

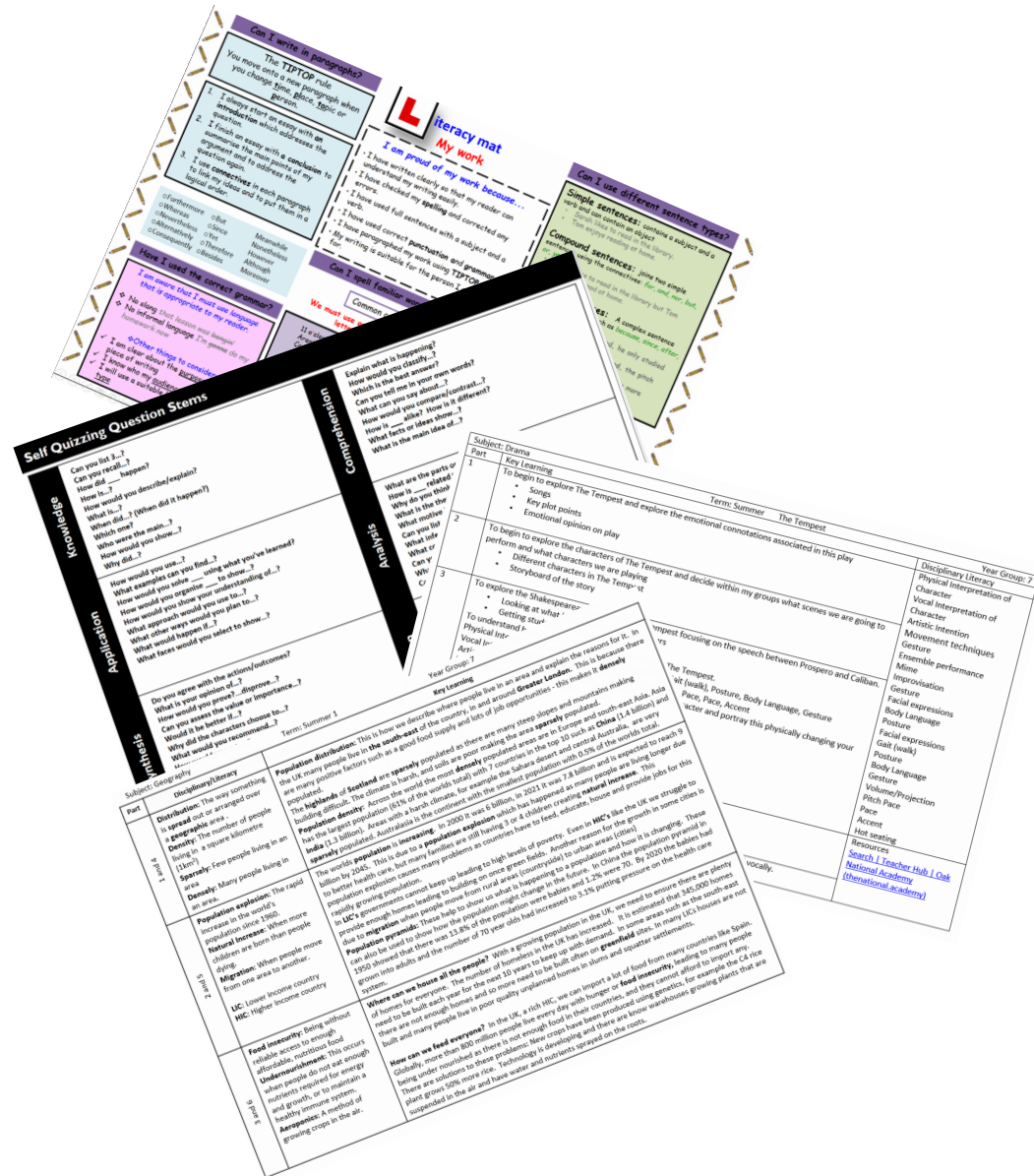
Year 10

Knowledge Organiser

Autumn 2022 - I

Contents Page

Self Quizzing/ Question Stems	3	Computing	26
Notes	4	Drama	27
Literacy Mat	5	Design and Technology	28
Literacy Mat	6	Food Preparation	29
English	7	Engineering	30
Maths	9	Health and Social Care	31
Science	12	Statistics	32
RE	15		
Wellbeing	16		
Sports Studies	17		
Geography	19		
History	20		
French	21		
Art – Graphics	22		
Art – Fine Art	23		
Art – Textiles	24		
Business Studies	25		



Self Quizzing Question Stems

Knowledge	<p>Can you list 3...?</p> <p>Can you recall...?</p> <p>How did ____ happen?</p> <p>How is...?</p> <p>How would you describe/explain?</p> <p>What is...?</p> <p>When did...? (When did it happen?)</p> <p>Which one?</p> <p>Who were the main...?</p> <p>How would you show...?</p> <p>Why did...?</p>	Comprehension	<p>Explain what is happening?</p> <p>How would you classify...?</p> <p>Which is the best answer?</p> <p>Can you tell me in your own words?</p> <p>What can you say about...?</p> <p>How would you compare/contrast...?</p> <p>How is ____ alike? How is it different?</p> <p>What facts or ideas show...?</p> <p>What is the main idea of...?</p>
Application	<p>How would you use...?</p> <p>What examples can you find...?</p> <p>How would you solve ____ using what you've learned?</p> <p>How would you organise ____ to show...?</p> <p>How would you show your understanding of...?</p> <p>What approach would you use to...?</p> <p>What other ways would you plan to...?</p> <p>What would happen if...?</p> <p>What faces would you select to show...?</p>	Analysis	<p>What are the parts or features of ...?</p> <p>How is ____ related to ...?</p> <p>Why do you think...?</p> <p>What is the theme...?</p> <p>What motive is there...?</p> <p>Can you list the parts...?</p> <p>What inference can you make...?</p> <p>What conclusions can you draw...?</p> <p>Can you identify the different parts of...?</p> <p>What evidence can you find...?</p> <p>Can you distinguish between...?</p>
Synthesis	<p>Do you agree with the actions/outcomes?</p> <p>What is your opinion of...?</p> <p>How would you prove?...disprove...?</p> <p>Can you assess the value or importance...?</p> <p>Would it be better if...?</p> <p>Why did the characters choose to...?</p> <p>What would you recommend...?</p> <p>How would you rate...?</p> <p>How could you determine...?</p> <p>What choice would you have made...?</p> <p>Why was it better that...?</p>	Evaluation	<p>What changes would you make to solve...?</p> <p>How would you improve...?</p> <p>What would happen if...?</p> <p>Can you elaborate on the reason...?</p> <p>Can you give an alternative...?</p> <p>Can you invent...?</p> <p>How could you change or modify the plot?</p> <p>What way would you design...?</p> <p>Suppose you could ____ what would you do?</p> <p>Can you predict the outcome if...?</p> <p>Can you construct a model of...?</p>

Can I write in paragraphs?

The TIPTOP rule

You move onto a new paragraph when you change time, place, topic or person.

1. I always start an essay with an **introduction** which addresses the question.
2. I finish an essay with a **conclusion** to summarise the main points of my argument and to address the question again.
3. I use **connectives** in each paragraph to link my ideas and to put them in a logical order.

- | | | |
|----------------|------------|-------------|
| ○Furthermore | ○But | Meanwhile |
| ○Whereas | ○Since | Nonetheless |
| ○Nevertheless | ○Yet | However |
| ○Alternatively | ○Therefore | Although |
| ○Consequently | ○Besides | Moreover |

Have I used the correct grammar?

I am aware that I must use language that is appropriate to my reader.

- ❖ No slang *that lesson was bangin'*
- ❖ No informal language *I'm gonna do my homework now*

❖ Other things to consider:

- ✓ I am clear about the purpose of this piece of writing
- ✓ I know who my audience is
- ✓ I will use a suitable layout and text type



literacy mat

My work

I am proud of my work because...

- I have written clearly so that my reader can understand my writing easily.
- I have checked my **spelling** and corrected any errors.
- I have used full sentences with a subject and a verb.
- I have used correct **punctuation** and **grammar**.
- I have paragraphed my work using **TIPTOP**.
- My writing is suitable for the person I am writing for.

Can I spell familiar words accurately?

Common contractions

We must use an apostrophe to replace any letter(s) we have left out.

11 o'clock	I'd	They're	Who'll
Aren't	I'll	Wasn't	Who's
Can't	I'm	We'd	Why'd
Couldn't	Isn't	We'll	Why'll
Didn't	It'd	We're	Why's
Doesn't	It'll	Weren't	Won't
Don't	It's	What'd	Wouldn't
Hadn't	Mightn't	What'll	You'd
Hasn't	Mustn't	What's	You'll
Haven't	Shan't	When'd	You're
He'd	She'd	When'll	
He'll	She'll	When's	
He's	She's	Where'd	
How'd	Shouldn't	Where'll	
How'll	They'd	Where's	
How's	They'll	Who'd	

Can I use different sentence types?

Simple sentences: contains a subject and a verb and can contain an object

- Sarah likes to read in the library.
- Tom enjoys reading at home.

Compound sentences: joins two simple sentences using the connectives: *for, and, nor, but, or, yet, so.*

- Sarah likes to read in the library but Tom prefers to read at home.

Complex sentences: A complex sentence contains a conjunction such as *because, since, after, although, or when.*

- Because Robert felt tired, he only studied for an hour.
- Although the rain had stopped, the pitch was still water-logged.
- Paul enjoys Music, however, he is more proficient in Art.

Homophones

I have checked that I have not mixed up my homophones.

Affect/effect	Meat/meet
Bare/bear	One/won
Brake/break	Passed/past
Buy/by	Peace/piece
For/four	Practice (n)/practise (v)
Flour/flower	Read/red
Grate/great	Sea/see
Hair/hare	Sight/site
Hole/whole	Son/sun
Hour/our	To/too/two
Knight/night	Wait/weight
Know/no	Weak/week
	Wear/where

What traffic light am I?
Is my punctuation accurate?

Basics:

- ❑ Every sentence must start with a capital letter.
- ❑ Every sentence must finish with some form of punctuation: ?!
- ❑ Proper nouns need capital letters. These are **unique** people, places or things *e.g. there are many cities so 'city' doesn't take a capital letter. However there is only one London, therefore it takes a capital letter.*
- ❑ When writing titles of works such as books, films or plays:
 - Capitalise the first word
 - Capitalise any main/important words
 - Don't capitalise minor words such as 'and', 'of' or 'the' *e.g. The Sound of Music, The Wizard of Oz, Harry Potter and the Goblet of Fire*
- ❑ When writing speech:
 - ✓ Go to a new line when a different person speaks *e.g. "Good morning" said the Headteacher.*
 - ✓ Each person's speech is marked with speech marks *e.g. "Walk on the left" said Mr Mathews.*

Can I spell accurately?

- ❑ Sound out the word
- ❑ Think about how it looks
- ❑ Think about a similar word
- ❑ Is there a memory sentence for this word? (*e.g. big elephants cannot always use small exits*)
- ❑ Find the word in a list –
 - Key words list
 - Frequently used words list
 - Your own word bank
- ❑ Look it up in a dictionary/spellchecker
- ❑ Ask a friend or teacher
- ❑ To learn it: look, cover, write, check
- ❑ Once you've solved it, add the correct spelling to your own word bank.

L iteracy mat

Can I use punctuation?

The Apostrophe

I always aim to use apostrophes correctly.

There are two main reasons why we use apostrophes: for **possession** and to **replace a letter or letters**

Note: Apostrophes are NEVER used to denote plurals

Full stop	.	indicates that a sentence has finished
Comma	,	indicates a slight pause in a sentence, separates clauses in a complex sentence and items in a list
Question mark	?	goes at the end of a question
Exclamation mark	!	goes at the end of a dramatic sentence to show surprise or shock
Apostrophe	'	shows that letter(s) have been left out or indicates possession
Speech marks	" "	indicate direct speech, the exact words spoken or being quoted
Colon	:	introduces a list, a statement or a quote in a sentence
Semicolon	;	separates two sentences that are related and of equal importance
Dash / hyphen	-	separates extra information from the main clause by holding words apart
Brackets	()	can be used like dashes, they separate off extra information from the main clause
Ellipsis	...	to show a passage of time, to hook the reader in and create suspense

Apostrophe for Possession

(To show that something belongs to another)

If a single thing/person owns anything, add an apostrophe + 's'.

- The dog's bone
- The boy's homework
- Jones's bakery
- Yesterday's lesson

However, if it is plural (more than one), an apostrophe comes after the 's'.

- The dogs' bones
- The boys' homework
- Joneses' bakeries (lots of Jones families)
- Many websites' content is educational

There/ their/ they're

Note: special care must be taken over the use of **there**, **their** and **they're** as they sound the same but are used quite differently:

- ❖ **There** shows position *Your seat is over there*
- ❖ **Their** shows that 'they' own something *Their blazers are navy blue*
- ❖ **They're** is short for **they are** as in *They're revising every day*

ITS

Note: **its**, which shows that something owns something (like our, his etc), **does not** take an apostrophe: *the dog ate its bone and we ate our dinner*





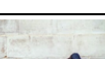







Your/ you're

Note: special care must be taken over the use of **your** and **you're** as they sound the same but are used quite differently:

- ❖ **Your** is possessive as in *this is your pen*
- ❖ **You're** is short for you are as in *you're coming over to my house*

Charles Dickens' *A Christmas Carol*: Knowledge Organiser

Key Vocabulary

Image	Word	Definition
	Social justice	Fairness in the way people are dealt with in society.
	Inequality	The unfair situation in society when some people have more opportunities, money, etc. than other people.
	Morality	The belief that some behaviour is right and acceptable and other behaviour is wrong.
	Transformation	The process of complete change, usually bringing improvement.
	Poverty	The state of being poor; being in a position of not having enough of something which is needed such as money or food.
	Avarice	an extremely strong wish to get or keep money or possessions; extreme greed.
	Responsibility	A duty to care for something; or blame.
	Expose	To make something that is covered or hidden able to be seen; To make public something bad or dishonest.
	Callous	Unkind, cruel, and without sympathy or feeling for other people.
	Society	People in general thought of as a group.
	Benevolent	Well-meaning and kindly.
	Remorse	A feeling of sadness and being sorry for what you have done.

QUICK OVERVIEW: *A Christmas Carol* is a Victorian novella by Charles Dickens. Through the novella, Dickens criticises the social injustice in what he considered a callous and often immoral society. Writing after the New Poor Law of 1834, he was appalled by the suffering he saw in society and the attitudes of many who believed the poor should be sent to workhouses. Dickens attempted to show that an alternative way was possible: society could be transformed with personal greed replaced by empathy and charity. Dickens had planned to write his arguments in a political essay, but chose instead to create a ghost story centred around his most famous protagonist, Ebenezer Scrooge. In this morality tale, spirits visit Scrooge and force him to change his ways.

Plot Overview

To get a sense of plot, there is no substitute for reading the book. Below is an overview of each of the five 'staves' (chapters). This is a very brief guide to the order and structure of the narrative.

Stave One

We are introduced to a wealthy misanthrope Scrooge. He holds callous views about the poor. He is visited by the Ghost of Jacob Marley who warns him that he will be visited by three other spirits in the novella.

Stave Two

Scrooge is visited by the Ghost of Christmas Past, who takes him to his childhood town, his former employer Fezziwig and the moment his relationship with Belle ended. The spirit shines a light on Scrooge's past.

Stave Three

Scrooge is visited by the Ghost of Christmas Present, who represents abundance and displays generosity to the poor. The spirit takes Scrooge to the Cratchits' house where Scrooge sees the disabled child, Tiny Tim, for the first time.

Stave Four






The final spirit is the Ghost of Christmas Yet to Come, who Scrooge fears the most. This phantom reveals Scrooge's future if he does not change his ways, and Scrooge accepts that he must transform.




Stave Five









Awaking on Christmas Day, Scrooge can redeem himself. Excited and childlike, Scrooge shows Christmas spirit. Most importantly, he shows generosity to the Cratchits and charity, promising to live by the spirits' moral lessons.


Key Quotations

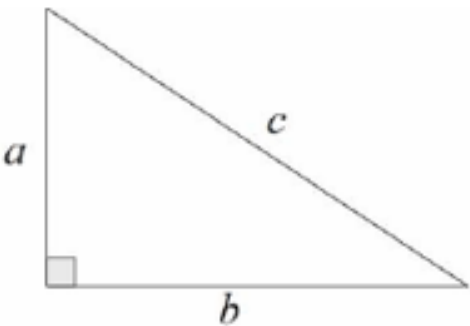
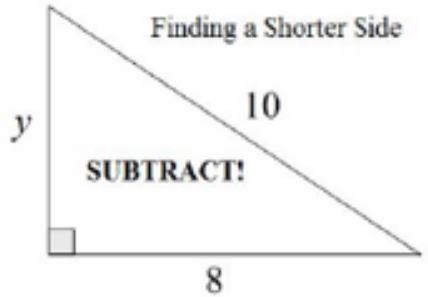
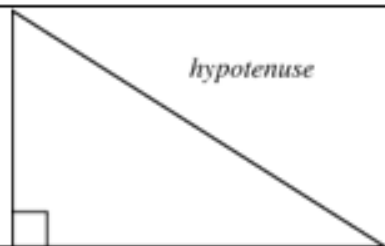
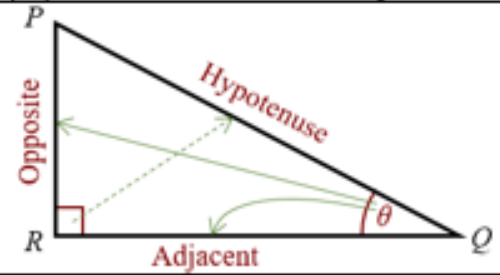
1. "Covetous, old sinner" – Dickens describing Scrooge	2. "What reason have you to be merry? You're poor enough." – Scrooge to Fred	3. "I have always thought of Christmas time ... as a good time; a kind, forgiving, charitable, pleasant time" – Fred	4. "The Treadmill and the Poor Law are in full vigour, then?" – Scrooge
5. "If they would rather die ... they had better do it, and decrease the surplus population." – Scrooge talking about the poor	6. "I wear the chain I forged in life" – Marley's Ghost	7. "Another idol has displaced me ... a golden one" – Belle	8. "Spirit," said Scrooge, with an interest he had never felt before, "tell me if Tiny Tim will live."
9. "This boy is Ignorance. This girl is Want. Beware them both..." – The Ghost of Christmas Present	10. "I will honour Christmas in my heart, and try to keep it all the year. I will live in the Past, the Present, and the Future." – Scrooge	11. "As light as a feather, as happy as an angel, as merry as a schoolboy" – Dickens describing Scrooge	12. "His own heart laughed: and that was quite enough for him." – Dickens describing Scrooge

Key Context:		
	Poverty and social injustice in Victorian Britain	Approximately three-quarters of the British population remained working-class. In Victorian Britain, life for working-class people was very difficult and there was a lot of poverty. Problems faced by the poor included overcrowded housing, low wages, poor diet and lack of food, insecure employment, and the dreaded effects of sickness. Child poverty rates were very high and child mortality (death) was common.
	Dickens' personal views and experiences	Dickens had strong moral opinions. He supported the poor, donated to charities, and was critical of social injustice. He believed that literature could bring change to society. He experienced social injustice himself – his father was jailed for getting into debt and Dickens was taken out of school to work in a factory.
	The New Poor Law of 1834 and the workhouses	The New Poor Law was brought in to tackle the problem of poverty in Victorian society. In reality, it forced thousands of the poorest into warehouses where they suffered extremely bad living and working conditions. Children were separated from their families. Dickens was very critical of the workhouses; he thought they were callous and punitive.
	Dickens' intent: the 'poor man's child'	Dickens' intent when writing <i>A Christmas Carol</i> was clear: to get Victorians to sympathise with the tragic injustice of child poverty, child labour, and other circumstances facing poor children. In his words, Dickens wanted his book to be a "sledgehammer blow", a forceful attack on behalf of poor children.
	Thomas Malthus and the 'surplus population'	The writer Thomas Malthus believed that part of the population was 'surplus' – not needed. He was also influential in the New Poor Law of 1834. Dickens disagreed with Malthus about population size and the best way to address poverty, and used <i>A Christmas Carol</i> to criticise Malthus' views.

Character Functions:		
	Scrooge: <ul style="list-style-type: none"> To reveal the effects of avarice. To suggest that anyone is capable of transformation. To reveal the causes of inequality and social injustice. 	Other characters (in order of appearance): Fred To act as a benevolent foil to Scrooge emphasising the importance of family. Also a mouthpiece for Dickens. The portly gentlemen To represent the virtue of charity supported by Dickens. Mr. Fezziwig To show Scrooge a philanthropic (kind-hearted) version of capitalism. Belle To show Scrooge the consequences that his avarice has had on his personal relationships.
	The Spirits: <ul style="list-style-type: none"> To warn of the effects of avarice. To induce Scrooge's transformation. To teach Scrooge moral lessons. 	
	The Cratchit family: <ul style="list-style-type: none"> To evoke sympathy for working-class families who face social injustice and poverty. To show that the poor were deserving of support and empathy from society. 	

Writer's Craft:		
Characterisation	Dickens deliberately crafts his characters to serve purposes. See 'Character Function'.	
Genre	Dickens uses the morality tale genre because it allows him to transform a man like Scrooge, and promote a more moral society. The spirits teach Scrooge moral lessons throughout and reveal that even the worst of mankind can change.	
Structure	The novella is given a five stave structure: stave one introduces the misanthropic Scrooge; the next three see Scrooge in the past, present and future; he then awakes on Christmas Day redeemed.	
Social commentary	Dickens observed society and presented his views about it in his books. He was angry about society's immoral treatment of the poor, and used his novella to make a powerful criticism of this.	
Setting	The novella is set in Victorian London, featuring many different places. This is because the novella moves through time including Scrooge's present, his childhood, and even the future after his death.	
Foil	Dickens uses Scrooge's benevolent nephew Fred as a character with opposite characteristics to Scrooge in order to draw attention to Scrooge's flaws, in particular his misanthropy.	
Mouthpiece	A mouthpiece is someone who is used to speak another person's views. Fred is used by Dickens to promote his own personal views about Christmas being 'kind, forgiving, charitable, pleasant'.	
Rhetoric	Moments in the novella are very rhetorical. Dickens doesn't just want his readers to read his message promoting social justice at Christmas time, he wants them to be <i>persuaded</i> by it.	
Allegory	Dickens uses certain characters to represent deeper ideas about society. By crafting the Spirits, Dickens personifies moral lessons. He uses Ignorance and Want to personify problems in society.	
Themes and Ideas:		
Inequality and social justice		Dickens promotes social justice in society by criticising the effects of social injustice, inequality and poverty. Examples of social injustice are common.
Morality		Dickens' novella is used to teach lessons about right and wrong and he transforms Scrooge into a moral person, intending this to be a lesson to society.
Transformation		Dickens believed that change was necessary in the way society treated the poor. He transformed his callous protagonist to show that anyone is capable of change.
Avarice/greed		Avarice is criticised throughout the novella. Avaricious characters are punished and shown the consequences of choosing a life of greed.
Poverty		There are numerous examples of poverty within the novella. Dickens portrays the poor as deserving of society's support and sympathy.
Charity		Dickens was a personal believer in charity; he promotes the virtue of giving to the poor through the portly gentlemen and the Ghost of Christmas Present.
Supernatural/ghosts		Spirits are used to teach Scrooge the moral lessons of the novella. The spirits give the novella structure and induce Scrooge's transformation.
Christmas		Like Fred says in Stave One, Dickens believed Christmas should be a 'kind, forgiving, charitable, pleasant time.' Christmas is the perfect time to spread his message.

Topic/Skill	Definition/Tips	Example
1. Ratio	Ratio compares the size of one part to another part . Written using the ':' symbol.	$3 : 1$ 
2. Proportion	Proportion compares the size of one part to the size of the whole . Usually written as a fraction.	In a class with 13 boys and 9 girls, the proportion of boys is $\frac{13}{22}$ and the proportion of girls is $\frac{9}{22}$
3. Simplifying Ratios	Divide all parts of the ratio by a common factor .	$5 : 10 = 1 : 2$ (divide both by 5) $14 : 21 = 2 : 3$ (divide both by 7)
4. Ratios in the form $1 : n$ or $n : 1$	Divide both parts of the ratio by one of the numbers to make one part equal 1 .	$5 : 7 = 1 : \frac{7}{5}$ in the form $1 : n$ $5 : 7 = \frac{5}{7} : 1$ in the form $n : 1$
5. Sharing in a Ratio	1. Add the total parts of the ratio. 2. Divide the amount to be shared by this value to find the value of one part. 3. Multiply this value by each part of the ratio. Use only if you know the total .	Share £60 in the ratio <u>3</u> : 2 : 1. $3 + 2 + 1 = 6$ $60 \div 6 = 10$ $3 \times 10 = 30, 2 \times 10 = 20, 1 \times 10 = 10$ $\pounds 30 : \pounds 20 : \pounds 10$

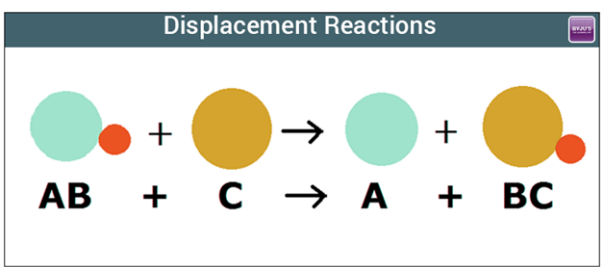
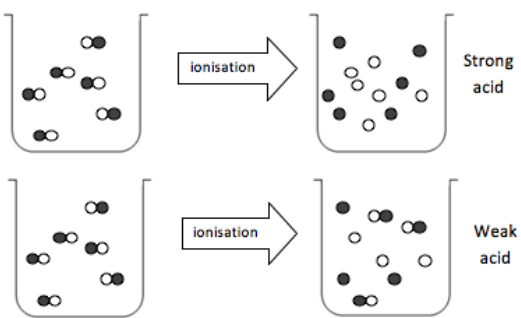
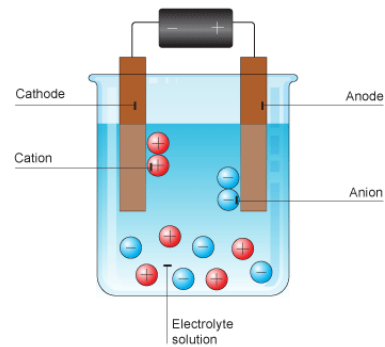
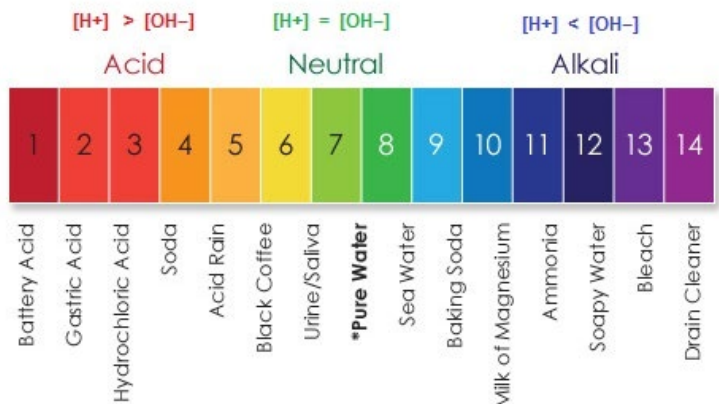
Topic/Skill	Definition/Tips	Example
1. Pythagoras' Theorem	<p>For any right angled triangle:</p> $a^2 + b^2 = c^2$  <p>Used to find missing lengths. a and b are the shorter sides, c is the hypotenuse (longest side).</p>	<p>Finding a Shorter Side</p>  <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> $a = y, b = 8, c = 10$ $a^2 = c^2 - b^2$ $y^2 = 100 - 64$ $y^2 = 36$ $y = 6$ </div>
2. Hypotenuse	<p>The longest side of a right-angled triangle.</p> <p>Is always opposite the right angle.</p>	
3. Adjacent	Next to	

Part	Key Learning																																		
Area and Volume	<table> <tr> <th>Key word or phrase</th><th>Definition</th></tr> <tr> <td>Arc</td><td>A proportion of the circumference of a circle.</td></tr> <tr> <td>Circle</td><td>A 2-dimensional shape made by drawing a curve that is always the same distance from a centre.</td></tr> <tr> <td>Circumference</td><td>The distance around the edge of a circle. It is a type of perimeter.</td></tr> <tr> <td>Compound Shape</td><td>A shape that is made up of 2 or more shapes</td></tr> <tr> <td>Composite</td><td>A positive number that is not prime</td></tr> <tr> <td>Cone</td><td>A solid (3-dimensional) object that has a circular base joined to a point by a curved side. The point is called a vertex</td></tr> <tr> <td>Cylinder</td><td>A solid geometrical figure with straight parallel sides and a circular or oval cross section</td></tr> <tr> <td>Diameter</td><td>The distance from one point on a circle through the centre to another point on the circle.</td></tr> <tr> <td>Frustum</td><td>Usually a pyramid or cone with the top cut off flat.</td></tr> <tr> <td>Hemisphere</td><td>A half of a sphere.</td></tr> <tr> <td>Length</td><td>Distance. How far from end to end. Or from one point to another.</td></tr> <tr> <td>Pi</td><td>The ratio of a circle's circumference to its diameter. The symbol is π. $\pi = 3.141592...$</td></tr> <tr> <td>Radius</td><td>The distance from the centre to the circumference of a circle. It is half of the circle's diameter.</td></tr> <tr> <td>Sector</td><td>A "pie-slice" part of a circle - the area between two radiuses and the connecting arc of a circle.</td></tr> <tr> <td>Segment</td><td>The smallest part of a circle made when it is cut by a line</td></tr> <tr> <td>Sphere</td><td>A 3-dimensional object shaped like a ball</td></tr> </table>	Key word or phrase	Definition	Arc	A proportion of the circumference of a circle.	Circle	A 2-dimensional shape made by drawing a curve that is always the same distance from a centre.	Circumference	The distance around the edge of a circle. It is a type of perimeter.	Compound Shape	A shape that is made up of 2 or more shapes	Composite	A positive number that is not prime	Cone	A solid (3-dimensional) object that has a circular base joined to a point by a curved side. The point is called a vertex	Cylinder	A solid geometrical figure with straight parallel sides and a circular or oval cross section	Diameter	The distance from one point on a circle through the centre to another point on the circle.	Frustum	Usually a pyramid or cone with the top cut off flat.	Hemisphere	A half of a sphere.	Length	Distance. How far from end to end. Or from one point to another.	Pi	The ratio of a circle's circumference to its diameter. The symbol is π . $\pi = 3.141592...$	Radius	The distance from the centre to the circumference of a circle. It is half of the circle's diameter.	Sector	A "pie-slice" part of a circle - the area between two radiuses and the connecting arc of a circle.	Segment	The smallest part of a circle made when it is cut by a line	Sphere	A 3-dimensional object shaped like a ball
Key word or phrase	Definition																																		
Arc	A proportion of the circumference of a circle.																																		
Circle	A 2-dimensional shape made by drawing a curve that is always the same distance from a centre.																																		
Circumference	The distance around the edge of a circle. It is a type of perimeter.																																		
Compound Shape	A shape that is made up of 2 or more shapes																																		
Composite	A positive number that is not prime																																		
Cone	A solid (3-dimensional) object that has a circular base joined to a point by a curved side. The point is called a vertex																																		
Cylinder	A solid geometrical figure with straight parallel sides and a circular or oval cross section																																		
Diameter	The distance from one point on a circle through the centre to another point on the circle.																																		
Frustum	Usually a pyramid or cone with the top cut off flat.																																		
Hemisphere	A half of a sphere.																																		
Length	Distance. How far from end to end. Or from one point to another.																																		
Pi	The ratio of a circle's circumference to its diameter. The symbol is π . $\pi = 3.141592...$																																		
Radius	The distance from the centre to the circumference of a circle. It is half of the circle's diameter.																																		
Sector	A "pie-slice" part of a circle - the area between two radiuses and the connecting arc of a circle.																																		
Segment	The smallest part of a circle made when it is cut by a line																																		
Sphere	A 3-dimensional object shaped like a ball																																		
Transformations and Constructions	<table> <tr> <th>Key word or phrase</th><th>Definition</th></tr> <tr> <td>Bearing</td><td>The angle in degrees measured clockwise from North.</td></tr> <tr> <td>Bisect</td><td>To divide into two equal parts</td></tr> <tr> <td>Congruence</td><td>Exact same shape. Same size angles and lengths.</td></tr> <tr> <td>Corresponding</td><td>Equivalent value, side, or vertex of a shape</td></tr> <tr> <td>Enlargement</td><td>Enlarging a shape changes its size. A transformation is a way of changing the size or position of a shape.</td></tr> <tr> <td>Loci</td><td>The set of all points that share a property e.g. 3cm away. This usually results in a curve or surface.</td></tr> <tr> <td>Perpendicular</td><td>At right angles (90°) to.</td></tr> <tr> <td>Reflection</td><td>An image or shape as it would be seen in a mirror.</td></tr> <tr> <td>Rotation</td><td>A circular movement. Rotation has a central point that stays fixed and everything else moves around that point in a circle</td></tr> <tr> <td>Scale Factor</td><td>The ratio of the length in one shape to the length of another.</td></tr> <tr> <td>Similar</td><td>When one shape can become another after a resize, flip, slide or turn.</td></tr> <tr> <td>Translation</td><td>Moving a shape without rotating or flipping it. The shape still looks exactly the same, just in a different place.</td></tr> <tr> <td>Transformation</td><td>Changing a shape using translation, rotation, reflection or enlargement</td></tr> <tr> <td>Vectors</td><td>A vector has magnitude (how long it is) and direction.</td></tr> </table>	Key word or phrase	Definition	Bearing	The angle in degrees measured clockwise from North.	Bisect	To divide into two equal parts	Congruence	Exact same shape. Same size angles and lengths.	Corresponding	Equivalent value, side, or vertex of a shape	Enlargement	Enlarging a shape changes its size. A transformation is a way of changing the size or position of a shape.	Loci	The set of all points that share a property e.g. 3cm away. This usually results in a curve or surface.	Perpendicular	At right angles (90°) to.	Reflection	An image or shape as it would be seen in a mirror.	Rotation	A circular movement. Rotation has a central point that stays fixed and everything else moves around that point in a circle	Scale Factor	The ratio of the length in one shape to the length of another.	Similar	When one shape can become another after a resize, flip, slide or turn.	Translation	Moving a shape without rotating or flipping it. The shape still looks exactly the same, just in a different place.	Transformation	Changing a shape using translation, rotation, reflection or enlargement	Vectors	A vector has magnitude (how long it is) and direction.				
Key word or phrase	Definition																																		
Bearing	The angle in degrees measured clockwise from North.																																		
Bisect	To divide into two equal parts																																		
Congruence	Exact same shape. Same size angles and lengths.																																		
Corresponding	Equivalent value, side, or vertex of a shape																																		
Enlargement	Enlarging a shape changes its size. A transformation is a way of changing the size or position of a shape.																																		
Loci	The set of all points that share a property e.g. 3cm away. This usually results in a curve or surface.																																		
Perpendicular	At right angles (90°) to.																																		
Reflection	An image or shape as it would be seen in a mirror.																																		
Rotation	A circular movement. Rotation has a central point that stays fixed and everything else moves around that point in a circle																																		
Scale Factor	The ratio of the length in one shape to the length of another.																																		
Similar	When one shape can become another after a resize, flip, slide or turn.																																		
Translation	Moving a shape without rotating or flipping it. The shape still looks exactly the same, just in a different place.																																		
Transformation	Changing a shape using translation, rotation, reflection or enlargement																																		
Vectors	A vector has magnitude (how long it is) and direction.																																		

potassium **most reactive**
 sodium
 calcium
 magnesium
 aluminium
 carbon
 zinc
 iron
 tin
 lead
 hydrogen
 copper
 silver
 gold
 platinum **least reactive**



K
 Na
 Ca
 Mg
 Al
 C
 Zn
 Fe
 Sn
 Pb
 H
 Cu
 Ag
 Au
 Pt



Acid + Alkali -> salt + water
 Metal + acid -> salt + hydrogen
 Metal oxide + acid -> salt + water
 Metal carbonate + acid -> salt + water + carbon dioxide

Reactivity series	An arrangement of metals in order of reactivity
Displacement reaction	Reaction where a more reactive element takes the place of a less reactive element in a compound
Oxidation	A reaction in which a substance loses electrons (gains oxygen)
Reduction	Reaction in which a substance gains electrons (loses oxygen)
Ore	A rock from which a metal can be extracted for profit
Acid	Solution with a pH less than 7; produces H ⁺ ions in water
Alkali	Solution with a pH more than 7; produces OH ⁻ ions in water
Aqueous	Dissolved in water
Strong acid	Acid in which all the molecules break into ions in water
Weak acid	Acid in which only a small fraction of the molecules break into ions in water
Dilute	A solution in which there is a small amount of solute dissolved
Concentrated	A solution in which there is a lot of solute dissolved
Neutralisation	A reaction that uses up some or all of the H ⁺ ions from an acid
Electrolysis	Decomposition of ionic compounds using electricity
Electrolyte	A liquid that conducts electricity
Discharge	Gain or lose electrons to become electrically neutral
Inert electrodes	Electrodes that allow electrolysis to take place but do not react themselves

Diatomic molecule	A molecule containing two atoms
Spectator ions	Ions that do not take part in a reaction and do not appear in the ionic equation for the reaction
Ionic equation	Balanced equation for reaction that omits any spectator ions

Common Reactions

Element + oxygen -> oxide of element

Eg Calcium + oxygen -> calcium oxide

Compound + oxygen -> oxides of each element in compound

Eg Methane + oxygen -> carbon dioxide + water

Water + metal -> metal hydroxide + hydrogen (for metals that react with water)

Eg water + sodium -> sodium hydroxide + hydrogen

Acid + metal -> salt + hydrogen

Eg Hydrochloric acid + magnesium -> magnesium chloride + hydrogen

Acid + metal oxide -> salt + water

Eg Sulphuric acid + copper oxide -> copper sulphide + water

Acid + metal hydroxide -> salt + water

Eg nitric acid + potassium hydroxide -> potassium nitrate + water

Acid + metal carbonate -> salt + water + carbon dioxide

Eg hydrochloric acid + calcium carbonate -> calcium chloride + water + carbon dioxide

Acid + ammonia -> ammonium salt

Eg nitric acid + ammonia -> ammonium nitrate

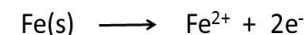
Positive ions

Name	Formula	Name	Formula
Hydrogen	H ⁺	Chloride	Cl ⁻
Sodium	Na ⁺	Bromide	Br ⁻
Silver	Ag ⁺	Fluoride	F ⁻
Potassium	K ⁺	Iodide	I ⁻
Lithium	Li ⁺	Hydroxide	OH ⁻
Ammonium	NH ₄ ⁺	Nitrate	NO ₃ ⁻
Barium	Ba ²⁺	Oxide	O ²⁻
Calcium	Ca ²⁺	Sulfide	S ²⁻
Copper(II)	Cu ²⁺	Sulfate	SO ₄ ²⁻
Magnesium	Mg ²⁺	Carbonate	CO ₃ ²⁻
Zinc	Zn ²⁺		
Lead	Pb ²⁺		
Iron(II)	Fe ²⁺		
Iron(III)	Fe ³⁺		
Aluminium	Al ³⁺		

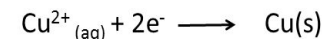
Half Equations



Oxidation Half-Equation:

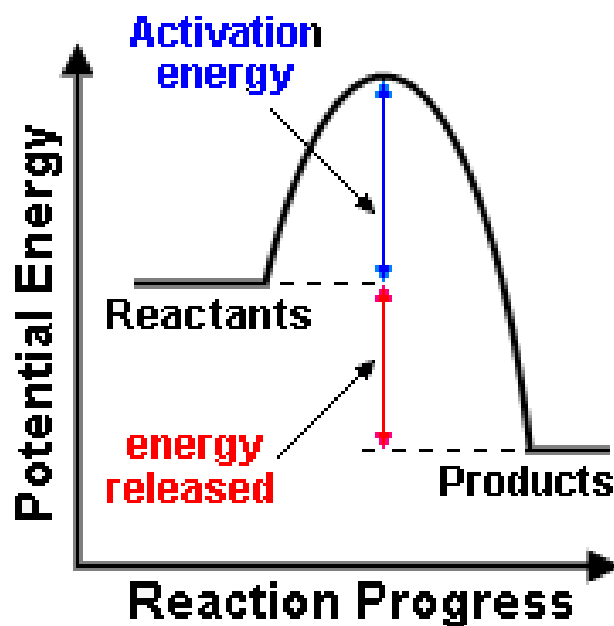


Reduction Half-Equation:

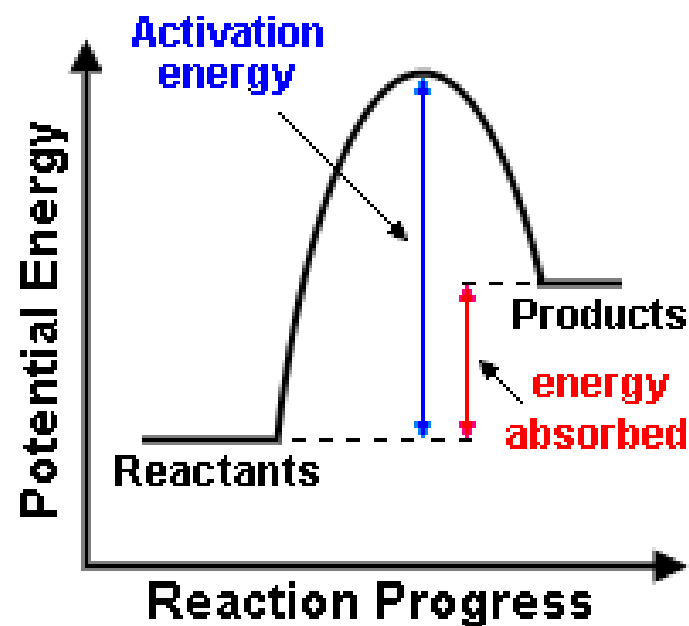


Tier 3 vocab

Exothermic reaction	Reaction where thermal energy is transferred from the chemicals to the surroundings and so the temperature increases
Endothermic reaction	Reaction where thermal energy is transferred from the surroundings to the chemicals and so the temperature decreases
Activation energy	The minimum energy particles must have to react



Exothermic reaction



Endothermic reaction

Part		Disciplinary/Literacy
1	<p>What is meant by human sexuality?</p> <p>Understanding some of the gender issues.</p>	<p><i>Heterosexual:</i> Being attracted to the opposite sex.</p> <p><i>Homosexual:</i> Being attracted to the same sex.</p> <p><i>Age of Consent:</i> the age at which someone is considered legally able to give their consent to sex.</p> <p><i>Consensual sex:</i> A sexual relationship where both parties are totally free to agree to it.</p> <p><i>LGBTQ+:</i> Lesbian, Gay, Bisexual, Transgender, Queer (or Questioning) plus any other sexual identity (including <i>non-binary</i>).</p>
2	<p>The Six Articles of Faith in Sunni Islam.</p> <p>The Five Roots of Usul ad-Din in Shia Islam</p> <p>Tawhid</p>	<p><i>Prophethood:</i> In Islam, this is the belief that Allah has sent a series of messengers to give humankind guidance on how to live a good life.</p> <p><i>The Imamate:</i> In Shi’a Islam, it is the belief that all Imams should be spiritual descendants from the Prophet Muhammad – leaders appointed by Allah.</p> <p><i>Tawhid:</i> the Oneness of God.</p> <p><i>Resurrection:</i> the rising of the dead at the Last Judgement.</p> <p><i>Shariah Law:</i> Muslim system of law based upon the Qur’an.</p>
3	<p>Should sex only occur within marriage?</p> <p>Is using contraception a sin?</p>	<p><i>Monogamy:</i> Being married to only one person at a time.</p> <p><i>Promiscuity:</i> Having many sexual partners, sleeping around.</p> <p><i>Fidelity:</i> the act of staying faithful to someone.</p>
4	<p>The nature of God.</p> <p>Angels</p> <p>Predestination</p>	<p><i>Omnipotence:</i> the idea that God is All Powerful</p> <p><i>Beneficence:</i> the idea that God is generous and only does good things</p> <p><i>Immanence:</i> the idea that God is here, close to us, now.</p> <p><i>Transcendence:</i> the idea that God exists beyond the level by which we can know him.</p> <p><i>Predestination:</i> the idea that God has already decided exactly what will happen and who will enter Paradise.</p>
5	<p>What is the nature and purpose of marriage?</p> <p>How easy is it to get divorced?</p>	<p><i>Commitment:</i> being dedicated to a cause (marriage)...staying faithful.</p> <p><i>Procreation: Reproduction, having sex in order to have children.</i></p> <p><i>Cohabitation:</i> choosing to live with someone without getting married to them.</p> <p><i>Annulment:</i> the act of ending a marriage by showing it was never legal in the first place.</p>
6	<p>Life after death (Islam)</p> <p>Prophethood</p> <p>The Qur’an</p>	<p><i>Akhirah:</i> the Muslim belief in everlasting life after death</p> <p><i>Jannah:</i> Islamic version of heaven, Paradise.</p> <p><i>Jahannam:</i> Islamic version of hell</p> <p><i>Risalah:</i> Meaning ‘message’ ...it refers to ‘prophethood’ and represents the various ways in which Allah communicates with humanity to reveal his messages.</p>




Part		Disciplinary/Literacy
1	An understanding of different views on love and sex. Different cultural approaches to sexual relationships. Is there such a thing as love?	<i>Monogamy</i> : being married to (or having sexual relations with) only one person at a time <i>Polygamy</i> : being married to more than one person at a time...Muslim men are allowed up to 4 wives. <i>Promiscuity</i> : having many sexual partners...sleeping around.
2	Understanding issues surrounding celibacy. Why might someone choose to be celibate? Why should monks, nuns, etc be celibate?	<i>Celibacy</i> : choosing to have non-sexual relationships <i>Vow</i> : a solemn promise
3	Monogamy and Promiscuity Is there anything wrong with casual sex? Are there any advantages to monogamy?	<i>Monogamy</i> : being married to (or having sexual relations with) only one person at a time <i>Promiscuity</i> : having many sexual partners...sleeping around. <i>Sexually Transmitted Infections (STIs)</i> : infectious diseases passed on through having unprotected sex.
4	Understanding Female Genital Mutilation (FGM) What is FGM? Why do some cultures practice FGM? Why is it so harmful?	<i>Female Genital Mutilation (FGM)</i> : a procedure where the female genitals are deliberately cut, injured or changed but without any medical reason for doing so. <i>Tribal culture</i> : distinct from religious teaching, tribal culture is the inherited culture of specific tribes which may well be at odds with both national and religious teaching. <i>Desensitise</i> : to make less sensitive.
5	Understanding issues surrounding honour based violence. What is honour based violence? Why do some cultures practice HBV? The consequences of HBV.	<i>Honour based violence</i> : HBV is a form of abuse used, primarily, to control the behaviour of women and girls within families or small communities. <i>Abuse</i> : cruel and violent treatment of a person or animal. <i>Cultural tradition</i> : Traditions and forms of behaviour, often illogical or at odds with established religion.
6	Euthanasia...tough love? Why do some people ask to be helped to die? What does the law say about euthanasia? What are the issues surrounding it?	<i>Active Euthanasia</i> : when something is deliberately done to end someone's life, e.g. lethal injection. <i>Passive Euthanasia</i> : allowing someone to die by not doing something. <i>Voluntary Euthanasia</i> : when someone who is asking to be helped to die. <i>Non-voluntary Euthanasia</i> : when someone is unable to ask, e.g. in a coma. <i>Sanctity of Life</i> : the idea that all human life is special and precious.

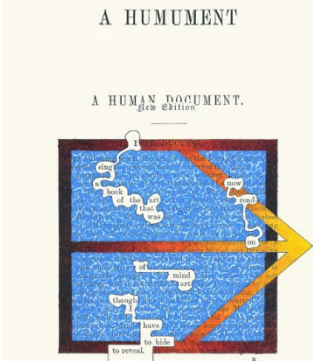

Part	Key Learning	
1	<p>Physical Components of fitness – MMFABS</p> <p># Muscular Endurance</p> <p>The ability of muscles to work repeatedly against a light to moderate load without getting tired.</p> <p># 1 minutes Sit up and press up test – advantages and disadvantages</p> <p>Flexibility Test- Sit & Reach Test Reach slowly forwards on sit and reach box, keeping legs flat on the floor.</p> <p><i>Advantages: Easy and quick.</i></p> <p><i>Disadvantages: Does not measure entire body flexibility?</i></p>	<p># Muscular strength</p> <p>The maximum force that can be generated by a muscle or group of muscles. Weights will be heavy and therefore repetitions are low.</p> <p>Static strength (The greatest amount of force which can be applied to an immovable object), Explosive strength (force exerted in one quick, powerful contraction), Dynamic strength (force that can be exerted repeatedly by a muscle)</p> <p><u>Strength Test- Grip Dynamometer Test</u></p> <p>Hold dynamometer parallel to the side of body (arms by side) with display facing away from body. Squeeze as hard as possible for 5 seconds without moving arm.</p> <p><i>Advantages: Minimal equipment needed.</i></p> <p><i>Disadvantages: Only measures strength of arm muscles</i></p>
2	<p># Flexibility The ability to move a joint fluidly through a complete range of movement. Some sports require all round flexibility whereas some sports require flexibility at specific joints.</p> <p>Flexibility Test - Sit & Reach Test Reach slowly forwards on sit and reach box, keeping legs flat on the floor. <i>Advantages: Easy and quick. Disadvantages: Does not measure entire body flexibility?</i></p>	<p># Aerobic Endurance</p> <p>The ability of the cardiorespiratory system to work efficiently, supplying nutrients to the working muscles. This is needed for long distance events</p> <p><u>What is the cardiorespiratory system?</u></p> <ul style="list-style-type: none"> Uptakes oxygen from air breathed in, Transports oxygen around body to working muscles, Removes waste products such as carbon dioxide <p><u>Forestry Step Up Test</u></p> <p>Step up and down bench in time with metronome. Do this for 5 minutes before taking pulse reading.</p> <p><i>Advantages: Easy and quick. / Disadvantages: Requires correct reading of pulse in order to be reliable.</i></p>
3	<p># Body Composition - This is the combination of muscle, fat and bone. = Ectomorph- Tall and Thin / Endomorph- Short and Dumpy Mesomorph- Muscular</p> <p>Skinfold Testing - Skinfold calipers are used to measure fat at various locations on the body. Males: Chest, Abdominal, Thigh. Females: Suprailiac, Tricep and Thigh.</p> <p><u>Bioelectrical Impedance Analysis (BIA)</u> Used to predict the percentage of body fat in a person.</p> <p>Participants must not exercise for 12 hours prior to the test or eat or drink within 4 hours of the test.</p> <p>Participant data should be entered into machine before BIA electrodes are connected to each wrist and foot, sending electrical impulses through the body.</p> <p>BMI - Used to measure fat and determine if a person is overweight</p>	<p># Speed – Distance divided by the time taken (m/s)</p> <p>Accelerative speed: This is the speed generated in order for a performer to be at their top speed. <i>Eg- long jump run up</i></p> <p>Pure speed: This is needed for events that are won by achieving the quickest time. <i>Eg- 100m sprint</i></p> <p>Speed endurance: This is an athlete's ability to sustain speed over a long period of time with short recovery periods. <i>Eg- a footballer</i></p> <p><u>Speed Test- 35 Meter Sprint Test</u> - Sprint as fast as possible over 35m whilst a peer times using a stopwatch. <i>Advantages: Easy and quick. Disadvantages: Assistant and non-slip surface needed.</i></p>
4	<p>Revision week – MMFABS</p> <p>Point Example Explain – how to structure and correctly answer 4, 6 and 9 mark questions</p> <p>Recapping a photo board and identifying which Physical Component of Fitness each sport/ athlete will need and why?</p>	



5	<p>Skill-Related Component of fitness – ABC-PR A – Agility, B – Balance, C – Co-ordination, P- Power and R- reaction time.</p> <p># Agility – the ability to change direction quickly at speed without losing balance. <u>Agility Test- Illinois Agility Test</u> Start lying on floor face down. On ‘go’ get up and print around course in direction indicated.</p> <p><i>Advantages: Cheap to do. Minimal equipment needed.</i> <i>Disadvantages: Good surface needed to minimise slipping risk.</i></p>	<p># Balance – The ability to maintain the centre of mass over a base of support.</p> <p>STATIC BALANCE- maintaining a balance whilst stationary. <i>Eg- handstand</i></p> <p>DYNAMIC BALANCE- maintaining a balance whilst in motion. <i>Eg- cartwheel</i></p> <p><u>Stork Test</u> - measures static balance on the ball of your foot.</p> <p><i>Remove all shoes, place hands on hips, position non-supporting foot against inside of knee of supporting leg, raise heel of supporting leg and hold the balance.</i></p> <p><i>Advantages: quick and easy to perform.</i> <i>Disadvantages: difficult if no practice hasn’t been allowed</i></p>	
6	<p># co-ordination The ability to use body parts together accurately. This is needed in most sports.</p> <p>HAND-EYE, FOOT - EYE and HAND HAND coordination Wall toss tests – measures hand eye co-ordination Advantages – quick and cheap to perform Disadvantages – doesn’t test all the co-ordination elements</p>	<p># Power The ability to use strength at speed therefore the faster or stronger a motion, the more powerful it will be. <u>Anaerobic Power Test- Vertical Jump Test</u> Stand with dominant side against board and reach up to record standing reach height. One dip is allowed then the participant must jump and touch the board as high as they can. <i>Advantages: Quick to do. Minimal equipment needed.</i> <i>Disadvantages: Only measures power in legs.</i></p>	<p># Reaction time The time taken for a performer to respond to a stimulus. <i>Eg- sprinter</i></p> <p>Ruler drop test – working in pairs follow printed instructions –<i>Advantages – cheap and quick to perform.</i> <i>Disadvantages – can be aided by partner making test invalid</i></p>


Part	Disciplinary/Literacy	Key Learning
1 and 4	<p>Global atmospheric circulation is the large-scale movement of air by which heat is distributed on the surface of the Earth.</p> <p>Trade winds- These blow from 30°N and S towards the equator</p> <p>ITCZ Intertropical convergence zone on the equator where the north and south trade winds and air masses meet producing low pressure.</p>	<p>At the equator, the sun's rays are concentrated. This means it is hotter. This causes global atmospheric circulation at different latitudes. Atmospheric circulation is the large-scale movement of air by which heat is distributed on the surface of the Earth. HADLEY CELL Largest cell which extends from the Equator to between 30° to 40° north & south. FERREL CELL Middle cell where air flows poleward between 60° & 70° latitude.</p> <p>POLAR CELL Smallest & weakness cell that occurs from the poles to the Ferrel cell. The flow of air between cells creates winds such as the trade winds. HIGH PRESSURE Caused by cold air sinking. Causes clear and calm weather. LOW PRESSURE Caused by hot air rising. Causes stormy, windy cloudy weather.</p> <p>As the air heats it rises causing low pressure. As it cools, it sinks, causing high pressure. Winds move from high pressure to low pressure.</p>
2 and 5	<p>Eyewall – This is on the edge of the eye and has the strongest winds.</p> <p>Coriolis effect - The deflection of the winds as they travel long distances due to the rotation of the Earth.</p> <p>Saffir-Simpson scale – This is how tropical storms are measured based on wind speed.</p> <p>Category 1 = 74-95mph Category 2 = 96-110mph Category 3 = 111-130mph Category 4 = 131-155mph Category 5 = 155+</p>	<p>Tropical storms occur in low latitudes between 5 and 30 degrees north and south of equator. Ocean temperature needs to be above 26 degrees C. Hurricanes form over Africa as easterly waves, they then hit the warm seas of the Atlantic. At the centre of the storm there is the eye where it is calm. This is surrounded by the eye-wall.</p> <p>The sequence of tropical storm formation.</p> <p>1. Air is heated above warm tropical oceans 2. Air rises under low pressure conditions</p> <p>3. Strong winds form as rising air draws in more air and moisture causing torrential rain</p> <p>4. Air spins due to Coriolis effect around a calm eye of the storm 5. Cold air sinks in the eye so it is clear and dry</p> <p>6. Heat is given off as it cools powering the storm. 7. On meeting land, it loses source of heat and moisture so loses power.</p> <p>Prediction. Constant monitoring of wind speed can help to give advanced warning of a tropical storm.</p> <p>Satellites to monitor path. Protection. Preparing for a tropical storm may involve. reinforcing buildings and building flood defences.</p> <p>Planning Involves getting people and the emergency services ready to deal with the impacts. Evacuation routes. This also includes Education and teaching people what to do in a storm.</p> <p>Development The scale of the impacts depends on the whether the country has the resources cope with the storm. Aid involves assisting after the storm, mainly in LICs.</p>
3 and 6	<p>Immediate response - The reaction of people as the disaster happens and in the immediate aftermath</p> <p>Long term responses - Later reactions that occur in the weeks, months and years after the event.</p> <p>Management strategies - Techniques of controlling, responding to, or dealing with an event.</p>	<p>Typhoon Haiyan – Philippines Friday 9th November 2013 had wind speeds of over 170 mph recorded making it a super typhoon (Cat 5 on Saffir Simpson Scale). Waves up to 15m high hit the coast. The province of Leyte was took the full force of the storm. Primary effects; 6,300 people killed, 90% of Tacloban City destroyed or damaged, 30,000 fishing boats destroyed, Strong winds damaged power lines and destroyed crops</p> <p>Secondary effects; 14 million people affected, 6 million lost their source of income, Flooding and landslides blocked roads, Shortages of water and food affected many people</p> <p>Immediat response; Aid agencies like the Red Cross responded quickly with food aid, water and temporary shelters, 1200 evacuation centres set up to help the homeless. The French government helped with field hospitals to help the injured.</p> <p>Long term responses; The UN and UK donated money. Rebuilding scheme for roads and bridges. Cash for work set up, people paid to clear debris. Oxfam supported the replacement of fishing boats. More cyclone shelter built.</p>

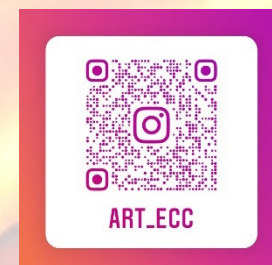
Part	Disciplinary/Literacy	Key Learning
1 and 4	<p>Social – relating to people and society</p> <p>Hippy – Usually a young person who rejects conventional society and advocates non-violence</p> <p>Feminist movement – Groups who wished for greater political, economic and social equality</p>	<p>Social Change, 1950-2000</p> <p>There were fundamental changes in US society in the second half of the 20th century. Although the cinema was still important, it was television, popular music and later the internet which had the greatest impact, especially on the young. The 1950s saw the birth of rock and roll with singers like Elvis. The 1960s saw the emergence of bands like the Beatles and protest singers like Bob Dylan. Disco became popular in the 1970s whilst in the 1980s working class artists like Bruce Springsteen railed against the system with songs like Born in the USA. However, perhaps the biggest development was in hip hop and rap which by the 90s had become mainstream with artists like Jay Z and Ice T. The 1950s saw the emergence of the teenager and a new and ever-changing youth culture followed by the student protests and hippy movement of the 1960s. There were also important developments in the position of women in society, influenced by the Second World War and the feminist movement of the 1960s and 1970s.</p>
2 and 5	<p>Conference – Meeting</p> <p>Cold War – Tensions and rivalry between USA and USSR whilst trying to avoid direct conflict with each other</p> <p>Communist – Someone who supports no private ownership and state control</p>	<p>Cold War Rivalry</p> <p>In 1945 the leaders of the USA, Britain and the USSR met at two peace conferences, Yalta and Potsdam, to decide the future of Germany and Eastern Europe. By the end of the second conference at Potsdam, the USA and USSR had become rivals in what became known as the Cold War, which lasted for over 40 years. A hot war is a conflict in which actual fighting takes place. A cold war is a war waged against an enemy by every means short of actual fighting. The USA adopted a policy of containment to stop the spread of communism in Europe and then the wider world. This led to a series of crises between the two superpowers, particularly the Berlin Crisis of 1948-49 and the Cuban Missile Crisis of 1962. In addition, the USA became involved in the conflict in Vietnam in order to prevent a communist takeover of the country. This conflict brought much opposition within the USA, especially from the student movement, and led to the eventual defeat and withdrawal of American troops.</p>
Part 3 and 6	<p>Détente – Lessening of tensions</p>	<p>The Search for World Peace since 1970</p> <p>During the 1970s the USA supported a policy of improved relations with the USSR, known as détente. The key features of this policy were the Helsinki Agreements and Nixon's visit to China. This warming of friendship came to an abrupt end with the Soviet invasion of Afghanistan in 1979, which plunged the world into a second phase of the Cold War. However, during the late 1980s co-operation between the USA and USSR improved once again due to the close working relationship of Reagan and Gorbachev and was followed by the end of the Cold War. The last 20 years of the twentieth century, on the other hand, saw the USA become increasingly concerned about the developments in the Middle East, especially in Iran and Iraq.</p>


Part	Key Learning Mon identité						Disciplinary Literacy	Resources
1	<div>Les gens disent que People say that De caractère Personality-wise</div>	<div>Verbs</div> <div>J'ai the eyes il a he has elle a she has Être je suis I am tu es you are il est/ elle est he is / she is nous sommes we are vous êtes you are ils / elles sont they are</div>	<div>Nouns</div> <div>les cheveux the hair les yeux the eyes</div>	<div>Adjectives 1</div> <div>blonds châtains – light brown bruns – dark brown gris – grey roux - red noirs - black</div>	<div>Conjunctions</div> <div>et aussi and also</div>	<div>Adjectives 2</div> <div>courts short frisés curly longs long mi-longs shoulder-length ondulés wavy</div>	<div>Useful verbs</div> <div>se chamailler –to bicker se disputer – to argue se fâcher – to argue s’entendre bien – to get on well s’entendre mal – to get on badly discuter – to discuss énervé – to annoy s’amuser – to have fun se confier – to confide habiter – to live naître – to be born partager – to share comprendre – to understand pouvoir – to be able to</div> <div>Les interjections</div> <div>Alors – so ben... - well euh – huh Ouah! – wow! Voyons – let’s see</div>	<div></div> <div></div> <div>https://quizlet.com/491575712/mon-identite-flash-cards/</div>
2		<div></div>	<div>Intensifiers:</div> <div>un pue a bit assez quite plutôt rather vraiment really très very</div>	<div>attentionné (e) caring fidèle loyal serviable helpful sympathique nice généreux (euse) generous travailleur (euse) hardworking</div>	<div>cependant however de plus furthermore et surtout and especially</div>	<div>antipathique unfriendly bête stupid égoïste selfish radin (e) stingy fainéant(e) lazy têtu (e) stubborn</div>		
3		<div>je voudrais être I would like to be il voudrait être He would like to be elle voudrait être She would like to be</div>	<div>Comparatives:</div> <div>un peu plus... a bit more... un peu moins... a bit less... beaucoup plus... a lot more...</div>	<div>J'ai I have tu as you have il / elle a he / she has nous avons we have vous avez you have ils / elles ont they have</div>	<div></div>			
		<div>ma meilleure qualité est my best quality is sa meilleure qualité est his./her best quality is</div>	<div>la confiance en soi Self confidence l’ouverture d’esprit open-mindedness la fidélité loyalty la générosité generosity la volonté d’esprit will-power</div>	<div>la gentillesse kindness l’honnêteté honesty l’humilité humility le sens de l’humour sense of humour</div>	<div></div>			
4	<div>La personnalité</div> <div>Agressif(ive) – aggressive Amusant(e) - funny/amusing Arrogant (e)-arrogant Bavard(e)- chattu</div>		<div>Charmant (e)- charming Content(e) – happy Débrouillard (e)- resourceful Fier – fière – proud Gentil (le) – kind</div>		<div>Heureux-euse – happy Méchant (e) – mean Rigolo - funny Sage - wise Sérieux (euse) – serious</div>		<div></div>	<div>https://members.gcsepod.com/content?subject_id=6015&exam_board_id=1011&topic_id=9055/</div>
5	<div>Le style J’ai un style plutôt.. – My style is rather...</div> <div>classique – classic Sportif - sporty décontracté – relaxed</div>			<div>skater – skater À la mode - fashionable C’est –it is Moche / laid – ugly Horrible – horrible</div>				
6	<div>Linking Expert:</div> <div>de plus – furthermore ensuite – after puis – then pourtant – yet</div>	<div>d’autre part – on the other hand cependant – however par contre – on the contrary</div>	<div>néanmoins – nonetheless parce que/car – because alors/donc/ainsi – so surtout – mostly en particulier –especially</div>	<div>soit... soit... – either...or d’ailleurs – by the way par conséquent – as a result (tout) d’abord – firstly</div>	<div>deuxièmement – secondly pour conclure – to conclude</div>			

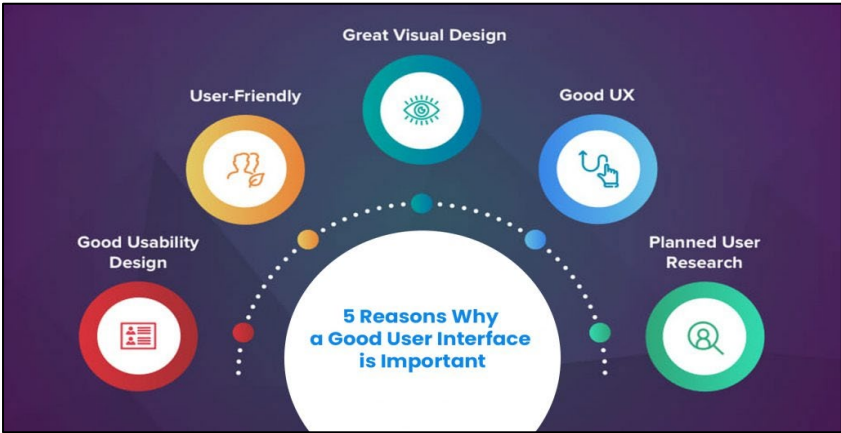

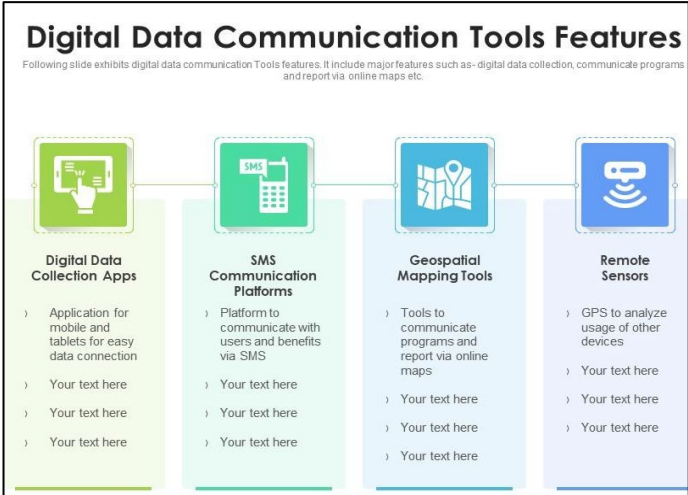
Week	AO	Key Learning	Disciplinary literacy	Definition	Resources
1	3	Drawing Mark making HPS – Hold, Pressure, Speed Formal elements - COLOUR, SPACE, LINE, PATTERN, TEXTURE, SHAPE, FORM, TONE	Composition	The arrangement or structure of the formal elements that make up an image, photograph, painting, sculpture or piece of music.	 <p>articles/realistic-observational-drawings Website about student work https://www.tate.org.uk/art/artworks/ruscha-honk-ar00184, Typography in Art. https://www.tomphillips.co.uk/humument https://www.youtube.com/watch?v=wOgIkxAfJsk History of Typography.</p> 
2	2	Photography angles Practical exploration using mobile phones and digital camera.	Contrast	Strong visual differences between light and dark, varying textures, sizes, etc.	
3	3	Observation studies theme, photographs and drawings, bottles, lobsters, fish.	Watercolour	A solid or liquid paint that is to be used, watered down and layered.	
4	2	Photoshop layering images and text using Photopea.com	Mixed media	Art that is made with a combination of different materials.	
5	1	<u>Artist research</u> Tom Phillips Appropriate Background wash and <u>title</u> 5 images in colour (for HWK) 5 facts about the artist 5 keywords What does the artist do? How does the artist do it? Your comments Experiments in the style of the artist	THE RULE OF 5	The lights and darks of a colour:	
				Tint – lightened colour, white + colour	
				Shade – darkened colour, Colour + black or grey.	
				Gradient – A gradual change from one colour to another.	
6	1	Artist research page: Tom Phillips continued.	Processes	The method used to create artwork that usually follows a range of steps rather than just one skill.	


week	AO	Key Learning - Coast	Disciplinary literacy	Definition	Resources
1	3	Using the KO in Art and Design Observational drawing HPS – Hold, Pressure, Speed Formal elements - COLOUR, SPACE, LINE, PATTERN, TEXTURE, SHAPE, FORM, TONE	Primary	Colour – Red, Yellow and Blue as these colours can't be made by others. Source – created by you. e.g. a drawing or photo	
			Secondary	Colour - mix two primary colours together Source – a reference, drawing or photo created by someone else	
2	2	Mark making explored further with pen, biro, ink, paint <div data-bbox="588 434 737 576"> THE RULE OF 5 </div>	Composition	the arrangement and layout of artwork/objects.	Featured Art Projects – STUDENT ART GUIDE
			Technique	the skill in which an artist uses tools and materials to create a piece of art.	
3&4	1	Artist research page Vincent Van Gogh Appropriate Background wash and title 5 images in colour (for HWK) 5 facts about the artist 5 keywords What does the artist do? How does the artist do it? Your comments Experiments in the style of the artist	Media/ Medium	the materials and tools used by an artist to create a piece of art.	Pen Pencil Fineliner Biro Ink Willow Chalk/Charcoal Camera Rule of thirds Mixed media Glue/ PVA Collage materials
			Analysis	Picking apart a piece of artwork using the formal elements of Art and Design	
			Highlight	the bright or reflective area within a drawing/painting where direct light meets the surface of the object or person.	
			Shadow/ Shade/ Shading	the darker areas within a drawing or painting where there is less light on the object or person	
5&6	3	Observation studies Bottles, fish, lobsters	Tone	refers to the lightness and darkness of an object to show it is solid subject, and to create depth.	
			Abstract	a piece of art that is not realistic. It uses shapes, colours and textures.	

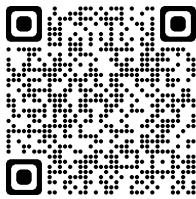
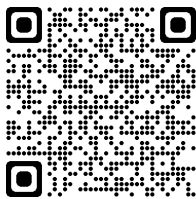
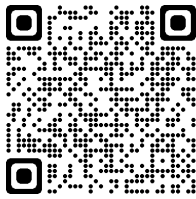

Week	AO	Key Learning	Disciplinary literacy	Definition	Resources
1	3	Drawing Mark making HPS – Hold, Pressure, Speed Formal elements - COLOUR, SPACE, LINE, PATTERN, TEXTURE, SHAPE, FORM, TONE	Warp and Weft	How fabrics are woven together. “from weft to right”	
2	2	Fibres and Burns test Warp and weft - weaving	Felt	making fabric by locking together fibres (generally wool) using friction and moisture.	
3	3	Felt making 2D 3D Shaping and stitch	Dye	A dye is a colored substance that chemically bonds to the substrate to which it is being applied	
4	2	Observation studies theme, photographs and drawings, bottles, lobsters, fish.	Mixed media	Art that is made with a combination of different materials.	Video reviews of high achieving Textile Design GCSE, AS and A level submissions : Lightbox Resource
5	1	<u>Artist research</u> Sandra Meech Appropriate Background wash and <u>title</u> <u>5 images</u> in colour (for HWK) <u>5 facts</u> about the artist <u>5 keywords</u> What does the artist do? How does the artist do it? Your comments <u>Experiments</u> in the style of the artist	Colour values	The lights and darks of a colour:	
				Tint – lightened colour, white + colour	
				Shade – darkened colour, Colour + black or grey.	
				Gradient – A gradual change from one colour to another.	
6	1	Artist research page: Sandra Meech continued.	Processes	The method used to create artwork that usually follows a range of steps rather than just one skill.	

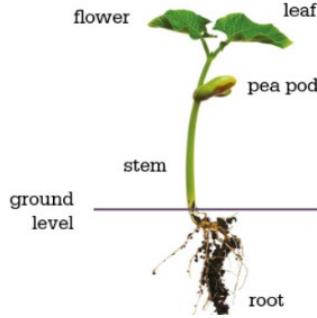





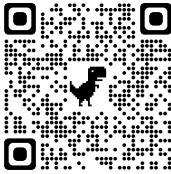




Part	Key Learning		Disciplinary/Literacy	Resources																					
1	<p>Purpose and nature of Business (1.1) <i>Why start a business?</i></p> <ul style="list-style-type: none">To produce a goodTo provide a serviceTo distribute productsTo benefit societyTo fill a gap in a market	<p><i>Business sectors...</i></p> <p>Primary- source raw materials. Secondary- manufacture using raw materials. Tertiary- sell manufactured goods.</p>		<p>Goods Tangible (physical) objects that can be purchased.</p> <p>Services Intangible (non-physical) products that cannot be stored.</p> <p>Entrepreneur A person who sets up a business or businesses.</p> <p>Needs Products that are used in order to survive.</p> <p>Wants Luxury items that individuals wish to purchase.</p> <p>Opportunity Cost Something that is given up in order to do something else.</p> <p>Factors of Production Resources needed in order to start a business.</p>	<p>BBC Bitesize</p> <p>https://www.bbc.co.uk/bitesize/guides/zvpk47h/revision/1</p>																				
2	<p>Business ownership (1.2) <i>There are four types of ownership:</i></p> <ul style="list-style-type: none">Sole TraderPartnershipCompanyNot-for-Profit organisation	<p>Stakeholders or Shareholders? Don't get confused between the two. Stakeholders are interested in a business; Shareholders are in it for the money!</p>	<table><tr><th>Sole Trader</th><th>Partnership</th><th>PLC (Public Limited Company)</th><th>LTD (Private Limited Company)</th><th>Non-Profit</th></tr><tr><td>One owner</td><td>2-20 owners</td><td>Shares are sold on the stock market</td><td>Owners known as shareholders</td><td>Often a social enterprise</td></tr><tr><td>Quick and easy to set-up</td><td>Shared financial responsibility</td><td>Limited liability for shareholders</td><td>Limited liability for owners</td><td>Helps to support local communities</td></tr><tr><td>Unlimited liability</td><td>Profits shared between partners</td><td>Expensive to set-up- £50,000 set-up costs</td><td>May have to seek financial help to set-up</td><td>Helps to support charities</td></tr></table>	Sole Trader	Partnership	PLC (Public Limited Company)	LTD (Private Limited Company)	Non-Profit	One owner	2-20 owners	Shares are sold on the stock market	Owners known as shareholders	Often a social enterprise	Quick and easy to set-up	Shared financial responsibility	Limited liability for shareholders	Limited liability for owners	Helps to support local communities	Unlimited liability	Profits shared between partners	Expensive to set-up- £50,000 set-up costs	May have to seek financial help to set-up	Helps to support charities	<p>Shareholders Any person or group that owns at least one share of a company's stock.</p> <p>Social Enterprise A business which offers something back to society through its actions.</p> <p>Limited Liability A type of liability that does not exceed the amount invested in a business.</p> <p>Unlimited Liability Refers to the full legal responsibility that business owners and partners assume for all business debts.</p> <p>Deed of Partnership A legal document that outlines the rights and responsibilities of all parties involved in a business.</p>	<p>BBC Bitesize</p> <p>https://www.bbc.co.uk/bitesize/guides/zdc6mfr/revision/1</p>
Sole Trader	Partnership	PLC (Public Limited Company)	LTD (Private Limited Company)	Non-Profit																					
One owner	2-20 owners	Shares are sold on the stock market	Owners known as shareholders	Often a social enterprise																					
Quick and easy to set-up	Shared financial responsibility	Limited liability for shareholders	Limited liability for owners	Helps to support local communities																					
Unlimited liability	Profits shared between partners	Expensive to set-up- £50,000 set-up costs	May have to seek financial help to set-up	Helps to support charities																					


Part	Key Learning	Disciplinary/Literacy	Resources
1	<p>Component 1- Learning Aim A: Investigate user interface design for individuals and organisations</p> <p>Types of User Interface:</p> <ul style="list-style-type: none"> - Text based - Speech/natural language - Graphical User Interface/Windows, Icons, Menus, Pointers (GUI/WIMPs) - Sensors - Menu/forms  <p>Factors affecting choice of user interface: performance/response time, ease of use, user requirements, user experience, accessibility and storage space</p> <p>How hardware and software affects user interfaces: operating systems/platforms, screen type/size, types of user input, hardware resources available and emerging technologies</p> <p>User skills: expert, regular, occasional and novice user skills and demographics: age, beliefs/values, culture and past experiences</p>	<p>User interface: is the means by which the user and a computer system interact, particularly the use of input devices and software.</p> <p>User accessibility needs: visual, hearing, speech, motor and cognitive needs. Intuitive design: refers to making products easy to use.</p> <p>User perception: refers to the perception of a given user and the way in which they are going to interact with the final product, such as an application or a website.</p> <p>Software: the programs and other operating information used by a computer.</p>	
2	<p>Component 3- Learning Aim A: Modern technologies</p>  	<p>Communication technologies: ad-hoc networks, open networks, performance issues and network availability</p> <p>Cloud storage: access rights, synchronization, availability and scalability</p> <p>Cloud computing: applications, consistency of versions between users, single shared instances and collaboration tools/features</p> <p>Inclusivity: the practice of providing equal access to resources for people who might otherwise be excluded or marginalized.</p>	

Part	Key Learning	Disciplinary/Literacy	Resources	
1/2/3	<p>Introduction to Eduqas Drama GCSE Component 1 Devising Theatre 40% of qualification. Students are required to devise a piece of original theatre in response to a stimulus, using either the techniques of an influential theatre practitioner or the characteristics of a genre of drama.</p> <p>Students respond to Exam board Stimuli:</p> <p>Learners will work in groups in response to one of the stimuli below:</p> <p>1. 'It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair.' Charles Dickens, A Tale of Two Cities</p> <p>2. 'Best Day of my Life' – American Authors Song</p> <p>3. 'We realise the importance of our voices only when we are silenced' – Malala Yousafzai</p> <p>4. https://images.app.goo.gl/Kxp2XA2HGPookVPH7 image =</p> <p>Brainstorm ideas for each stimuli individual. group and create monologue</p>		<p>Conventions, forms, strategies, Alter ego Back story, Chorus/chorus work voice Conscience corridor (also known as 'conscience alley' or 'thought tunnel') Flashback, Forum theatre, Freeze-frame, Hot-seating, Improvisation, Narration, Narrator, Pace, Pause, Pitch. Rehearsal techniques, Role reversal, Role transfer, Sculpting Soundscape, Split screen Tableau(x), Tempo, Thoughts in the head or thought tracking. Analytical, structural and theatrical terms Alienation. Anti-climax.</p> <p>Staging: Arena staging Aside Audience Auditorium Devising/devised work Dramatic irony Dramatic tension End on staging Epic theatre Fourth wall Genre Monologue, Naturalism Physical theatre Promenade staging Proscenium, Realism Style Subtext, Theatre in the Round, Thrust stage Traverse stage, Devising, Improvisation. Characterisation Still Image/Freeze Frame Role-Play Split Stage Vocal Skills Tone of voice, Pitch, Pace, Pause, Volume</p>	<p>GCSE Drama Eduqas</p> <p>GCSE Drama - Eduqas - BBC Bitesize</p> <p>Styles, genres and practitioners - GCSE Drama Revision - BBC Bitesize</p>
4/5/6	<p>Rehearsal Response to chosen Stimuli: devise a piece of original theatre in response to one of the above stimuli, using either the techniques of an influential theatre practitioner or theatre company or the characteristics of a genre of drama.</p> <p>Students create and develop ideas to communicate meaning to an audience by: • researching and developing ideas using the techniques or characteristics of the practitioner or genre • rehearsing, amending and refining the work in progress. Students should consider the following when devising their piece of theatre: • structure • theme/plot • form and style • language/dialogue. Learners choosing performing should consider how meaning is communicated through the following, as appropriate to the piece of theatre: • performance conventions • use of space and spatial relationships on stage, including the choice of stage (e.g., proscenium arch, theatre in round, traverse or thrust) • relationships between performers and audience • design elements including lighting, sound, set and costume • the physical and vocal interpretation of character. Create monologue and well as group work.</p>			
7/8	<p>Produce a portfolio of supporting evidence which demonstrates the research, creation and development of ideas. This is a working record and therefore should be compiled during the process and edited to ensure an appropriate focus. The evidence should focus on three stages which are significant to the development of the devised piece of theatre. The three stages should demonstrate: 1. how ideas have been researched, created and developed in response to the chosen stimulus 2. how ideas from the chosen practitioner/genre have been incorporated in the piece to communicate meaning 3. how ideas have been developed, amended and refined during the development of the devised piece. For each stage, candidates must provide illustrative material (as listed below) and a commentary, which may include annotations on the illustrative material. The commentary for each stage should be approximately 250 – 300 words and total 750 to 900 words for the complete portfolio.</p>			
9/10/11	<p>Performance The length of the piece will depend on the number of actors in the group and should be as follows: Group of two actors: 5-10 minutes Group of three actors: 7-12 minutes Group of four actors: 9-14 minutes Group of five actors: 11-16 minutes. Each actor must interact with other performers and/or the audience for a minimum of five minutes. Performer's must change their facial expression and body language to create their chosen character.</p> <p>How has your body and face portrayed your chosen character? How have you fulfilled the stimuli?</p> <p>Group and monologue performance</p>			
11/12	<p>Written Evaluation 3 main sections to the evaluation in:</p> <p>1. Analyse and evaluate either their interpretation of character/role or their realisation of design in the final performance.</p> <p>2. Analyse and evaluate how either their own performance skills or their own design skills contributed to the effectiveness of the final performance</p> <p>3. Analyse and evaluate their individual contribution to the final performance, including how effectively they fulfilled their initial aims and objectives (referring back to stimulus and practitioner/genre).</p>			

Part	Key Learning	Disciplinary/Literacy	Resources
1	<p>CNC is an abbreviation for Computer Numerically Control. This is the generic term for a machine driven by a computer such as a router, mill, laser cutter etc.</p> <p>CAD stands for Computer Aided Design. 2D Design and Fusion are CAD packages</p> <p>CAM is an abbreviation for Computer Aided Manufacture (making). CAM will involve using CNC machines to manufacture products</p>	CNC CAD CAM Tenon Mortise 2D Design	
2	<p>CNC technology is used to manufacture furniture in factories. Component parts are machined from sheets of material using CNC routers and saws. These can be drilled and have joints cut as part of the same process. CNC production would be used extensively by companies like IKEA where high volume of production has led to automation. Parts in this section are not marked out and machined by hand due to the volume of production required.</p>	Plywood Manufactured board Series Parallel Circuit	
3 and 4	<p>You are using different components in the manufacture of your circuit. These include LEDs, resistors, battery connectors and switches. LED stands for light emitting diode. LEDs have recently grown in popularity as they have become brighter. They are considerably more energy efficient than conventional light bulbs. This means that using them produces fewer greenhouse emissions than other forms of light.</p> <p>Soldering is the process of melting solder with a soldering iron to join wires together.</p>	Assembly LED (Light emitting diode) Resistor Battery Connector Solder Soldering iron Short circuit	
5	<p>A switch is a break in the circuit. This can take the form of a toggle switch where something physically slides across or moves creating a circuit until its state is changed. Examples of slide / toggle switches would be house light switches. Switches could also be a push to make (switch on) or push to break switches (switch off). Push to make switches often input into other more complex electronics. For example, the keys on a keyboard, the power switch on your phone and the buttons on a mouse are push to make switches</p>	Prototype Tensol Cement Weld	
6	<p>Finite means will run out. Infinite means will not run out. Sun is an infinite source of energy. There will always be another sunny day (we hope!!)</p> <p>Sustainable sources of energy are sources that can be replenished without causing further permanent damage to the environment.</p> <p>Non renewable sources of energy are sources that once used up are gone forever. Oil, once used up has gone.</p> <p>Renewable sources of energy are sources such as water, wind and sun.</p> <p>A turbine is connected to the energy source and turned to generate electricity</p>	Generation Non / sustainable Finite / infinite Non / renewable Fossil fuel Turbine	

Part	Key Learning		Disciplinary/Literacy	Resources
1	<p>Classification of fruits and vegetables – All fruits and vegetables come from plants that are grown in the ground. Not all parts of each plant are eaten. Vegetables are categorised into – Root, stem, tuber, fungi, bulb, seeds and pods, flower heads, leaves, sea vegetables and vegetable fruits. Fruits are categorised as – Hard, soft, citrus, tropical, dried, stoned and miscellaneous.</p>		<p>Tuber – part of the plant attached to the roots below the ground. Stem – the main body or stalk of a plant</p>	 SCAN ME
2	<p>Variety of fruits and vegetables A balanced diet will contain at least five portions of fruits and vegetables eaten daily. This is because some nutrients such as vitamin C and dietary fibre are found only in fruit and vegetables so a diet lacking in fruit and vegetables can cause nutritional deficiencies. An easy way to eat a wide range of fruits and vegetables is to ‘eat a rainbow’ – make sure your plate vegetables. It can include fresh, canned, or frozen fruit and vegetables.</p>		<p>5-a-day - a government campaign to encourage us to eat five servings of vegetables/fruit per day.</p>	 SCAN ME
3	<p>Importance of fruits and vegetables in the diet There are many benefits of eating fruits and vegetables: They contain vitamin A for maintenances of normal vision. Folate for the formation of healthy blood cells and for the nervous system. Fibre to help maintain a healthy gut. Potassium to help maintain healthy blood pressure and nervous system functions. Magnesium to help maintain healthy bones and teeth Vitamin C which acts as an antioxidant and is important for maintaining the healing of body tissue. It also helps to absorb iron from plant sources.</p>		<p>Julienne – Matchstick size pieces Brunoise – Small dice Macedoine – Large dice Chiffonade – Shredding Simmer – small bubbles below boiling point.</p>	
4	<p>Preserving fruits and vegetables Many fresh fruits and vegetables quickly spoil and decay. They are often processed and preserved to increase the shelf life and give us all-year-round availability. Bacteria, moulds and yeast spoilage are controlled by removing the moisture or oxygen, using heat/cold or altering the pH with sugar, salt or vinegar. Methods of preservation include: Drying, canning, bottling, freezing, ultra heat treatment (UHT), Modified atmosphere packaging.</p>		<p>Preserves – a process which allows fruit to last longer Modified atmosphere packaging – MAP – Gases are used to keep fruits and vegetables fresher for longer – salad pillow packs.</p>	
5	<p>Seasonality and Food Miles Foods are in season when they are ripe and ready to harvest or pick. Seasonal fruit and vegetables will be tastier and more nutritious compared to the same foods forced to grow out of season. Fruits and vegetables are widely available and often cheaper when in season. Food miles means the distance a food has had to travel to reach our kitchens. The carbon footprint of foods is calculated from the amount of fuel used during growing and production, transportation and the miles consumers have to travel to buy their shopping. The fewer the miles a food has travelled the better for the environment because less CO2 has been produced.</p>		<p>Seasonal foods – Foods that are only available at certain times of the year Importing – Bringing foods into the UK from a different country Food miles – The distance food travels from where it is grown to where it is eaten.</p>	
6	<p>Herbs and spices Herbs are the leaves, stems and roots of plants, used to flavour foods. Herbs include basil, bay, dill, sage, lemongrass, coriander, chives, mint, parsley, rosemary, tarragon and thyme. Spices are the dried flowers, seeds, leaves, bark and roots of aromatic plants. Spices include all spice, caraway, cardamom, cayenne pepper, chilli, cinnamon, cumin, ginger, paprika, pepper and turmeric. Enzymic browning – occurs when the fruits and vegetables are cut and exposed to oxygen. This causes the fruit or vegetable to turn brown.</p>		<p>Enzymic browning – discolouration of certain foods caused by oxygen and enzymes Catalyst – a substance that increases the rate of a reaction.</p>	

Part	Key Learning	Disciplinary/ Literacy	Resources
1	<p>Brazing - Used for joining steel by melting a brass rod on the hot steel. As the brass melts, it forms a joint. Brazing is a slow and safe way to learn about joining metal with heat. During the process of brazing, the joining metal is melted and filled into the joint of the two parent metals by capillary action - that is the ability for liquids to flow in narrow spaces, without the help of gravity. The liquid metal is protected from oxidation during its liquid stage by a flux. The liquid metal is then cooled to join the pieces together.</p> <p>A flux is a material that keeps the metal from oxidising during its liquid stage. The flux flows into the joint during the joining stage and is usually made of a material that prevents oxides to form, such as borax.</p>	<p>Capillary action Annealing Ferrous Brazing Flux Oxidation</p>	
2	<p>Drilling - There are two types of machine drill, the bench drill and the pillar drill. The bench drill is used for drilling holes through materials including a range of woods, plastics and metals. It is normally bolted to a bench so that it cannot be pushed over and that larger pieces of material can be drilled safely.</p> <p>The larger version of the machine drill is called the pillar drill. This has a long column which stands on the floor. This can do exactly the same work as the bench drill but because of its larger size it is capable of being used to drill larger pieces of materials and produce larger holes.</p>	<p>Chuck Spindle speed Chuck guard Machine vice</p>	
3	<p>Centre lathe - Metal can be turned in a lathe, which can be hand operated or controlled via a computer on a computer numerical controlled (CNC) lathe. A lathe spins the work at high speed as a cutting tool is introduced to the metal to produce round and cylindrical shapes. Round pieces of metal are held in a lathe using a three-jaw chuck, and metal that is not round is held by a four-jaw chuck.</p>	<p>3 Jaw chuck Carriage Tailstock Lubricant Swarf</p>	
4	<p>Sand casting - Sandcasting can be used to cast larger and more complex shapes as it uses a two-part mould. A former is made, usually by hand, and is placed in the 'green' sand, which is packed tightly around the former before it is removed. This is repeated on the other part of the mould. Two holes are made in the sand, one for the molten metal to be poured into (the runner) and one for the metal to come up and out the other side (the riser). Once they are both ready, parting powder is applied to the sand and the two moulds are placed together, one on top of the other. The molten metal, often aluminium in schools, is poured into the runner until it comes up to the riser when the cavity in the sand is full of metal</p>	<p>Casting flask Cope and drag Runner and riser Strickling off Fettling</p>	
5	<p>Milling - Metal can be shaped using a milling machine - a very versatile tool for smoothing a surface or edge and for cutting grooves and profiles. Milling machines can work either horizontally (horizontal milling machine) or vertically (vertical milling machine) - both machines perform the same tasks; the main difference is the direction the cutting tool is held.</p>	<p>Axis End mill Vertical mill</p>	
6	<p>Bending and riveting - A rivet is often used to hold sheet material to another metal structure, eg some 'off-road' cars have their body held to the structure using a rivet. Nuts and bolts work by tightening a nut along a threaded bolt so that the sheet material is compressed in place. Screws work in a very similar way - as a screw is turned it drives deeper into one material as it compresses another in place.</p>	<p>Rivet Rivet snap Rivet gun</p>	

Part	Key Learning					Disciplinary literacy
1 – 2	Life Stages 4-10 years: childhood 11-18 years: adolescence 19-45 years: young adult 46-65 years: middle adulthood 65+ years: older adult Development changes: (PIES) examples below for each life style Physical: fine and gross motor skills, mobility, body changes, menopause, ageing characterises. Intellectual: language development, Emotional: Bonding, different attachments, independence, self-confidence, self image, self esteem. Social: relationships, social skills and responsibilities.					 <p>Milestones -The complex changes in skills, abilities and capabilities that individuals experience as they grow.</p> <p>Growth - an increase in measurable quality.</p> <p>Development - The complex changes in skills, abilities and capabilities that individuals experience as they grow.</p> <p>Physical development – biological/physiological intellectual growth of an individual, such as muscles Intellectual development – growth of an individuals’ ability to think and reason. Emotional development – development/growth in ability to recognise, express and manage feelings Social development – ability to recognise, interpret and respond to social situations. Throughout the life stages, individuals will be able to form relationships with others.</p>
3-4	Childhood P–Motor skills I- Reading& writing E- Self-image S – Attachments develop	Adolescence P –Puberty I- Critical thinking E- Mood swings S- Peers, sexuality	Young adult P – health changes I- Learning continues E –Stress, companionship S- Relationships, parenthood	Middle adulthood P – health changes, menopause for females I- memory changes E – Stress, bonding S – relationship changes	Older adult P –sensory changes I- memory loss E - loneliness S – social life changes – increase/decrease	<p>Life events – experiences that disrupt an individual's usual activities, causing a change or readjustment to their life.</p>
5-6	Factors that impact development Physical Factors: Diet and nutrition, activities, lifestyle choices e.g. alcohol, smoking, genetics, physical and mental health, disability, sensory impairment. Social Factors: positive and negative relationships, social inclusion/exclusion, opportunities, discrimination bullying. Emotional Factors: anxiety, fear, sadness, happiness, grief, attachments, family security. Cultural Factors: Community, religion, race, gender, sexual orientation. Environmental Factors: housing needs and conditions, pollution (air, noise light), neighbourhood, home environment (neglect, conflict), access to services. Unexpected and expected life events can impact an individuals development across their life stages. Examples: Physical events: accidents/injuries, long term/short term illnesses, puberty, genetic disorders Relationship changes: starting ending relationships, parenthood, bereavement Life circumstances: Schools starting/changing/ending, redundancy, retirement, bankruptcy, imprisonment.					

Part	Key Learning
Types of Data	<ul style="list-style-type: none"> • Quantitative data is numerical observations or measurements. It can be either continuous or discrete. • Qualitative data is non-numerical observations. • Continuous data can take any value on a continuous numerical scale. • Discrete data can only take particular values on a continuous numerical scale • Categorical Data can be sorted into non-overlapping categories • Ordinal data can be written in order or can be given a numerical rating scale • Bivariate or Multivariate data involves 2 or more related data values • Primary data is collected by, or for, the person who is going to use it • Secondary data has been collected by someone else
Collecting Data	<ul style="list-style-type: none"> • An open question has no suggested answers. • A closed question has a set of given answers to choose from. • A pilot survey is conducted on a small sample to test the design and methods of that survey. • A random response method uses a random event to decide how to answer the question • An outlier or anomalous value is a value that does not fit the pattern of the data. • Data may be cleaned by identifying and assessing extreme values, missing data and errors before it is used. • In an investigation or experiment, you need to try to control extraneous variables. These are any variables that you are not interested in but that could affect the result of your experiment. • A control group is selected randomly from the population and is not subject to any factors under investigation. • A hypothesis is a statement made as a starting point for an investigation.
Sampling	<ul style="list-style-type: none"> • A population is everything or everybody that could possibly be involved in an investigation • A census is a survey or investigation of a whole population. • If a sample is not representative of a whole population, it is biased. A sample that is selected unfairly or that is too small can bias the results. In general, the larger the sample, the more reliable the results. • The sampling units are the people or items that are to be sampled • The sampling frame is a list of the people or items that are to be sampled • The Petersen capture-recapture formula is $\frac{m}{n} = \frac{M}{N}$ • In a random sample, every member of the population has an equal chance of being included. • A stratified sample selects a random sample from each stratum of the population in proportion to the size of that stratum.

My Diary :							
Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	05/09/2022	06/09/2022	07/09/2022	08/09/2022	09/09/2022	10/09/2022	11/09/2022
2	12/09/2022	13/09/2022	14/09/2022	15/09/2022	16/09/2022	17/09/2022	18/09/2022
3	19/09/2022	20/09/2022	21/09/2022	22/09/2022	23/09/2022	24/09/2022	25/09/2022
4	26/09/2022	27/09/2022	28/09/2022	29/09/2022	30/09/2022	01/10/2022	02/10/2022
5	03/10/2022	04/10/2022	05/10/2022	06/10/2022	07/10/2022	08/10/2022	09/10/2022
6	10/10/2022	11/10/2022	12/10/2022	13/10/2022	14/10/2022	15/10/2022	16/10/2022
7	17/10/2022	18/10/2022	19/10/2022	20/10/2022	21/10/2022	22/10/2022	23/10/2022

My Homework

Week						
05/09/2022						
12/09/2022						
19/09/2022						
26/09/2022						
03/10/2022						

My Homework

Week						
10/10/2022						
17/10/2022						

September	Friday 9 th	Friday 16 th	Friday 23 rd	Friday 30 th
	THIS WEEK: %	THIS WEEK: %	THIS WEEK: %	THIS WEEK: %
		OVERALL: %	OVERALL: %	OVERALL: %
October	Friday 7 th	Friday 14 th	Friday 21 st	HALF TERM
	THIS WEEK: %	THIS WEEK: %	THIS WEEK: %	
	OVERALL: %	OVERALL: %	OVERALL: %	

How often have you been in the 100% Club this half term?

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
--------	--------	--------	--------	--------	--------	--------

Are you a Rising Star?



Attendance Matters: record your attendance at the end of each week and track your progress!

November	Friday 4 th	Friday 11 th	Friday 18 th	Friday 25 th
	THIS WEEK: %	THIS WEEK: %	THIS WEEK: %	THIS WEEK: %
	OVERALL: %	OVERALL: %	OVERALL: %	OVERALL: %
December	Friday 2 nd	Friday 9 th	Friday 16 th	CHRISTMAS HOLIDAYS
	THIS WEEK: %	THIS WEEK: %	THIS WEEK: %	
	OVERALL: %	OVERALL: %	OVERALL: %	

How often have you been in the 100% Club this half term?

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
--------	--------	--------	--------	--------	--------	--------

Are you a Rising Star?



Attendance Matters: record your attendance at the end of each week and track your progress!

January	Friday 6 th		Friday 13 th		Friday 20 th		Friday 27 th	
	THIS WEEK:	%	THIS WEEK:	%	THIS WEEK:	%	THIS WEEK:	%
	OVERALL:	%	OVERALL:	%	OVERALL:	%	OVERALL:	%
February	Friday 3 rd		Friday 10 th		HALF TERM			
	THIS WEEK:	%	THIS WEEK:	%				
	OVERALL:	%	OVERALL:	%				

How often have you been in the 100% Club this half term?

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
--------	--------	--------	--------	--------	--------	--------

Are you a Rising Star?



February / March	Friday 24 th	Friday 3 rd	Friday 10 th	Friday 17 th	Friday 24 th	Friday 31 st
	THIS WEEK: %	THIS WEEK: %	THIS WEEK: %	THIS WEEK: %	THIS WEEK: %	THIS WEEK: %
	OVERALL: %	OVERALL: %	OVERALL: %	OVERALL: %	OVERALL: %	OVERALL: %

How often have you been in the 100% Club this half term?

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
--------	--------	--------	--------	--------	--------	--------

Are you a Rising Star?



April/May	EASTER HOLIDAYS	Friday 21 st	Friday 28 th	Friday 5 th	Friday 12 th	Friday 19 th
		THIS WEEK: %	THIS WEEK: %	THIS WEEK: %	THIS WEEK: %	THIS WEEK: %
		OVERALL: %	OVERALL: %	OVERALL: %	OVERALL: %	OVERALL: %

May	Friday 26 th	HALF TERM
	THIS WEEK: %	
	OVERALL: %	

How often have you been in the 100% Club this half term?

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
--------	--------	--------	--------	--------	--------	--------

Are you a Rising Star?



[illegible]