

Knowledge Organiser

Year 8 Term 2

Name:	Form group:	Masters of Recall Big Quiz:
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Spellings & Times Tables

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<p>Capitulate- to surrender or give in after a struggle.</p> <p>Complicity- shared responsibility for a crime or misdeed.</p> <p>Enconce- to be comfortably settled.</p> <p>Gambol- to run around joyously.</p> <p>Dissentient- someone who disagrees with a majority opinion.</p>	<p>Ignominious- shameful and embarrassing (in reference to behaviour).</p> <p>Inebriate- demonstrating drunken behaviour.</p> <p>Machination- a clever plot; a scheme.</p> <p>Malignity- meanness; hatefulness.</p> <p>Manifestly- clearly; obviously.</p>	<p>Maxim- a short statement that expresses a general truth or rule.</p> <p>Pervade- to spread out and become present everywhere in a space.</p> <p>Piebald- an animal that has irregular pattern or pigmented spots on an unpigmented (white) coat.</p> <p>Restive- restless and agitated; unable to remain still.</p> <p>Irrepressible- uncontrollable, unable to be held back.</p>	<p>Stupefy- to make someone so shocked or surprised that they cannot think or respond.</p> <p>Taciturn- to be reserved and quiet.</p> <p>Tractable- easy to persuade or influence.</p> <p>Unanimous- fully agreed upon or supported (in reference to a decision or vote).</p> <p>Apronym- A name that is particularly suited to its owner because of their characteristics or occupation e.g., Boxer because he is strong.</p>	<p>Satirise- to deride/mock something serious (often political) by means of satire.</p> <p>Ridicule- to mock an idea.</p> <p>Superannuated- too old to be useful.</p> <p>Accumulate- get or gather together.</p> <p>Laborious- characterised by effort to the point of exhaustion.</p>	<p>Vivacious- lively; high-spirited.</p> <p>Tyrannical- exercising power in a cruel way.</p> <p>Manoeuvre- a movement or series of moves requiring skill and care; a large-scale military exercise.</p> <p>Indefatigable- tireless; unable to run down.</p> <p>Obstinate- stubborn, strong-minded, unbending.</p>
7 times table	8 times table	11 times table	9 times table	12 times table	6 times table



Look

Look at the information carefully.

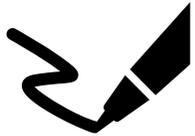
Read it three times.

It may help to **say** it as you read it.



Cover

Cover it with your hand or a piece of paper.



Write

Write it out, from memory.



Check

Check what you have written matches the information exactly. Have you got it correct? If so, tick your work to show it is correct.

If it **doesn't match exactly**, use your **purple pen to correct it**.

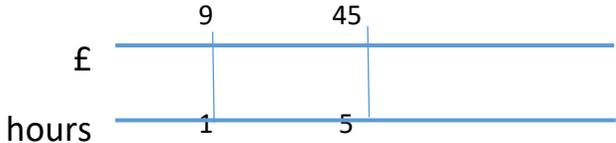
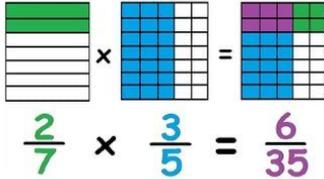
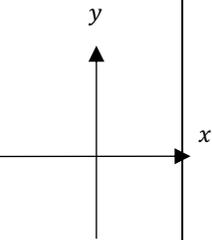
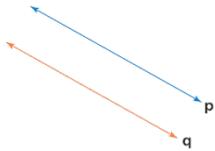
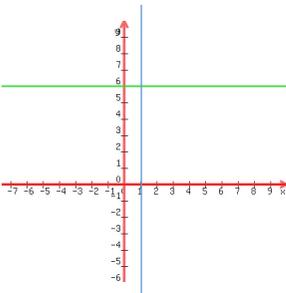
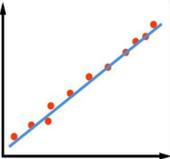
Repeat.

When you get it 100% correct, move on to the **next** piece of information.



Correct

English	Animal Farm	Year 8 Term 2
<p>Week 1: Vocabulary</p> <p>anthropomorphism: assigning human characteristics to non-human entities.</p> <p>personification: assigning human characteristics to any non-human thing.</p> <p>Zoomorphism: when humans are given animal characteristics.</p> <p>allegory: a narrative in which the characters and events are symbols of something else, often political, or religious.</p> <p>symbol: something that represents or stands for something else.</p>	<p>Week 2: Academic Vocabulary</p> <p>ACADEMIC VERBS</p> <p>The author...</p> <p>critiques alludes to attacks characterises satirises denounces provokes</p> <p><u>Authorial Intent and Influence:</u></p> <p>The writer reflects their own experiences by... The writer echoes real events and attitudes when... The writer challenges their reader to... The writer is motivated by...</p>	<p>Week 3: Academic Writing</p> <p><u>Language Exploration:</u></p> <p>This image/ line/ word/ creates the impression that... This is representative of... This conjures images of... This could also suggest that... This is particularly significant because...</p> <p>New:</p> <p><u>Links and Development:</u></p> <p>This idea is echoed when... ...made more significant when we consider... ...is compounded by... ...provides a stark contrast with...</p>
<p>Week 4: Revision</p> <p><u>Thesis statement:</u> NAME, VERB, POINT, PLACE, (COMMA), QUOTATION</p> <p><u>The Literary Present</u> In literary analysis, we ALWAYS talk about the text and the writer as if they are in the present tense, even if they were writing hundreds of years ago. e.g., Orwell <u>is</u> implying that... The pigs <u>are</u> manipulating the other animals...</p> <p>polysyndeton: a list of words/ phrases that are connected by the repeating the same conjunction asyndeton: a list of words, phrases or clauses that are connected without conjunctions.</p> <p>tricolon: a series of three words, phrases, or clauses.</p>	<p>Week 5: Form</p> <p>Fable: a story told to highlight human weaknesses or follies, usually featuring anthropomorphic animals, featuring a moral lesson.</p> <p>Aesop: a possibly legendary ancient Greek storyteller who lived circa 4BC, to whom is attributed hundreds of fables, many of them famous.</p> <p>oral tradition: stories, knowledge and other cultural information being passed from generation to generation through spoken word.</p> <p>propaganda: the biased and sometimes misleading use of media and information to promote a political cause or point of view.</p>	<p>Week 6: Political Vocabulary</p> <p>politics: the way a country is run; a person's personal beliefs and convictions about how a country is run.</p> <p>spectrum: a sliding scale measuring any position between two extreme points.</p> <p>left wing: the radical, reforming, or socialist section of the political spectrum; beliefs include higher taxes for the rich to support the poor and vulnerable, as well as greater state intervention.</p> <p>right wing: the conservative, reactionary section of the political spectrum; beliefs include free markets, personal profit, social Darwinism, and reduced state intervention.</p>

Maths	Multiplicative Reasoning	Year 8 Term 2
<p>Week 1: Proportion</p> <p>When 2 things are directly proportional, they change at the same rate. Our key representation for proportion is a double number line.</p> <p>Constant of proportionality - The constant value relating amounts that increase/decrease at the same rate. e.g. £9 per hour, £ and hours are directly proportional, for every 1 hour worked, you are paid £9. The constant of proportionality is 9.</p> 	<p>Week 2: Multiplying and dividing fractions</p> <p>Multiplication is a repeated addition of the same amount. E.g.</p> $4 + 4 + 4 = 3 \times 4 \text{ (3 lots of 4)}$ $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} = 3 \times \frac{1}{5} = \frac{3}{5} \text{ (3 lots of one fifth)}$  $\frac{2}{7} \times \frac{3}{5} = \frac{6}{35}$ <p>Reciprocal – the multiplicative inverse of a number, e.g. the reciprocal of 5 is $\frac{1}{5}$. <i>Dividing by an amount is the same as multiplying by the reciprocal.</i></p>	<p>Week 3: Axes and coordinates</p> <p>X axis – the horizontal axis Y axis – the vertical axis</p>  <p>Quadrant – one of four regions separated by the x and y axes</p> <p>Cartesian co-ordinates – are used to indicate a position on a graph. (x,y) is a coordinate in a quadrant where x tells us how far along (left or right) and y tells us how far up/down. They must be in the order x then y.</p> <p>Origin – (0,0)</p>
<p>Week 4: Linear graphs 1</p> <p>Gradient – the measure of steepness of a line. When in the form 1 : n, n= the gradient. Parallel – two lines which have the same gradient, they remain a fixed distance apart. Constant – a fixed value</p>  <p>Horizontal line – parallel to the x axis, has an equation $y = a$ where a is a constant. <i>Green line is $y = 6$</i></p>  <p>Vertical line – parallel to the y axis, has an equation $x = a$ where a is a constant. <i>Blue line is $x = 3$</i></p>	<p>Week 5: Linear graphs 2</p> <p>Proportion – the mathematical comparison between two numbers (when two ratios or fractions are equivalent, they are proportional)</p> <p>y-intercept – where a line crosses the y-axis</p> <p>Table of values – created to help plot a graph by generating coordinates.</p> <p>Substitute – to replace a variable with a number.</p> <p>$y = mx + c$ – this is often the form of a linear graph where m is the gradient and c is the y-intercept eg. $y = 3x + 7$ has a gradient of 3 and a y-intercept of 7</p>	<p>Week 6: Representing data</p> <p>Correlation – a measure of the strength of the relationship between two variables</p>  <p>Line of best fit – a line that shows the best estimate of the relationship between two variables.</p> <p>Outlier – a result which lies beyond where most of the data is clustered</p> <p>Discrete – data which can only take certain values (i.e. data that can be counted e.g. number of people)</p> <p>Continuous – data which can take any value (i.e. data that can be measured e.g. the height of a person)</p> <p>Frequency – the number of times an event occurs</p>

Week 1: Aerobic Respiration	Week 2: Anaerobic Respiration	Week 3: Endothermic and Exothermic Reactions
<p>respiration the chemical process inside mitochondria that releases energy for life processes</p>	<p>anaerobic a process that does not involve oxygen</p>	<p>chemical reaction a process which involves the rearrangement of atoms to form new substances</p>
<p>aerobic a process that involves oxygen</p>	<p>cytoplasm the jelly like substance that fills the cell, where anaerobic respiration takes place</p>	<p>exothermic a chemical reaction that releases thermal energy into the surroundings</p>
<p>glucose a simple sugar that can be made from larger carbohydrates</p>	<p>lactic acid a waste product that is produced from anaerobic respiration</p>	<p>endothermic a reaction that absorbs thermal energy from the surroundings</p>
<p>mitochondria a subcellular structure where aerobic respiration takes place</p>	<p>breathing rate how many breaths are taken per minute</p>	<p>temperature change how much the temperature increases or decreases from the initial (starting) temperature</p>
<p>carbon dioxide a waste product that is produced from aerobic respiration as a gas</p>	<p>pulse a pulse can be felt in locations where an artery passes over a solid structure, such as bone.</p>	<p>risk a situation that may lead to something dangerous happening</p>
<p>The word equation for aerobic respiration is:</p> <p style="text-align: center;">oxygen + glucose → carbon + water dioxide</p> <p>The balanced symbol equation for aerobic respiration is:</p> <p style="text-align: center;">6O₂ + 6CO₂ → C₆H₁₂O₆ + 6H₂O</p>	<p>waste product any substances that are produced in a reaction that are not the desired product</p> <p>The word equation for anaerobic respiration in animals is:</p> <p style="text-align: center;">glucose → lactic acid</p> <p>The word equation for anaerobic respiration in yeast is:</p> <p style="text-align: center;">glucose → ethanol</p> <p><i>Anaerobic respiration does not involve oxygen. Notice how the two equations above do not contain oxygen as a reactants.</i></p>	<p>5 Signs of a Chemical Reaction</p> <ul style="list-style-type: none"> • Fizzing / bubbling (effervescence) • A change of colour • A change of temperature • A precipitate (insoluble solid) is formed • (a new product is formed)

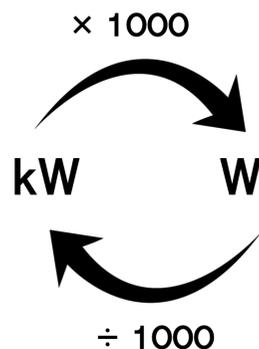
Week 4: Catalysts and Data Analysis

catalyst	a substance that increases the rate of a reaction without being used up
rate	how quickly a process happens
conclusion	a statement that summarises the results of an experiment
data	the information collected from an experiment
repeatable	if the same person conducts the same experiment and obtains (collects) the same results an experiment is said to be repeatable
analysis	the process interpreting the meaning of collected data
enzyme	A biological catalyst found in the digestive system. It helps to break down food into smaller molecules that can diffuse into the blood.

Week 5: Energy Sources

energy source	a source from which useful energy can be extracted or converted
renewable	an energy source that will not run out e.g solar, wind, geothermal, nuclear, tidal.
non-renewable	an energy source that is used faster than it is replenished and will run out e.g fossil fuels coal, gas, and oil.
power	the amount of energy transferred in a set amount of time
Watts (W)	the units of power
standard form	a method of writing small or large numbers e.g. $192 = 1.92 \times 10^2$

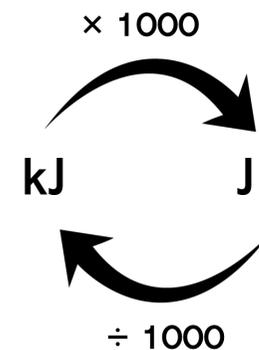
Converting from watts (W) to kilowatts (kW)



Week 6: Energy Use

fuel	a substance that is burned to release energy
Joules (J)	the units for all types of energy
kilowatt hour (kWh)	the unit used to state the amount of energy used by a 1kW appliance for 1 hour
compare	to find similarities and differences between two objects
estimate	a rough calculation
conversion	the process of changing units by multiplying or dividing

Converting from joules (J) to kilojoules (kJ)

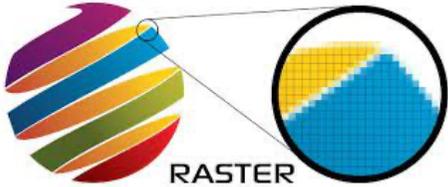


French		En ville (2)		Year 8	Term 2																					
Key phonics : eu oi qu in i è et u																										
Week 1: Les activités en ville		Week 2: Pouvoir		Week 3: Les directions																						
faire des promenades to do walking faire du shopping to do shopping faire une balade en bateau-mouche to do a boat-trip faire du tourisme to do sightseeing faire du bowling to do bowling visiter les musées to visit museums visiter les monuments to visit monuments manger au restaurant to eat at the restaurant manger chez mcdo to eat at McDonald's voir un concert to see a concert voir un match de foot to see a football match voir un spectacle to see a show		The infinitive verb ' pouvoir ' means ' to be able to '. It is a modal verb meaning when it is conjugated it is followed immediately by an infinitive . Present tense: Je peux I can Tu peux You can Il / elle peut He / she can On peut We can Nous pouvons We can Vous pouvez You can Ils / elles peuvent They can		Où est... ? Where is... ? Allez tout droit go straight on Continuez tout droit continue straight on Tournez à droite turn right Tournez à gauche turn left Prenez la première rue à droite take the first road on the right Prenez la deuxième rue à gauche take the second road on the left Traversez le pont cross the bridge Traversez le carrefour cross the crossroads																						
Week 4: Vouloir The infinitive verb ' vouloir ' means ' to want to '. It is a modal verb meaning when it is conjugated it is followed immediately by an infinitive . Present tense: Je veux I want Tu veux You want Il / elle veut He / she want On veut We want Nous voulons We want Vous voulez You want Ils / elles veulent They want		Week 5: Le weekend dernier Qu'est-ce que tu as fait? What did you do ? Le weekend dernier last weekend La semaine dernière last week Hier soir last night Hier yesterday Avant-hier the day before yesterday Il y a deux jours two days ago J'ai fait... I did... J'ai visité... I visited J'ai mangé... I ate J'ai vu... I saw Je suis allé(e) I went		Week 6: Le passé composé The perfect tense (le passé composé) is used to describe an event that has happened – the past tense . Forming the perfect tense with avoir has two parts – the present tense of avoir + the past participle (the action that has happened) <table border="1"> <thead> <tr> <th>Present part of avoir</th> <th>Past participle</th> <th>English meaning</th> </tr> </thead> <tbody> <tr> <td>J'ai</td> <td>fait</td> <td>I did</td> </tr> <tr> <td>Tu as</td> <td>vu</td> <td>You saw</td> </tr> <tr> <td>Il / elle / on a</td> <td>mangé</td> <td>He / she / we ate</td> </tr> <tr> <td>Nous avons</td> <td>regardé</td> <td>We watched</td> </tr> <tr> <td>Vous avez</td> <td>joué</td> <td>You played</td> </tr> <tr> <td>Ils / elles ont</td> <td>visité</td> <td>They visited</td> </tr> </tbody> </table>		Present part of avoir	Past participle	English meaning	J'ai	fait	I did	Tu as	vu	You saw	Il / elle / on a	mangé	He / she / we ate	Nous avons	regardé	We watched	Vous avez	joué	You played	Ils / elles ont	visité	They visited
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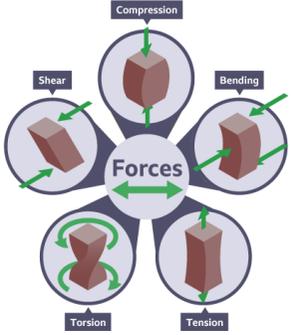
Geography	Extreme Environments: Russia	Year 8	Term 2
Week 1: Key Terms	Week 2: Key Terms	Week 3: Background information	
<p>Natural resource: raw material i.e. oil and gas occurring in nature that can be used for economic gain.</p> <p>Trade: the action of buying and selling goods</p> <p>Economy: how a country or place is doing in making goods, and how much money it has.</p> <p>Agriculture: farming</p> <p>Continental climate: the climate of places in the interior of continents, the climate is not influenced by the sea.</p>	<p>Latitude: the measurement of distance north or south of the Equator.</p> <p>Permafrost: a permanently frozen layer of soil.</p> <p>Infrastructure: the basic physical and organizational structures and facilities (e.g. buildings, roads, power supplies)</p> <p>Exploit: to make use of a resource i.e. oil.</p> <p>Tourism: travel for pleasure or business.</p>	<p>Russia is the largest country in the world.</p> <p>Russia has eleven time zones.</p> <p>Russia is located within the continents of Europe and Asia.</p> <p>Russia has a relatively small population of 144 million people.</p> <p>Siberia in Russia is sparsely populated due to the freezing temperatures and poor soil for farming.</p>	
Week 4: Climate and biomes	Week 5: Human adaptations	Week 6: Russian resources	
<p>The main biomes in Russia are the Taiga, Tundra, Temperate Forest and Steppe.</p> <p>The two largest biomes are the Taiga and Tundra.</p> <p>Taiga: swampy coniferous forest found in high northern latitudes</p> <p>Tundra: a vast, flat, treeless Arctic region.</p> <p>Deciduous trees: Trees which will lose their leaves in winter months</p> <p>Coniferous forest: Trees which maintain their leaves all year round.</p>	<p>Indigenous: originating or occurring naturally in a particular place</p> <p>Nomadic: moving from one place to another rather than living in one place all of the time.</p> <p>The Nennets' are an indigenous group who live in Northern Siberia. They move seasonally with their reindeer using the reindeer hide for clothing and tents.</p> <p>The migration routes of the Nennet's are being affected by infrastructure associated with resource extraction.</p>	<p>Economic activity: the amount a country makes and sells is called economic activity.</p> <p>Industrial economy: an economy based on the secondary sector i.e manufacturing.</p> <p>Self-sufficient: needing no outside help in satisfying one's basic needs.</p> <p>Exports: send (goods or services) to another country for sale.</p> <p>Russia has vast quantities of natural resources i.e. oil and gas which makes it self-sufficient and able to export large quantities of raw materials.</p>	

History	Slavery and Empire	Year 8 Term 2
<p>Week 1: Trans-Atlantic Slave Trade</p> <p>Slavery: forcing someone to work for free, usually in horrific conditions</p> <p>Middle passage: the part of the trade triangle where Africans were transported across the Atlantic to the West Indies. The main methods of capture were raids of African villages, use of criminals, kidnapping young Africans and re-selling slaves.</p> <p>An estimated 12.5 million Africans were transported between the 16th and 18th centuries.</p> <p>The voyage took 3-4 months and enslaved people were kept in chains in the hull of the ships.</p> <p>15-16% of enslaved people died on the Middle Passage.</p> <p>Zong Massacre 1781-83: 131 African people were thrown overboard because the crew could not claim insurance money on the lost cargo.</p>	<p>Week 2: Auctions and life on Plantations</p> <p>Auction: a public sale where goods go to the highest bidder.</p> <p>Slave auctions were advertised when it was known that a slave ship was due to arrive.</p> <p>Slaves would often be split up from their families and friends and given new names.</p> <p>It was the role of the auctioneers to make individual slaves seem appealing to plantation owners. Slaves would be scrubbed and their wounds filled with hot tar before auction.</p> <p>The unsold and frail were often sold by scramble auctions, where after agreeing a flat rate, plantation owners would race to grab the best workforce.</p>	<p>Week 3: Abolition</p> <p>Abolition: to do away with or put an end to. An abolitionist supports the abolition of the slave trade.</p> <p>1787 The Society for the Abolition of the Slave Trade was created.</p> <p>1789 Olaudah Equiano, an ex-slave, released his memoir <i>The Interesting Narrative of the Life of Olaudah Equiano</i></p> <p>1807 Parliament passed an Act that abolished Britain's role in the slave trade</p> <p>1833 Parliament passed an Act that abolished slavery in the Empire</p> <p>Morality: people saw slavery as going against their Christian duty.</p> <p>Economy: Slave traders in Parliament made profits.</p> <p>William Wilberforce: the abolitionist who introduced a bill that helped to abolish the transatlantic slave trade.</p>
<p>Week 4: Empire</p> <p>Empire: A group of nations or peoples ruled over by an emperor, empress, or other powerful sovereign or government</p> <p>After the World War One (after 1918) it became increasingly difficult for Britain to hold on to the Empire. It became clear that:</p> <ul style="list-style-type: none"> • Britain could no longer afford an empire. • Britain had no right to rule people who did not want to be ruled by Britain. • Britain realised that the Royal Navy was not strong enough to protect all the Empire anywhere in the world. <p>Mansa Musa: King of Mali and richest man in the old world</p>	<p>Week 5: West Africa</p> <p>Benin: The Oba (King) of Benin is the supreme ruler. Initially resisted the slave trade and traded cloth.</p> <p>Asante: The gold trade was central to economic life. The Kings of Asante used profit from the gold trade to build huge armies, and used them constantly to fight and take land.</p> <p>Transatlantic Slave Trade: created by Europeans, who took huge numbers of African slaves to force them to work in places such as America and the West Indies. They worked on plantations for crops such as sugar or tobacco.</p> <p>Tight Pack: Method involving packing as many slaves into the hold of a ship as possible</p> <p>Revolt: take violent action against an established government or ruler; rebel.</p>	<p>Week 6: Consequences and India</p> <p>Scramble for Africa: Where European countries divided control of Africa following the Berlin Conference 1884-5</p> <p>Asante Wars: A series of 5 wars between the English and Asante people from 1823-1900 over who should have the power in the area</p> <p>Britain controlled land in the West Indies (where a lot of sugar was processed by slaves). They also controlled land in the East Indies which included India.</p> <p>Jewel in the crown of the British Empire: India was one of the wealthiest parts of the British Empire and this was how it was referred to. Koh-i-Noor diamond, set in the British crown, taken from India in 1849.</p>

Religious Studies	Hinduism/ Evil and Suffering	Year 8 Term 2
<p>Week 1: The Mandir</p> <p>The Holy Building for Hindus is a Mandir. Mandirs contain Murtis. Murtis: are sacred statues or images of the Gods.</p> <p>Many Hindus will choose one God to worship. They may worship a God that their family has worshipped for generations. Hindus may carry out the following rituals at the Mandir:</p> <ul style="list-style-type: none"> -Remove the shoes, ring a bell, walk around the shrine, sing, chant, pray (puja), Present offerings of food, milk, or money <p>Puja: Hindu (Hindi) Prayer/worship</p> <p>Shrine: a holy place associated with a God, sacred person, or sacred object.</p>	<p>Week 2: Puja</p> <p>Shrine: a place regarded as holy because of its associations with God or a sacred person or relic, marked by a building or other construction. Many Hindu families will have a shrine at home. They perform Puja (prayer) here.</p> <p>Sight: The Murti, The flowers, lamp Sound: Bell, singing Smell: Flowers, Incense Taste: Food offerings (given to the Murti) Touch: Kum-Kum powder</p>	<p>Week 3: Pilgrimage</p> <p>Hindus go to the river Ganga in India. Hindus believe that the river is a Goddess, called ` . How Ganga came to earth:</p> <ul style="list-style-type: none"> -The King of the Land asked the King of the Mountains to send a river after 12 years of no rainfall. -The King of the Mountains said he could send his daughter, Ganga, from the heavens, but she was stubborn. -She was persuaded to come down to earth through Shivas matted hair. -She disappeared into the stomach of a sage, before reappearing from out of his ear. -She flowed through the region and the land, animals and people were saved from drought.
<p>Week 4: Adam and Eve- Original Sin</p> <p>God gave humans free will. Therefore, although he exists, he cannot interfere in any suffering humans experience because of their own choices.</p> <p>Original sin: because of Adam and Eve committing the first sin, Christians believe that all human beings are born sinful. It was passed down throughout humanity.</p> <p>This is called original sin; This idea means that human beings are born with an in-built tendency to do wrong against God.</p>	<p>Week 5: The problem of evil- Job</p> <p>Moral Evil: actions done by humans which causes suffering.</p> <p>Natural Evil: suffering which is not caused by humans.</p> <p>The story of Job: the Bible tells the story of a man called Job who is described as a good man who loves God. Satan challenges God, saying that Job is only good because he has a happy life. God allows Satan to put Job's faith to the test by causing him to suffer.</p>	<p>Week 6:</p> <p>Jesus suffered greatly during the crucifixion and was treated very badly leading up to the crucifixion taking place.</p> <p>Sometime Christians believe that by following the example of Jesus's life it can help them reach Heaven.</p> <p>Prodigal son: in the parable of the Prodigal Son, the father forgives his son when he returns and welcomes him home. In the same way, God waits for humans to realise what they have done wrong and ask for forgiveness and welcomes them back when they do. It is the willingness to ask for forgiveness and change one's behaviour that is central to the idea of forgiveness.</p>

Computing	Graphics	Year 8	Term 2
Week 1: Digital images	Week 2: Raster graphics	Week 3: Vector graphics	
<p>Digital images Graphics on a screen are made up of tiny blocks called pixels. The more pixels on the screen, the higher the resolution and the better the quality of the picture will be. The higher the image resolution, the more memory is needed to store the graphic. Resolution indicates the number of pixels that are displayed per inch for an image.</p>	<p>Raster graphics Raster graphics are also called bitmap graphics, they are a type of digital image that uses tiny rectangular pixels, or picture elements, arranged in a grid formation to represent an image.</p> 	<p>Vector graphics Vector graphics are based on mathematical relationships with control points that make up the image. Information is not stored about each pixel. These points are connected by lines and curves called vector paths or vectors.</p> 	
Week 4: Formatting	Week 5: Validation	Week 6: Modelling	
<p>Spreadsheet: Spreadsheets are used to store information and data. Once we have our information in a spreadsheet we can run powerful calculations, make graphs and charts and analyse patterns. Data: is words, numbers, dates, images, sounds etc without context. Graph: a graph is a visual element that represents data in a worksheet Formatting: to modify the data's appearance in a worksheet.</p>	<p>Data validation (Drop down menus): is a feature that allows you to control the type of data entered into your worksheet. Lookup formulas: performs an approximate match lookup in a one-column or one-row range and returns the corresponding value from another one-column or one-row range. cell referencing: refers to a cell or a range of cells on a worksheet and can be used in a formula</p>	<p>Input messages: can be used to show a message when a cell is selected Conditional formatting: makes it easy to highlight certain values or make particular cells easy to identify IF formulas: allows you to make logical comparisons between a value and what you expect</p>	

PSHE	Public Health	Year 8 Term 2
<p>Week 1: Aesthetic dangers</p> <p>Plastic surgery: is used to repair and reconstruct missing or damaged tissue and skin.</p> <p>The main aim of plastic surgery is to restore the function and appearance of tissue and skin so it's as close to normal as possible.</p> <p>Plastic surgery is different from cosmetic (Aesthetic) surgery, which is surgery carried out solely to change a person's appearance to achieve what they feel is a more desirable look</p>	<p>Week 2: The media and body image</p> <p>Body Image: a person's perception of how attractive their body is, how we feel we look and how this influences our behaviour.</p> <p>Mental Wellbeing: when an individual is happy, content and can cope with the normal stresses of life.</p> <p>Physical Health: the condition of our bodies, how healthy we eat and the physical exercise we do.</p>	<p>Week 3: Transplant law</p> <p>Now that the law has changed, it will be considered that you agree to become an organ donor when you die, if:</p> <ul style="list-style-type: none"> • you are over 18. • you have not opted out. • you are not in an excluded group. • <p>You still have a choice whether or not you want to become an organ donor and can register or amend your decision at any time.</p>
<p>Week 4: Managing Change</p> <p>Most people experience grief when they lose something or someone important to them. If these feelings are affecting your life, there are things you can try that may help.</p> <p>Ways to support bereavement:</p> <ul style="list-style-type: none"> • talk about feelings to family or friends • speak to a health professional or counsellor • seek support at school • look at free help and support online • use free resources such as guides on the NHS website 	<p>Week 5: First aid</p> <p>Anaphylaxis: this is commonly called an allergic reaction and can occur after an insect sting or eating certain foods.</p> <p>Bleeding heavily: if someone is bleeding heavily, the main aim is to prevent further blood loss and minimise the effects of shock.</p> <p>Mild choking: if the airway is only partly blocked, the person will usually be able to speak, cry, cough or breathe.</p> <p>Severe choking: If choking is severe, the person won't be able to speak, cry, cough or breathe, and without help they'll eventually become unconscious. If coughing doesn't work start back blows.</p>	<p>Week 6: Money Charity</p> <p>Why is budgeting important?</p> <p>In short, budgeting is important because it helps you control your spending, track your expenses, and save more money. Additionally, budgeting can help you make better financial decisions, prepare for emergencies, get out of debt, and stay focused on your long-term financial goals.</p> <p>Why budget?</p> <ul style="list-style-type: none"> • Helps you to control your spending • Keeps track of your goals • Helps you plan for your future.

ADT	TECHNOLOGY – METALS	Year 8 Term 2
<p>Week 1: Selecting Materials</p> <p>Materials can be selected based upon their working properties. It is important to know and understand which materials can be used for a specific purpose:</p> <ul style="list-style-type: none"> • How do they look? • What are they commonly used for? • How can they be manufactured? • How do they perform in use? • What makes them unique - are they the most durable, the lightest etc? <p>Many products are made from metal and understanding the way each metal will function is vital.</p>	<p>Week 2: Forces And Stresses</p> <p>Forces act on materials all the time - even if a material appears stationary it still has a force acting on it.</p> <p>There are five terms used to describe what type of force can act on a material:</p> <ul style="list-style-type: none"> • Tension - a pulling force • Compression - a pushing force • Bending - forces at an angle to the material • Torsion - a twisting force • Shear - forces acting across the material 	<p>Week 3: Ecological And Social Footprint</p> <p>When considering the ecological and social implications of using metal, its non-renewable nature is the main concern. Metal cannot be grown and is a finite resource - there is only a certain amount within the Earth's crust.</p> <p>Whenever environmental impact is being reduced, 'The 6 Rs' can be called upon to ensure an in-depth analysis has been done.</p> <p>The 6 Rs can be considered by the designer, the manufacturer and the customer.</p> 
<p>Week 4: Scales Of Production</p> <p>There are four terms used to describe the scale of production in relation to manufacturing a product:</p> <ol style="list-style-type: none"> 1. Prototype And One-Off Production 2. Batch Production 3. Mass Production Continuous Production 	<p>Week 5: Prototypes and one-off production</p> <p>There are many ways to produce a prototype - some are rough and look like models and others are well finished and function as intended.</p> <p>It is now possible to 3D print metal, and many engineering companies have welcomed this technology as 3D printing is classed as additive manufacture, rather than subtractive.</p> <p>Additive manufacture builds up the metal form in layers, whereas subtractive manufacture takes material away from a larger piece.</p> <p>There is very little waste when using additive techniques, making it more environmentally friendly.</p>	<p>Week 6: Mass production and Continuous production</p> <p>Mass production Mass-produced products are manufactured in large volumes, and often assembly line workers can be used to fit standard components</p> <p>Continuous production Continuous production takes place 24 hours a day, 7 days a week and, in some cases, 365 days a year.</p>

Knowledge Recall Questions

Step 1 – learn the knowledge using your recall book and look, cover, write, check, correct.

Step 2 – from memory, complete the weekly recall questions. These are mandatory. Use family and friends to test you 😊.

Step 3 – any question you cannot confidently answer, go back and learn the knowledge again.

Maths

Multiplicative Reasoning

Year 8

Term 2

Week 1: Proportion

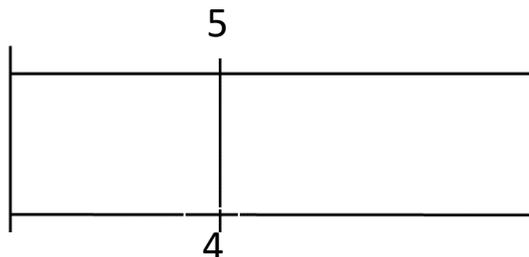
1. Jim gets paid £12 per hour.
Four every ___ hour he is paid _____

- What is the constant of proportionality?
- How much will Jim be paid if he works for 5 hours?
- Draw out a double number line (in your yellow book) for this situation.
- How much with Jim be paid if he works 10 and a half hours?

2. 1cm on a map is 100m in real life.
For every ___ cm there is _____ m

The distance between to places is 150m, how far should this measure on the map?

- Two things are directly proportional and are shown on the double number line.



Both things are scaled up by 4, what are the new positions?
What is the constant of proportionality?

Week 2: Multiplying and dividing fractions

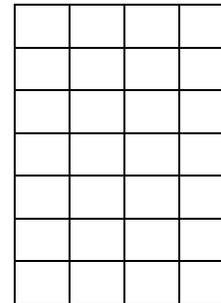
$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} = 3 \times \frac{1}{4} = \frac{3}{4}$$

$$\frac{1}{5} + \frac{1}{5} + \frac{1}{5} =$$

$$\frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7} =$$

$$\frac{1}{7} \times \frac{3}{4} =$$

(use the grid to help you)



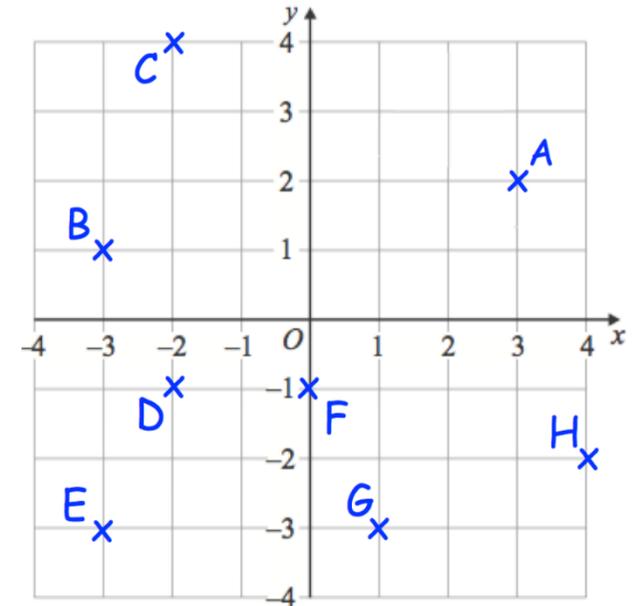
What is the reciprocal of;

- 6
- 3
- $\frac{1}{7}$
- $\frac{2}{5}$

Dividing by an amount is the same as...

Week 3: Axes and coordinates

1. Write the coordinates of each letter



2. True or false?

- Coordinates are written (y, x)
- What coordinate is the origin?

Maths	Ratio & Multiplicative reasoning	Year 8 Term 2
Week 4: Linear graphs 1	Week 5: Linear graphs 1	Week 6: Representing data
<ol style="list-style-type: none"> Gradient is a measure of _____. Lines that have the same gradient are called _____. Draw a horizontal line Draw a vertical line Lines that are vertical are parallel to _____ Lines that are horizontal are parallel to _____. For each line state whether it would be horizontal or vertical; <ul style="list-style-type: none"> $y = 2$ $y = 0.5$ $x = 10$ $x = -4$ 	<ol style="list-style-type: none"> Where a line crosses the y-axis is called the _____ To substitute means to _____. For each question, state the gradient and the y-intercept; <ul style="list-style-type: none"> $Y=6x+2$ $Y=0.5x-7$ $Y=-2x+10$ $Y=6 + 3x$ 	<ol style="list-style-type: none"> A measure of strength of relationship between 2 variables is called _____ An _____ is a result which lies beyond where most of the data is clustered. Discrete data is Continuous data is Frequency is ... True or false <ul style="list-style-type: none"> A line of best fit must go through all the points. There will always be a correlation between data.

Week 1: Aerobic Respiration	Week 2: Anaerobic Respiration	Week 3: Endothermic and Exothermic Reactions
<ol style="list-style-type: none"> Where in a cell does aerobic respiration take place? What are the reactants of aerobic respiration? What are the products of aerobic respiration? What is the word equation for aerobic respiration? Which gas is needed for aerobic respiration? 	<ol style="list-style-type: none"> What does anaerobic mean? Where in a cell does anaerobic respiration take place? What is the definition of a waste product? What is the word equation for anaerobic respiration in animals? What is the word equation for anaerobic respiration in yeast cells? 	<ol style="list-style-type: none"> What type of reaction absorbs thermal energy from the surroundings? What type of reaction releases thermal energy into the surroundings? List signs of a chemical reaction: <ol style="list-style-type: none"> _____ _____ _____ _____ _____
Week 4: Catalysts and Data Analysis	Week 5: Energy Sources	Week 6: Energy Use
<ol style="list-style-type: none"> How does a catalyst affect the rate of a reaction? What is the name given to a statement that summarises the results of an experiment? Define rate. When can results be called repeatable? What is an enzyme? 	<ol style="list-style-type: none"> What name is given to the amount of energy transferred in a set amount of time? What name is given to an energy source that will not run out? What name is given to an energy source that is used faster than it is replenished? Convert the following from W to kW <ol style="list-style-type: none"> 1000W 1500W 900W 250W 	<ol style="list-style-type: none"> Which variable is measured in joules? What does kWh stand for? If you find similarities and differences between two objects, what are you doing? Convert the following from kJ to J <ol style="list-style-type: none"> 2kJ 120kJ 35kJ 250kJ 0.5kJ

French	En ville (2)	Year 8	Term 2
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Week 1: Les activités en ville	Week 2: Pouvoir	Week 3: Les directions
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Fill in the missing word:

_____ **des promenades**
to do walking

faire du _____ to do shopping

faire une _____ **en bateau-mouche**
to do a boat-trip

faire du _____ to do sightseeing

_____ **du bowling** to do bowling

visiter les _____ to visit museums

_____ **les monuments**
to visit monuments

_____ **au restaurant**
to eat at the restaurant

manger _____ **mcdo**
to eat at McDonald's

_____ **un concert**
to see a concert

voir un _____ **de foot**
to see a football match

voir un _____ to see a show

The infinitive verb ' _____ ' means 'to be able to'. It is a _____ verb meaning when it is conjugated it is **followed immediately by an** _____.

Present tense: Complete the table below

	I can
Tu peux	
	He / she can
On peut	
	We can
Vous pouvez	
	They can

Eg. Je **peux** manger chez mcdo – I **can** eat at McDonald's

Translate :

I can do shopping

He can see a concert

They (fem) can do sightseeing

Où est... ? = _____

What directions are being given?

Allez tout droit et tournez à gauche

Continuez tout droit et tournez à droite

Tournez à droite et traversez le carrefour

Tournez à gauche

Prenez la première rue à droite et tournez à gauche

Traversez le pont et prenez la deuxième rue à gauche

French	En ville (2)	Year 8 Term 2																																																									
Week 4: Pouvoir	Week 5: Le weekend dernier	Week 6: Le passé composé																																																									
<p>The infinitive verb ' _____ ' means 'to want to'. It is a _____ verb meaning when it is conjugated it is followed immediately by an _____.</p> <p>Present tense: Complete the table below</p> <table border="1" data-bbox="107 491 763 754"> <tr><td>Je veux</td><td></td></tr> <tr><td>Tu veux</td><td></td></tr> <tr><td></td><td>He / she wants to</td></tr> <tr><td></td><td>We want to</td></tr> <tr><td>Nous voulons</td><td></td></tr> <tr><td></td><td>You want to</td></tr> <tr><td>Ils / elles veulent</td><td></td></tr> </table> <p>Eg. Je veux manger chez mcdo – I want to eat at McDonald's</p> <p>Translate :</p> <p>I want to see a concert.</p> <p>_____</p> <p>We want to do shopping.</p> <p>_____</p> <p>They (masculine) want to visit monuments.</p> <p>_____</p>	Je veux		Tu veux			He / she wants to		We want to	Nous voulons			You want to	Ils / elles veulent		<p>Qu'est-ce que tu as fait ? =</p> <p>_____</p> <p>Match up the time frames:</p> <table data-bbox="790 563 1440 866"> <tr><td>Le weekend dernier</td><td>last night</td></tr> <tr><td>La semaine dernière</td><td>the day before yesterday</td></tr> <tr><td>Hier soir</td><td>yesterday</td></tr> <tr><td>Hier</td><td>two days ago</td></tr> <tr><td>Avant-hier</td><td>last weekend</td></tr> <tr><td>Il y a deux jours</td><td>last week</td></tr> </table> <p>Complete the past tense structure:</p> <table data-bbox="790 1074 1344 1377"> <tr><td>J'ai _____</td><td>I did...</td></tr> <tr><td>J'ai _____</td><td>I visited</td></tr> <tr><td>J'ai _____</td><td>I ate</td></tr> <tr><td>J'ai _____</td><td>I saw</td></tr> <tr><td>Je suis _____</td><td>I went</td></tr> </table>	Le weekend dernier	last night	La semaine dernière	the day before yesterday	Hier soir	yesterday	Hier	two days ago	Avant-hier	last weekend	Il y a deux jours	last week	J'ai _____	I did...	J'ai _____	I visited	J'ai _____	I ate	J'ai _____	I saw	Je suis _____	I went	<p>The perfect tense (_____) is used to describe an event that has happened – the _____ tense.</p> <p>Forming the perfect tense with avoir has _____ parts – the present tense of _____ + the _____ participle (the action that has happened)</p> <p>Complete the table by filling in the blanks</p> <table border="1" data-bbox="1473 603 2123 1026"> <thead> <tr> <th>Present part of avoir</th> <th>Past participle</th> <th>English meaning</th> </tr> </thead> <tbody> <tr> <td>_____</td> <td>fait</td> <td>I _____</td> </tr> <tr> <td>Tu as</td> <td>vu</td> <td>You _____</td> </tr> <tr> <td>Il / elle / on a</td> <td>_____</td> <td>He / she / we ate</td> </tr> <tr> <td>Nous</td> <td>regardé</td> <td>We watched</td> </tr> <tr> <td>Vous avez</td> <td>_____</td> <td>You played</td> </tr> <tr> <td>Ils / elles</td> <td>visité</td> <td>They _____</td> </tr> </tbody> </table> <p>Translate:</p> <p>Last night we visited the monuments.</p> <p>_____</p> <p>_____</p> <p>Yesterday I saw a show.</p> <p>_____</p> <p>_____</p>	Present part of avoir	Past participle	English meaning	_____	fait	I _____	Tu as	vu	You _____	Il / elle / on a	_____	He / she / we ate	Nous	regardé	We watched	Vous avez	_____	You played	Ils / elles	visité	They _____
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Geography	Extreme Environments: Russia	Year 8	Term 2
Week 1: Key Terms	Week 2: Key Terms	Week 3: Background information	
<ol style="list-style-type: none"> 1. What is a natural resource? 2. Define trade 3. Define 'economy' 4. What is agriculture? 5. What is a continental climate? 	<ol style="list-style-type: none"> 1. Define latitude 2. What is permafrost? 3. Define Infrastructure 4. What is exploit? 5. Define tourism 	<ol style="list-style-type: none"> 1. What is the largest country in the world? 2. How many time zones does Russia have? 3. What two continents is Russia located in? 4. What is the size of Russia's population? 	
Week 4: Climate and biomes	Week 5: Human adaptations	Week 6: Russian resources	
<ol style="list-style-type: none"> 1. What are the main biomes of Russia? 2. What are the largest biomes of Russia? 3. What is a Taiga? 4. What is a Tundra? 5. What is difference between deciduous and coniferous forests? 	<ol style="list-style-type: none"> 1. Define Indigenous 2. Define Nomadic 3. Who are the Nennets? 	<ol style="list-style-type: none"> 1. Define Economic activity: 2. Define Industrial economy: 3. What does Self-sufficient mean? 4. Define Exports 	

Religious Studies	Dharmic Faiths/Evil and Suffering	Year 8 Term 2
Week 1: The Mandir	Week 2: Puja	Week 3: Pilgrimage
<p>Which holy building do Hindus use?</p> <p>What is a Murti?</p> <p>Name one thing a Hindu will do when entering the Mandir.</p> <p>What is Puja?</p> <p>What is a shrine?</p> <p>Why do Hindus often choose only one God to worship?</p>	<p>What is a shrine?</p> <p>Where might you find a Hindu shrine?</p> <p>What do Hindus do at a shrine?</p> <p>How is smell shown at a shrine?</p> <p>How is sound shown at a shrine?</p> <p>How is taste shown at shrine?</p>	<p>Where do Hindus go on pilgrimage?</p> <p>How many years of no rainfall were there in the story of Ganga?</p> <p>How did Ganga get to earth?</p> <p>Draw 3 images below to tell the story of goddess Ganga.</p> <div data-bbox="1473 852 2132 1059" style="border: 1px solid black; height: 130px; margin-bottom: 5px;"></div> <div data-bbox="1473 1059 2132 1257" style="border: 1px solid black; height: 124px; margin-bottom: 5px;"></div> <div data-bbox="1473 1257 2132 1452" style="border: 1px solid black; height: 122px;"></div>

Religious Studies	Dharmic Faiths/Evil and Suffering	Year 8 Term 2
Week 4: Adam and Eve- Original Sin	Week 5: The problem of evil- Job	Week 6: The suffering of Jesus
<p>God gave humans f _____ w _____. What does this mean?</p> <p>What is the original sin? Summarise in 30 words or less.</p> <p>Draw 4 images below to tell the story of the original sin</p> <div data-bbox="114 635 763 1433" style="border: 1px solid black; height: 500px; width: 100%; display: flex; flex-direction: column;"> <div style="border-bottom: 1px solid black; height: 125px;"></div> </div>	<p>What is moral evil?</p> <p>What is natural evil?</p> <p>Draw 4 images below to tell the story of the original sin</p> <div data-bbox="795 635 1444 1433" style="border: 1px solid black; height: 500px; width: 100%; display: flex; flex-direction: column;"> <div style="border-bottom: 1px solid black; height: 125px;"></div> </div>	<p>How did Jesus die?</p> <p>What does Jesus suffering teach Christians?</p> <p>How can Jesus be a role model to handling suffering?</p> <p>Summarise the Parable of the Prodigal son in the 3 boxes below:</p> <div data-bbox="1476 815 2130 1417" style="border: 1px solid black; height: 377px; width: 100%; display: flex; flex-direction: column;"> <div style="border-bottom: 1px solid black; height: 125px;"></div> <div style="border-bottom: 1px solid black; height: 125px;"></div> <div style="border-bottom: 1px solid black; height: 125px;"></div> </div>

ADT	TECHNOLOGY – METALS	Year 8	Term 2
Week 1: Selecting Materials	Week 2: Forces And Stresses	Week 3: Ecological And Social Footprint	
<p>Materials can be selected based upon their working properties.</p> <p>What questions should be asked about their working properties?</p>	<p>Write five terms used to describe what type of force can act on a material:</p>	<p>What are ecological and social implications of using metal?</p>	
Week 4.: Scales Of Production	Week 5: Prototypes and one-off production	Week 6: Mass production and Continuous production	
<p>What are the four terms used to describe the scale of production in relation to manufacturing a product?</p>	<p>What are Prototypes</p> <p>What are one-off productions?</p>	<p>What is Mass Productions?</p> <p>What is Continuous Production?</p>	