chuck	
ndustrial desig esigns includ ghting, surface lentity and part olour and part olour and part objire your or olourful jigsa	gner. His e furniture, ce design, brand ackaging. His tterns will wn designs for a W. Manufactured bo	ards	Have large, broad leaves Grow in warmer countries - need long, warm summers	Have small needles for leaves Can survive in colder countries with long winters	to si       PVA glue       Glass paper       Deciduous       Evergreen       Pillar drill       Drill bit       Scroll saw       Jig	Pell them: Chipboard MDF Plywood Laminated Glass paper Dowel Wood finish Chuck key Junior hacksaw		Guard Chuck Table	
ndustrial desig esigns includ ghting, surface lentity and pa- polour and pad spire your ov polourful jigsa MDF	gner. His e furniture, 2e design, brand ackaging. His tterns will win designs for a Wanufactured bo Chipboard	ards Plywood	Have large, broad leaves Grow in warmer countries need long, warm summers Have fruit, seeds or nuts Tall, thin trunks	Have small needles for leaves Can survive in colder countries with long winters Have conser they are conferous – sometimes berries Wide, short trunks	to si       PVA glue       Glass paper       Deciduous       Evergreen       Pillar drill       Drill bit       Coniferous       Scroll saw       Jig       Bench hook	Pell them: Chipboard MDF Plywood Laminated Glass paper Dowel Wood finish Chuck key Junior hacksaw Wood stain		Guard Chuck Table	
ndustrial desig esigns includ ghting, surfac lentity and pa- olour and pa- lolour and pa- spire your or olourful jigsa MDF MDF	gner. His e furniture, 2e design, brand ackaging. His tterns will win designs for a Wanufactured bo Chipboard Chipboard	ards Plywood Usersed together Layers of wood glued & compressed together	Have large, broad leaves Grow in warmer countries - need long, warm summers Have fruit, seeds or nuts Tall, thin trunks Grow quickly – 60+ years	Have small needles for leaves Can survive in colder countries with long winters Have conse – they are coniferous – sometimes berries Wide, short trunks Grow slowly – 150+ years	to si       PVA glue       Glass paper       Deciduous       Evergreen       Pillar drill       Drill bit       Coniferous       Scroll saw       Jig       Bench hook       Belt sander	Pell them: Chipboard MDF Plywood Laminated Glass paper Dowel Wood finish Chuck key Junior hacksaw Wood stain Specification		Guard Chuck Table	
ndustrial desig esigns includ ghting, surface dentity and pa- olour and pati sspire your or olourful jigsa MDF MDF	gner. His e furniture, 2e design, brand ackaging. His tterns will wn designs for a Wanufactured bo Chipboard Chipboard	ards Plywood Users of wood glued &	Have large, broad leaves Grow in warmer countries - need long, warm summers Have fruit, seeds or nuts Tall, thin trunks Grow quickly – 60+ years Produces cheap timber Evergreen – keep their leaves	Have small needles for leaves Can survive in colder countries with long winters Have cones – they are coniferous – sometimes berries Wide, short trunks Grow slowly – 150+ years Produced expensive timber Deciduous – lose and regrow	to signature       PVA glue       Glass paper       Deciduous       Evergreen       Pillar drill       Drill bit       Coniferous       Scroll saw       Jig       Bench hook       Belt sander       Marking out	Pell them: Chipboard MDF Plywood Laminated Glass paper Dowel Wood finish Chuck key Junior hacksaw Wood stain Specification Isometric		Guard Chuck Table	
ndustrial desig designs includ ighting, surfac dentity and par colour and par nspire your ov colourful jigsa	gner. His e furniture, ce design, brand ackaging. His tterns will wn designs for a w. Vanufactured bo Chipboard Chipboard	ards Plywood Usersed together Layers of wood glued & compressed together	Have large, broad leaves Grow in warmer countries - need long, warm summers Have fruit, seeds or nuts Tall, thin trunks Grow quickly – 60+ years Produces cheap timber	Have small needles for leaves Can survive in colder countries with long winters Have conse – they are coniferous – sometimes berries Wide, short trunks Grow slowly – 150+ years Produced expensive timber	to si       PVA glue       Glass paper       Deciduous       Evergreen       Pillar drill       Drill bit       Coniferous       Scroll saw       Jig       Bench hook       Belt sander	Pell them: Chipboard MDF Plywood Laminated Glass paper Dowel Wood finish Chuck key Junior hacksaw Wood stain Specification	Scroll saw	Guard Chuck Table	



## Y7 Textiles – Monsters



# Computer Science

## **Data Representation I**



Computers need to <b>store, process</b> and	communicate information.	Key term
Computers use sequences of symbols		ASCII
Information in computers must be represented	Base 10	
Convert binary to decimal: Instructions	To convert bits to bytes: <b>Divide</b> the number of bits by 8	Base 2
Write multipliers over the ×2 ×2 ×2 ×2 bits: 16 8 4 2 1 Start with 1 on the right, × × × × × ×	Because this is how many groups of 8 bits, i.e. bytes, 'fit' in the sequence.	Binary digit/bit
and double as you go from right to left. $\begin{array}{cccc} 1 & 1 & 0 & 1 \\ \hline & & & \\ \hline \hline & & & \\ \hline & & & \\ \hline & & & \\ \hline \hline \\ \hline & & & \\ \hline \hline \\ \hline & & & \\ \hline \hline \\ \hline \hline \\ \hline & & & \\ \hline \hline \\ \hline \hline \\ \hline \hline \hline \\ \hline \hline \\ \hline \hline \hline \\ \hline \hline \hline \\ \hline \hline \hline \hline \\ \hline \hline \hline \hline \\ \hline \hline \hline \hline \hline \\ \hline \hline \hline \hline \hline \hline \hline \hline \hline \\ \hline \hline$	bits	Byte
For each bit set to 1, (16) (8) (2) select its corresponding multiplier 26	÷8	Character
Add up the selected in decimal numbers: the sum is the decimal number.	bytes	kilo-
	To convert bytes to bits: <i>Multiply</i> the number of bytes by 8. <i>Because there are 8 bits in every byte</i> .	mega-
	because there are oblis in every byte.	giga-
	×8 bits	tera-
	bytes	Sequence
		Switch

Key term	Definition
ASCII	American Standard Code for Information Interchange – A Character encoding format for text data
Base 10	A numbering system using 10 digits (0 to 9)
Base 2	A numbering system using 2 digits (0 and 1)
Binary digit/bit	The symbols that digital devices to represent information
Byte	A group of eight binary digits/bits
Character	Any number, letter or symbol
kilo-	thousands
mega-	millions
giga-	billions
tera-	trillions
Sequence	
Switch	An electronic device that controls the flow of electricity

# Computer Science

## Block Based Programming 1



Key Terms		https://app.edublocks.org/				
Algorithm	list of instructions used to carry out a task.	Name and download your	Untitled Project      Split Blocks     Imports	Code	Python 3 (E) (	Save 10 Run > Select here to run your
Sequence	Running instructions in order	project here	Statements			code
Selection	When your code makes a choice		Lists     Loops			
Iteration	When your code does the same thing more than once	Definitions     Math     Ture		<b>^</b>		
Variable	A name that refers to data being stored by the computer		Tool box	Block code	Python co	ode
Comparison operator	e.g. ==, >, <, >=, <=, !=	-	oorts	Variables Used to create	Statements This is where you go for	<b>Logic</b> Go here for if
Logic Operators	e.g. AND, OR, NOT	Useful if you need a random number or time functions.		variables.	input or output.	statements or if you need to use comparison operators.
Count- controlled iteration	When we want to run commands a set number of times.	L Imports		Variables	Statements	
Condition-	When we want to run	Loops		Math	edublocks	
controlled iteration	commands until the condition set is no longer being met.	Iteration can be found here (for loops and		Go here for your mathematical		
Debugging	The process of finding an error in your code an taking steps to fix the problem.	while loops)		operators.		