

Knowledge Organiser

Year 7 Term 3

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>Perilous- involving or full of huge risk or danger.</p> <p>Raucous- harsh voices or disorderly behaviour.</p> <p>Dictate- an authoritative order or command.</p> <p>Connotations- something suggested by a word or thing.</p> <p>Campaign- to serve in or go on a campaign.</p>	<p>Interpretations- to explain something and understand in a particular way.</p> <p>Statistics- a number-based fact.</p> <p>Hopelessness- the feeling or condition of having no hope.</p> <p>Suppressing- To keep in or repress (a feeling, smile, groan, etc.).</p> <p>Courageous- to possess or demonstrate bravery.</p>	<p>Console- to alleviate or lessen the feeling of grief, sadness, or disappointment. To comfort someone.</p> <p>Blasphemy- the action or offence of speaking sacrilegiously about God or sacred things.</p> <p>Opponent- a person who is on the opposing side.</p> <p>Uproarious- characterised by or provoking loud noise or uproar.</p> <p>Figurative- not to be understood literally- use of metaphorical language.</p>	<p>Perpetrators- a person who carries out a harmful, illegal, or immoral act.</p> <p>Prohibit- formally forbid someone from doing something.</p> <p>Imposition- an unfair or unwelcome demand or burden.</p> <p>Obscenity- the state or quality of being offensive.</p> <p>Hysterical- wildly uncontrolled emotion.</p>	<p>Devout- having or showing deep religious feeling or commitment.</p> <p>Pacifist- a person who believes that war and violence are unjustifiable.</p> <p>Anaphora- repeating the beginning of a sentence in multiple sentences.</p> <p>Interfere- to prevent a process or activity from continuing or being carried out properly.</p> <p>Palpable- easily noticeable.</p>	<p>Epistrophe- repetition of phrases or words in a set of sentences.</p> <p>Ideology- a system of ideas or beliefs.</p> <p>Unanimously- without opposition; agreement amongst all.</p> <p>Accosted- approach and address someone boldly or aggressively.</p> <p>Illustrates- to demonstrate or exemplify an idea.</p>
3 times table	6 times table	9 times table	12 times table	4 times table	8 times table



Look

Look at the information carefully.

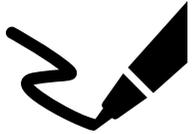
Read it three times.

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

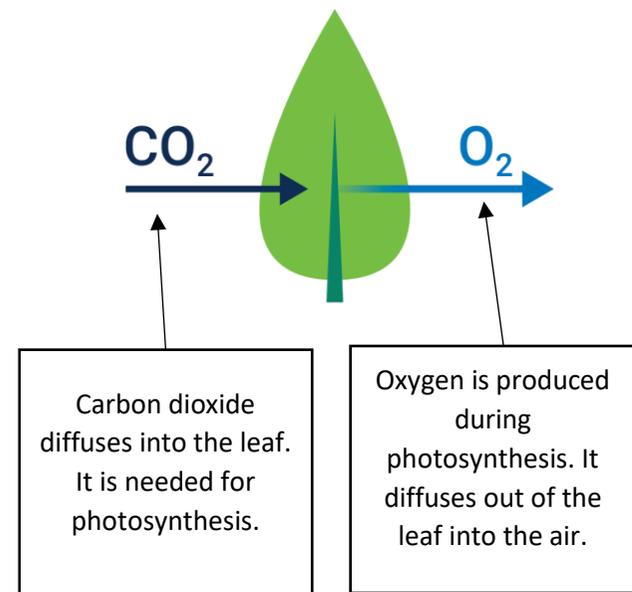
English		I am Malala	Year 7	Term 3
Week 1: Vocabulary		Week 2: Academic Writing 1		Week 3: Academic Writing 2
<p>Plight: a dangerous or difficult situation.</p> <p>Socioeconomic status: the social standing of a position or group.</p> <p>Inequality: unequal or unjust distribution of resources or opportunities to a person or group.</p> <p>Underclass: the lowest social group in a country or community.</p> <p>Disenfranchised: someone who is deprived of the right to vote or have power in their own lives.</p> <p>Universal Human Truth: an idea which everyone understands.</p>		<p>ACADEMIC VERBS</p> <p><i>The writer...</i></p> <p>challenges provokes educates questions criticises enlightens reveals empowers</p>	<p>ACADEMIC ADVERBS</p> <p><i>The author writes...</i></p> <p>powerfully effectively purposefully</p> <p>ACADEMIC ADJECTIVES</p> <p><i>The reader finds this...</i></p> <p>emotive powerful profound inspiring</p>	<p>Writing a Thesis Statement: NAME, VERB, POINT, PLACE, (COMMA), QUOTATION</p> <p>e.g., Shan creates a disturbing tone at the opening of the novel, 'eat me alive, from the inside out.'</p> <p>Thesis statement and introducing authorial intent and influence:</p> <ul style="list-style-type: none"> · 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...
Week 4: Noun and Verb Sub-Classes		Week 5: Grammar Knowledge		Week 6: Form
<p>Abstract noun: states, feelings, and concepts, e.g., love, hope.</p> <p>Concrete noun: objects we can see/touch.</p> <p>Countable: counted and pluralised, e.g., cup(s), people</p> <p>Mass: can't be counted and not plural e.g., furniture, snow.</p>	<p>Material verb: actions or events, e.g., jump, wash.</p> <p>Relational verb: identify properties or show states of being e.g., appear, become, be, grow</p> <p>Infinitive verb: a verb which has 'to' before it, e.g. <u>To see</u> is to believe.</p> <p>Modal verbs: likelihood, possibility, ability, or obligation, e.g., <i>might, could, can, should, will.</i></p>	<p>Perspective</p> <p>First person: the narrator is a character in the story, dictating events from their perspective using 'I' or 'we'.</p> <p>Second person: written directly to the reader, using 'you'.</p> <p>Third person perspective: the narrator exists outside of the story and addresses the characters by name or uses 'he/she/they' and 'him/her/them'.</p>	<p>Biography: an account of someone's life written by someone else.</p> <p>Autobiography: an account of a person's life written by that person.</p> <p>Non-fiction: a text based on real life events.</p> <p>Report: an account of something which has happened, usually including details like time, place, and facts.</p>	

Maths		Applications of number	Year 7	Term 3														
Week 1: Adding and subtracting 1		Week 2: Adding and subtracting 2		Week 3: Multiplying and dividing 1														
<p>Sum: the answer to an addition. The sum of 5 and 6 is 11</p> <p style="text-align: center;">Addend + Addend = Sum</p> <p>Difference: the answer to a subtraction. The difference between 8 and 12 is 4</p> <p style="text-align: center;">Minuend – Subtrahend = Difference 12 – 8 = 4</p> <p>Partition: breaking down a number into smaller parts.</p> <p>Frequency: the number of times something occurs.</p> <p>Perimeter: the distance around the outside of a shape.</p>		<p>Credit: money going into a bank account. Also known as income.</p> <p>Debit: money going out of a bank account. Also known as expenses.</p> <p>Balance: how much money is in an account.</p> <p>Profit: a financial gain.</p> <p>Loss: a financial decrease (losing money).</p>		<p>Product: the answer to a multiplication.</p> <p style="text-align: center;">Factor x factor = product 3 x 6 = 18 The product of 3 and 6 is 18</p> <p>Factor: numbers we multiply to get another number.</p> <p>Quotient: the answer to a division.</p> <p style="text-align: center;">Dividend ÷ divisor = quotient 20 ÷ 4 = 5</p> <p>Dividend: the number being divided</p> <p>Divisor: the number you are dividing by.</p>														
Week 4: Multiply and divide 2		Week 5: Metric units		Week 6: Core knowledge														
<p>Factors are always integers.</p> <p>Highest common factor (HCF): the common factor of two or more numbers with the greatest value,</p> <p>Multiple: a number in that times table. Multiples of 3: 3, 6, 9, 12, 15, ... etc</p> <p>Lowest common multiple: the common multiple of two or more numbers with the lowest value.</p> <p>Array: items or numbers arranged in rows and columns. </p>		<p>Prefix: a word at the front of another word which changes its meaning.</p> <table border="1" data-bbox="1176 922 1433 1193"> <thead> <tr> <th>Prefix</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>Milli</td> <td>$\frac{1}{1000}$</td> </tr> <tr> <td>Centi</td> <td>$\frac{1}{100}$</td> </tr> <tr> <td>Deci</td> <td>$\frac{1}{10}$</td> </tr> </tbody> </table> <p>1kg = 1000g 1km = 1000m 1m = 100cm 1cm = 10mm</p> <p>Units of length: millimeter (mm), metre (m) etc.</p> <p>Units of mass: gram (g), kilogram (kg) etc.</p> <p>Units of capacity: millilitre (l), litre (L) etc.</p>		Prefix	Meaning	Milli	$\frac{1}{1000}$	Centi	$\frac{1}{100}$	Deci	$\frac{1}{10}$	<p>Commutative: gives the same result regardless of the order. Example 2 + 3 = 3 + 2</p> <p>Integer: whole number</p> <p>Fact family</p> <p>3 x 6 = 18 6 x 3 = 18 18 ÷ 3 = 6 18 ÷ 6 = 3</p> <table border="1" data-bbox="1798 1145 2065 1281"> <tr> <td colspan="3" style="text-align: center;">18</td> </tr> <tr> <td style="text-align: center;">6</td> <td style="text-align: center;">6</td> <td style="text-align: center;">6</td> </tr> </table> <p>If a factor is scaled up, the product is scaled up. 30 x 6 = 180</p>	18			6	6	6
Prefix	Meaning																	
Milli	$\frac{1}{1000}$																	
Centi	$\frac{1}{100}$																	
Deci	$\frac{1}{10}$																	
18																		
6	6	6																

Week 1: Diffusion

diffusion	the net movement of particles moving from a region of high concentration to an area of low concentration
concentration	the number of particles of a substance in a set volume
exchange	the act of giving one thing and receiving another
net movement	the overall movement
particle	the smallest unit of a substance, such as an atom or a molecule

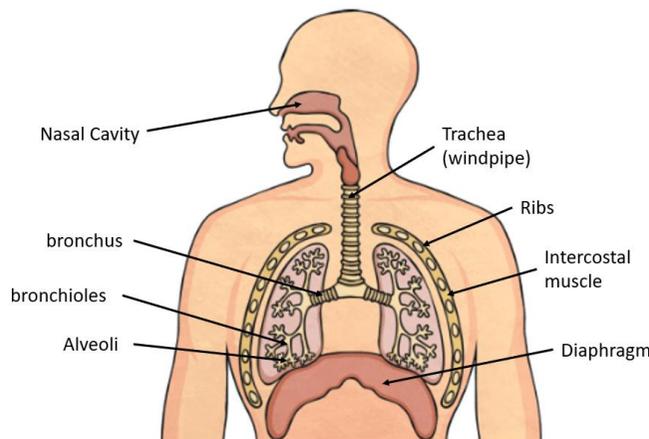
The diagram below shows diffusion happening in a leaf.



Week 2: Gas Exchange

alveoli	tiny air sacs in the lungs where gas exchange happens
stomata	small opening on the surface of a leaf where gas exchange happens
diaphragm	a sheet of muscle found under the ribs
ribs	bones that encase and protect the lungs and heart.
intercostal muscles	muscles in between the ribs that help to move the ribcage
inhale	the process of breathing air into the lungs
exhale	the process of breathing air out of the lungs

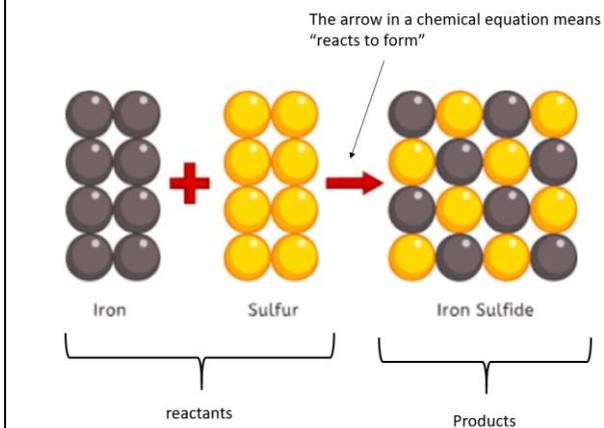
Use the diagram below to learn the names of the parts of the respiratory system.



Week 3: Chemical Reactions

molecule	2 or more atoms bonded together - the atoms can be the same or different
chemical reaction	a process which involves the rearrangement of atoms to form new substances
reactants	the substances found at the beginning of a reaction
products	the new substances produced at the end of a reaction
physical reaction	a process which involves a change of state (rearrangement of particles) but no new substance is formed
precipitate	an insoluble solid formed from a reaction
→	the arrow in a chemical equation means "reacts to make"

The diagram below shows a chemical reaction



Week 4: Combustion and Oxidation

combustion	a chemical reaction between fuel and oxygen (burning)
oxidation	a chemical reaction where an element gains oxygen
oxide	the second name of a substance to show that oxygen is bonded <i>e.g. calcium oxide</i>
fuel	a substance that is burned to release energy, also known as a hydrocarbon
mean	the average - it makes results more reliable and accurate

How to calculate the mean

1,2,5,3,4,3,2,2

Step 1: add together all of the numbers.

$$1+3+5+3+4+3+2+2=23$$

Step 2: divide you answer from step 1 by the number of numbers that you have in your data.

$$23 \div 8 = 2.875$$

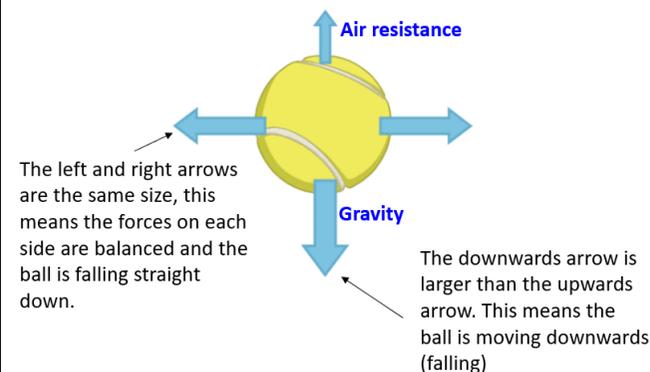
Step 3: round your number to one whole number

$$2.875 \rightarrow \underline{3}$$

Week 5: Forces

force	a push or pull effect
contact force	a force produced by two objects touching
non-contact force	a force produced when two objects are not touching
friction	a force that goes against a moving object
air resistance	a force created by air particles acting against a moving object
normal contact	a force applied to an object by a supporting surface
upthrust	an upward force created by water against floating objects

The diagram below shows that forces acting on a tennis ball as it falls.



Week 6: Mass, weight and Gravity

weight	the force an object applies downwards due to gravity
mass	the amount of matter (solid, liquid or gas) in an object - measured in kilograms (kg)
gravity	the force that attracts an object to the centre of the earth
gravitational field strength	the strength of the gravity acting on an object - the gravitational field strength of Earth is always 10N/kg

The formula to calculate weight is:

Weight (N) = Mass (kg) × Gravitational field strength (N/kg)

Example: If mass is 56 kg and gravitational field strength is 10 N/kg what is the weight in N?

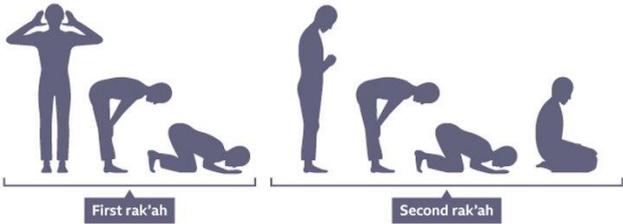
$$\begin{aligned} \text{Weight (N)} &= \text{Mass (kg)} \times \text{Gravitational Field strength (N/kg)} \\ &= 56\text{kg} \times 10\text{N/kg} \\ &= 560\text{N} \end{aligned}$$

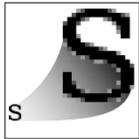
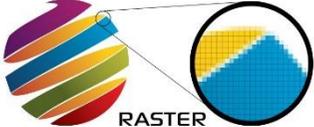
The weight is 560 newtons.

French		Au Collège 1		Year 7	Term 3
Year 7 Phonics: eu oi qu in i è et u					
Week 1: Les matières		Week 2: Quand ?		Week 3: Quelle heure est-il ? 1	
Qu'est-ce que tu étudies ? J'étudie... le français le théâtre la géographie la musique la technologie l'EPS l'histoire l'informatique l'anglais les arts plastiques/le dessin les sciences les maths J'étudie l'histoire et les sciences To say what lesson you <i>have</i> use ' j'ai + subject ' (remove the article le/la/les/l') eg. I have maths = J'ai maths	What do you study ? I study... French drama geography music technology PE history ICT English art science maths I study history and science	aujourd'hui le lundi le vendredi le matin l'après-midi tous les jours et aussi puis après la récré l'heure du déjeuner le lundi matin, j'ai français, anglais et maths. On Monday mornings, I have French, English and maths. Puis, après l'heure du déjeuner, on a EPS. Then, after lunchtime, we have PE.	today on Mondays on Fridays in the morning in the afternoon every day and also then afterwards break lunch time	il est une heure il est quatre heures il est trois heures et demie à huit heures à neuf heures et demie à une heure et demie l'après-midi le matin le matin à neuf heures et demie j'ai maths in the morning at 9.30am I have maths l'après-midi, à une heure, j'ai anglais. In the afternoon, at 1 o'clock, I have English.	it is 1 o'clock it is 4 o'clock it is half past 3 at 8 o'clock at half past 9 at half past 1 in the afternoon in the morning
Week 4: Quelle heure est-il ? 2		Week 5: Les opinions		Week 6: Les adjectifs	
à dix heures et quart à est dix heures et demie à onze heures moins le quart à midi à deux heures cinq à deux heures dix à deux heures vingt à deux heures vingt-cinq à trois heures moins vingt-cinq à trois heures moins vingt à trois heures moins dix à trois heures moins cinq Les cours commencent à huit heures vingt-cinq. Lessons start at 8 :25. Les cours finissent à deux heures quarante-cinq. Lessons finish at 2 :45.	at quarter past 10 at half past 10 at quarter to 11 at midday at 5 past 2 at 10 past 2 at 20 past 2 at 25 past 2 at 25 to 3 (3 hours minus 25) at 20 to 3 (3 hours minus 20) at 10 to 3 (3 hours minus 10) at 5 to 3 (3 hours minus 5)	J'aime (beaucoup) J'adore Je n'aime pas Je déteste Je préfère Follow the opinion with the noun eg. J'aime la musique OR with the infinitive eg. J'aime étudier la musique (I like to study music) À mon avis Je pense que Eg. À mon avis le français est intéressant Quelle est ta matière préférée? What is your favourite subject? Le français est ma matière préférée. French is my favourite subject. Je voudrais étudier	I like (a lot) I love I don't like I hate I prefer In my opinion I think that	parce que c'est... parce que ce n'est pas... très assez un peu intéressant facile amusant ennuyeux difficile nul car le/la prof est... sévère sympa	because it is... because it isn't... very quite a little interesting easy fun boring difficult rubbish the (m/f) teacher is... strict nice

Geography		Why are ecosystems so important?	Year 7	Term 3
Week 1: Introduction to ecosystems		Week 2: Biomes and local ecosystems		Week 3: Rainforest structure
<p>Ecosystem: an environment containing abiotic (non-living) and biotic (living) components.</p> <p>Abiotic: a living part of an ecosystem i.e. plants, animals, bacteria.</p> <p>Biotic: a living part of an ecosystem i.e. plants, animals, bacteria.</p>	<p>Producer: an organism or plant that is able to absorb energy from the sun through photosynthesis</p> <p>Consumer: organisms that obtain their energy from eating other organisms</p> <p>Biome: a large-scale ecosystem i.e. tropical rainforest, desert.</p>	<p>Lowland fens: often waterlogged and thick with strong reeds and vegetation much of this area has now been drained and turned to farmland.</p> <p>Bog: Area of muddy or wet ground.</p> <p>Heathlands: land covered with low growing woody vegetation</p> <p>Moorlands: land which is often hilly and has not been farmed, covered with low growing vegetation.</p> <p>Woodlands: land covered with trees.</p> <p>Saturated: soil is filled with water.</p>	<p>Buttress roots: large wide roots which provide support for a shallowly rooted tree.</p> <p>Canopy: where the upper parts of most of the trees are found</p> <p>Emergent trees: the few trees which grow above the canopy layer.</p> <p>Epiphytes: plants which can grow on the branches of trees without soil.</p> <p>Shrub layer: the undergrowth of the forest containing shrubby vegetation and seedling trees.</p>	
Week 4: Deforestation		Week 5: Sustainability		Week 6: Oceans
<p>Deforestation: the action of clearing a wide area of trees.</p> <p>Subsistence farming: keeping animals and crops for ones own use, without extra for trade.</p> <p>Forest degradation a drop in the quality and biodiversity of a forest.</p> <p>Indigenous People: who originated in a particular place i.e. indigenous people of the Amazon rainforest.</p> <p>Logging: cutting down large areas of trees in order to sell the timber.</p>	<p>Sustainable: using resources in a way which meets the needs of today without damaging it for future generations.</p> <p>Greenhouse effect: the trapping of the sun's warmth in the atmosphere.</p> <p>Carbon dioxide: a gas which is always in the air, but contributes to global warming.</p> <p>Ecotourism: tourism directed towards preserving and protecting natural habitats</p>	<p>Ecotourism: Tourism directed towards preserving and protecting natural habitats.</p> <p>HIC: High income country</p> <p>LIC: Low income country</p> <p>NEE: Newly emerging economy</p>	<p>Convergence: where two or more things meet.</p> <p>Ocean current: a continuous movement of water mainly driven by wind.</p> <p>Gyre: a circular ocean current.</p> <p>Marine environments: aquatic environments with high levels of dissolved salt.</p> <p>Marine debris: litter found in marine environments (Oceans and seas)</p>	

History	Medieval Power	Year 7 Term 3
<p>Week 1: Chronology</p> <p>Medieval Period 5th-13th century CE: sometimes called the 'Middle Ages' this is the period of time between the fall of the Roman Empire and the Renaissance period.</p> <p>Hierarchy: a system or organization in which people or groups are ranked one above the other according to status or authority.</p> <p>Feudal System: a system to control the land.</p>	<p>Week 2: Eleanor of Aquitaine</p> <p>Aquitaine: The largest and richest region in Medieval France.</p> <p>Crusade: A religious war between Christians and Muslims about who controlled Jerusalem (the holy land).</p> <p>Eleanor of Aquitaine:</p> <ul style="list-style-type: none"> - First married King Louis of France, when they separated, she kept control of Aquitaine. - Second husband was King Henry II, she helped him to rule England and Aquitaine. <p>Generalisation: A belief that is applied to a group of people.</p>	<p>Week 3: Henry II and Thomas Becket</p> <p>Clergy: Members of the Christian church- religious leaders.</p> <p>Archbishop of Canterbury- Head of the Catholic Church in England.</p> <p>Excommunicated: Officially exclude (remove) someone from the Christian church.</p> <p>Penitence: the action of feeling or showing sorrow and regret for having done wrong.</p>
<p>Week 4: King John and the Magna Carta</p> <p>Magna Carta: issued in June 1215 and was the first document to put into writing the principle that the king and his government was not above the law.</p> <p>Barons: the group below the king in the feudal structure who gave him soldiers in return for being given land to rule.</p> <p>Justice: the condition of being morally correct or fair.</p> <p>Scutage: a payment made by a baron to the king in order to stay at home rather than fight in war.</p>	<p>Week 5: Black Death</p> <p>Black Death: a pandemic that arrived in England in 1348. It is estimated that the disease killed around 50 million people.</p> <p>Buboes: a swollen inflamed lymph node in the armpit or groin.</p> <p>Silk Road: a network of trade routes that connected Asia to Europe during the Medieval period.</p> <p>Miasma: a poisonous air. People believed miasma caused the Black death.</p> <p>Quarantine: separates and restricts the movement of people who were exposed to a contagious disease to see if they become sick.</p>	<p>Week 6: Peasants Revolt</p> <p>Poll Tax: a tax that anyone over the age of 14 had to pay, regardless of how much money they had.</p> <p>Wat Tyler: leader of the Peasants Revolt in England in 1381.</p> <p>Revolt: take violent action against an established government or ruler; rebel.</p> <p>Peasants: the poorest members of society, at the bottom of the Feudal System they worked the land.</p>

Religious Studies		Islamic Practices	Year 7	Term 3	
Week 1: Salah at the Mosque Rak'ah: when Muslims pray they follow a cycle this is called a rak'ah. This includes saying "Allahu akbar", which means "God is great", multiple times as well as reciting the first chapter of the Qur'an. 		Week 2: The Mosque Mosque (Masjid): the holy place of worship for a Muslim. Inside the Mosque: <ul style="list-style-type: none"> • There are no images of religious figures to show respect • Decorated with Islamic architecture • A place of prayer, study or celebration Prayer at the Mosque: <ul style="list-style-type: none"> • men and women pray in separate rooms • prayer involves bowing and kneeling as • encourages self-discipline • keeps Muslims in close contact with Allah 		Week 3: Zakah Zakah: Muslim gives 2.5 per cent of their wealth over a certain amount to charity, after they have paid for what is necessary to support themselves and their families. Alms is another word used for Zakah or charity. Sadaqah: in addition to practising Zakah, Muslims are encouraged to voluntarily give their time to charity throughout the year. The Mosque: has many uses in the community for both Muslims and non-religious believers. Some Muslims may volunteer to help in the mosque to help practice their faith.	
Week 4: Sawm Sawm: is the obligation on Muslims to fast between sunrise and sunset during the month of Ramadan. Ramadan: is a time for both physical and moral self-discipline. It is a time of obedience to Allah and a time of understanding hunger. During Ramadan Muslims should not: <ul style="list-style-type: none"> • listen to music • smoke • avoid bad thoughts and actions <p>The holy month of Ramadan is also about spending extra time studying the Qur'an and attending mosque and helping others.</p>		Week 5: Hajj Pilgrimage: is a religious journey to a location of religious significance. Hajj: is the Muslim pilgrimage, which it is compulsory for Muslims to undertake at least once in their lifetime as long as they are healthy and can afford it. <p>In order for it to count as pilgrimage, a Muslim's journey must take place within the month of Dhu'l-Hijja.</p>		Week 6: Hajj Kaba'a: Muhammad was commanded to build the Ka'ba as a shrine dedicated to Allah where worship would take place. All Muslims face the Kaba'a whilst praying. Safa and Marwa: during Hajj Muslims perform the Sa'y- walking between the hills of Safa and Marwa several times. Plain of Arafat: Muslims visit the Plain of Arafat where they pray asking for forgiveness from Allah. This is the site the Muhammad performed his last sermon.	

Computing		Vector Graphics	Year 7	Term 3
Week 1: Digital graphics		Week 2: Vector graphics		Week 3: Raster graphics
<p>Digital graphics: combine text and images to produce a graphic product which can be used for a specific purpose.</p> <p>Resolution: indicates the number of pixels that are displayed per inch for an image.</p> <p>Pixel: the smallest unit of a digital image or graphic that can be displayed and represented on a digital display device.</p> <p>Colour depth: the maximum number of colours an image can contain.</p> <p>Realism: the fact of representing a person or thing in a way that is accurate and true to life.</p> <p>Scalability: the capacity to be changed in size or scale.</p>		<p>Vector graphics are based on mathematical relationships with control points that make up the image. These points are connected by lines and curves called vector paths or vectors.</p> <p>Advantage: scalable. When you resize a vector graphic the mathematical relationships mean that the image does not lose quality.</p> <p>Disadvantage: loss of realism. Vector graphics are never going to be as lifelike as bitmaps or photos. They will always appear computer generated.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Raster <small>.jpeg .gif .png</small></p> </div> <div style="text-align: center;">  <p>Vector <small>.svg</small></p> </div> </div>		<p>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>Advantage: better sense of realism than a vector graphic.</p> <p>Disadvantage: harder to scale than vector graphic due to loss of quality.</p> <div style="text-align: right;">  </div>
Week 4: Vector file types and software feature		Week 5: Compression		Week 6: Common Computing skills
<p>The most common types of vector file are:</p> <ul style="list-style-type: none"> • AI (Adobe Illustrator) • EPS (Encapsulated PostScript) • PDF (Portable Document Format) • SVG (Scalable Vector Graphics). <p>Vector software features:</p> <p>Layer: the different levels at which you can place an object.</p> <p>Pen: allows you to create a path.</p> <p>Show/hide: allows you to show/hide an object.</p> <p>Lock: allows you to lock an object in position.</p> <p>Opacity: allows you to adjust the transparency of an image.</p>		<p>Lossy compression: some data is removed and discarded, thereby reducing the overall amount of data and the size of the file. An image can be compressed by reducing its colour depth. This reduces the range of colours that the image contains.</p> <p>Lossless compression: there are some files that we would not want to lose data from. For example: text files, spreadsheets, financial records, emails. With lossless compression, files are reduced in size without the loss of data.</p>		<p>Copy: control +c</p> <p>Paste: control+v</p> <p>Snipping tool: windows+shift+s</p> <p>Download: copy (data) from one computer system to another, typically over the internet.</p> <p>School email address: username@stedwards.trinitymat.org</p> <p>Username: 22SurnameFirstinitial</p>

PSHE	British Values	Year 7 Term 3
<p>Week 1: British Values</p> <p>What are the British Values?</p> <ul style="list-style-type: none"> • Democracy • Rule of law • Individual liberty • Respect and tolerance <p>Why do we have British Values?</p> <ul style="list-style-type: none"> • Allow us to create environments free from discrimination, intolerance and hate. • They help us to challenge prejudice and stereotyping, whilst strengthening relationships within the community. 	<p>Week 2: What is a democracy?</p> <p>Democracy: is a system of government in which laws, policies and leadership are directly decided by the people through voting.</p> <p>Parliament includes:</p> <ul style="list-style-type: none"> • House of Commons – The first chamber (part) • The House of Lords – The second chamber (part) • The King (the monarch) 	<p>Week 3: how to vote in the UK</p> <p>General election: the election of representatives to a House of Commons from constituencies (area) throughout the country.</p> <p>Who can vote in the UK?</p> <ul style="list-style-type: none"> • Anyone aged 18 or over, • A citizen of the UK, a Commonwealth country or the Republic of Ireland. • Not in a category barred from voting (see below). <p>Who is not allowed to vote in the UK?</p> <ul style="list-style-type: none"> • Members of the House of Lords. • Those in prison. • People convicted of cheating when voting are barred for five years. • Those who are not sound of mind and have been detained in hospital.
<p>Week 4: rule of law</p> <p>Rule of law: a situation in which the laws of a country are obeyed by everyone. Where individuals, businesses and the government have a responsibility to follow the rule of law, and can be punished when they do not</p>	<p>Week 5: individual liberty</p> <p>Individual liberty: protection of your rights and the right of others you work with. Freedom to practice human rights.</p> <p>Human rights: are a set of universal rights that all humans are entitled to regardless of their age, race, religion or gender.</p> <p>The Universal Declaration of Human Rights was published in 1948, and sets out the rights that all humans should be entitled to. After WW11, many countries got together to decide on which rights would protect people from ever having to experience horrors such as the Holocaust again.</p>	<p>Week 6: respect and tolerance</p> <p>Respect: is a way of treating or thinking about something or someone.</p> <p>Tolerance: is accepting all people. People should be allowed to keep their own beliefs and ways of life as long as they do not harm others or break laws.</p> <p>Tolerance towards others does not mean agreeing with them. It means respecting their rights to hold beliefs that some people may think are wrong.</p>

ADT	Resistant Materials: Polymers		Year 7	Term 3
<p>Week 1: What Are Material Properties?</p> <p>Materials are chosen based on factors including working properties, aesthetics, environmental impact, function, manufacturing processes etc. It is important to choose a material fit for purpose...</p> <ol style="list-style-type: none"> 1) How do they look? 2) What are they commonly used for? 3) How can they be manufactured? 4) How do they perform in use? 5) What makes them unique - are they the most durable, the lightest etc.? 	<p>Week 2: Thermoplastics</p> <p>Most polymers are synthetic, meaning they are man-made and have been designed by chemical engineers. Different polymers are created all the time so that the demands of the consumer can be met.</p> <p>Polymers fall into two categories</p> <ul style="list-style-type: none"> • Thermosetting Plastic or thermoset • Thermoforming Plastic or thermoplastic <p>‘Thermo’ indicates that heat will be involved in the way the polymer is shaped, and ‘set’. This means that once the polymer has been set in that shape, heat will not alter the form.</p> <p>Thermoforming plastic, however, can be heated and shaped, then heated and shaped again. These polymers are also often referred to simply as ‘thermoplastics.</p>	<p>Week 3: Popular Polymers</p> <p>A popular polymer to use in schools is acrylic. This can be heated and bent using a line bender and, as it is a thermoforming polymer, it can then be reheated and reshaped. For example, a hairdryer would not be made from acrylic as it would not withstand the heat and would deform when used.</p> <p>Four popular polymers used in schools are:</p> <ul style="list-style-type: none"> • Acrylic • Polypropylene • High Impact Polystyrene (Hips) • Polylactic Acid (PlA) (If The School Has A 3d Printer) 		
<p>Week 4: Ecological And Social Footprint</p> <p>Most polymers are made from a product of crude oil.</p> <p>There is a drive to reduce the use of plastics as they don’t biodegrade quickly and can pollute oceans. When considering the ecological and social implications of using polymers, it is likely that the polymer is non-renewable.</p> <p>Some polymers are plant-based, but most are derived from crude oil, which cannot be grown and is a finite resource - there is only a certain amount within the Earth’s crust.</p>	<p>Week 5: Process Used To Produce</p> <p>The process used to produce the Common Polymer Polythene:</p> <ol style="list-style-type: none"> 1) Crude oil is drilled and pumped to the surface of the earth 2) The oil is transferred to an oil tanker and shipped to an oil distillery 3) The oil is heated to break it down and obtain different products through a process called fractional distillation 4) A chemical called naphtha, a mix of hydrocarbons used for the production of many different plastic polymers, is vented off from the distillery column - a long vertical tube where the oil is separated into different components 5) This then undergoes a process called cracking so that individual hydrocarbons, called monomers, are produced 6) Monomers undergo polymerisation, which links monomers together to make a polymer chain - the monomer ethene is polymerised to make polythene. 	<p>Week 6: Use of material properties in products</p> <p>There are many commercial products used daily that are made from plastic polymer.</p> <p>Injection moulded plastic seating can be made from a variety of different polymers. A popular chair, called the ‘polyside’ chair, was designed by Robin Day and launched in 1963. It was the first to be injection moulded from a single piece of polypropylene and is a design icon, having been copied in many forms since. It is still in production in some form today, especially in schools.</p> <p>Electrical plugs and sockets are made from compression moulded polymers, specifically from a thermosetting polymer called urea formaldehyde:</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		Applications of number	Year 7	Term 3																				
Week 1: Adding and subtracting 1		Week 2: Adding and subtracting 2		Week 3: Multiplying and dividing 1																				
<ol style="list-style-type: none"> What is the sum of 7 and 10? What is the difference between 8 and 20? What is the sum of 12 and 21? What is the difference between 20 and 50? Partition 148 in 2 different ways. Partition 1478 in 2 different ways. In the calculation, $30 - 5 = 25$ Which part is the minuend? In the calculation, $46 - 5 = 41$ Which part is the difference? In the calculation, $15 - 7 = 8$ Which part is the subtrahend? 		<ol style="list-style-type: none"> Complete the following sentences. <ol style="list-style-type: none"> Money going into a bank account is called... Money going out of a bank account is called The balance is ... David buys a phone for £100. He sells it for £150. Has he made a profit or a loss? George buys a car for £1000. He sells it for £800. Has he made a profit or a loss? Use the table to complete the questions. <table border="1" data-bbox="840 957 1384 1209"> <thead> <tr> <th>Date</th> <th>Description</th> <th>Credit £</th> <th>Debit £</th> <th>Balance £</th> </tr> </thead> <tbody> <tr> <td>2nd May</td> <td>Opening balance</td> <td></td> <td></td> <td>104.50</td> </tr> <tr> <td>5th May</td> <td>Gift</td> <td>20</td> <td></td> <td>124.50</td> </tr> <tr> <td>6th May</td> <td>Phone Bill</td> <td></td> <td>38.50</td> <td>86</td> </tr> </tbody> </table> <ol style="list-style-type: none"> What is the opening balance? What is the debit for? What is the balance at the end? 		Date	Description	Credit £	Debit £	Balance £	2 nd May	Opening balance			104.50	5 th May	Gift	20		124.50	6 th May	Phone Bill		38.50	86	<ol style="list-style-type: none"> What is the product of 3 and 4? What is the product of 10 and 6? In the calculation, $30 \div 5 = 6$ Which part is the dividend? In the calculation, $45 \div 5 = 9$ Which part is the divisor? In the calculation, $100 \div 5 = 20$ Which part is the quotient? Write a calculation with a dividend of 20. <ol style="list-style-type: none"> And another... And another...
Date	Description	Credit £	Debit £	Balance £																				
2 nd May	Opening balance			104.50																				
5 th May	Gift	20		124.50																				
6 th May	Phone Bill		38.50	86																				

Maths	Applications of number	Year 7 Term 3
Week 4: Multiply and divide 2	Week 5: Metric units	Week 6: Core knowledge
<ol style="list-style-type: none"> Can factors be decimals? Explain your answer. HCF means ... LCM mean ... The factors of 10 are 1, 10, 2, 5 The factors of 15 are 1, 15, 3, 5 What is the HCF of 10 and 15? Write five multiples of 6 Write a multiple of 7 greater than 30 Write a multiple of 4 that is also a multiple of 6. 	<ol style="list-style-type: none"> Milli means ... Centi means ... Deci means ... Fill in the blanks. $1\text{kg} = \text{_____ g}$ $1000\text{cm} = \text{_____ km}$ $\text{_____ cm} = 1\text{m}$ $\text{_____ cm} = 10\text{mm}$ Write an example of a unit of length. Write an example of a unit of mass. Write an example of a unit of capacity. 	<ol style="list-style-type: none"> What operations are commutative? Write two integers that are greater than 12 but less than 20 <ol style="list-style-type: none"> Draw a bar model to show $4 \times 5 = 20$ Write the full fact family <ol style="list-style-type: none"> Draw a bar model to show $15 \div 3 = 5$ Write the full fact family Use this calculation to help you work out the rest. $4 \times 5 = 20$ <ol style="list-style-type: none"> 40×5 4×50 40×50 4×2.5

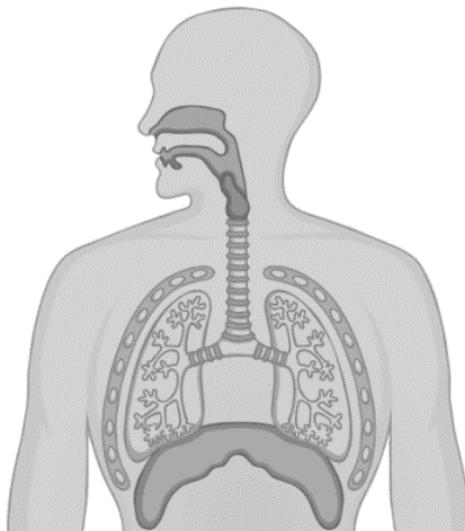
Week 1: Biology - Diffusion

1. Define the word diffusion.
2. Which gas diffuses into a leaf?
3. What is the gas names in question 2 used for?
3. Which gas diffuses out of a leaf?
4. Where is the gas in question 3 made?
5. Define particle.
6. What does exchange mean?
7. Define concentration.
8. What does 'net movement' mean?

Week 2: Biology – Gas Exchange

1. What happens in the alveoli?
2. Where does gas exchange happen in leaves?
3. What is the function of the ribs?
4. What is an intercostal muscle?
5. What is another word for 'breathing in?'
6. What is another work for 'breathing out?'

Label the diagram below with the following words:
Nasal cavity, bronchus, bronchioles, diaphragm, trachea, intercostal muscle, ribs, alveoli

**Week 3: Chemistry – Chemical Reactions**

1. What is the name given to two or more atoms bonded together?
2. What does the arrow mean in a chemical equation?
3. What is the name given to the substances at the start of a chemical reaction?
4. What is the name given to the new substances at the end of a chemical reaction?
5. What is a precipitate?
6. Look at the word equation below:
$$\text{Carbon} + \text{oxygen} \rightarrow \text{carbon dioxide}$$
 - a) Name the product in the equation.
 - b) Name the reactants in the equation.

Week 4: Chemistry – Combustion and Oxidation

1. What is another word for burning?

2. What is combustion?

3. Define the word 'fuel.'

4. Calculate the mean of the following numbers. Show your working out for each.
 - A) 2, 2, 5, 3, 6, 7, 1, 8

 - B) 12, 12, 14, 20, 17, 16

 - C) 16, 22, 14

 - D) 102, 101, 110, 112, 104, 107

Week 5: Physics - Forces

1. What is a force?

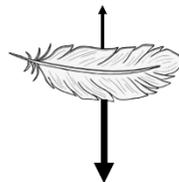
- 2) what is the name given to a force produced by two objects that are touching?

- 3) what is upthrust?

- 4) which word means 'a force that goes against a moving object?'

- 5) for each diagram describe how the object is moving.

a)



b)



Week 6: Physics – Mass, weight, and Gravity

1. Which word means the force that applies downwards due to gravity?

2. Define mass.

3. What are the units of measurement for mass?

4. Recall the formula to calculate weight.

5. If a mass is 22kg and a gravitational field strength is 10n/kg what is the weight in n? Show your working out.

6. If a mass is 150kg and a gravitational field strength is 10n/kg what is the weight in n?

French	Au college 1 – at school	Year 7 Term 3																								
Week 1: My subjects	Week 2: Quand?	Week 3: Quelle heure est-il ? 1																								
<p>1. Translate in to French 'I study French'.</p> <p>2. Translate in to English 'J'étudie les maths et le dessin'.</p> <p>3. Translate in to French 'I study English and history'.</p> <p>4. Translate in to English 'j'ai sciences et géographie'.</p> <p>5. Translate in to French 'I have music'.</p> <p>6. Translate in to French 'I study drama and PE'.</p>	<p>Match up the time frames:</p> <table border="0"> <tr> <td>aujourd'hui</td> <td>then</td> </tr> <tr> <td>le lundi</td> <td>every day</td> </tr> <tr> <td>le vendredi</td> <td>today</td> </tr> <tr> <td>le matin</td> <td>lunch time</td> </tr> <tr> <td>l'après-midi</td> <td>in the afternoon</td> </tr> <tr> <td>tous les jours</td> <td>break</td> </tr> <tr> <td>et</td> <td>on Fridays</td> </tr> <tr> <td>aussi</td> <td>on Mondays</td> </tr> <tr> <td>puis</td> <td>and</td> </tr> <tr> <td>après</td> <td>afterwards</td> </tr> <tr> <td>la récré</td> <td>also</td> </tr> <tr> <td>l'heure du déjeuner</td> <td>in the morning</td> </tr> </table> <p>Translate:</p> <p>Today I study maths and then in the afternoon, I study French.</p> <hr/> <hr/>	aujourd'hui	then	le lundi	every day	le vendredi	today	le matin	lunch time	l'après-midi	in the afternoon	tous les jours	break	et	on Fridays	aussi	on Mondays	puis	and	après	afterwards	la récré	also	l'heure du déjeuner	in the morning	<p>Translate these times in to English:</p> <p>il est neuf heures =</p> <p>il est onze heures =</p> <p>il est treize heures =</p> <p>à dix heures et demie =</p> <p>à onze heures et quart =</p> <p>à dix heures moins le quart =</p> <p>Translate the following sentences :</p> <p>1. Le matin, à neuf heures j'ai maths.</p> <p>2. L'après-midi à treize heures j'ai anglais.</p> <p>3. A dix heures moins le quart j'ai EPS.</p> <p>4. L'après-midi à deux heures j'ai français.</p>
aujourd'hui	then																									
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l'heure du déjeuner	in the morning																									

Religious Studies		Islamic Practices	Year 7	Term 3
Week 1: Salah at the Mosque		Week 2: The Mosque		Week 3: Zakah
<ol style="list-style-type: none"> 1. What is rak'ah? Explain in 20 words or less. 2. What does the term Allahu Akbar mean? 3. Which chapter of the Qur'an is recited during prayer? 		<ol style="list-style-type: none"> 1. Define the key term Mosque in 20 words or less. 2. Name two uses of a Mosque. 3. Name one ritual completed during prayer at the Mosque. 		<ol style="list-style-type: none"> 1. Define the key term Zakah in 20 words or less. 2. What percentage of money is given in Zakah? 3. Define the key term Sadaqah.
Week 4: Sawm		Week 5: Hajj		Week 6: Hajj
<ol style="list-style-type: none"> 1. Define the key term sawm in 20 words or less. 2. Define the key term Ramadan in 20 words or less. 3. Name two things that should not be done during Ramadan. 		<ol style="list-style-type: none"> 1. Define the key term pilgrimage in 20 words or less. 2. Hajj is pilgrimage to which location? 3. In which month of the Islamic calendar must pilgrimage take place? 		<ol style="list-style-type: none"> 1. All Muslims must face which location for prayer? 2. Safa and Marwa is a part of pilgrimage what happens here? 3. What do Muslims do at the plains of Arafat?

Computing	Vector Graphics	Year 7	Term 3
Week 1: Digital graphics	Week 2: Vector graphics	Week 3: Raster graphics	
<ol style="list-style-type: none"> 1. If a graphic is digital, what does it mean? 2. Define resolution. 3. What is a pixel? 4. Explain what is meant by the term realism. 5. If a graphic is scalable, what does it mean? 	<ol style="list-style-type: none"> 1. List where you have seen a vector graphic. 2. Give an advantage of vector graphics. 3. State a disadvantage of vector graphics. 4. Describe how a vector graphic is made? 	<ol style="list-style-type: none"> 1. Describe how a bitmap graphic is made. 2. Give an advantage of raster graphics. 3. State a disadvantage of vector graphics. 4. Draw 5 pixels 	

Computing	Vector Graphics	Year 7	Term 3
Week 4: Vector file types and software features	Week 5: Compression	Week 6: Common Computing skills	
<ol style="list-style-type: none"> 1. List as many vector file types that you can think of. 2. Explain how you can use layers in vector software. 3. If you hide a path what would happen? 4. If you lock a layer, would you be able to edit the path on that layer? 5. If you are using 10 % opacity on a graphic, describe how would it appear? 	<ol style="list-style-type: none"> 1. Describe what happens when an image is compressed using lossy compression. 2. Describe what happens when an image is compressed using lossless compression. 	<ol style="list-style-type: none"> 1. What is the keyboard short cut to copy an image? 2. What is the keyboard short cut to paste an image? 3. What is the keyboard shortcut to snip a section of your screen? 4. Give an example when you have downloaded an app/file from the internet. 	

ADT	Resistant Materials: Polymers	Year 7	Term 3
<p>Week 1: What Are Material Properties?</p> <p>What are the five factors that need considering when choosing a material property?</p>	<p>Week 2: Thermoplastics</p> <p>What is Thermosetting</p> <p>What is Thermoforming</p>	<p>Week 3: Popular Polymers</p> <p>List the 4 popular polymers</p> <p>1</p> <p>2</p> <p>3</p> <p>4</p>	
<p>Week 4: Ecological and Social Footprint</p> <p>What is the main product which polymers are derived from?</p>	<p>Week 5: Process Used to Produce</p> <p>What is the process used to create a Common Polymer Polythene?</p> <div data-bbox="1120 1005 1512 1412" data-label="Diagram"> </div>	<p>Week 6: Use of material properties in products</p> <p>What is injection moulding?</p> <div data-bbox="1904 1133 2105 1420" data-label="Image"> </div>	