

## Unit 1 - primes

No.	Question	Answer
1.1	What is a prime number?	A number that only has two factors, one and itself
1.2	What is a square number?	The result of multiplying a number by itself
1.3	What is the square root?	The inverse of squaring e.g. the square root of 64 is 8
1.4	What is an integer?	A whole number
1.5	What is a multiple?	A number in the times table
1.6	What is a factor?	A number that divides into another number without any remainder
1.7	What is the HCF?	The highest common factor (the largest whole number that is a factor of both numbers)
1.8	What is the LCM?	The lowest common multiple (the smallest number that is a multiple of both numbers)
1.9	What is the index?	How many times a number has been multiplied by itself e.g. $3^5 = 3 \times 3 \times 3 \times 3 \times 3$
1.10	What does power mean?	How many times a number has been multiplied by itself e.g. $3^5 = 3 \times 3 \times 3 \times 3 \times 3$ "three to the power of five"
1.11	What does squared mean?	A number to the power of 2
1.12	What does cubed mean?	A number to the power of 3
1.10	What are the prime factors?	The factors of a number that are also prime numbers
1.11	What is prime factor decomposition?	Breaking down a number into the product of its prime factors using a prime factor tree
1.12	What does product mean?	Multiply

## Unit 2 - fractions

No.	Question	Answer
2.1	What is an improper fraction?	A fraction where the numerator is bigger than the denominator
2.2	What is a mixed fraction?	A fraction where there is a whole number and a fraction (it is bigger than one)
2.3	What is a unit fraction?	A fraction with a numerator of one
2.4	How do you multiply fractions?	Multiply the numerators and multiply the denominators
2.5	How do you divide fractions?	Find a common denominator Divide the numerators
2.6	How do you add fractions?	Find a common denominator Add the numerators
2.7	How do you subtract fractions?	Find a common denominator Subtract the numerators
2.8	How do you find a fraction of an amount?	Divide the amount by the denominator and multiply by the numerator
2.9	To find... $\frac{1}{2}$	Divide by 2
2.10	To find... $\frac{1}{3}$	Divide by 3
2.11	To find... $\frac{1}{4}$	Divide by 4
2.12	To find... $\frac{1}{5}$	Divide by 5
2.13	To find... $\frac{1}{6}$	Divide by 6
2.14	To find... $\frac{1}{7}$	Divide by 7
2.15	To find... $\frac{1}{8}$	Divide by 8
2.16	To find... $\frac{1}{9}$	Divide by 9
2.17	To find... $\frac{1}{10}$	Divide by 10

## Autumn 1; Why did the Industrial Revolution turn London into an 'abyss' for the poorest people?

Timeline			25	Charles Dickens	One of the great Victorian novelists. His stories were often a comment on society at the time e.g. <i>Oliver Twist</i> was about cruel treatment in the workhouse.
1	1775	Abraham Darby III built the first bridge made of iron	26	Charles Booth	A researcher and social reformer; Wrote <i>Life and Labour of the People in London</i> which contained the colour coded map of poverty. Invented the poverty line.
2	1837	Queen Victoria crowned	27	Jack London	A social reformer who wrote <i>The People of the Abyss</i>
3	1839	Charles Dickens published <i>Oliver Twist</i>	28	Dr John Snow	Discovered that the Broad Street Pump in Soho had been contaminated with sewage and this had caused an outbreak of cholera.
4	1849	15,000 people die of cholera in south London	<b>Key Concepts</b>		
5	1851	Year of the Great Exhibition and for the first time more people live in towns than in the countryside	29	Industrial Revolution	This was a time when manufacturing of all kinds moved out of people's homes and into new steam powered factories. New machines replaced the work of many people. This led to changes in population, transport, towns and cities, medicine, science and technology. Also later led to changes in laws and changes in society.
6	1858	The 'Great Stink'	30	Deserving poor	Those who deserved help because Victorians believed their poverty was not their fault. For example children, the elderly, the sick, and the disabled.
7	1889	Charles Booth created his colour coded map of poverty	31	Undeserving poor	People who did not deserve help because Victorians believed their poverty was their fault. Victorians believed that if you were a healthy adult the only reasons for poverty was laziness or that poor people spent their money unwisely on beer and gambling.
Key Words			32	Victorian	Belonging to, made in, or living in the time when Queen Victoria was queen of Great Britain (1837–1901). Victorian beliefs are ones considered to be typical of the time when Queen Victoria was queen, such as a belief in strict moral and religious rules and in the importance of family life.
8	abyss	1. A very deep hole 2. A very bad situation that will not improve	33	British Empire	Counties invaded and ruled by Britain. The countries were exploited for Britain's economic benefit
9	Blast furnace	Where iron ore is heated up so that the metal runs out of the rock as a liquid. The liquid metal is cooled into solid iron bars	34	Economic factors	Changes caused by jobs and money e.g. low pay and dangerous jobs
10	Poverty line	The minimum amount a family of four needed to live on. Anyone living below the poverty line was considered to be poor. Charles Booth found that 30% of London's population lived in poverty	35	Political factors	Changes caused by laws and leaders e.g. lack of laws protecting people
11	Phossy jaw	white phosphorus used to make the matches caused necrosis of the jaw. Meaning that the bone cells would die and rot away	36	New technology	Changes caused by new inventions e.g. machines and factories
12	slum	a very poor and crowded area, especially of a city	37	Movement of people	Migration e.g. e.g. from rural areas to urban areas
13	Sanitation	systems for taking dirty water and sewerage away from buildings in order to protect people's health:	38	Increased population	More people living in certain areas
14	Cholera	a serious infection of the stomach caused by drinking infected water or eating infected food, causing diarrhoea, vomiting, and often death	39	Attitudes of society	People's opinions e.g. how the rich thought the poor should be treated
15	Aldgate Pump	Water supply that was contaminated with liquid human remains from an overcrowded burial ground.	40	Social reformer	A person who tries to improve the quality of life for specific groups in society e.g. the poor
16	Lodging house	Known as a 'doss house'. For 4d a night you could rent a bed in a room with 80-100 people. For 2d a night a seat on a bench held in place by a rope.	<b>Key Questions</b>		
17	Vermin	Small animals and insects that can be harmful and are difficult to control when they appear in large numbers e.g rats and lice	41	How did jobs turn London into an abyss for the poorest?	<ol style="list-style-type: none"> <li><b>Jobs were hard and horrible:</b> Match girls suffered from 'phossy jaw', tanners worked in horrible smelly conditions, toshers sieved through sewerage for valuables.</li> <li><b>Jobs were low paid and casual:</b> Booth found that 30% of workers lived in poverty because of low pay. Dockers and builders were not regularly employed.</li> </ol>
18	workhouse	a building where very poor people in Britain used to work in exchange for food and shelter.	42	How did accommodation turn London into an abyss for the poorest?	<ol style="list-style-type: none"> <li><b>Overcrowding:</b> in slum housing often a family lived in only one room. Pauper burial grounds were full to bursting and contaminated the water</li> <li><b>Unsanitary:</b> slum housing had running water or sewerage system. Sewerage contaminated the water supply causing deadly diseases such as cholera</li> <li><b>Cruel:</b> the poorest and most desperate slept in vermin infested doss houses or went to the workhouse.</li> </ol>
19	Gin lane	A picture by William Hogarth showing the damaging affects of alcohol on society, especially the poor	43	How did eating, drinking and entertainment turn London into an abyss for the poorest people?	<ol style="list-style-type: none"> <li><b>Eating:</b> the poorest had to eat food from street sellers and bought food as they needed it e.g. 5 'pinches' of tea a day.</li> <li><b>Drinking:</b> Drinking alcohol was common amongst the poorest which led to violence, disease, unemployment, poverty and death</li> <li><b>Entertainment:</b> blood sports were cruel and nasty, the theatre put on violent plays and often people got drunk and fought in the crowd</li> </ol>
20	Blood sports	any sport that involves animals being killed or hurt to make the people watching or taking part feel excitement e.g. rat baiting			
21	Penny gaffs	Cheap theatre in a pub with violent plays			
22	The Great Exhibition	International exhibition of culture art and inventions			
Key People					
23	Abraham Darby III	Discovered how to make iron stronger and harder			
24	Queen Victoria	Queen of England from 1837-1901			

Historical Context				Allusions	
Eighteenth Century	<i>Smith</i> is set in 1750. The Eighteenth Century means the 100 years from 1700-1799.	Carriage and Equipage	These are both types of horse-drawn transport. There were no trains in 1750. Equipages are smaller and more expensive than carriages.	Justice is Blind	In Greek Mythology, the goddess of Justice wears a blindfold – so that she judges people based on what they have done, not how they appear. Sometimes, people change the meaning to suggest that the Law sometimes gets things wrong.
Shilling	A Shilling was a <b>coin</b> worth 12 pennies.	Gaol	Jail (pronounced the same). The original spelling was Gaol.	Bird Symbolism	<i>Different birds symbolise different types of people. E.g. if you call someone a hawk, it means they are predatory.</i>
Guinea	A Guinea was a <b>coin</b> worth 20 shillings.	The Pox	A disease that spread quickly and kills its victims.	Don't Judge a Book by its Cover	This phrase means that you shouldn't judge a book (or a person) until you see what's inside.
Livery	A person's livery is the clothes that they wear.	Coachmen / Footmen / Maids	Wealthier individuals could afford to employ servants who would live with them in their houses. Coachmen and Footmen looked after the coaches and ran errands. Maids cleaned and cooked the house.	The 12 Days of Christmas	...is a song that countdowns to Christmas. In the novel <i>Smith</i> , the hangman rewrites the words to countdown to an execution.
Pistol, Musket and Fowling Piece	These are types of fire-arm (guns). They can fire one ball at a time – then they must be reloaded. They use gunpowder.	Debtors' Prison	If you got into debt and couldn't pay it back, you would go to debtors' prison. Here, your family could visit and even live with you in gaol. You were not allowed to leave until the debt was paid.	The Fall of Lucifer	In Christianity, Lucifer (Satan or the Devil) was the brightest and most beautiful angel in heaven. He defied (fought with) God and was punished by falling from heaven into Hell.
Historical Locations		The Law		Crime	
St Paul's	St Paul's Cathedral was the main church and tallest building in London in 1710. It's churchyard was filled with booksellers and market stalls. It is the area where Smith picks pockets.	Justice	Justice is the idea that everyone should get what they deserve and that crimes should be punished and good deeds rewarded.	Highwaymen	Highwaymen were thieves that wore masks and rode horses. They would rob passing carriages – taking the passengers' jewels and money.
Ludgate	Ludgate Hill was a main Road in the City of London. It is still a main Road today.	A Justice	A Justice is a person – a Judge. When Smith calls Mr Mansfield a 'Justice' he means a <i>Justice of the Peace</i> (a Judge).	Toby or High Toby	These are both other names for Highwaymen in 1750. When characters talk about 'the high Toby' they usually mean Lord Tom or Dick Mulrone.
Tyburn	Tyburn is an area of London (now it is near Marble Arch). In 1750 it was on the edge of the city. Criminals were executed here. There was a gallows that was called the Tyburn Tree.	The Old Bailey	The Old Bailey is a building – it is the main court of London, where criminals are given their punishments.	"Stand and Deliver!"	...is what Highwaymen called to their victims. Stand! (Stop!) and Deliver (Give me your valuables!)
Newgate	Newgate Prison (or Gaol) was a large jail in London. It held criminals of many types. In 1750, visitors were allowed into and out of the gaol with much greater freedom.	The Hangman, Gallows and Tyburn	London had a hangman in 1750. It was his job to execute criminals who were sentenced to death. Criminals would be driven through the city on a cart from Newgate to Tyburn. The hangman would place them on the gallows. The gallows was a tall post with a loop of rope hanging from it (a noose). The hangman would open a trap door and the criminal would drop through with the rope around their neck.	Honour among Thieves	This is the idea that criminals can have rules and codes that they follow. Criminals often suggest that they have a noble code and that they look out for each other and don't harm the innocent.
Hampstead	Hampstead is an area in the North of London. It has both wild areas and expensive houses. It was popular with highwaymen in the Eighteenth Century.				
Finchley Common	Finchley Common was a large wild area near Hampstead. It is where Lord Tom works as a highwayman. It no longer exists.	Lawyer / Attorney	A Lawyer or Attorney reads and writes legal documents. They also represent people in court.	Romantic Stories	Highwaymen were romantic figures – which means that many people were attracted to their exciting and dangerous life.
Childhood		Everyday Life		Criminals	
Education	Only wealthier children would have gone to school in 1750 – most would have worked. It is not surprising that Smith and his sisters cannot read.	Pubs, Inns, Taverns	These were important places in 1750 London. Many people drank a lot and drunkenness was common. They were also places to meet, eat and gossip.	Dick Turpin	A real historical figure. The most famous Highwayman. Worked Hampstead from <i>The Spaniard's</i> Pub. Was finally caught and executed at Tyburn in 1739.
Apprentices /Servants	Children could work as servants (as Smith does for the Mansfields) or as apprentices. Apprentices lived with their masters and learnt their trade. Lord Tom jokes that Smith is his apprentice.	Landlord	A landlord or landlady is the person who runs a pub or tavern. We meet two in the novel.	Claude Duval	A real historical figure. Another famous Highwayman. A handsome Frenchman who became a romantic criminal in England. Executed in 1670.
Pickpockets	Children could be criminals – often pickpockets.	Priest / Parson	A Christian religious leader in the community.	Dick Mulrone	A fictional highwayman invented by Leon Garfield.



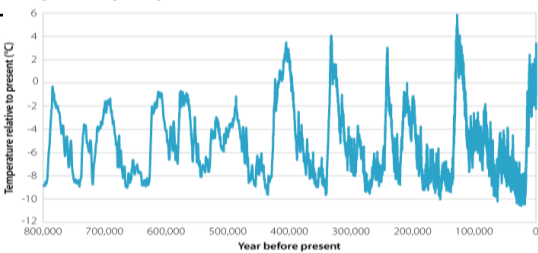

Topic:	The Periodic table 1 (C.11)
Define "period"	Rows in the periodic table
Define "group"	Columns in the periodic table
Which side of the periodic table contains metals?	Left
Which side of the periodic table contains non-metals?	Right
Where are alkali metals found in the periodic table?	Group 1
Where are halogens found in the periodic table?	Group 7
Give 4 properties of metals	*High melting point *Good thermal and electrical conductors *Ductile *Malleable
Give 4 properties of non-metals	*Low melting point *Poor thermal and electrical conductors *Brittle
Define "alloy" (extension only)	Mixture of two elements, one is a metal
Why are alloys hard? (extension only)	Atoms are different sizes so can't slide over each other

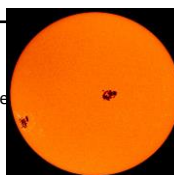
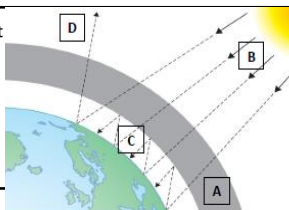
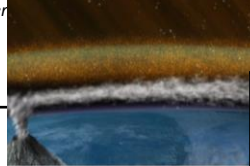
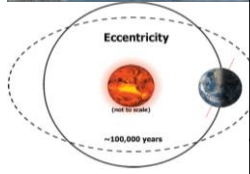
Topic:	The Periodic table 2 (history) (C.12)
What is the name for the smaller number given for each element?	Atomic number
What is the name for the bigger number given for each element?	Mass number
How do you calculate the number of protons for an element?	Use the atomic number
How do you calculate the number of electrons for an element?	Use the atomic number
How do you calculate the number of neutrons for an element?	Mass number - atomic number
How are elements arranged in the periodic table?	In order of atomic number (lowest to highest)
The column (group) in the periodic table tells us the ...	Number of electrons in the outer shell
What is the name of the elements found in the middle of the periodic table that are not part of a group?	Transition metals
Why did Mendeleev do when creating the modern periodic table? (extension only)	Left gaps to make the pattern fit
How do you calculate the relative formula mass of a compound? (extension only)	Add up the mass numbers

Topic:	The periodic table 3 (groups) (C.13)
Name 6 alkali metals in order of reactivity (low to high)	Lithium, sodium, potassium, rubidium, caesium, francium
What is formed when alkali metals (group 1) react with water?	Alkaline metal hydroxide
What happens to reactivity as you move down the alkali metals (group 1)?	Increases
Name the 5 halogens (group 7) in order of reactivity (low to high)	Astatine, Iodine, Bromine, Chlorine, Fluorine
State 3 properties of the halogens (group 7)	Non-metal, highly reactive, diatomic
What happens to reactivity as you move down the halogens (group 7)?	Decreases
Name three noble gases (group 0) (extension only)	Helium, neon, argon
State 3 properties of the noble gases (group 0) (extension only)	Non-metal, inert, gases
What happens to density as you move down the noble gases (group 0)? (extension only)	Increases

Topic:	Materials (extension only) (C.14)
How are ceramics made?	Shaping wet clay and heating in furnace
State two properties of ceramics	Hard and tough
Why do we glaze ceramics?	To make them waterproof
What is a polymer?	A very large molecule made from smaller molecules called monomers
Give an example of a polymer	Plastic
Give two properties of polymers	Insulators, unreactive
Define "composite"	A material made from two or more different types of material
Give two examples of composites	MDF and fibreglass
What is MDF made from?	Wood fibres and glue
Why do we use composites?	We can combine materials with useful properties

Topic:	Reaction properties (C.15)
Recall the six signs of a chemical reaction	1) Odour, 2) colour change, 3) precipitate formed, 4) temperature change, 5) gas produced, 6) light emitted
Define "exothermic"	A reaction which gives out energy
Define "endothermic"	A reaction which takes in energy
Describe the test for oxygen gas	Relights a glowing splint
Describe the test for hydrogen gas	A lit splint causes a squeaky pop
Describe the test for carbon dioxide gas	Turns limewater cloudy
If a salt contains two elements only, what ending is given to the name? (extension only)	"-ide"
If a salt contains more than two elements (including oxygen!), what ending is given to the name? (extension only)	"-ate"
What is the formula for copper sulphate?	CuSO <sub>4</sub>
What is the formula for calcium carbonate?	CaCO <sub>3</sub>

KS3 Geography Knowledge: Climate Change	
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LONG TERM CLIMATE CHANGE	
<p><b>How have global temperatures changed over the past 800,000 years?</b></p> <p><b>More specifically.....</b></p>	<p>Over the past 800,000 years the earth's climate has fluctuated with periods of warm weather and periods of colder weather.</p>  <p>300,000 years ago, average global temperatures were 4°C warmer than today, where as approximately 420,000 years ago, average global temperatures were 9°C colder than today.</p>
<b>HISTORICAL RECORDS</b>	Historical documents show that temperature changes have resulted in periods of history where the earth was colder than today (glacials) and warmer than today (interglacials). <i>During the Little Ice Age, Napoleon's army froze to death.</i>
<b>PAINTINGS</b>	Paintings from 1677 show that the Thames was previously frozen over!
RECENT GLOBAL WARMING	
<p><b>How has global temperature changed since 1860?</b></p> <p><b>More specifically...</b></p>	<p>More recently the earth's temperature has shown a rapidly warming trend, with average temperatures continuing to grow.</p> <p><i>In 1883, the average temperature was 13.5°C, whereas in 1960 the average temperature had risen to 14.0°C. By 1985, the average temperature had risen to almost 14.4°C.</i></p> 
<b>THERMOMETER RECORDS</b>	<ul style="list-style-type: none"> <li>Average global temperatures have risen by 0.8°C in the last 100 years.</li> <li>Most of the warming has occurred recently.</li> <li>In the last 35 years, average temperatures have risen by 0.5°C.</li> <li>The 20 warmest years on record have all come since 1995.</li> <li>The five warmest years on record have come since 2010, with 2016 being the warmest year yet.</li> </ul>
<b>SATELLITE IMAGES</b>	Arctic ice cover has decreased since the 1970s. It has reduced by approximately 4% and has halved in thickness in many places.
<b>SEA LEVEL RISE</b>	Rises in temperature and melting ice sheets has resulted in a rise in sea levels.

NATURAL CAUSES OF CLIMATE CHANGE		HUMAN CAUSES OF CLIMATE CHANGE	
<p><b>Solar output</b></p> <p>A sunspot is dark patch on the sun that appears from time to time. Every 11 years the number of sunspots changes from very few to lots to very few again.</p> <p><i>Lots of sunspots = warmer      Very few sunspots = cooler</i></p> <ul style="list-style-type: none"> <li><i>During 1645–1715 there were very few sunspots. During this time, there was a cold period known as the 'Little Ice Age'.</i></li> </ul> 		<p><b>The Greenhouse Effect</b></p> <ol style="list-style-type: none"> <li>Humans produce greenhouse gases, which create a blanket around the earth.</li> <li>Sunlight travels to earth as shortwave radiation.</li> <li>Sunlight bounces off the earth's surface as long-wave radiation. This reflected sunlight is trapped in the earth's atmosphere by the greenhouse gases = earth heats up.</li> <li>Some heat does manage to escape.</li> </ol> 	
<p><b>Volcanic Activity</b></p> <p>Violent volcanic eruptions blast lots of ash, gases (e.g. sulphur dioxide) and liquids into the atmosphere. Major volcanic eruptions lead to a brief period of global cooling. This is because the ash, gases and liquids can block out the sun's rays, reducing the temperature.</p> <ul style="list-style-type: none"> <li><i>Pinatubo 1991 eruption = world temperatures fell by 0.5°C for a year.</i></li> </ul> 		<p><b>Methane</b></p> <p>Cows produce a methane when they fart, belch and poo. Methane is a greenhouse gas that traps longwave radiation in the earth's atmosphere.</p> <p><i>The world's population is rising and countries are becoming more developed = there are more people and more families that have money to spend on food (e.g. meat) = rising demand for meat = more animals farmed = more methane produced.</i></p>	
<p><b>Orbital Change</b></p> <p>Orbital change refers to changes in how the earth moves round the sun. It affects how close the earth is to the sun and therefore how much energy we get from the sun. When the earth is very close to the sun, it is warmer. When the earth is further away from the sun, it is cooler.</p> <ul style="list-style-type: none"> <li><i>Eccentricity: how the earth orbits the sun. Every 100,000 years the orbit changes from circular to elliptical (egg-shaped). This affected how earth is to the sun.</i></li> </ul> 		<p><b>Carbon dioxide</b></p> <p>Carbon dioxide is the greenhouse gas that people are most worried about, as it is the one we are adding to the atmosphere fastest.</p> <ul style="list-style-type: none"> <li>Fossil fuels (coal, gas, oil) are burnt to make energy = carbon dioxide is released into the atmosphere.</li> <li>Humans drive cars, which release carbon dioxide, nitrous oxide and methane into the atmosphere.</li> </ul> <p><i>Rising population and more developed countries = increased demand for electricity = more carbon dioxide produced.</i></p>	
		<p><b>How does human activity = greenhouse gases?</b></p> <p><b>Methane</b></p> <p><b>Humans are to blame because....</b></p>	
		<p><b>Carbon dioxide</b></p> <p><b>Humans are to blame because...</b></p>	





## EFFECTS OF CLIMATE CHANGE

Sea level rise due to melting ice sheets = flooding in low lying countries (Bangladesh). 80% of people exposed to river flooding live in developing countries.	Extreme weather (drought) = crops will die = famine. A famine occurred in Somalia (2008-9) where 258,000 died due to a lack of food.	Pests & diseases: mosquitoes love hot weather. Global warming will = 90 million people will be exposed to malaria by 2030.	Extreme weather events = increase in refugees as people are forced to leave their homes due to famine or flooding.	Habitats will be lost due to extreme weather associated with climate change.	Pests & diseases: an increase of 2°C will mean more pests = more crops will die. <i>E.g. wheat yields losses will increase by 46% in countries such as China.</i>	Extreme weather (hurricanes). In 2017 there were 83 storms and 42 hurricanes. This was above average. Climate change will result in more hurricanes in the future.
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<b>Location:</b>	Southern Asia, along the Tropic of Cancer. It neighbours Burma, India and the Indian Ocean.	<b>Where is the UK located?</b>	The UK is located in the west of Europe. It is made up of England, Scotland, Wales and Northern Ireland.
<b>How has climate change increased flooding ?</b>	<ul style="list-style-type: none"> <li>It's low altitude (&lt;10m above sea level) and long coastline (580km) makes it vulnerable to sea level rise.</li> <li>The Himalayas lie to the north of Bangladesh. The ice and snow melts in the summer, which then rushes down into the rivers in Bangladesh. This occurs more due to increased temperatures.</li> <li>Bangladesh is prone to cyclones and monsoonal rains which bring a huge amount of rain. Due to climate change, these storms will occur more often.</li> </ul>	<b>How has climate change increased flooding ?</b>	<ul style="list-style-type: none"> <li>Extreme weather will be more common – floods, droughts, heatwaves...etc.</li> <li>Sea level will cause coastal flooding</li> </ul>
<b>Primary effects</b>	<ul style="list-style-type: none"> <li>1000 people died</li> <li>7 million homes destroyed</li> <li>Hospitals flooded</li> <li>400,000 factories closed down.</li> <li>Fields were flooded. 2/3<sup>rd</sup>s of the country was flooded.</li> <li>Roads and railways were flooded.</li> </ul>	<b>Negative effects</b>	<ul style="list-style-type: none"> <li>Flooding due to extreme weather (precipitation and storms) and sea level rise. The number of people at risk of flooding is likely to double to 1.9 million by 2050. Current flooding costs the UK £1.9 million.</li> <li>Sea level rise and storms = more coastal erosion. It is expected that sea levels will rise by 1 – 2m by 2080. The most at risk areas will be soft rock coastlines, such as South Wales, North-West Scotland, Yorkshire and the Thames Estuary.</li> <li>Water shortages due to extreme weather (lack of precipitation). Many places will have a lack of water.</li> <li>Increases in temperature can lead to heatwaves, such as the 2003 heatwave, during which temperatures reached 38.5°C = 2045 deaths. This will become normal summer weather by the 2040s.</li> <li>Climate change in other countries (Kenya, Peru, Indonesia) will affect crop yields in these countries. The UK will suffer as it will be more difficult to import food from these countries.</li> </ul>
<b>Secondary effects</b>	<ul style="list-style-type: none"> <li>Dead bodies spread disease and illness</li> <li>30 million people homeless.</li> <li>Temporary hospitals did not have the necessary equipment or medicine.</li> <li>Many people losing their jobs.</li> <li>700,000 hectares of crops were destroyed.</li> <li>Blocked transport routes mean that aid could not reach victims.</li> </ul>	<b>Positive effects</b>	<ul style="list-style-type: none"> <li>A warmer, wetter climate will increase crop yields in the UK.</li> <li>Tourism will increase due to warmer weather = more jobs and income for the UK.</li> </ul>
<b>Solar panels</b>	<i>These use the sun to create energy, therefore less fossil fuels are burned.</i>	<b>Improving public transport</b>	<p>The UK government has invested £840million in public transport across 10 UK cities.</p> <p>London have improved buses = more people use the bus &amp; less drive = less greenhouse gases.</p> <ul style="list-style-type: none"> <li>➢ <i>Live information boards at bus stops tell bus users when their bus will arrive making it easier.</i></li> <li>➢ <i>Bus lanes give buses priority on the roads = shorter journey times.</i></li> </ul> <p>Cycle hire schemes in UK cities encourage people to cycle rather than drive = less greenhouse gas emissions.</p>
<b>Insulation</b>	Traps heat in the house = less heating is needed = less energy used = less fossil fuels burned.		
<b>Have a shower instead of a bath</b>	Less water is used = less heating is needed to heat the water = less energy used = less fossil fuels burned		
<b>Switch off electrical goods</b>	Prevents the overuse of energy.	<b>National Parks</b>	Planting trees and preventing deforestation = more trees = more photosynthesis = more carbon dioxide removed from the atmosphere = less global warming. Many governments have created national parks to protect trees. <i>The Gola Forest (Sierra Leone - Africa) is a national park that protects 71,000 hectares of trees.</i>
<b>Use double glazed windows</b>	Traps heat in the house = less heating is needed = less energy used = less fossil fuels burned.	<b>Renewable energies</b>	Generating energy from natural renewable sources ( <i>solar panels, hydro-electric power, wind turbines</i> ). They do not produce greenhouse gases.
<b>Turn down heating</b>	Less energy is used = less fossil fuels are burned.	<b>International agreements</b>	<p>Many of the governments around the world meet to discuss climate change and how they can work together to reduce global carbon emissions. <i>In 2016 world leaders met at the Paris Climate Summit where 196 countries signed a climate agreement, where they promised to:</i></p> <ul style="list-style-type: none"> <li>➢ <i>Reduce greenhouse gas emissions and keep global temperature increase below 2°C.</i></li> <li>➢ <i>HICs to support LICs by providing \$100 billion per year</i></li> </ul>
<b>Use low energy light bulbs</b>	Less energy is used = less fossil fuels are burned.		

Year 8 – RE – Autumn 1					
No.	Question	Answer	No.	Question	Answer
1	What is the bible?	Holy book for Christians, contains all their religious teachings	17	How does intelligent design explain creation?	Life is too complex to come about by chance
2	What is Genesis?	First chapter of the bible, means ‘beginning’	18	How does intelligent design explain creation?	Therefore, life must have been designed and planned by an intelligent being
3	What does creationism mean?	The belief that God created the world	19	What is the evidence for intelligent design?	Complexity of the world e.g. how the parts of the eye work together
4	What does creation mean?	When something is made	20	What is a strength of the evidence?	How unlikely it is that the eye would have been formed by chance
5	What does evolution mean?	When something has grown and developed over time, from a simple life form to a more complex one	21	What is a weakness of the evidence?	Flaws in nature e.g. hurricanes or volcanoes
6	What is the big bang?	A large explosion that created all matter and energy in the universe	22	How do scientists believe the world was created?	A- the big bang- a powerful explosion which created all matter
7	How do Christians believe the world was created?	A- God created the world in 6 days and rested on the seventh	23	How do scientists believe the world was created?	B- enormous heat generated, as it cooled, life began to develop
8	How do Christians believe the world was created?	C- He created the heavens and earth, light and dark, land and sea, plants and trees, sun, moon and stars, animals, fish and birds and then man and woman.	24	What is the evidence for the big bang?	The universe is getting bigger so it must once have been smaller
9	What is the evidence for the Christian creation story?	The bible	25	What is a strength of this?	Scientifically proven
10	What is a strength of the bible?	Christians believe it was given by god so it must be true	26	What is a weakness of this?	What could have caused the big bang?
11	What is a weakness of the bible?	There is no proof it was written by god, it could be made up	27	How do scientists believe life was created?	A- Species have evolved from simple life forms into more complex ones
12	How do Hindus believe the world was created?	A- There was nothing in the world, a giant cobra appeared with Lord Vishnu sleeping on it.	28	How do scientists believe life was created?	B- their DNA has changed over time to allow species to develop and survive
13	How do Hindus believe the world was created?	B- A sound began...ohm...Vishnu told Brahma to create the world.	29	What is the evidence for this?	Fossil records showing how organisms have changed over time
14	How do Hindus believe the world was created?	C- He split the lotus flower into three- the heaven, earth and skies.	30	What is a strength of this?	Physical evidence that scientists can study
15	How do Hindus believe the world was created?	D- He created trees, plants, animals, birds and fish. Eventually Lord Shiva will destroy the earth and then the cycle will continue.	31	What is a weakness of this?	Gaps in the fossil record
16	What is the evidence for the Hindu creation story?	Hindu sacred texts			

# Year 8 – Spanish – Autumn 1

1	inglés / inglesa	English	16	junio	June
2	ecosés / ecosesa	Scottish	17	julio	July
3	británico/a	British	18	au gosto	August
4	francés / francesa	French	19	septiembre	Septembrer
5	español/a	Spanish	20	octubre	October
6	italiano/a	Italian	21	noviembre	November
7	alemán / alemana	German	22	diciembre	December
8	marroquí	Moroccan	23	el pelo	hair
9	colombiano/a	Colombian	24	negro	black
10	somali	Somalian	25	castaño	brown
11	enero	January	26	rubio	blonde
12	febrero	February	27	pelirrojo	ginger
13	marzo	March	28	gris	grey
14	abril	April	29	ondulado	wavy
15	mayo	May	30	rizado	curly



31	liso	straight	46	deportista	sporty
32	largo	long	47	tímido/a	shy
33	corto	short	48	paciente	patient
34	los ojos	eyes	49	divertido/a	funny
35	azules	blue	50	generoso/a	generous
36	verdes	green	51	estupido/a	stupid
37	marrones	hazelnut	52	simpático/a	nice
38	alto/a	tall / big	53	valiente	brave
39	bajo/a	short / small	54	hablador/a	chatty
40	delgado/a	thin	55	molesto/a	annoying
41	gordo/a	fat	56	mi madre	my mum
42	de talla mediana	medium height	57	mi padre	my dad
43	inteligente	clever	58	mi hermano	my brother
44	trabajadora	hard-working	59	mi hermana	my sister
45	perezoso	lazy	60	mis padres	my parents






<div> <div>  <div> <div>Oasis</div> <div>academy</div> <div>south bank</div> </div> </div> <div> <div>South Bank</div> <div>Primary</div> </div> </div> <div>Year 8 – French – Autumn 1</div>					
1	anglais(e)	English	16	juin	June
2	écossais(e)	Scottish	17	juillet	July
3	britannique	British	18	août	August
4	français(e)	French	19	septembre	Septembrer
5	espagnol(e)	Spanish	20	octobre	October
6	italien(ne)	Italian	21	novembre	November
7	allemande(e)	German	22	décembre	December
8	marocain(e)	Moroccan	23	les cheveux	hair
9	colombien(ne)	Colombian	24	noirs	black
10	somalien(ne)	Somalian	25	bruns	brown
11	janvier	January	26	blonds	blonde
12	février	February	27	roux	ginger
13	mars	March	28	gris	grey
14	avril	April	29	bouclés	wavy
15	mai	May	30	frisés	curly

<div> <div> <div>Oasis</div> <div>academy</div> <div>sydney</div> </div> <div> <div>South Bank</div> <div> </div> </div> </div> <div>Year 8 – French continued – Autumn 1</div>					
31	raides	straight	46	sportif(ve)	sporty
32	longs	long	47	timide	shy
33	courts	short	48	patient(e)	patient
34	les yeux	eyes	49	drôle	funny
35	bleus	blue	50	généreux(se)	generous
36	verts	green	51	stupide	stupid
37	noisette	hazelnut	52	sympa	nice
38	grand(e)	tall / big	53	courageux(se)	brave
39	petit(e)	short / small	54	bavarde	chatty
40	mince	thin	55	casse-pieds	annoying
41	gros(se)	fat	56	ma mère	my mum
42	de taille moyenne	medium height	57	mon père	my dad
43	intelligent(e)	clever	58	mon frère	my brother
44	travailleur(se)	hard-working	59	ma soeur	my sister
45	paresseux(se)	lazy	60	mes parents	my parents

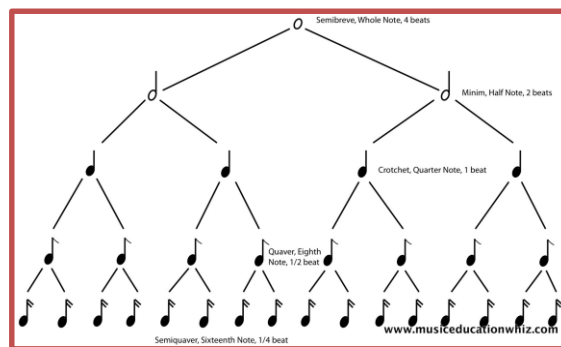
## Keywords

<b>Pulse</b>	The 'heartbeat' of a piece of music. Usually played on a cowbell – it keeps all of the performers in time
<b>Rhythm</b>	The pattern of beats in a piece of music. Usually played by a percussion instrument e.g. drum kit, djembe or by beatboxing or body percussion
<b>Call and Response</b>	When a singer or drummer plays a rhythm and the rest of the group respond with the same rhythm or a variation on it
<b>Tempo</b>	How fast or slow a piece of music is e.g. slow tempo / fast tempo.
<b>Dynamics</b>	How loud or soft a piece of music is. The dynamics get louder as more instruments/singers join in.
<b>Texture</b>	The layers of sound in a piece of music. E.g. thick texture when many people are playing/singing and thin texture if it is a solo
<b>Polyrhythm</b>	Many different layers of rhythms on top of each other
<b>Structure</b>	The overall layout of a piece of music. Usually begins with an intro before verse/chorus and ends with an outro.
<b>Ostinato</b>	A repeating rhythm
<b>Master Drummer</b>	The main musician who leads an African Drumming Performance. Keeps everyone in time and leads the call and response
<b>Bass / Tone / Slap</b>	Different ways that you can play a djembe. Bass is in the middle of the drum (low pitch), tone is on the side of the drum (medium pitch) and slap is on the edge of the drum (high pitch)

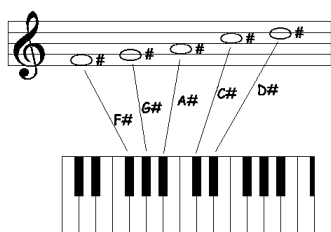
## Note Values and their durations

<b>Semibreve</b> 	Lasts for 4 beats [counts]
<b>Minim</b> 	Lasts for 2 beats [counts]
<b>Crotchet</b> 	Lasts for 1 beat [count]
<b>Quaver</b> 	Lasts for half a beat [count]
<b>Semiquaver</b> 	Lasts for a quarter beat [count]

## The Rhythm Tree



## Pentatonic Scale



## The Music of West Africa



The Djembe

Cowbell



Balafon



Cajon



1	Different qualities of darkness and light.	Tone	13	Pop Art	An art movement that originated in the 1960s and is concerned with popular culture.
2	The feel of a surface e.g. rough/ smooth.	Texture	14	Roy Lichtenstein	An American painter who was part of the Pop Art movement.
3	A mark made by a point moving on a surface.	Line	15	Popular Culture	The ideas, beliefs and customs of a mainstream culture or cultures.
4	The three dimensional quality of an object.	Form	16	Themes common in Lichtenstein's work	The lives of ordinary white Americans, Ambiguity,
5	The outline of an object.	Shape	17	Warm Colours	Red, Orange and Yellow. These colours are associated with feeling physically warm and strong emotions such as anger.
6	Different hues caused by light refracting on a surface.	Colour	18	Cool Colours	Blue, Green and Purple. These colours are associated with feeling physically cool and emotions such as calm and sadness.
7	The space within a painting or sculpture that contains the important objects/ information.	Contrasting Colour	19	'In the Car' 1963	A painting by Roy Lichtenstein that shows a man and women together driving in a car. Lichtenstein uses warm colours for the woman and cool colours for the man.
8	The space within a painting or sculpture that does not contain the important objects/ information.	Complimentary Colour	20	'Oh Jeff...I love you too...but...' 1964	A painting by Roy Lichtenstein that shows a young an beautiful women on the phone to a man named Jeff.
9	The arrangement of objects within an artwork.	Warm colours	21	'Drowning Girl' 1963	A painting by Roy Lichtenstein that shows a young beautiful woman drowning whilst crying. This painting uses almost entirely cool colours.
10	A technique used to show different distance on a flat surface.	Cool colours	22	Ambiguity	Having more than one possible meaning.
11	Placing two or more objects together for a contrasting effect.	Onomatopoeia	23	Common characteristics of the lives of white Americans in the 1960's	Wealthy Healthy Men – Short smart hair and suits Women – Shoulder length hair and dresses.
12	A shading technique where lines are placed at different distances apart to show tone.	Hatching			