

# Q3 Academy Langley

## Quest for Knowledge Booklet

### Year 7

### 2023-2024

*This pack has been put together by your Learning Consultants.*

*It contains lots of Essential Knowledge that underpins your learning.*

*It will form the basis of your Independent Learning and needs to be learnt over the course of the school year.*

*Some strategies to help maximise how you use this pack:*

- Copy out information to help you learn;
- Test yourself on information (Look-Cover-Test-Check);
- Create and use flash cards;
- Read through the pack silently to deepen your understanding;
- Ask a parent/carer or friend to test you on the content.

**Student Name:**

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**Company:**

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**Tutor:**

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**ACADEMY  
LANGLEY**

# Using your Quest for Knowledge Booklet

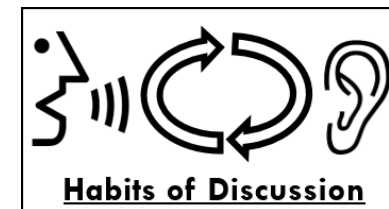
## Strategies to use your Quest for Knowledge effectively:

Strategy	Guidance
<b>Copying out</b> – writing out information from the Q4K yourself.	<i>This strategy is useful for working through information systematically; it has its limitations though.</i>
<b>Mind Mapping</b> – writing a topic or key idea, and surrounding it with linked ideas or information.	<i>This strategy is a nice way to break down information, and draw links between them.</i>
<b>Self-quizzing</b> – cover information that you feel is learned, before testing yourself.	<i>This is an extremely effective strategy – as you get more confident, you can ask more difficult questions of yourself!</i>
<b>Quizzing at home</b> – parents/carers relatives take key information, and quiz you on it.	<i>This is similar to self-quizzing; make sure that whoever quizzes you pays close attention to accuracy of your answers!</i>
<b>Blurting</b> – write a topic or key idea, before writing everything you can think of. Then, check to see what you know and have missed.	<i>This is a great way to find the gaps in your knowledge; give it a try!</i>
<b>Flash cards</b> – on a small piece of paper or card, write a question or term. On the back, write the answer or definition. Test yourself, or get tested by someone!	<i>Flash cards are particularly useful for remembering key terminology, vocab or dates.</i>

<p><b><u>Agreement Prompts:</u></b></p> <ul style="list-style-type: none"> <li>• “I agree with Jason because...”</li> <li>• “I was just thinking of something similar to Maria’s point about...”</li> <li>• “Grace’s point makes sense because...”</li> <li>• “I think that the strongest part of Taz’s response was...”</li> <li>• “Nelam’s point about ____ was important because it...”</li> </ul>	<p><b><u>Disagreement Prompts:</u></b></p> <ul style="list-style-type: none"> <li>• “I disagree with Chris because...”</li> <li>• “I think it’s more complex than what you’re saying, Alice, because...”</li> <li>• “I understand why you’d say that Naresh, but...”</li> <li>• “There’s another piece of evidence that contradicts Rosie’s point...”</li> <li>• “I see things differently to Shara because...”</li> <li>• “The evidence I’ve looked at suggests something different to Ben’s response...”</li> </ul>
<p><b><u>Add to Prompts:</u></b></p> <ul style="list-style-type: none"> <li>• “I’d like to elaborate on Jade’s idea...”</li> <li>• “I’d like to build on Kate’s point...”</li> <li>• “There’s another example of what Theo is talking about...”</li> <li>• “You could also add that...”</li> <li>• “The thing that I think is missing from Charlie’s point is...”</li> <li>• “I understand, and would like to add...”</li> <li>• “Is it fair to say that...”</li> <li>• “If we change Jess’ point just a little, we could add...”</li> <li>• “Alex’s point about _____ was good but I’d also add...”</li> </ul>	<p><b><u>Paraphrasing:</u></b></p> <ul style="list-style-type: none"> <li>• “Another way you may interpret that is...”</li> <li>• “Put another way, Brian is saying...”</li> <li>• “So Nyasha is saying that...”</li> <li>• “It is fair to say that Chris believes...”</li> </ul>

# Habits of Discussion

## French



<u>Agreement Prompts</u>	<u>Disagreement Prompts</u>
<ul style="list-style-type: none"> <li>• “Je suis d’accord avec _____ parce que...” – I agree with _____ because...</li> <li>• “Je suis du même avis que...” – I am of the same opinion as...</li> <li>• “Sans doute ton point est vrai _____ parce que...” - There is no doubt that your point is true because...</li> <li>• “ Selon moi, ta idée est... convaincante/puissante/pertinente _____ parce que...” – In my opinion, your idea is... Convincing/powerful/relevant because...</li> <li>• “Je prends le parti de _____ parce que...” – I take the side of _____ because...</li> <li>• “J’abonde dans le sens de _____ parce que...” – I agree wholeheartedly with...</li> <li>• “J’accepte sans équivoque l’avis de _____ parce que...”</li> </ul>	<ul style="list-style-type: none"> <li>• “Je ne suis pas d’accord avec...” – I disagree with...</li> <li>• “Je pense que c’est plus compliqué/complexe que ce que tu as dit _____ parce que...” – I think that it is more complicated/complex than what you have said</li> <li>• “Je comprends ce que tu veux dire _____ mais...” - I understand what you are trying to say but...</li> <li>• “J’ai un avis différent à _____ car...” – I am of a different view to _____ as...</li> <li>• “Je suis désolé(e) _____ mais à mon avis...” – I am sorry but in my opinion...</li> <li>• “Je suis contre le point de _____ parce que...” – I am against _____’s point because...</li> <li>• “Le point de _____ ne dépasse pas la surface des choses parce que...” _____’s point skims the surface because...</li> <li>• Je refute le point de _____ parce que... I reject this point because...</li> <li>• Je condamne nettement le point de _____ parce que... - I condemn outright _____’s point because...</li> <li>• Je crois que c’est tout le contraire – I believe that exactly the opposite is true</li> <li>• Je suis (fermement) opposé(e) à l’avis de _____ parce que... - I am firmly opposed to _____’s opinion because</li> </ul>
<u>Add to Prompts</u>	<u>Paraphrasing</u>
<ul style="list-style-type: none"> <li>• “En plus, on pourrait dire que...” – In addition, one could say that...</li> <li>• “Le point de _____ était vrai mais je voudrais ajouter quelque chose...” - _____’s point was true but I would like to add something...</li> <li>• “En cela s’ajoute”... - In addition there is...</li> <li>• “Par ailleurs, Je voudrais dire que”... - Furthermore, I would like to say that...</li> </ul>	<ul style="list-style-type: none"> <li>• “En d’autres termes _____ dit que...” – In other words, _____ said that...</li> <li>• “Cela revient à dire que” – This amounts to saying that...</li> <li>• “Pour résumer le point de _____...” – To summarise _____’s point...</li> <li>• “Autrement dit...”- In other words...</li> <li>• “Autant dire que...” – In other words...</li> <li>• “En fin de compte...” – At the end of the day...</li> <li>• J’en reviens toujours là...” I come back to the point that...</li> <li>• J’ai déjà constaté/dit que...” – I have already said that...</li> </ul>

<p><b><u>Agreement Prompts</u></b> <u>Respuestas de acuerdo</u></p> <ul style="list-style-type: none"> <li>• <b>Estoy de acuerdo con _____ porque...</b> I agree with _____ because...</li> <li>• <b>Tengo la misma opinión que...</b> I have the same opinion as...</li> <li>• <b>No hay duda, tu punto de vista es verdad porque...</b> There is no doubt that your point is true because...</li> <li>• <b>En mi opinión, tu idea es convincente / poderosa / relevante porque...</b> In my opinion, your idea is convincing/powerful/relevant because...</li> <li>• <b>El punto de vista de _____ tiene sentido porque...</b> _____ point makes sense because...</li> </ul>	<p><b><u>Disagreement Prompts</u></b> <u>Respuestas de desacuerdo</u></p> <ul style="list-style-type: none"> <li>• <b>No estoy de acuerdo con _____</b> I disagree with _____</li> <li>• <b>Pienso que eso es más complicado/complejo que lo que has dicho porque...</b> I think that it is more complicated/complex than you have said because...</li> <li>• <b>Entiendo lo que dices pero...</b> I understand what you are trying to say but...</li> <li>• <b>Lo siento pero en mi opinión...</b> I am sorry but in my opinion...</li> <li>• <b>Estoy en contra de _____ porque...</b> I am against _____'s point because...</li> <li>• <b>Veo las cosas diferentes a _____ porque...</b> I see things differently to _____ because...</li> </ul>
<p><b><u>Add to Prompts</u></b> <u>Añadimos las respuestas</u></p> <ul style="list-style-type: none"> <li>• <b>Además, puedo decir que...</b> In addition, I could say that...</li> <li>• <b>El argumento de _____ era verdad pero me gustaría añadir algo...</b> _____’s argument was true but I would like to add something...</li> <li>• <b>Además, hay...</b> Also, there is...</li> <li>• <b>Entiendo, y me gustaría añadir...</b> I understand, and would like to add...</li> </ul>	<p><b><u>Paraphrasing</u></b> <u>Parafrasear</u></p> <ul style="list-style-type: none"> <li>• <b>En otras palabras _____ diría que...</b> In other words, _____ said that...</li> <li>• <b>Así que _____ esta diciendo que...</b> So _____ is saying that...</li> <li>• <b>Para resumir el punto de vista de _____...</b> To summarise _____’s point...</li> <li>• <b>En otras palabras...</b> In other words...</li> </ul>



## Quest for Knowledge - Assessment Cycle One - English

### Big Question: How Do I Craft Texts?

<u>Language</u>	<u>Definition</u>	<u>Fiction/ Non-Fiction</u>
<b>Simile</b>	Comparing two things with as or like.	<b>F/NF</b>
<b>Metaphor</b>	Direct comparison, without the use of as or like.	<b>F/NF</b>
<b>Personification</b>	Human characteristics given to non living things/objects	<b>F/NF</b>
<b>Imagery</b>	Highly descriptive/figurative language	<b>F/NF</b>
<b>Triplet</b>	A set of three adjectives, verbs or adverbs.	<b>F/NF</b>
<b>Repetition</b>	Repeating a word or phrase.	<b>F/NF</b>
<b>List</b>	Four or more words/ phrases in a row.	<b>F/NF</b>
<b>Pathetic Fallacy</b>	Weather establishes/creates mood/tone	<b>F</b>
<b>Semantic Field</b>	Group of words linking to one topic.	<b>F/NF</b>
<b>Rhetorical Question</b>	A question that requires no answer.	<b>NF</b>
<b>Emotive language</b>	Language that evokes an emotional response.	<b>NF</b>
<b>Statistics</b>	Numerical data.	<b>NF</b>
<b>Anecdote</b>	A short description of an account of an event.	<b>NF</b>
<b>Epicrisis</b>	Famous quote.	<b>NF</b>
<b>Hyperbole</b>	Extreme exaggeration.	<b>NF</b>

<u>Word Class</u>	<u>Definition</u>
<b>Noun</b>	A word that represents a place, person or object.
<b>Adjective</b>	A word that describes a noun.
<b>Verb</b>	A word that describes an action.
<b>Adverb</b>	A word that describes a verb (usually ends in ly).
<b>Pronouns</b>	Words that replace nouns for an individual/ a group of people.

### Non-Fiction Writing

<u>Term</u>	<u>Definition</u>
<b>Ethos</b>	Appealing to community values/ morals/ ethics.
<b>Pathos</b>	Appealing to an audience's emotions.
<b>Logos</b>	Appealing to logic/reasoning.

## Quest for Knowledge - Assessment Cycle Two - English

### Big Question: What Is The History Of English?

<u>Method</u>	<u>Definition</u>
<b>Animal Imagery</b>	Giving non-animal/ objects animal characteristics.
<b>Symbolism</b>	An image which represents a hidden deeper meaning.
<b>Motif</b>	Reoccurring symbol/image
<b>Allusion</b>	A reference to an event, person, myth etc. that is well known.
<b>Allegory</b>	A narrative with a hidden meaning (often moral, political or religious).
<b>Foreshadowing</b>	A hint at a later event.
<b>Contrast</b>	Two different ideas/ images.

<u>Key Terms: Form</u>	
<b>Tragic Hero</b>	Main character; tragic flaw.
<b>Tragedy</b>	A genre of drama based on human suffering/downfall.

<u>Criteria: Tragic Hero</u>
High status.
Audience must view him as admirable/ worthwhile.
Hamartia= tragic flaw that leads to downfall.
The tragic hero suffers internally and externally.
Anagnorisis: delayed recognition of mistakes.
Peripeteia: a sudden reversal of fortune/ circumstance.
Must die.



**Quest for Knowledge - Assessment Cycle Three - English**  
**Big Question: How Has Shakespeare Influenced Literature?**

<b><u>Background Information</u></b>	
<b>The Divine Right of Kings</b>	The belief that a King's authority comes from God.
<b>Regicide</b>	The killing of a monarch; regarded as a mortal sin.
<b>The Natural Order</b>	Hierarchy: God— State— Man— Woman— Nature.
<b>Patriarchal Society</b>	A system of society controlled/ dominated by men.
<b>Stock Character</b>	Stock characters represent specific stereotypes.
<b>Archetype</b>	A typical example of a type of character, setting or story pattern.

<b>Form</b>	The 'type' or genre of a text. e.g., A tragedy/comedy.
<b>Language</b>	The words and images used. e.g., Metaphor or simile.
<b>Structure</b>	The way a text is organised. E.g., soliloquys/dialogue.

<b><u>Shakespearean Plays</u></b>	
<b>Tragedy</b>	A genre of drama based on human suffering/downfall.
<b>History</b>	A genre of drama based on historical events (dramatized); social strata; social commentary.
<b>Comedy</b>	A genre of drama based on idyllic settings; fate and supernatural; reason vs. emotion; reconciliation and mistaken identity.

**Quest for Knowledge – Assessment Cycle Four – English**  
**Big Question: How Does Poetry Inform Our World View?**

<b><u>Form</u></b>	<b><u>Definition</u></b>
<b>Ballad</b>	A poem that tells a story.
<b>Elegy</b>	A poem of serious reflection. It usually expresses grief, sadness or loss.
<b>Free Verse</b>	A poem that has no regular rhythmic pattern or rhyme scheme.
<b>Lyric</b>	A poem that explores emotion and feeling. It is songlike in its structure.
<b>Sonnet</b>	A 14-line poem with a formal rhyme scheme.

<b><u>Structure</u></b>	<b><u>Definition</u></b>
<b>Caesura</b>	A pause in a line of poetry, marked by punctuation.
<b>Enjambement</b>	The continuation of a line (no punctuation).
<b>Rhyming Couplet</b>	A pair of lines that rhyme.
<b>Stanza</b>	A verse (a ‘paragraph’).

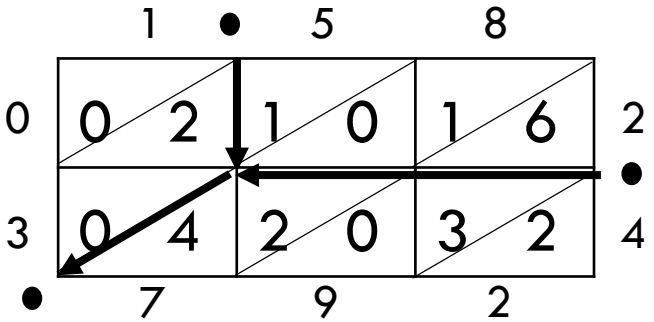
<b><u>Wider Information</u></b>	<b><u>Additional Information</u></b>
<b>Immigration</b>	Moving to a foreign country.
<b>Oppression</b>	The abuse of power.
<b>Slave Trade</b>	The selling and transport of human beings as slaves by European countries.
<b>Holocaust</b>	The killing of civilians (especially Jews) by Nazis during World War Two.
<b>The Windrush Generation</b>	Caribbean immigrants who emigrated from Jamaica to England in 1948.

Quest for Knowledge – Assessment Cycle One – Maths

Big Question: How Can We Calculate Efficiently?

Key Term	Essential Knowledge												
Integer	A whole number (including negatives and zero).												
Comparing Values	Greater than: > Less than: < Equal to: = Not equal to: ≠ Approximately equal to: ≈												
Odd Numbers	Integers that are <b>not</b> multiples of 2 (end in 1, 3, 5, 7 or 9).												
Even Numbers	Integers that are multiples of 2 (end in 0, 2, 4, 6 or 8).												
Rounding	Round up if the following digit is 5 or more. Round down if the following digit is less than 5.												
Significant Figures	Start counting from the first non-zero digit.												
Place value	<table><tr><td></td><td></td><td></td><td>Tenths</td><td>Hundredths</td><td>Thousandths</td></tr><tr><td>Tens</td><td>Units</td><td>●</td><td><math>\frac{1}{10}</math></td><td><math>\frac{1}{100}</math></td><td><math>\frac{1}{1000}</math></td></tr></table>				Tenths	Hundredths	Thousandths	Tens	Units	●	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
			Tenths	Hundredths	Thousandths								
Tens	Units	●	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$								
Standard Form	<ul style="list-style-type: none"><li>Number between 1 and 10 (not including 10);</li><li>× 10;</li><li>Power is an integer.</li></ul> <div>9.401 × 10<sup>-4</sup> 4.8 × 10<sup>7</sup></div>												
Sum/Total	The result when numbers are added together.												
Difference	The result when one number is subtracted from from another.												
Product	The result when numbers are multiplied together.												
Evaluate	Find the value; work out.												
Perimeter	Distance around the <i>outside</i> of a shape.												
Right Angle	90°.												
Angles on a Straight Line	Add up to 180°.												
Angles Around a Point	Add up to 360°.												
Angle in a Triangle	Add up to 180°.												
Interior Angles	Angles inside a shape.												
Area	The amount of space inside a 2D shape (measured in squares).												
Units for Area	mm <sup>2</sup> , cm <sup>2</sup> , m <sup>2</sup> , km <sup>2</sup>												
Area of a Rectangle	length × width												
Area of a Triangle	$\frac{\text{base} \times \text{height}}{2}$												
Multiplying/Dividing Negatives	<table><tr><td>×/÷</td><td>+</td><td>-</td></tr><tr><td>+</td><td>+</td><td>-</td></tr><tr><td>-</td><td>-</td><td>+</td></tr></table>	×/÷	+	-	+	+	-	-	-	+			
×/÷	+	-											
+	+	-											
-	-	+											
Adding/Subtracting Negatives	<div><div>- -</div><div>Add</div><div><div>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10</div><div>Subtract</div><div><div>+ -</div><div>- +</div></div></div></div>												

**Quest for Knowledge – Assessment Cycle Two – Maths**  
**Big Question: How Can a Number be Presented?**

<u>Key Term</u>	<u>Essential Knowledge</u>
<b>Chinese Method</b>	<p>Put the numbers along the top and right hand side. Multiply each digit. Follow the lines for the position of the Decimal. For example <math>1.58 \times 2.4 = 3.672</math></p> 
<b>Multiplying Decimals</b>	<p>Multiply each decimal by a power of 10 so as to work with integers. Divide by the same powers of 10 for the answer.</p>
<b>Dividing Decimals</b>	<p>Multiply both numbers by the same power of 10 until the one you are dividing by is an integer then do the division.</p>
<b>Index Form</b>	$5 \times 5 \times 5 = 5^3$ <p>Index/Exponent Base</p>
<b>Power/Index</b>	Number of times the base is multiplied by itself.
<b>Anything to the Power Zero</b>	Is equal to one ( $6^0 = 1$ ).
<b>Area of a Square</b>	$\text{length}^2$
<b>Multiplying With the Same Base</b>	Add the powers: $4^3 \times 4^5 = 4^8$
<b>Dividing With the Same Base</b>	Subtract the powers: $\frac{6^{10}}{6^2} = 6^8$
<b>Raising a Power to a Power</b>	Multiply the powers: $(9^2)^4 = 9^8$
<b>Square (Operation)</b>	Raise a number to the index of 2.
<b>Cube (Operation)</b>	Raise a number to the index of 3.
<b>First 15 Square Numbers</b>	1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225
<b>First 5 Cube Numbers</b>	1, 8, 27, 64, 125
<b>Square Root <math>\sqrt{\quad}</math></b>	<p>Inverse of square. <math>\sqrt{64} = 8</math> because <math>8^2 = 64</math></p>
<b>Cube Root <math>\sqrt[3]{\quad}</math></b>	<p>Inverse of cube. <math>\sqrt[3]{27} = 3</math> because <math>3^3 = 27</math></p>
<b>Volume</b>	Measure of how much 3D space an object occupies.
<b>Volume of a Cube</b>	$l^3$ (length cubed)
<b>Units for Volume</b>	$\text{mm}^3, \text{cm}^3, \text{m}^3, \text{km}^3, \text{ml}$ and litres.
<b>Order of Operations (BIDMAS)</b>	<ul style="list-style-type: none"><li>• Brackets</li><li>• Indices</li><li>• Division/<b>M</b>ultiplication</li><li>• Addition/<b>S</b>ubtraction</li></ul>
<b>Inverse Operations</b>	<p>Addition <math>\leftrightarrow</math> Subtraction Multiplication <math>\leftrightarrow</math> Division Powers <math>\leftrightarrow</math> Roots</p>
<b>Divisibility Test for 3</b>	Digits add up to a multiple of 3.
<b>Divisibility Test for 9</b>	Digits add up to a multiple of 9.
<b>Estimate a Calculation</b>	Find an approximate value of a calculation by rounding each value (usually to 1 significant figure).

Quest for Knowledge – Assessment Cycle Three – Maths

Big Question: How Can We Break Up a Number?

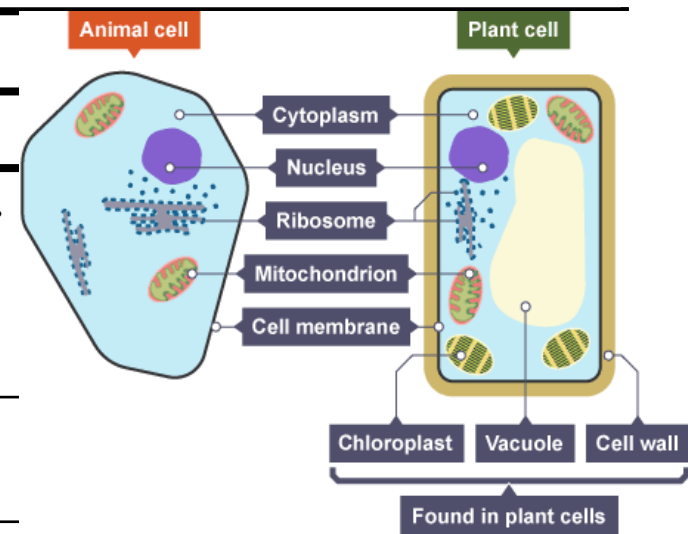
Key Term	Essential Knowledge
Prime Number	An integer with exactly 2 factors, 1 and the prime number itself.
First 10 Prime Numbers	2, 3, 5, 7, 11, 13, 17, 19, 23, 29
Highest Common Factor (HCF)	The largest number that is a factor of each number. HCF of 12 and 18 is 6.
Factor	An integer that divides exactly into another integer with no remainder. 5 and 3 are factors of 15 because $15 \div 5 = 3$
Multiple	Numbers that appear in another number's times table. These are infinite. $5 \rightarrow 5, 10, 15, 20...$
Lowest Common Multiple (LCM)	The first number that is a multiple of each number. $2 \rightarrow 2, 4, 6, 8...$ $3 \rightarrow 3, 6, 9...$ LCM is 6.
Fraction	<div><div><div>2</div><div>5</div></div><div><div>Numerator: number of parts.</div><div>Denominator: total number of equal parts the whole is divided into.</div></div><div><div></div><div></div><div></div><div></div><div></div></div></div>
Proper Fraction	Numerator is smaller than the denominator. $\frac{3}{8}$
Improper Fraction	Numerator is greater than the denominator. $\frac{13}{7}$
Mixed Number	An integer plus a proper fraction. $2\frac{3}{4} = 2 + \frac{3}{4}$
Adding and Subtracting Fractions	Ensure the fractions have a common denominator; add/subtract the numerators; denominators stay the same.
Multiplying Fractions	Multiply the numerators; multiply the denominators.
Fractions Equivalent to 1	Numerator and denominator are equal. $\frac{51}{51} = 1$
Simplifying a Fraction	Cancel out all common factors that divide to make 1. $\frac{18}{30} = \frac{6 \times \cancel{3}}{10 \times \cancel{3}} = \frac{6}{10} = \frac{3 \times \cancel{2}}{5 \times \cancel{2}} = \frac{3}{5}$
Equivalent Fractions	Two fractions that represent the same proportion of the whole: $\frac{2}{5} = \frac{4}{10}$ <div><div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div></div>
Dividing Fractions	Ensure the fractions have a common denominator; divide the numerators; divide the denominators (which will give you a denominator of 1 as they are equal). $\frac{3}{5} \div \frac{4}{5} = \frac{3 \div 4}{5 \div 5} = \frac{3 \div 4}{1} = \frac{3}{4}$

**Quest for Knowledge – Assessment Cycle Four – Maths**  
**Big Question: How Can One Whole Be Shared Out?**

Key Term	Essential Knowledge
Percentage	A number expressed as a fraction over 100. $\frac{47}{100} = 47\%$
Converting Between Fractions, Decimals and Percentages	<p>Divide the numerator by the denominator</p> <p><math>\frac{50}{100} = \frac{1}{2}</math> Fraction</p> <p>0.5 Decimal</p> <p>50% Percentage</p> <p>Put over 100 and simplify</p> <p><math>\times 100</math></p> <p><math>\div 100</math></p>
Calculate 1%	Divide by 100: 1% of 350 = 3.5
Calculate 10%	Divide by 10: 10% of 24 = 2.4
100%	The whole amount: 100% of 137 = 137
Calculate 50%	Divide by 2: 50% of 18 = 9
Calculate 25%	Divide by 4: 25% of 40 = 10
“Percentage/Fraction of”	Multiply: 15% of 200 = $\frac{15}{100} \times 200$
Percentage Change	$\frac{\text{New value} - \text{Original value}}{\text{Original value}} \times 100$
Interest	A percentage fee paid when money is borrowed.
Ratio	How much of one thing there is compared to another. 3 : 5 means “3 parts to 5 parts”. Ratios always use equal parts.
Bar Model	A pictorial representation of a problem where boxes are used to represent the known and unknown quantities. Here is a ratio of 5:3 as a bar model: 
Ratio in its Simplest Form	All terms are the smallest possible integer with no common factors other than 1.
Fractions/Ratios	<p><math>\frac{3}{4} \rightarrow 3 : 4 \leftarrow \frac{4}{7}</math></p>
Milli-	Thousandth (0.001)
Centi-	Hundredth (0.01)
Kilo-	Thousand (1000)
Metric Length Conversions	1cm = 10mm; 1m = 100cm; 1km = 1000m.
Metric Weight Conversion	1kg = 1000g
Metric Volume Conversion	1 litre = 1000ml; 1 ml = 1 cm <sup>3</sup>
Directly Proportional	Both quantities increase at the same rate. If you double one, you double the other.
Inversely Proportional	One quantity increases while the other decreases at the same rate. If you double one, you half the other.

## Quest for Knowledge – Assessment Cycle One - Science

Biology Big Question: What are the building blocks of life?	
Key Words & Facts	Description
Plant and Animal Cells	Animal cells contain: <b>nucleus, cell membrane, cytoplasm, mitochondria</b> . Plant cells contain the same organelles as an animal cell however they also contain a <b>cell wall, vacuole and chloroplasts</b> .
Microscopes	The main features of a microscope include; stage, objective lens, eyepiece lens, base, light, arm, fine focus, coarse focus.
Specialised Cell	A specialised cell is where a cell has been <b>differentiated</b> to carry out a particular function. Examples of specialised cells include; red blood cell, nerve cells, egg cells, root hair cells and sperm cells.
Organ systems	<p><b>Cells</b> – The building blocks of life.</p> <p><b>Tissues</b> – A group of similar cells working together.</p> <p><b>Organs</b> – Groups of tissues working together to perform a certain function.</p> <p><b>Organ systems</b> – A group of organs working together.</p> <p><b>Organism</b> – A group of several organ systems working together.</p>
Skeleton	The skeleton has 4 main functions; <b>protection, support, movement and blood cell production</b> .
Joints	Types of joints: <b>ball and socket, fixed, hinge, pivot</b> .
Diffusion	Diffusion is the movement of substances from <b>a high concentration to a low concentration</b> .



Chemistry Big Question: What is everything made up of?	
Key Words & Facts	Description
Element	An element is a substance made up of only <b>one type of atom</b> e.g. gold or oxygen.
Compound	A compound is a substance made up of <b>two or more different elements</b> these atoms are <b>chemically bonded</b> e.g. water.
Mixture	A mixture contains <b>two or more substances which are not chemically bonded together</b> and can be physically separated e.g. iron and sulphur can be separated using a magnet.
Periodic Table	A table of chemical elements arranged by atomic number. There are <b>118 known elements</b> .
Solid	Solids are strong substances where particles are held together <b>closely</b> .
Liquid	Liquids contain particles which are held closely together, they <b>break apart easily</b> therefore <b>cannot hold their own shape but they take the shape of the container</b> .
Gas	Gases contain particles which move around very quickly, they have a lot of <b>space</b> between them and they <b>fill the shape of the container</b> they're in.
Heating and Cooling	<p>Solid → Liquid = <b>Melting</b></p> <p>Liquid → Gas = <b>Boiling /Evaporation</b></p> <p>Gas → Liquid = <b>Condensation</b></p> <p>Liquid → Solid = <b>Freezing</b></p>

Physics Big Question: What role does energy have in our universe?	
Key Words & Facts	Description
Energy Stores	<p>8 different types of energy store include; light, heat (thermal), kinetic (movement), elastic, sound, gravitational, electrical and chemical.</p> <p>Law of Energy Conservation states that energy <b>cannot be created or destroyed</b>, it can only be <b>transferred</b>.</p>
Thermal Power Station	<p>Coal/gas is burnt, thermal energy is transferred, the thermal energy then heats water, the steam produced turns a turbine (kinetic energy). The turbine is attached to an electric generator, the electricity is then sent via the national grid to your home.</p> <p>Chemical → Thermal; Thermal → Kinetic; Kinetic → Electrical</p>
Renewable vs. Non-Renewable Energy	<p>Renewable energy - Energy from natural resources that is <b>always being replenished/remade</b>, it <b>never runs out</b>. For example, crops grown to make biofuel.</p> <p>Non-renewable energy - Energy from natural resources that <b>cannot be easily replenished/remade</b>, can <b>run out</b>. For example, coal and oil.</p>



## Quest for Knowledge – Assessment Cycle Two - Science

Biology: Why is light so important for plants and animals?	
<u>Key Words &amp; Facts</u>	<u>Description</u>
The Eye	<p><b>Pupil:</b> The pupil is the black dot in the centre of your eye and allows light to enter.</p> <p><b>Iris:</b> This is your eye colour, it is a muscle that controls the size of your pupil and the amount of light that enters your eye.</p> <p><b>Lens:</b> The lens is behind the iris and pupil. It works with your cornea to focus the light that enters your eye, much like a camera.</p> <p><b>Retina:</b> Located at the back of the eye, the retina is a layer of tissue that transforms the light coming into your eye into electrical signals. These signals are sent to the brain where they are recognized as images.</p> <p><b>Optic nerve:</b> This part of your vision works as the connecting element between the retina and the brain.</p>
Photosynthesis	<p>Photosynthesis is the process by which plants use <b>sunlight, water, and carbon dioxide to create oxygen and release energy in the form of sugar (glucose)</b>. Photosynthesis happens in the <b>leaves</b> of a plant.</p> <p style="text-align: center;">Carbon dioxide + water → glucose + oxygen.</p>
Light and Photosynthesis	<b>Light is needed</b> for photosynthesis. If light intensity is <b>lower</b> the rate of photosynthesis will <b>decrease</b> . We can measure the rate of photosynthesis by counting the number of bubbles released per minute.
Hypothesis	<b>Hypothesis - A hypothesis is an idea about how something works that can be tested using experiments.</b>
Independent Variable	The variable that is <b>changed</b> during an experiment.
Dependent Variable	The variable that is <b>measured</b> in an experiment.
Control Variable	A variable which must be kept the <b>same</b> .

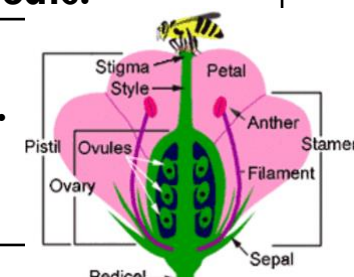
Chemistry: How are materials cycled on Earth?	
<u>Key Words &amp; Facts</u>	<u>Description</u>
Structure of the Earth	<p><b>Crust</b> - relatively thin and rocky.</p> <p><b>Mantle</b> - has the properties of a solid, but can flow very slowly.</p> <p><b>Outer core</b> - made from liquid nickel and iron.</p> <p><b>Inner core</b> - made from solid nickel and iron..</p>
Volcanoes	A volcano is an opening in the Earth's crust. It allows hot magma, ash and gases to escape from below the surface.
Types of Rock	<p><b>Igneous</b> – formed when magma (lava) cools.</p> <p><b>Sedimentary</b> – formed as layers of sediment are squashed together under huge pressure.</p> <p><b>Metamorphic</b> – formed when pre-existing rock is exposed to high heat and pressure.</p>
Rock Cycle	<p>The Earth's rocks are continually changing due to process such as <b>weathering, erosion and large earth movements</b>.</p> <p style="text-align: center;">Rock formation is dependent on variations of heat and pressure.</p>

Physics: What does light do?	
<u>Key Words &amp; Facts</u>	<u>Description</u>
Reflection	<p>When light reaches a mirror, it <b>reflects off</b> the surface of the mirror:</p> <p>The <b>incident ray</b> is the light going towards the mirror</p> <p>The <b>reflected ray</b> is the light coming away from the mirror</p> <p>The <b>law of reflection</b> states that the angle of incidence <b>equals</b> the angle of reflection, <math>i = r</math>.</p>
Refraction	<p>Light waves change speed when they pass across the boundary between two substances with a different <b>density</b>, such as air and glass.</p> <p>This causes them to change direction, an effect called <b>refraction</b>.</p> <p>At the boundary between two transparent substances:</p> <p style="padding-left: 40px;">the light slows down going into a denser substance;</p> <p style="padding-left: 40px;">the light speeds up going into a less dense substance, and the ray bends away from the normal.</p>
Light	<p><b>Primary</b> colours of light: <b>red, green and blue</b>.</p> <p><b>Secondary</b> colours of light: <b>yellow, cyan and magenta</b>.</p> <p>Objects that look white <b>reflect all</b> of the colours of the spectrum.</p> <p>Objects that look black <b>absorb all</b> of the colours of the spectrum.</p>

## Quest for Knowledge – Assessment Cycle Three - Science

### Biology: How do different organisms reproduce?

<u>Key Words &amp; Facts</u>	<u>Description</u>
<b>Human Reproduction</b>	Physical changes are called <b>puberty</b> . Puberty takes place between the ages of <b>9 and 14</b> in most people. Puberty usually takes place <b>earlier in girls than it does in boys</b> .
<b>Development of Foetus</b>	The foetus relies upon its mother as it develops. It needs <b>protection</b> against knocks, bumps and temperature changes; <b>oxygen and nutrients</b> (food and water). The developing foetus also needs its waste substances removing. The uterus and the amniotic fluid, a liquid contained in a bag, protect the foetus.
<b>Menstrual Cycle</b>	The menstrual cycle is <b>approximately a 28-day cycle</b> that prepares the female body for pregnancy. During the process, the lining of the uterus is prepared for pregnancy. If implantation of the <b>fertilised egg</b> into the uterus lining does not happen, the <b>lining is then shed. The cycle then repeats</b> .
<b>Plant Reproduction</b>	Flowering plants reproduce sexually through a process called <b>pollination</b> . The flowers contain <b>male sex organs called stamens and female sex organs called pistils</b> . Stamen consists of the <b>anther and filament</b> . Pistil consists of the <b>stigma, style, ovary and ovule</b> .
<b>Genetic Variation</b>	The nucleus contains <b>chromosomes</b> , chromosomes contain strands of <b>DNA</b> . <b>Variation</b> can be caused either by our <b>DNA (genetic) or by our surroundings (environmental)</b> . It can also sometimes be caused by both.
<b>Seed Dispersal</b>	Plants <b>disperse</b> their seeds in lots of different ways. Some seeds are <b>transported</b> by the wind and are shaped to float, glide or spin through the air. Plants growing near a river may use the flowing water to transport their seeds. Some seed pods are designed to <b>explode</b> and throw the seeds a good distance from the parent plant. Many plants also use <b>animals to carry</b> their seeds. This type of seed may have handy hooks which attach to an animal's fur. Alternatively, the plants might make tasty fruit to enclose the seeds, which <b>attract</b> animals to eat them.



### Chemistry: How can we separate mixtures?

<u>Key Words &amp; Facts</u>	<u>Description</u>
<b>Solubility</b>	<b>Solubility</b> is the <b>maximum mass of solute that dissolves in a certain volume of solvent</b> . A solute is a substance that can <b>dissolve in a liquid</b> . A solvent is a substance, normally a liquid that <b>dissolves another substance</b> .
<b>Filtration</b>	Filtration is when we take a mixture and pass it through a material that will separate part of it from the rest (often a liquid and a solid). The left over solid is called the <b>residue</b> . The left over liquid is called the <b>filtrate</b> .
<b>Distillation and Evaporation</b>	<b>Evaporation</b> is defined as the process of a <b>liquid changing into a gas</b> . <b>Distillation</b> is a separation technique used to <b>separate a solvent from a mixture</b> . For example, water can be separated from salt solution by distillation. Distillation involves boiling the mixture and then condensing the gas to produce a liquid.
<b>Chromatography</b>	<b>Chromatography</b> is a method for <b>separating dissolved substances from one another</b> . It works because some of the coloured substances dissolve in the solvent used better than others, so they travel further up the paper. The line where the coloured substance is placed is to be drawn in pencil.

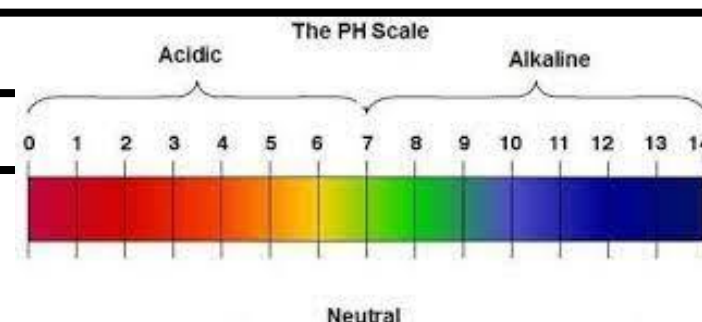
### Physics: How do electrical circuits work?

<u>Key Words &amp; Facts</u>	<u>Description</u>
<b>Electric Current</b>	Current is the <b>flow of electrons</b> around a circuit. It is measured in <b>amps</b> using an <b>ammeter</b> .
<b>Potential Difference</b>	Potential difference is the <b>energy transferred</b> to the bulb or component. Its measured in <b>volts</b> using a <b>voltmeter</b> .
<b>Resistance</b>	Resistance is a quantity that measures how the material <b>reduces the flow of electric current</b> . Resistance is measured in <b>Ohms (Ω)</b> .
<b>Series and Parallel Circuits</b>	Series – The <b>current is the same everywhere in a series circuit</b> . It does not matter where you put the ammeter, it will give you the same reading. Parallel – In a parallel circuit, different components are connected on <b>different branches of the wire</b> . In a parallel circuit, if a lamp breaks or a component is disconnected from one parallel wire, the components on different branches keep working. Unlike a series circuit, the lamps stay bright if you add more lamps in parallel.

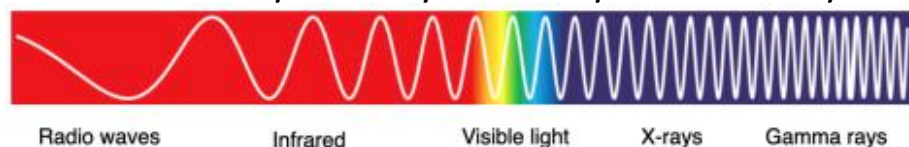
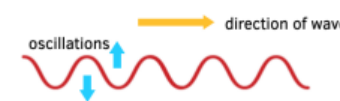
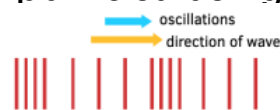
## Quest for Knowledge – Assessment Cycle Four - Science

Biology: What is the most important factor within an ecosystem?	
Key Words & Facts	Description
Food Chains and Food Webs	<p>A <b>food chain</b> is a diagram that shows what an organism eats. It also shows the <b>transfer of energy</b> between organisms.</p> <p>A food web is a set of <b>linked food chains</b>.</p> <p><b>Food webs show the feeding relationships of organisms</b> more realistically than food chains.</p> <p>Organisms in a food web depend on each other for survival. They are <b>interdependent</b>.</p>
Predator-Prey Relationships	<p>A <b>predator</b> is an animal that hunts, kills and eats other animals for food.</p> <p>A <b>prey</b> is an organism that predators kill for food.</p> <p>Predator/prey relationships can be illustrated in a food chain or food web.</p> <p>If the <b>prey population in an ecosystem grows, predator numbers will respond</b> to the increased food supply by <b>increasing</b> as well. <b>Growing predator numbers will eventually reduce the food supply</b> to the point where it can no longer sustain the predator population ... and so on.</p>
Distribution of Organisms	<p>The distribution of an organism is where that species is found within a habitat. Distribution can be investigated using a <b>quadrat</b>. The availability of light can impact distribution.</p>

Chemistry: How do different chemicals react?	
Key Words & Facts	Description
Acids and Alkalis	<p>The pH scale tells us how <b>acidic or alkaline</b> a substance is.</p> <p><b>Acids have a pH of 0-6 and Alkalis have a pH of 8-14.</b></p> <p><b>Neutral substances have a pH of 7.</b></p>
Indicators and pH Scale	<p><b>Universal indicator</b> changes colour to show the strength of an acid or alkali.</p> <p><b>Litmus paper</b> changes colour to identify if something is acid or alkali.</p>
Structure of the Atom	<p>Atoms contain <b>protons, neutrons and electrons</b>. The electrons are arranged in shells around the nucleus.</p> <p>The protons and neutrons are found in the <b>nucleus</b> at the centre of the atom.</p>
Metal + Oxygen	<p><b>Metals react with oxygen to form metal oxides.</b> This reaction is called <b>oxidation</b>.</p> <p><b>metal + oxygen → metal oxide</b></p> <p>An example is magnesium + oxygen → magnesium oxide</p>
Rusting	<p>A process in which iron and steel react with oxygen and water. There are several ways to prevent iron and steel rusting. Some of these work because they stop oxygen or water reaching the surface of the metal.</p> <p>These methods include:</p> <ul style="list-style-type: none"> <li><b>oiling</b> - for example, bicycle chains;</li> <li><b>greasing</b> - for example, nut and bolts;</li> <li><b>painting</b> - for example, car body panels;</li> <li>coating with a thin layer of plastic.</li> </ul>



Physics: What is the power of waves?	
Key Words & Facts	Description
Introduction to Waves	<p><b>Waves transfer energy.</b> There are two types of wave: <b>transverse and longitudinal</b>.</p> <p>Longitudinal waves have <b>compressions and rarefactions</b>; compressions are regions of high pressure due to particles being close together; rarefactions are regions of low pressure due to particles being spread further apart.</p> <p>Transverse waves have <b>peaks and troughs</b>.</p>
Sound Waves	<p>A vibration produces a sound wave.</p> <p><b>Sound waves are longitudinal.</b> The <b>oscillations</b> are in the same direction as the wave.</p> <p>Sound <b>cannot travel through empty space</b>, a vacuum, because there are no molecules to vibrate.</p> <p>Sound travels <b>faster through liquids and solids than it does through air and other gases</b>.</p>
Electromagnetic Spectrum	<p>Electromagnetic waves are <b>transverse waves</b> made up of electric and magnetic fields.</p> <p>Different electromagnetic waves carry different amounts of energy.</p> <p>The amount of energy carried by an electromagnetic wave depends on the wavelength: <b>the shorter the wavelength, the higher its energy</b>. The order of the electromagnetic spectrum is: <b>gamma ray; x-ray, ultraviolet; visible; infrared; microwave; radio</b>.</p>



## Quest for Knowledge – Assessment Cycle One and Two - History

### Big Question: What Were the Biggest Turning Points in England Between 1000 & 1250?

W	Key Content	Description
1	Witan	A council of noblemen and churchmen who advised the king and chose a new king when he died.
	Harold Godwinson	As Sub-Regulus and Earl of Wessex – he was the closest advisor to Edward the Confessor and richest man in England.
	Edgar Atheling	Edward the Confessor's great nephew and closest blood relative to the throne.
	William of Normandy	Powerful and ruthless Duke of Normandy who believed Edward the Confessor promised him the throne who believed he was promised the throne in the Embassy of 1064.
	Harold Hardrada	Related to Viking King of England Harthacnut – Led 15,000 Viking warriors.
2	185 miles	The distance Harold Godwinson marched in five days to lead the fight against Harald Hardrada.
	Fyrd	Part-time soldiers called up in time of war to defend their local area.
	14 <sup>th</sup> October 1066	The Battle of Hastings.
	Housecarls	Well trained professional Anglo-Saxon soldiers.
	Shield Wall	Common Medieval defensive tactic of linking shields to make attacking difficult.
3	Feudal System	The king owns all the land but lends it to those below him in return for loyalty, soldiers and tax.
	King	Top of the Feudal System, although later replaced by the Pope in Rome.
	Barons	Controlled large estates of land in return for loyalty and armies for the king.
	Knights	Controlled smaller areas of the barons' land in return for fighting in the barons' armies.
	Peasants	Did all the work and provided produce and taxes in return for protection from the knights.
	Motte	A man-made hill upon which many Norman castles were built.
	Bailey	A castle courtyard surrounded by a defensive wall.
	500	The number of castles built during William the Conqueror's reign.
4	Rebellion	The north of England was particularly difficult to control and rebellion broke out there in 1069.
	Edwin & Morcar	Brothers in Law of Harold Godwinson and powerful earls – often rebelled against William the Conqueror.
	60%	Percentage of the land in the north considered wasteland 20 years after the Harrying of the North.
	100 000	According to Orderic Vitalis, 100 000 people died in the Harrying of the North.
5	Archbishop of Canterbury	The most important bishop in Medieval England – had a lot of political power.
	Thomas Becket	Archbishop of Canterbury from 1162, until his murder on 29 <sup>th</sup> December 1170.
	Henry II	King of England between 1154 and 1189 and personal friend of Thomas Becket.
	Penance	A punishment intended to make up for a wrong.
	4	The number of knights who burst into Canterbury Cathedral and stabbed Thomas Becket to death.
6	Magna Carta	King subject to law, no free man to be locked up without trial by jury, Great Council to advise the king.
	King John	Nicknamed 'Lackland', he was an unpopular king who fought many unsuccessful wars.
	Runnymede	The barons forced King John to sign the Magna Carta at Runnymede.
	Robert Fitzwater	The elected leader of the barons.
8	Source	Evidence from the past, such as letters, diaries, photographs, as sources.
	SNOP	Source Content, Nature, Origins (Where and when is it from? Who created it) and Purpose (Why was it made?).
	Interpretation	When a historian writes their opinion of what happened in the past, it is an interpretation.
	Historiography	The study of interpretations of the past.
9	Local History	History in and around the area within a few miles of Q3 Academy Langley.
	National History	The history of the United Kingdom as a whole.

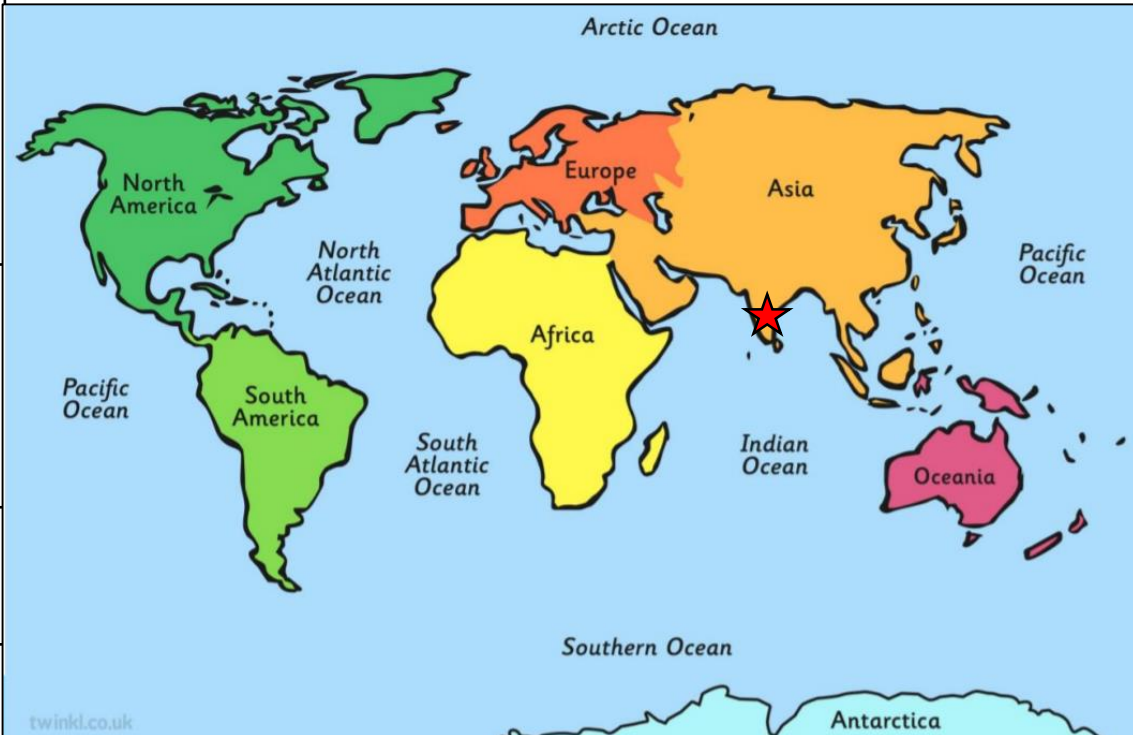


**Quest for Knowledge – Assessment Cycle Three and Four - History**  
**Big Question: What Was the Most Significant Change During the Renaissance?**

W	Key Content	Description
1	Black Death	Epidemic that arrived in England in 1348 and killed 1/3 of the population.
	Black Death Causes	Imbalance of the Four Humours; God; Alignment of planets; Miasma (bad airs).
	Flagellants	People who believed whipping themselves would make God stop the Black Death.
	Black Death Treatments	Rubbing the victims' body with a chicken; Leeches; Praying; Flagellation.
	Renaissance	The new age of reason and logic which emerged after the Dark Ages.
2	Printing Press	Johannes Gutenberg invented a printing press in 1440 which could print 1000 pages a day.
	Galen	Important physician from Roman times whose inaccurate ideas about medicine persisted for a long time and went unchallenged.
	Vesalius	Anatomist who, in 1543, illustrated a book on human anatomy called On the Fabric of the Human Body which was accurate and contradicted Galen.
	Four Humours	Theory which states that four substances in the body caused illness if they were out of balance.
3	Letters of Indulgence	A document you bought from the Church to reduce the time spent in purgatory.
	Reformation	Renaissance ideas about reforming the Catholic Church.
	Catholic	The Church based in Rome and headed by the Pope, and believers of this church.
	Protestant	Churches inspired by Luther and set up in opposition to Catholicism, and believers of such churches.
	Transubstantiation	The Catholic idea that bread and wine taken at mass transforms into Jesus' blood and flesh.
	95 Thesis or Points	Martin Luther nailed 95 Points to the church door in Wittenberg.
	Purgatory	Catholics believe there is a place between death and heaven where you spend some time waiting and suffering before being given entry to heaven.
	Heresy	To say or think things which go against a religion. This would make you a heretic.
4	Six Articles	1539 law which returned many Catholic practices to the English Church.
	Act of Supremacy 1534	Law which made Henry head of the church in England, instead of the Pope.
	Excommunication	This means to be excluded from the Catholic Church and heaven.
	Henry's Great Matter	Henry's need to have a son – which began the English Reformation.
	1536	Henry VIII orders the Act of Suppression which begins the Dissolution of the Monasteries.
5	Valor Ecclesiasticus	Thomas Cromwell orders a survey into the wealth and corruption of the Church in 1536.
	Monastery	Religious buildings which would pray for the spiritual health of the community and provide charity (alms), health and hospitality.
	Monks & Nuns	Monks & nuns chose a holy life of poverty (no money), chastity (no sex) and obedience.
6	Act of Suppression	1536 act which began the <b>Dissolution of the Monasteries</b> .
	Pilgrimage of Grace	An uprising mainly in the north of England against Henry's English Reformation.
	Robert Aske	Leader of the 1536 Pilgrimage of Grace.
	24 Articles	The demands of the Pilgrimage of Grace.
	27 000	Estimated size of the Pilgrimage when it faced the Duke of Norfolk at Doncaster.
8	Source	Evidence from the past, such as letters, diaries, photographs, as sources.
	SNOP	Source Content, Nature, Origins (Where and when is it from? Who created it) and Purpose (Why was it made?).
	Interpretation	When a historian writes their opinion of what happened in the past, it is an interpretation.
	Historiography	The study of interpretations of the past.
9	Local History	History in and around the area within a few miles of Q3 Academy Langley.
	National History	The history of the United Kingdom as a whole.

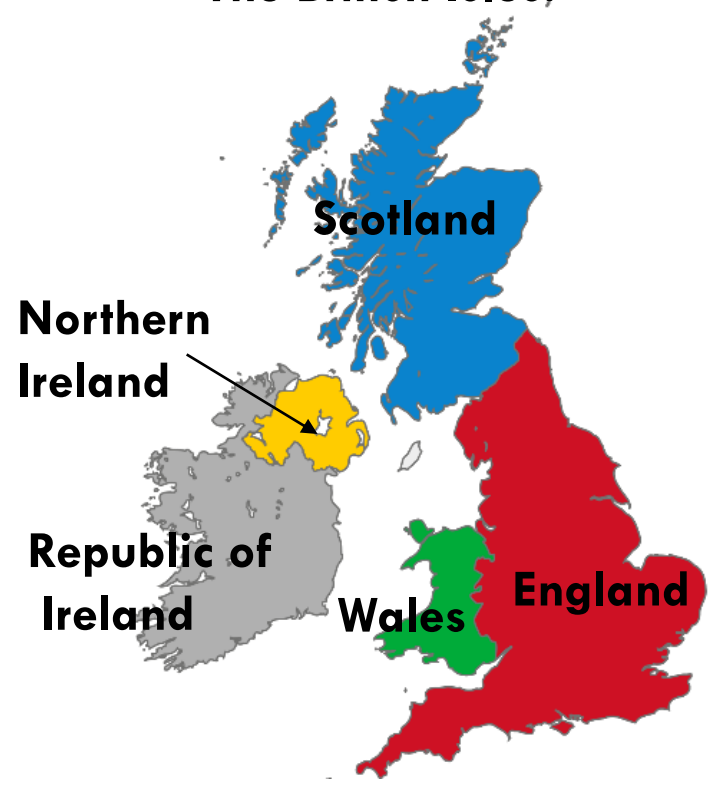
# Quest for Knowledge – Assessment Cycle One and Two - Geography

## Big Question: What Are Fantastic Places?

1	Continents	A continent is a large land mass. There are 7 in the world; Africa, Asia, Antarctica, Europe, North America, South America and Oceania.	
2	Oceans	An ocean is a large expanse of water. There are 5 in the world; Indian, Pacific, Atlantic, Southern and Arctic Ocean.	
3	Physical Geography	Physical geography is the study of natural environments and landforms.	
4	Human Geography	Human geography is the study of societies, cultures and economies.	
5	Environmental Geography	Environmental geography is the study of how humans impact the Earth.	
6	Compass	A compass is a tool for finding direction. The four main points of the compass are north, east, south and west.	
7	Grid References	On a map there is a grid of squares that helps the map-reader to locate a place. There are four figure grid references and six figure grid references.	
8	Contour Lines	Contours are brown lines drawn on maps that join places of the same height. They can be used to see the relief (height and shape) of the land.	
9	Scale	Scale refers to the relationship (or ratio) between distance on a map and the actual distance on the ground.	
10	India	A country in southern Asia. It has the world's biggest population.	
11	Latitude	Lines of latitude are used to find out how far north or south a place is. These lines run parallel to the Equator.	
12	Longitude	Lines of longitude are used find out how far east or west a place is. These lines run from the top of the Earth to the bottom, they meet at the north and south poles.	
14	Social	Social refers to people, for example education and healthcare.	
15	Economic	Economic refers to money, for example jobs and businesses.	
16	Environmental	Environmental refers to the natural area or landscape, for example, ensuring that toxic waste is cleared up.	
17	Population	Population is the number of people in a certain area.	
18	Population Change	Population numbers change over time, influenced by births, deaths and migration into or out of the area.	
19	Economy	This is the part of society that creates wealth, it involves the way in which goods and services are sold and used in a country or area.	
20	Economic Development	Economic development is the increase in the standard of living as a result of countries becoming richer.	
21	Migration	Migration is the movement of people from one permanent location to another.	
22	Rural	Areas which are less densely populated, also considered as the countryside.	
23	Urban	An urban area is a built-up area such as a town or city, with higher population density.	
24	Urbanisation	Urbanisation is the increase in the proportion of people living in towns and cities.	
25	Industry	Industry is any economic activity which creates jobs and generates income. All industry is made up of four sectors: primary (extracting raw materials), secondary (manufacturing raw materials into products), tertiary (providing a service) and quaternary (hi-tech) industry.	

## Quest for Knowledge – Assessment Cycle Three and Four - Geography

### Big Question: What Makes Britain Beautiful?

1	British Isles	The British Isles lie off the north-western coast of continental Europe. They include two main islands, Great Britain and Ireland; and many smaller islands off their coasts.	<b>The British Isles;</b> 
2	United Kingdom	The United Kingdom (U.K.), consists of England, Scotland, Wales and Northern Ireland.	
3	Great Britain	Great Britain is the official collective name of England, Scotland and Wales and their associated islands.	
4	Geology	Geology is the study of the physical features and history of Earth.	
5	Igneous Rock	Igneous rocks are formed from magma (molten rock) that has cooled and solidified.	
6	Metamorphic Rock	Metamorphic rocks are formed from other rocks that are changed because of heat or pressure.	
7	Sedimentary Rock	Sedimentary rocks are formed from the broken remains of other rocks that are compressed and become joined together.	
8	Weathering	Weathering is the breakdown of rocks at the Earth's surface, by the action of rainwater, extremes of temperature and biological (plant or animal) activity.	
9	Erosion	Erosion is the wearing away of rock and soil. There are four different types of erosion that may occur in a river: hydraulic action, abrasion, attrition and solution.	
10	Transportation	The movement of sediment which is carried downstream or across oceans. There are four different types of transportation: suspension, saltation, solution, and traction.	
11	Deposition	When material that has been weathered, eroded and transported is dropped in a new location.	
12	Glacier	A glacier is a slowly moving river of ice, formed by the build up and compaction of snow on mountains or near the poles.	
13	Corrie	A corrie is an armchair shaped hollow high on a mountain with steep back and side walls.	
14	Air Mass	An air mass is a large volume of air which travels from one area to another.	
15	Prevailing Wind	Prevailing winds are the dominant wind direction in an area. In the UK it is south west.	
16	River Source	The source is where the river begins. This is usually a location situated on hills or mountains.	
17	River Mouth	The mouth of a river is the place where a river enters a sea, ocean or lake.	
18	Waterfall	Waterfalls often form in the upper course of a river where it flows over different bands of rock. It erodes soft rock more quickly than hard rock and this may lead to the creation of a waterfall, a sudden vertical drop in the river channel.	
19	Gorge	A steep-sided valley is left where the waterfall once was, it is formed as the waterfall retreats upstream.	
20	Plunge Pool	A plunge pool is found at the bottom of a waterfall. It is formed by erosion.	
21	Meander	A meander is a bend in the river. Meanders usually occur in the middle or lower course, and are formed by erosion and deposition.	
22	Population Density	The number of people living in a certain area per square kilometre (km <sup>2</sup> ).	
23	Internal Migration	The movement of people from one region of a country to another region.	
24	Population Pyramid	Population pyramids are graphs that show population structures, for example, how many males and females of different age groups are in the population in each place.	



## Quest for Knowledge – Assessment Cycle One and Two – R.S

### Big Question: What Are the Key Beliefs That Underpin the Christian and Muslim faith?

	<u>Key Words</u>	<u>Description</u>
1	<b>Covenant</b>	An agreement or promise God makes with humans.
2	<b>Abraham</b>	Abraham was willing to sacrifice his son, Isaac, and was rewarded by God for his loyalty with descendants and land.
3	<b>Descendant</b>	A descendant is a person born in a direct biological line. For example, a person's children, grandchildren, and great-grandchildren are their descendants.
4	<b>Resurrection</b>	Jesus rose from the dead three days after his death.
5	<b>Incarnation</b>	The idea of God becoming flesh, as Jesus.
6	<b>Prophecy</b>	A prediction or estimation about the future. Jesus' birth was foretold in a prophecy.
7	<b>Divine</b>	Holy or religiously special. Christians believe Jesus showed a divine nature.
8	<b>Set Prayer</b>	These are traditional prayers that are always the same and never change.
9	<b>Holy Week</b>	The last week of Jesus' life. Jesus shared a last meal with his disciples on Maundy Thursday. He was crucified on Good Friday by the Romans. Christians believe he was resurrected on Easter Sunday to show the triumph of good over evil.
10	<b>Salvation</b>	Christians believe Jesus died to save them of their sins and to grant them eternal life in Heaven.
11	<b>Atonement</b>	Humans reconciling and restoring their relationship with God.
12	<b>Sacrament</b>	A religious act whereby Christians believe they receive the grace or gift of God.
13	<b>Worship</b>	Christians show praise and commitment to God through acts of worship such as praying; singing and carrying out religious duties.
14	<b>Church</b>	A place of worship for Christians. The Church is where religious ceremonies are performed and the religion can come together as a community.
15	<b>The Lord's Prayer</b>	When the disciples asked how they should pray, Jesus taught them this set prayer. It talks about forgiveness and guidance.
16	<b>Prophet</b>	A messenger of God.
17	<b>Prophet Muhammad</b>	The Prophet was born in 570AD. He was orphaned and raised by his uncle and he worked as a trader. He married his wife Khadijah. The Qur'an was revealed to him on the Night of Power.
18	<b>Revelation</b>	Revealing or communicating divine truth.
19	<b>The Night of Power</b>	On this night, Angel Jibril revealed the words of the Qur'an to the Prophet Muhammad. These revelations continued over the next 23 years.
20	<b>Hadith</b>	Collection of teachings from the Prophet Muhammad.
21	<b>Qur'an</b>	Muslim holy book, that is treated with great respect. It should be kept in the highest place and never touch the floor.
22	<b>Five Pillars of Islam</b>	Five key practices that Muslims should fulfil as part of their duty, including: <ul style="list-style-type: none"><li>• Shahadah – declaration of faith,</li><li>• Salat – praying five times a day,</li><li>• Zakat – donating 2.5% of their annual wealth to charity,</li><li>• Sawm – fasting,</li><li>• Hajj – a pilgrimage to Mecca.</li></ul>
23	<b>Eid-ul-Fitr</b>	A festival to mark the end of Ramadan, where Muslims would have fasted for a month.
24	<b>Eid-ul-Adha</b>	A festival celebrated following the completion of the fifth pillar of Islam (Hajj).

## Quest for Knowledge – Assessment Cycle Three and Four – R.S

### Big Question: What Are the Key Beliefs That Underpin the Sikh and Buddhist faith?

	<u>Key Words</u>	<u>Description</u>
1	<b>Guru</b>	A religious teacher.
2	<b>Guru Nanak</b>	The founder of Sikhism. Guru Nanak grew up surrounded by Muslims and Hindus, and was said to have been a special child. He went to the river to bathe and did not return for three days. He had communicated with God and this experience encouraged him to go and teach others about Sikhism.
3	<b>Caste System</b>	This was a system that categorised people under their social hierarchy. Guru Nanak opposed this.
4	<b>Guru Gobind Singh</b>	The tenth, and final human Guru. Guru Gobind Singh nominated the Guru Granth Sahib to become the eternal Guru. He created the Khalsa and 5 K's.
5	<b>Guru Granth Sahib</b>	Holy book in Sikhism.
6	<b>Mool Mantar/Mantra</b>	The first page of the Guru Granth Sahib, a set of beliefs Sikhs have about God.
7	<b>Ik Onkar</b>	'There is only one God.'
8	<b>Nirgun</b>	Means without physical form, quality or merit. When referring to God, it simply means without physical form.
9	<b>Sargun</b>	Means with physical form, quality or merit. When referring to God, it means supreme form.
10	<b>Reincarnation</b>	The idea that after death the soul will be reborn into another form, depending on karma.
11	<b>Panj Piare</b>	The Beloved Five – the first five members of the khalsa, who were willing to sacrifice their lives for the God and their Guru.
12	<b>Khalsa</b>	A group of initiated Sikhs who have undertaken the Amrit Sanskar ceremony. They will wear the Five K's and change their last name.
13	<b>Five K's</b>	Five items Sikhs may wear as an outward symbol of their faith: kesh, kanga, kachera, kirpan and kara.
14	<b>Gurdwara</b>	Sikh place of worship.
15	<b>Langar</b>	A free kitchen in the Gurdwara, that serves food to all. Set up by Guru Nanak.
16	<b>Vaisakhi</b>	A festival to show gratitude and thanks. It also remembers the beginning of the Khalsa.
17	<b>Diwali</b>	Sikh festival to remember Guru Hargobind who freed 52 prisoners.
18	<b>Waheguru</b>	Literally means the Wonderful Lord. God has many names in Sikhism, but Waheguru is most commonly used.
19	<b>Siddhartha Gotama</b>	Siddhartha Gotama was born as a Prince, there was a prophecy that he would be a great ruler or holy teacher. His father kept him in the palace to ensure the prophecy would come true.
20	<b>Four Sights</b>	When Buddha left the palace, he saw four things that he had never experienced before. He saw: a holy man; a sick man; dead man and old man.
21	<b>Ascetic</b>	Someone who practices self-denial.
22	<b>Enlightenment</b>	A state of perfect knowledge and wisdom.
23	<b>Four Noble Truths</b>	1. Everyone will experience suffering. 2. This comes from desire. 3. It is possible to stop suffering and achieve enlightenment. 4. Buddhists should follow the middle way to achieve this.
24	<b>Middle Way</b>	Living a life in between luxury and self-denial.
25	<b>Eightfold Path</b>	The Eightfold Path is a set of guidelines for Buddhists to live by, that should lead to the end of suffering.
26	<b>Five Moral Precepts</b>	1. Do not harm living beings. 2. Do not take things that are not freely given. 3. Do not behave in a sexually improper way. 4. Do not speak untruthfully. 5. Do not cloud the mind with drugs and alcohol.
27	<b>Samsara Cycle</b>	The cycle of life, death and rebirth.
28	<b>Wesak</b>	Also called 'Buddha Day', celebrates the birthday of the Buddha. Some may also remember his enlightenment and death.

Quest for Knowledge – Assessment Cycle One - French

Big Question: Comment est la vie scolaire ? What is school life like?

Key Verbs	Meaning in English
J'aime	I like
Je n'aime pas	I don't like
J'adore	I love
Je déteste	I hate
Je préfère	I prefer
C'est	It is
Ils/elles sont	They (masc/fem) are
J'étudie	I study
Je mange	I eat
Je joue	I play
Je porte	I wear
J'ai	I have
Je vais	I go
Il y a	There is / are

Key Infinitive Verbs	Meaning in English
étudier	to study
porter	to wear
aller <sup>1</sup>	to go

<sup>1</sup> These verbs are irregular.

Key Conjunctions	Meaning in English
et	and
mais	but
car	because

Key Adjectives	Meaning in English
intéressant(e)	interesting
amusant(e)	fun
grand(e)*	big
petit(e)*	small
nul(le)	rubbish
énorme	enormous
ennuyeux/ennuyeuse	boring

\* These adjectives go before the noun they describe.

Key Grammar	Rule
Use of Definite Articles	The definite article is used when we are talking about a specific noun. <b>le</b> is for masculine nouns; <b>la</b> is for feminine nouns; <b>l'</b> is for masculine or feminine nouns that begin with a vowel or some words that begin with a <i>h</i> ; <b>les</b> is for plural nouns - when there is more than one item.
Use of Indefinite Articles	We use indefinite articles before the noun when we are talking about something that's not specific. a/an = <i>un</i> (masculine) / <i>une</i> (feminine)
Adjectival Agreement	In French, <b>adjectives</b> must <b>agree</b> with the <b>nouns</b> they are describing, which means that they have to show if they are <b>masculine</b> or <b>feminine</b> and <b>singular</b> or <b>plural</b> to match the noun.
Position of Adjectives	In French, unlike in English, most <b>adjectives</b> come <b>after</b> the <b>noun</b> they are describing, e.g. un stylo violet (a purple pen), un sport ennuyeux (a boring sport).
Infinitive Verbs	An infinitive is a verb taken directly from the dictionary in its original form. Infinitives are the basic form of a verb, before any changes for tense or people are made, like to play or to do.

Quest for Knowledge – Assessment Cycle Two - French

Big Question: Qui suis-je ? Who am I?

Key Verbs	Meaning in English
Je suis	I am
Il est / elle est	He is / she is
On est	We are (informal)
J'ai	I have
Il a / elle a	He has / she has
On a	We have (informal)
Je vais	I go
Il va / elle va	He goes / she goes
On va	We go (informal)
Je fais	I do
Il fait / elle fait	He does / she does
On fait	We do (informal)
Je joue / on joue	I play / we play

Key Infinitive Verbs	Meaning in English
jouer	to play
faire <sup>1</sup>	to do
avoir <sup>1</sup>	to have
être <sup>1</sup>	to be

<sup>1</sup> These verbs are irregular.

Key Adverbs	Meaning in English
aussi	also
vraiment	really
très	very

Key Adjectives	Meaning in English
préféré(e)	favourite
prochain(e)	next
méchant(e)	mean
content(e)	happy
triste	sad
agréable	pleasant / nice
timide	shy
sympa	nice
beau* / belle*	beautiful
travailleur / travailleuse	hardworking
heureux / heureuse	happy
paresseux / paresseuse	lazy
sérieux	conscientious

\* These adjectives go before the noun they describe.

Key Vocabulary	Meaning in English
un père	a dad
un frère	a brother
une mère	a mom
une sœur	a sister
des parents	parents
mon	my (masculine)
ma	my (feminine)
mes	my (plural)

Key Grammar	Rule
The Near Future tense	The <b>futur proche</b> (near future) tense describes what is going to happen with certainty. <b>Forming the near future tense:</b> To form the futur proche, use the <b>present tense</b> of aller (to go) plus an <b>infinitive</b> . <i>E.g. Je vais jouer au foot. I'm going to play football.</i>
The Negative Form	To say 'not', use ne and pas, on either side of the <b>conjugated verb</b> . Use n' before a vowel or 'h'. In the <b>present tense</b> , they are placed around the main verb in the sentence: <div>subject + ne or n' + conjugated verb + pas</div> <i>E.g. Je n'ai pas de frère. I do not have a brother.</i>

## Quest for Knowledge – Assessment Cycle Three - French

**Big Question: Comment est ta vie quotidienne ? What is your daily life like?**

Key Verbs	Meaning in English
Je mange	I eat
Je bois	I drink
Je prends	I take
Je fais	I do
Je quitte	I leave
Je rentre	I go back
J'habite	I live
Je me lève	I get up
Je me lave	I wash (myself)
Il y a	There is / there are
Il fait + weather	It is (only when discussing the weather)
Je voudrais	I would like
J'aimerais	I would like
Ce serait	It would be

Key Conjunctions	Meaning in English
cependant	however
ou	or

Key Adverbs	Meaning in English
assez	quite

Key Infinitive Verbs	Meaning in English
manger	to eat
boire	to drink
prendre	to take
habiter	to live

Key Vocabulary	Meaning in English
français(e)	French
la France	France
anglais(e)	English
l'Angleterre	England

Key Adjectives	Meaning in English
préfér(e)	favourite
mauvais(e)*	bad
sain(e)	healthy
végan(e)	vegan
végétarien(ne)	vegetarian
bon(ne)*	good
frais / fraîche	fresh
fatigué(e)	tired
propre	clean
sale	dirty

\* These adjectives go before the noun they describe.

Key Grammar	Rule							
Comparative	Adjectives and adverbs can be used to compare things or people with each other, eg John is taller than Peter → Peter is smaller than Henri → Henri is as tall as Sarah.							
	The comparative is used when expressing terms such as: more... (than), less... (than) or as... (as).							
	<div>The words in French are:<div><div>plus... (que) → more... (than)</div><div>moins... (que) → less... (than)</div></div><div><div>E.g. Le poisson est <b>plus</b> sain <b>que</b> les frites.</div><div>Fish is <b>healthier</b> (<b>more</b> healthy) than fries.</div></div></div>							
The Partitive Article	‘Some’ and ‘any’ are partitive articles and are used to refer to an unknown quantity of something. In French, the partitive article is formed with de (‘of’) and the <b>definite article</b> (‘the’.) This table shows how the combination works:							
	<table><tr><td>masculine</td><td>feminine</td><td>before a vowel or silent h</td><td>plural</td></tr><tr><td>de + le → du</td><td>de la</td><td>de l’</td><td>de + les → des</td></tr></table>	masculine	feminine	before a vowel or silent h	plural	de + le → du	de la	de l’
masculine	feminine	before a vowel or silent h	plural					
de + le → du	de la	de l’	de + les → des					

Quest for Knowledge – Assessment Cycle Four - French

Big Question: Quel est ton divertissement préféré ? What is your favourite entertainment?

Key Verbs	Meaning in English
J'écoute	I listen
Je regarde	I watch
Je joue	I play
Il / elle joue	He / she plays
On joue	We play (informal)
Je fais	I do
Il / elle fait	He / she does
On fait	We do (informal)
Je suis	I am
Il est / elle est	He is / she is
On est	We are (informal)

Key Infinitive Verbs	Meaning in English
écouter	to eat
regarder	to drink

Key Adverbs	Meaning in English
beaucoup	however
très	but
trop	also
parce que	because

Key Adjectives	Meaning in English
préfér��(e)	favourite
g��nial(e)	great
actif / active	active
facile	easy
difficile	difficult
dangereux	dangerous
passionnant	exciting
populaire	popular
sportif / sportive	sporty
dr��le	funny

Key Vocabulary	Meaning in English
un film d'action	an action film
une ��mission	a TV programme
la musique	music
le sport	sport
jouer au foot	to play football
faire de la natation	to go swimming
faire une promenade	to go for a walk
faire du v��lo	to go cycling

Key Grammar	Rule							
Preposition « à »	<b>Talking about playing a sport or computer game.</b> If you're talking about playing a sport or a computer game, you use the phrase <i>jouer à</i> .							
	The <i>à</i> changes depending on whether the noun is masculine, feminine or plural.							
	<table><tr><td>masculine</td><td>feminine</td><td>before a vowel or silent h</td><td>plural</td></tr><tr><td>à + le → au</td><td>à la</td><td>à l'</td><td>à + les → aux</td></tr></table>	masculine	feminine	before a vowel or silent h	plural	à + le → au	à la	à l'
masculine	feminine	before a vowel or silent h	plural					
à + le → au	à la	à l'	à + les → aux					

Key Facts	
Le 14 juillet The 14 <sup>th</sup> of July / Bastille Day	The storming of the Bastille on July 14, 1789 has been commemorated in France for more than a century. It marked the beginning of the French Revolution, and is now a national holiday. It is celebrated with a mixture of solemn military parades and fireworks. In Paris, the traditional military parade on the Champs-��lys��es is a meticulously planned spectacle, and is televised all over the country.

## Quest for Knowledge – Assessment Cycle One - Spanish

**Big Question: ¿Cómo es la vida escolar?** *What is school life like?*

Key Verbs	Meaning in English
Me gusta	I like
No me gusta	I don't like
Me encanta	I love
Odio	I hate
Prefiero	I prefer
Es	It is
Son	They are
Estudio	I study
Como	I eat
Juego	I play
Llevo	I wear
Tengo	I have
Voy	I go
Hay	There is / there are

Key Infinitive Verbs	Meaning in English
Estudiar	To study
Llevar	To wear
Ir	To go

Key Adjectives	Meaning in English
Interesante	Interesting
Divertido(a)	Fun
Grande	Big
Pequeño(a)	Small
Enorme	Enormous
Aburrido(a)	Boring

Key Conjunctions	Meaning in English
y	and
pero	but
porque	because

Key Grammar	Rule
Use of Definite Articles	The definite article is used when we are talking about a specific noun. <b>el</b> is for masculine nouns; <b>la</b> is for feminine nouns; <b>los</b> is for plural masculine nouns - when there is more than one item. <b>las</b> is for plural feminine nouns - when there is more than one item.
Use of Indefinite Articles	We use indefinite articles before the noun when we are talking about something that's not specific. <b>a/an = un (masculine) / una (feminine)</b>
Adjectival Agreement	In Spanish, <b>adjectives</b> must <b>agree</b> with the <b>nouns</b> they are describing, which means that they have to show if they are <b>masculine</b> or <b>feminine</b> and <b>singular</b> or <b>plural</b> to match the noun.
Position of Adjectives	In Spanish, unlike in English, most <b>adjectives</b> come <b>after</b> the <b>noun</b> they are describing. E.g. un boli morado (a purple pen); un deporte aburrido (a boring sport).
Infinitive Verbs	An infinitive is a verb taken directly from the dictionary in its original form. Infinitives are the basic form of a verb, before any changes for tense pronouns are made. E.g. to play or to do.



## Quest for Knowledge – Assessment Cycle Two - Spanish

### Big Question: ¿Quién soy? Who am I?

Key Verbs	Meaning in English
<b>Soy</b>	I am
<b>Es</b>	He is / she is
<b>Somos</b>	We are
<b>Tengo</b>	I have
<b>Tiene</b>	He has / she has
<b>Tenemos</b>	We have
<b>Voy</b>	I go
<b>Va</b>	He goes / she goes
<b>Vamos</b>	We go
<b>Hago</b>	I do
<b>Hace</b>	He does / she does
<b>Hacemos</b>	We do
<b>Juego/Jugamos</b>	I play / we play

Key Vocabulary	Meaning in English
<b>Un padre</b>	A dad
<b>Un hermano</b>	A brother
<b>Una madre</b>	A mum
<b>Una hermana</b>	A sister
<b>Los padres</b>	Parents
<b>Mi</b>	My
<b>Mis</b>	My (plural)

Key Infinitive Verbs	Meaning in English
<b>Jugar</b>	To play
<b>Hacer</b>	To do
<b>Tener</b>	To have
<b>Ser</b>	To be

Key Adjectives	Meaning in English
<b>Favorito(a)</b>	Favourite
<b>Próximo(a)</b>	Next
<b>Travieso(a)</b>	Mean
<b>Feliz</b>	Happy
<b>Triste</b>	Sad
<b>Amable</b>	Kind / nice
<b>Tímido(a)</b>	Shy
<b>Simpático(a)</b>	Nice
<b>Bonito(a)</b>	Beautiful
<b>Trabajador(a)</b>	Hardworking
<b>Contento(a)</b>	Happy
<b>Perezoso(a)</b>	Lazy
<b>Serio(a)</b>	Serious

Key Adverbs	Meaning in English
<b>También</b>	Also
<b>Realmente</b>	Really
<b>Muy</b>	Very
<b>Bastante</b>	Quite

Key Grammar	Rule
<b>The Near Future Tense</b>	<p>The near future tense describes what is going to happen with certainty.</p> <p><b>Forming the near future tense:</b></p> <p>To form the near future, use the <b>present tense</b> of ir (to go) plus an <b>infinitive</b>.</p>
<b>The Negative Form</b>	<p>To say 'not', use <b>no</b>. <b>No</b> usually goes before the verb. E.g. No tengo hermanos; Mi hermano no es alto.</p>

## Quest for Knowledge – Assessment Cycle Three - Spanish

**Big Question: ¿Cómo es tu vida diaria?** *What is your daily life like?*

Key Verbs	Meaning in English
<b>Como</b>	I eat
<b>Bebo</b>	I drink
<b>Tomo</b>	I take
<b>Hago</b>	I do
<b>Dejo</b>	I leave
<b>Vuelvo</b>	I go back
<b>Vivo</b>	I live
<b>Me levanto</b>	I get up
<b>Me lavo</b>	I wash (myself)
<b>Hay</b>	There is / there are
<b>Hace + weather</b>	It is (only when discussing the weather)
<b>Me gustaría</b>	I would like
<b>Sería</b>	It would be

Key Infinitive Verbs	Meaning in English
<b>Comer</b>	To eat
<b>Beber</b>	To drink
<b>Tomar</b>	To take
<b>Vivir</b>	To live

Key Adjectives	Meaning in English
<b>Favorito(a)</b>	Favourite
<b>Malo(a)</b>	Bad
<b>Sano(a)</b>	Healthy
<b>Vegano(a)</b>	Vegan
<b>Vegetariano(a)</b>	Vegetarian
<b>Bueno(a)</b>	Good
<b>Fresco(a)</b>	Fresh
<b>Cansado(a)</b>	Tired
<b>Limpio(a)</b>	Clean
<b>Sucio(a)</b>	Dirty

Key Conjunctions	Meaning in English
<b>sin embargo</b>	however
<b>o</b>	or

Key Vocabulary	Meaning in English
<b>español(a)</b>	Spanish
<b>España</b>	Spain
<b>inglés(a)</b>	English
<b>Inglaterra</b>	England

Key Grammar	Rule
<b>Comparative</b>	<p>Adjectives and adverbs can be used to compare things or people with each other. E.g. John is taller than Peter → Peter is smaller than Henri → Henri is as tall as Sarah.</p> <p>The comparative is used when expressing terms such as: more... (than), less... (than) or as... (as).</p> <p>The words in Spanish are:  <b>más... (que)</b> → more... (than)  <b>menos... (que)</b> → less... (than)</p>
<b>The indefinite articles unos/unas</b>	<p>‘Some’ and ‘any’ are used to refer to an unknown quantity of something. In Spanish, these is translated with the indefinite articles.</p> <p><b>unos</b> – plural masculine items;  <b>unas</b> – plural feminine items.</p>

## Quest for Knowledge – Assessment Cycle Four - Spanish

**Big Question: ¿Cuál es tu entretenimiento favorito?** *What is your favourite entertainment?*

Key Verbs	Meaning in English
<b>Escucho</b>	I listen
<b>Veo</b>	I watch
<b>Juego</b>	I play
<b>Juega</b>	He / she plays
<b>Jugamos</b>	We play
<b>Hago</b>	I do
<b>Hace</b>	He / she does
<b>Hacemos</b>	We do
<b>Soy</b>	I am
<b>Es</b>	He is / she is
<b>Somos</b>	We are

Key Infinitive Verbs	Meaning in English
<b>Escuchar</b>	To listen
<b>Ver</b>	To watch

Key Adverbs	Meaning in English
<b>Mucho(a)/os(as)</b>	A lot
<b>Muy</b>	Very
<b>Demasiado(a)/os(as)</b>	Too much
<b>Porque</b>	Because

Key Adjectives	Meaning in English
<b>Favorito(a)</b>	Favourite
<b>Genial</b>	Great
<b>Activo(a)</b>	Active
<b>Fácil</b>	Easy
<b>Difícil</b>	Difficult
<b>Peligroso(a)</b>	Dangerous
<b>Emocionante</b>	Exciting
<b>Popular</b>	Popular
<b>Deportista</b>	Sporty
<b>Gracioso(a)</b>	Funny

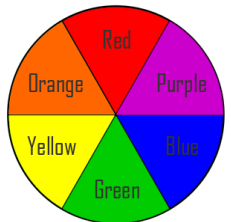
Key Vocabulary	Meaning in English
<b>Una película de acción</b>	An action film
<b>Un programa de televisión</b>	A TV programme
<b>La música</b>	Music
<b>El deporte</b>	Sport
<b>Jugar al fútbol</b>	To play football
<b>Hacer natación</b>	To go swimming
<b>Dar un paseo</b>	To go for a walk
<b>Montar en bici</b>	To ride a bike

Key Grammar	Rule								
Preposition 'a'	<b>Talking about playing a sport or computer game</b>								
	If you're talking about playing a sport or a computer game, you use the phrase <i>jugar a</i> .								
	The <b>a</b> changes depending on whether the noun is masculine, feminine or plural.								
	<table><tr><td>Masculine</td><td>Feminine</td><td>Plural masculine</td><td>Plural feminine</td></tr><tr><td>a + el = al</td><td>a + la = a la</td><td>a + los = a los</td><td>a + las = a las</td></tr></table>	Masculine	Feminine	Plural masculine	Plural feminine	a + el = al	a + la = a la	a + los = a los	a + las = a las
Masculine	Feminine	Plural masculine	Plural feminine						
a + el = al	a + la = a la	a + los = a los	a + las = a las						

Key Facts	
<b>La Feria de Abril/ Seville Fair</b>	<p>The Seville Fair (<b>Feria de Abril</b>) is held in Seville. The fair begins two weeks after the Holy Week (<b>Semana Santa</b>). It begins on the Saturday and it runs for seven days. Each day the fiesta starts with a parade of carriages and riders which arrive at the bullring, where the bullfighter and the breeders meet. For the whole duration of the <b>Feria</b>, the river banks are covered in tents and there is an amusement park with games and roller coaster to ride.</p>

## Quest for Knowledge - Assessment Cycle One, Two, Three and Four - Art

The aim within your Hori7on project is to create a creative body of work that includes a range of techniques and promotes creative understanding and skills.

<u>Term</u>	<u>Description</u>
<b>Mixed media</b>	Mixed media is a term used to describe artworks composed from a combination of different media or materials.
<b>Mark Making</b>	Mark making is a term used for the creation of different patterns, lines, textures and shapes.
<b>Rachel Brooks</b>	Rachel Brooks is a British wildlife artist. Her work aims to promote biodiversity and conservation of the sea.
<b>Backstitch</b>	A method of sewing with overlapping stitches, where you go back on the stitch to make it stronger.
<b>Threading a Needle</b>	Hold the threaded needle in between your thumb and finger with the double end of the thread (this should make a loop), wrap 4 times and then slowly pull the twists down the thread and it will tighten as you go down.
<b>Relief Printing</b>	a process consisting of cutting or etching a printing surface in such a way that all that remains of the original surface is the design to be printed.
<b>Symmetry</b>	Symmetry in art is when the elements of a painting or drawing balance each other out.
<b>Colour Theory Through Painting</b>	Primary colours – Blue, Yellow, Red Secondary colours – Purple, Orange, Green 

## Art and Design – What we need to do throughout all of our pieces of work

<u>Term</u>	<u>Description</u>
<b>Review</b>	To look over the work you are producing throughout the creative process and assessing its quality.
<b>Modify</b>	To change or re-do work that does not meet the assessment objective and does not show full potential.
<b>Refine</b>	To add to the work to ensure it is of a high quality and meets the assessment objectives.

**Quest for Knowledge - Assessment Cycle One, Two, Three and Four - Art**





<b><u>Term</u></b>	<b><u>Definition</u></b>
<b>Tone</b>	Tone refers to the lightness or darkness of colours used, this can be shown with mark making, the amount of ink used or the pressure used with your pencil or biro pen.
<b>Line</b>	A line is a mark made on a surface that joins different points. Lines can vary in length, width, direction and shape. You will need to consider Line carefully within design work and marking out sea allowances.
<b>Colour</b>	Colour is present when light strikes an object and it is reflected back into the eye, Primary colours consist of red, blue and yellow, when these are mixed they create secondary colours, purple, green and orange.
<b>Composition</b>	Composition is the term given to a complete work of art and, more specifically, to the way in which all its elements work together to produce an overall effect. The position of elements is key to composition. You will control your composition when creating fish designs and prints.
<b>Form</b>	In relation to art the term form has two meanings: it can refer to the overall form taken by the work – its physical nature; or within a work of art it can refer to the element of shape among the various elements that make up a work.
<b>Shape</b>	Shape is a flat area surrounded by edges or an outline. Artists use all kinds of shapes. Geometric shapes are precise and regular, like squares, rectangles, and triangles. You will use these more during the cycle to complete your design work.
<b>Mood</b>	Mood is the atmosphere in a piece of artwork, or the feeling expressed. How does the work of Rachel Brooks.
<b>Texture</b>	Texture refers to the surface quality in a work of art. We associate textures with the way that things look or feel. You will need to consider texture when completing your mark making tasks.





**Quest for Knowledge – Assessment Cycle One and Two - Music**  
**Big Question: Can Anyone Learn To Read the Language of Music?**

**Topic: Melody, Pitch, Rhythm & Notation**

- Learning to read musical notation
- Learning to perform two hands on the keyboard

<u>Key Words</u>	<u>Description</u>
<b>Pulse</b>	A steady beat like a ticking clock or a heartbeat.
<b>Tempo</b>	The speed of a piece of music.
<b>Duration</b>	Describes how long or short a note lasts.
<b>Ostinato</b>	A short musical idea (phrase) that is repeated throughout a piece of music.
<b>Rhythm</b>	A pattern of long and short notes that create an interesting sound.
<b>Time Signature</b>	Two numbers (that look like a fraction) at the start of a piece of music that tell you the number of beats in each musical measure or bar.
<b>Bars and Bar lines</b>	A bar (or measure) is a segment of time that music is divided into based on the time signature at the start of a piece of music. The bar lines divide the bars.
<b>Pitch</b>	How high or low a note sounds.
<b>Stave</b>	The 5 lines and 4 spaces that represent a different musical pitch.
<b>Treble Clef</b>	The sign at the start of a stave that tell us the notes are above middle C. (LINES = Every Good Boy Deserves Football. SPACES = FACE)
<b>Bass Clef</b>	The sign at the start of a stave that tell us the notes are below middle C. (LINES = Greasy Burgers Deserve Fries Always SPACES = All Cows Eat Grass)
<b>Ledger line</b>	A short line added for notes above or below the stave.
<b>Accidentals</b>	The general term used with referring to a group of sharps and flats.
<b>Sharp #</b>	Raising the pitch of a note by a semitone (black key to the right).
<b>Flat b</b>	Lowering the pitch of a note by a semitone (black key to the left).

Note	Rest	Name	Value
		Semibreve	4 beats
		Minim	2 beats

Note	Rest	Name	Value
		Crotchet	1 beat
		Quaver	1/2 beat



G A B C D E F G A B C D E F G A B C D E F



**Quest for Knowledge – Assessment Cycle Three and Four - Music**  
**Big Question: How Is Melody and Harmony Related to Each Other in Music?**

**Topic: Melody, Harmony, Chords and Scales**

- Learning to read musical notation
- Learning to perform two hands on the keyboard

<u>Key Words</u>	<u>Description</u>
<b>Chord</b>	Two or more notes played together at the same time.
<b>Seventh (chord)</b>	Adding the 7th note to the chord to create an extended chord (e.g. C7 chord = C, E, G, Bb).
<b>Scale</b>	A set of various notes (pitches) that are used to form the basis of a piece of music.
<b>Improvisation</b>	When a performer creates (composes) and performs a melody at the same time. They make the music up on the spot.
<b>Tone</b>	Two notes that are 2 semitones (a tone) apart or 1 whole note apart (e.g. C - D).
<b>Semitone</b>	Two notes that are 1 semitone apart (e.g. C - C#).
<b>Major</b>	Describes a chord, scale or key that sounds happy.
<b>Minor</b>	Describes a chord, scale or key that sounds sad.
<b>Key Signature</b>	The sharps or flats after the clef at the beginning of each stave that show the accidentals belonging to the key of the music.
<b>Key</b>	The key is the group of pitches or scale that form the basis of the piece of music.
<b>Interval</b>	The distance between the pitch of two notes (e.g. C - E = 3rd)
<b>Tonic</b>	The first (I) note of a scale. The most important degree of the scale.
<b>Dominant</b>	The fifth (V) note of a scale. The second most important degree of the scale.
<b>Riff</b>	A repeated, chord progression, rhythm or melodic phrase throughout a piece of popular music (exactly the same as an ostinato but call a riff in popular music).

**MAJOR KEYS**



C Major      G Major      D Major      F Major

**Key Signatures**

**MINOR KEYS**



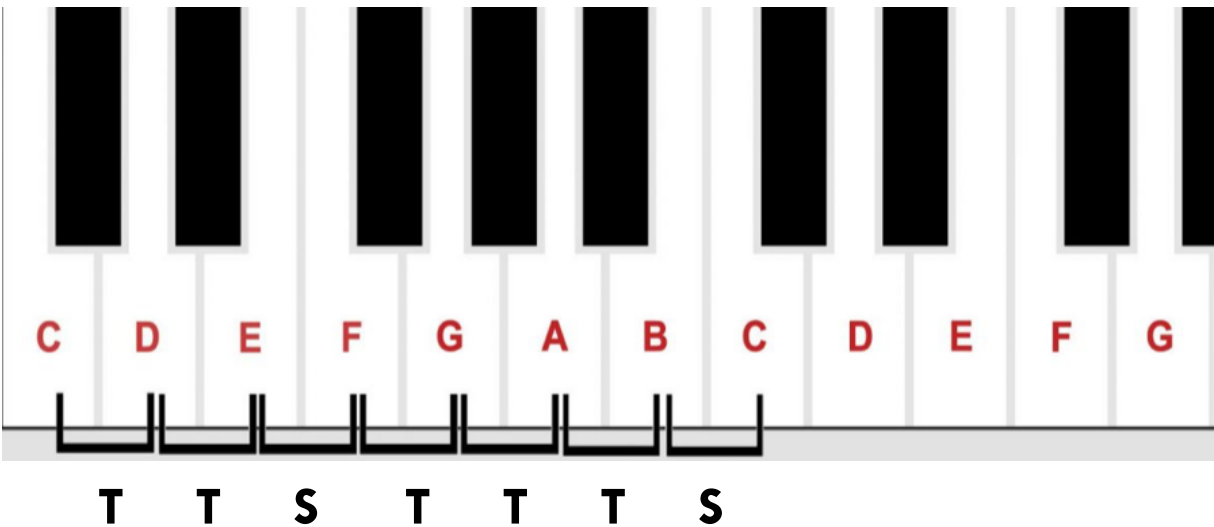
A Minor      D Minor

**Major key pattern**

Every major scale follows the same pattern of T and S.

T = Tone

S = Semitone





## Quest for Knowledge – Assessment Cycle One and Two - Drama

### Big Question: How Does Physicality Shape a Performance?

Elements of Stagecraft	
<u>Terminology</u>	<u>Description</u>
<b>Gestures</b>	The way we use our hands and arms to express the character's emotions.
<b>Movement</b>	The way we move our bodies on stage to express the character's emotions.
<b>Stillness</b>	The use of pause and lack of movement to express the character's emotions.
<b>Posture</b>	The way we stand to express the character's emotion or personality traits.
<b>Gait</b>	A mixture of their posture and movement to create a distinct way of walking.

Elements of Theatre	
<u>Terminology</u>	<u>Description</u>
<b>Props</b>	Objects used on stage, naturalistically or non-naturalistically that represent something a character might hold or use.
<b>Costume</b>	The clothing worn by a particular character this could be naturalistic (true to real life) or non-naturalistic (representative).
<b>Blackout</b>	When the lights go down in between scenes or acts to signal a change of location or time.

Theatrical Conventions	
<u>Terminology</u>	<u>Description</u>
<b>Improvisation</b>	The spontaneous use of movement and speech to create a character or object in a particular situation; acting done without a script.
<b>Role-play</b>	Naturalistic acting of scenes that we would see in everyday life using character dialogue.
<b>Mime</b>	Silent actions that depict actions of scenes we would see in every day life.
<b>Still Image</b>	A frozen image of a scene. These are often used at the beginning or end of scenes but can be used at any time to pause the scene and allow us to further examine a section.
<b>Exaggeration</b>	When the actor makes everything they are doing bigger, larger or louder. This can be to allow the audience to better understand a particular trait of a character.
<b>7 Archetypes</b>	Fool, Innocent, Mother, Hero, Trickster, Devil, King
<b>7 Levels of Tension</b>	1 Lethargy, 2 Californian, 3 Economic, 4 Awareness, 5 Anxiety, 6 Anger/Joy, 7 Freeze/Stunned.
<b>Front Facing</b>	Is when the actor makes a concerted effort to perform everything facing directly at the audience.
<b>Clocking</b>	When the actor turns their head towards the audience at specific moments in the action to incorporate the audience into the scene.
<b>Linear Narrative Structure</b>	A linear or chronological structure is where the story is told in the order it happens.
<b>Transition</b>	When we move from one scene to the next. This can be accompanied with a change of lighting, sound or theatrical convention.

## Quest for Knowledge – Assessment Cycle Three and Four - Drama

### Big Question: How Can Our Differences Unite Us?

Elements of Stagecraft	
<u>Terminology</u>	<u>Description</u>
<b>Gestures</b>	The way we use our hands and arms to express the character's emotions.
<b>Facial Expression</b>	The way we manipulate the face to express the character's emotions.
<b>Movement</b>	The way we move our bodies on stage to express the character's emotions.
<b>Posture</b>	The way we stand to express the character's emotion or personality traits.
<b>Positioning/ Proxemics</b>	The place we stand on stage in relation to other characters to show the characters' relationships, status or emotions towards another character.
<b>Voice</b>	How we manipulate the way we say things to express the character's emotions.
<b>Tone</b>	A collective use of pitch, pace, pause and volume to deliver a line that is driven by the character's motive in the scene.

Elements of Theatre	
<u>Terminology</u>	<u>Description</u>
<b>Set</b>	This could be in a naturalistic form to create specific locations or could be symbolic or representative of places or themes.
<b>Props</b>	Objects used on stage, naturalistically or non-naturalistically that represent something a character might hold or use.
<b>Blackouts</b>	When the lights go down in between scenes or acts to signal a change of location or time.
<b>Sound FX</b>	Used in order to make the sound of things that can't be physically present on stage for logistical or safety reasons but are integral to the action of a piece. E.g. An explosion, the sound of bird song outside a window.

Theatrical Conventions	
<u>Terminology</u>	<u>Description</u>
<b>Physical Theatre</b>	A style of theatre that uses movement to communicate messages and represent relationship and/or when actors use their bodies to represent objects other than people or characters onstage.
<b>Blocking</b>	The precise staging of actors in order to facilitate the performance of a play, ballet, film or opera.
<b>Narration</b>	When the action in a story is told to the audience in 3 <sup>rd</sup> person speech with the accompaniment of role-play or mime. It helps to move the story along or change location or time period.
<b>Dialogue</b>	Spoken conversation used by two or more characters to express thoughts, feelings, and actions. It allows the audience a better understanding of a character motives or intentions.
<b>Role-play</b>	Naturalistic acting of scenes that we would see in everyday life.
<b>Still Image</b>	A frozen image of a scene. These are often used at the beginning or end of scenes but can be used at any time to pause the scene and allow us to further examine a section.
<b>Transitions</b>	When we move from one scene to the next. This can be accompanied with a change of lighting, sound or theatrical convention.

## Quest for Knowledge – Assessment Cycle One – Physical Education

### Big Question: What Are Key Sporting Values?

	Key Terminology
<u>Key Words &amp; Facts</u>	<u>Description</u>
<b>Invasion Games</b>	Sports that involve scoring a goal in the opponent's space <b>e.g. netball, football, basketball.</b>
<b>Striking and Net Games</b>	Sports that involve scoring points by striking an object with a racket or bat <b>e.g. badminton and cricket.</b>

	Head: All Concepts
<u>Key Words &amp; Facts</u>	<u>Description</u>
<b>Tactic</b>	A tactic is a strategy used to help performers to score the most goals, points or win a race.
<b>Analyse</b>	1) <b>Observe</b> the performance 2) <b>Select</b> a performer 3) <b>Identify</b> if they are a strong or weak performer

	Heart: All Concepts
<u>Key Words &amp; Facts</u>	<u>Description</u>
<b>Teamwork</b>	Working as a group to achieve a common aim.

	Hands: Invasion Games
<u>Key Words &amp; Facts</u>	<u>Description</u>
<b>Netball Mastery Skill: chest pass</b>	1) Hands in <b>W position</b> on the ball 2) <b>Step</b> into the pass 3) Hands <b>point</b> to receiver on follow through
<b>Football Mastery Skill: first touch</b>	1) <b>Track</b> the ball 2) Use <b>inside</b> of the foot 3) <b>Cushion</b> the ball
<b>Netball: pivoting</b>	1) <b>Run towards</b> the ball 2) <b>Jump and catch</b> in the air 3) Land <b>one foot at a time</b> 4) Landing foot must <b>stay still</b>
<b>Football: ball manipulation</b>	1) <b>Small</b> touches 2) <b>Close</b> to your feet 3) <b>Protect</b> the ball

	Hands: Striking and Net Games
<u>Key Words &amp; Facts</u>	<u>Description</u>
<b>Badminton: ready position</b>	1) <b>Feet</b> shoulder width <b>apart</b> 2) <b>Knees</b> bent 3) <b>Weight low</b> and forward over toes 4) Racket <b>in front and away</b> from the body
<b>Badminton: grip</b>	1) <b>Shake hands</b> with the racket 2) Wrap all fingers around racket 3) <b>V-shape</b> in between <b>thumb</b> and <b>index finger</b>

## Quest for Knowledge – Assessment Cycle Two and Three – Physical Education

### Big Question: Why Are Key Values Important in Sport?

	Key Terminology
<u>Key Words &amp; Facts</u>	<u>Description</u>
Outdoor Adventurous Activities	Sports that are performed in a outdoor environment <b>e.g. orienteering, problem solving, climbing.</b>
Aesthetics	Sports that involve scoring points by making a routine look aesthetically pleasing <b>e.g. trampolining and dance.</b>
Health Related Fitness	An activity that promotes improving health and fitness <b>e.g. circuit training.</b>
Athletics	An activity that includes a variety of throwing, running and jumping events <b>e.g. the 100m sprint in outdoor athletics.</b>

	Head: All Concepts
<u>Key Words &amp; Facts</u>	<u>Description</u>
Tactic	A tactic is a strategy used to help performers to score the most goals, points or win a race.
Analyse	1) <b>Observe</b> the performance 2) <b>Select</b> a performer 3) <b>Identify</b> if they are a strong or weak performer

	Heart: All Concepts
<u>Key Words &amp; Facts</u>	<u>Description</u>
Teamwork	Working as a group to achieve a common aim. An example in P.E is communicating with my team mate to start moving before I pass on the baton in relay.

	Hands: Outdoor Adventurous Activities
<u>Key Words &amp; Facts</u>	<u>Description</u>
Orienteering Mastery Skill: Setting a Map	1) <b>Look</b> at surrounding features 2) <b>Locate</b> where you are 3) <b>Thumb</b> the map 4) Thumb, feet and face in same <b>direction</b> 5) <b>Turn</b> the map accordingly

	Hands: Health Related Fitness
<u>Key Words &amp; Facts</u>	<u>Description</u>
Health-Related Fitness Mastery Skill 1: Squat	1) Feet <b>shoulder width</b> apart 2) <b>Heels down</b> 3) <b>Bend knees</b> to 90 degrees 4) <b>Back straight</b> , arms across chest
Health-Related Fitness Mastery Skill 2: Sit Up	1) Feet <b>flat</b> 2) Hands <b>across chest</b> 3) <b>Elbows touch knees</b>
Health-Related Fitness Mastery Skill 3: Half Press Up	1) Shoulders over hands 2) <b>Flat back</b> 3) <b>Bend elbows</b> 4) <b>Tense stomach</b>
Health	A state oh complete physical, emotional and social wellbeing and not merely the absence of disease.
Fitness	The ability to meet the demands of the environment.

	Hands: Aesthetics
<u>Key Words &amp; Facts</u>	<u>Description</u>
Trampolining and Dance Mastery Skills: Tension and Extension	<b>Tension</b> 1) Contract muscles 2) Maintain a body shape <b>Extension</b> 1) Lock joints 2) Point fingers and toes
Trampolining: seat drop	1) Flex 90 degrees at hip 2) Legs straight 3) Land hands, bottom, legs and heels at the same time

# Quest for Knowledge – Assessment Cycle Four – Physical Education

## Big Question: How Do Tactics Lead to Success in Sport?

	Key Terminology
<u>Key Words &amp; Facts</u>	<u>Description</u>
Invasion Games	Sports that involve scoring a goal in the opponent's space e.g. netball, football, basketball.
Striking and Net Games	Sports that involve scoring points by striking an object with a racket or bat e.g. badminton and cricket.
Athletics	An activity that includes a variety of throwing, running and jumping events e.g. the 100m sprint in outdoor athletics.

	Head: All Concepts
<u>Key Words &amp; Facts</u>	<u>Description</u>
Tactic	A tactic is a strategy used to help performers to score the most goals, points or win a race.
Analyse	1) <b>Observe</b> the performance 2) <b>Select</b> a performer 3) <b>Identify</b> if they are a strong or weak performer

	Heart: All Concepts
<u>Key Words &amp; Facts</u>	<u>Description</u>
Teamwork	Working as a group to achieve a common aim. An example in P.E is communicating with my team mate to start moving before I pass on the baton in relay. An example of when teamwork is used outside of education is taking on other people's ideas in staff meetings.

	Hands: Athletics
<u>Key Words &amp; Facts</u>	<u>Description</u>
Athletics Mastery Skill: Head position	When sprinting the head should be upright and focused on the end of the lane. When throwing a javelin the head should be looking in the direction of the throw. When throwing a shot putt the head should start by facing the feet and finish looking at where the shot put should be landing. When pacing the head should be relaxed and facing forwards.

	Hands: Invasion Games
<u>Key Words &amp; Facts</u>	<u>Description</u>
Basketball Mastery Skill: triple treat	1) <b>Ball</b> at the hip 2) <b>Dominant foot</b> out 3) <b>Knees bent</b> 4) Leaning forward – “ <b>nose over toes</b> ” 5) <b>Head up</b>
Basketball: chest pass	1) Hands in <b>W position</b> on the ball 2) <b>Step</b> into the pass 3) Hands <b>point</b> to receiver on follow through
Basketball: dribbling	1) <b>Dirty fingers</b> clean palms 2) <b>Soft hands</b> 3) <b>Look up</b> 4) <b>Hip height</b>

	Hands: Striking and Net Games
<u>Key Words &amp; Facts</u>	<u>Description</u>
Cricket Mastery Skills: Throwing and Catching	<b>Catching</b> 1) Hands together with fingers pointing up or down 2) Tracking the ball all the way into the hands 3) Still head position where possible <b>Throwing</b> 1) Side-on with feet wider than shoulder width apart 2) Non-throwing arm aiming at target. 3) Rotate hips during follow through

**Quest for Knowledge – Assessment Cycle One and Two – Computing**

**Big Question: How Do We Stay Safe Online?**



<b><u>Key Words &amp; Facts</u></b>	<b><u>Description</u></b>
<b>Computer Viruses</b>	Replicate themselves and can transfer from one computer to another. They are activated by a user often as email attachments and attachment to other files and programs.
<b>Cyberbullying</b>	When the Internet, mobile phones or other devices are used to send or post text or images intended to hurt or embarrass or harm another person.
<b>Cyberstalking</b>	Using information and communication technology, particularly the internet, to harass an individual, group of individuals or organisation.
<b>Grooming</b>	The actions undertaken by a paedophile to befriend and create an emotional connection with a child to exploit them or take advantage of them.
<b>Hacking</b>	Slang term used to describe illegal access of computer systems by other users without permission.
<b>Happy Slapping</b>	Taking and publishing pictures of assault online.
<b>Illegal Content</b>	Material, which is against the law to be shown, seen or published. To most common types are; sexual abuse of children, extreme sexual violence, hate/hate crimes and xenophobia.
<b>Pharming</b>	The process of collecting information from a computer by hidden means – often makes use of computer programs called spyware.
<b>Phishing</b>	An email or text messaging scam where victims are conned into believing that they are being contacted by their bank for instance and can give sensitive personal details such as bank account passwords.
<b>Sexting</b>	Sending explicit pictures (often self-portraits/selfies) by multimedia text messages, usually via mobile phones.
<b>Spyware</b>	Records the activity on your computer such as your keystrokes, thereby logging your passwords for instance and then send the data back over the network to a hacker. Spyware can also be used to control your webcam and microphone.
<b>Trojan</b>	It gains access to a computer by pretending to be legitimate software. The Trojan allows unauthorised backdoor access to a computer without the user being aware.
<b>Troll</b>	Someone who posts inflammatory or off-topic messages in an online community with the intent of provoking readers into making an emotional response or disrupting on-topic discussion.
<b>Worms</b>	Spread like viruses but do not require human intervention. They attach themselves to network tools to spread automatically around a network very quickly.

**Quest for Knowledge – Assessment Cycle Three and Four – Computing**  
**Big Question: How Can We Use Excel To Model Situations?**

<b><u>Key Words &amp; Facts</u></b>	<b><u>Description</u></b>
<b>Absolute Cell Reference</b>	A cell reference that does not change when it is copied.
<b>Active Cell</b>	The active cell is the cell in the spreadsheet that is currently selected for data entry.
<b>Average</b>	Finds an average for a range of cells.
<b>Cell</b>	A rectangular area formed by the intersection of a column and row.
<b>Cell Reference</b>	The name of a cell that is found by combining the column letter with the row number. For example the cell in column 'C' in row '3' Would be called C3.
<b>Column</b>	Runs vertically on the spreadsheet (up and down).
<b>Count</b>	Counts cells in a range if they meet a condition.
<b>Data</b>	Data refers to the type of information that can be stored in the cells of a spreadsheet.
<b>Fill Handle</b>	The fill handle is the small bold square in the bottom right corner of a cell that can be used to copy (fill) data to adjacent cells in the same row or column.
<b>Formula</b>	A formula is a spreadsheet data type that will calculate a result and display it in the active cell.
<b>Formula Bar</b>	The formula bar appears directly above the column headings of a spreadsheet and will display what has been typed into the active cell.
<b>Function</b>	A named formula built into a spreadsheet to perform a task.
<b>Freezing Columns/Rows</b>	Freezing is a technique that can be used in larger spreadsheets to assist in viewing the information on the screen.
<b>Max</b>	Returns the highest value in a range.
<b>Min</b>	Returns the lowest value in a range.
<b>Range</b>	A range is a group of cells in a spreadsheet that have been selected.
<b>Relative Reference</b>	A relative reference is one that changes when it is copied.
<b>Rows</b>	Rows run horizontally on the spreadsheet screen.
<b>Sum</b>	Adds the range of cells together.
<b>Values</b>	Values are numerical data that is entered into a cell.
<b>Workbook</b>	A workbook is a collection of worksheet that are saved together in on file.
<b>Worksheet</b>	A worksheet is the grid of columns and rows that information is inputted into.



**Quest for Knowledge – Assessment Cycle One, Two, Three and Four - Design Technology**  
**Big Question: How Do Graphic Designers Combine Functionality and Creative Ideas?**

<b><u>Term</u></b>	<b><u>Description</u></b>
<b>Graphic Designer</b>	A person who combines text and pictures in advertisements, magazines, or books.
<b>ACCESSFM</b>	ACCESSFM is a designers tool used to make you think about products in a critical and analytical way.
<b>A = Aesthetics</b>	What does the product look like? Consider colour, finish, texture, theme and inspiration.
<b>C = Cost</b>	How much does the product cost to make? Including individual items to buy, as well as work force. How much would you sell the produce for?
<b>C = Customer</b>	Who has the product been designed for? Identify a Target Market, considering age, gender and interests.
<b>E = Environment</b>	Where will this product be used? Consider if the product is to be used indoors, outdoors, what room and where in the room? How might these factors effect the overall design and function of the product?
<b>S = Size</b>	What is the maximum and minimum size of the product? Use specific dimensions (mm is best). Height x Width x Depth. Why must it be this size? What other factors effect the size of a product?
<b>S = Safety</b>	Is the product safe? What makes it safe? Are there any potential dangers? Consider the user, size, finish and environment.
<b>F = Function</b>	What the product must do and how will it do this? What important factors influence this? Consider size, safety and environment and how they influence a product's function. Has the product got a secondary function? (Can it do or must do something else?)
<b>M = Materials</b>	What are the essential material properties for this product? Do not just name materials. Why are these material properties so important? Think about function, size and safety.
<b>Product Specification</b>	A product spec is a document that outlines the product you will be building, what it is going to look like, and the specific product requirements and functions. It may also include the persona or user it is being made for.
<b>Design Brief</b>	A design brief is a document that outlines the core details and expectations of a design project for a brand. A good design brief sets the tone for a successful design project by outlining the goals, quality, and deliverables.
	Recycling symbol for recyclable materials.
	Tidyman: Disposal of this carefully and thoughtfully.
	Plastic materials safety code.
	CE marking. Conformity to the requirements of the applicable EU countries.
	Food safety symbol.

**Quest for Knowledge – Assessment Cycle One, Two, Three and Four - Food**  
**Big Question: How Can We Ensure Our Food Is Nutritious and Safe To Eat?**

<b>Term</b>	<b>Description</b>
<b>The 4 C's</b>	Steps to follow which can guarantee food safety: Cooking, cleaning, chilling and cross-contamination.
<b>Bacteria</b>	Microscopic organisms which can be harmful to health and cause disease.
<b>Cross-contamination</b>	The process whereby bacteria are transferred from one place to another.
<b>Personal Hygiene</b>	The steps we can take to prevent cross-contamination: washing hands, wearing apron, tying hair back/wearing a hat, removing nail polish/jewellery.
<b>The Danger Zone</b>	The temperature range between 5-63°C in which bacteria multiply most quickly.
<b>Knife Safety</b>	Carrying knives carefully around the food room; holding close to the thigh area; no pointing; never try to catch a falling knife; always pass with the handle towards the other person.
<b>Colour-coded Chopping Boards</b>	Red = raw meat, Blue = raw fish. Yellow = cooked meat, White = Dairy and bread, Green = Salad and fruit, Brown = Vegetables.
<b>Dormant</b>	Normal physical functions of a bacteria are slowed down or suspended as if in a deep sleep.
<b>Four Conditions of Bacterial Growth</b>	Food, warmth, moisture and time.
<b>Binary Fission</b>	When a single-cell bacteria subdivides and creates two new cells. This occurs every 20 minutes if the correct conditions are present.
<b>Pathogenic Bacteria</b>	Bacteria which can cause disease.
<b>The Eatwell Guide</b>	A visual representation of what a 'balanced diet' should look like.
<b>Sources of Carbohydrate</b>	Bread, pasta, potatoes and cereals.
<b>Sources of Protein</b>	Meat, poultry, beans, nuts and seeds, fish, eggs, Quorn, soya and tofu.
<b>Sources of Oils/Spreads</b>	Olive oil, sunflower oil, spreads.
<b>Sources of Dairy</b>	Milk, cheese, butter, yoghurt, cream, dairy alternatives e.g. soya milk and spread.
<b>Sources of Vitamins and Minerals</b>	Fruits and vegetables.
<b>Food Allergy</b>	When the body's immune system reacts unusually to specific foods. This can be life threatening.
<b>Food Intolerance</b>	When you have difficulty digesting certain foods or ingredients in food. This is not serious, but can make you feel unwell.



The name 'Q3' represents three high ideals:  
***To seek that which is good.***  
***To seek that which is right.***  
***To seek that which is true.***

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