



Q3 Academy Langley

Quest for Knowledge Booklet

Year 9

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:		
Company:		
Tutor:		





Using your Quest for Knowledge Booklet



Strategies to use your Quest for Knowledge effectively:

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



was..."

it..."

Habits of Discussion

• "Nelam's point about ____ was important because • "I see things differently to Shara because..."



Agreement Prompts: Disagreement Prompts: • "I agree with Jason because..." • "I disagree with Chris because..." • "I was just thinking of something similar to Maria's • "I think it's more complex than what you're saying, point about..." Alice, because..." • "I understand why you'd say that Naresh, but..." "Grace's point makes sense because..." • "I think that the strongest part of Taz's response "There's another piece of evidence that contradicts Rosie's point..."

Add to Prompts:

- "I'd like to elaborate on Jade's idea..."
- "I'd like to build on Kate's point..."
- "There's another example of what Theo is talking about..."
- "You could also add that..."
- "The thing that I think is missing from Charlie's point is..."
- "I understand, and would like to add..."
- "Is it fair to say that..."
- "If we change Jess' point just a little, we could add..."
- "Alex's point about _____ was good but I'd also add..."

Paraphrasing:

"The evidence I've looked at suggests something

- "Another way you may interpret that is..."
- "Put another way, Brian is saying..."

different to Ben's response..."

- "So Nyasha is saying that..."
- "It is fair to say that Chris believes..."



Habits of Discussion French



Agreement Prompts	<u>Disagreement Prompts</u>	
• "Je suis d"accord avec parce que" — I agree with because	• "Je ne suis pas d'accord avec…" — l disagree with…	
• "Je suis du même avis que…" — I am of the same opinion as…	 "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 	
 "Sans doute ton point est vrai parce que" - There is no doubt that your point is true because 	"Je comprends ce que tu veux dire mais" - I understand what you are trying to say but	
 " Selon moi, ta idée est convaincante/puissante/pertinente parce que" — In my opinion, your idea is Convincing/powerful/relevant because 	different view toas	
• "Je prends le parti de parce que…" – I take the side of because…	The suis désolé(e) mais à mon avis" — I am sorry but in my opinion The suis désolé(e) mais à mon avis" — I am sorry but in my opinion	
• "J'abonde dans le sens de parce que" – l agree wholeheartedly with	"Je suis contre le point de parce que" — I am against''s point because	
• "J'accepte sans équivoque l'avis de parce que…"	"Le point de ne dépasse pas la surface des choses parce que"'s point skims the surface because	
	Je refute le point de parce que l reject this point because	
	Je condamne nettement le point de parce que l condemn outright''s point because	
	 Je crois que c'est tout le contraire – I believe that exactly the opposite is true 	
	 Je suis (fermement) opposé(e) à l'avis de	
Add to Prompts	<u>Paraphrasing</u>	
 "En plus, on pourrait dire que" – In addition, one could say that 	• "En d'autres termes dit que…" — In other words, said that…	
"Le point de était vrai mais je voudrais ajouter quelque chose"''s point was true but I would like to add something	 "Cela revient à dire que" – This amounts to saying that "Pour résumer le point de" – To summarise 	
• "En cela s'ajoute" In addition there is	's point…	
• "Par ailleurs, Je voudrais dire que" Furthermore, I would like	• "Autrement dit"- In other words	
to say that	• "Autant dire que" — In other words	
	• "En fin de compte" — At the end of the day	
	• J'en reviens toujours là" I come back to the point that	
	• J'ai déjà constaté/dit que…" — l have already said that…	



Habits of Discussion <u>Spanish</u>



<u>Agreement Prompts</u>	<u>Disagreement Prompts</u>
<u>Respuestas de acuerdo</u>	Respuestas de desacuerdo
	No catavi da marranda cam
	No estoy de acuerdo con
• Estoy de acuerdo con porque	l disagree with
I agree with because	
	• Pienso que eso es más complicado/complejo que lo que
• Tengo la misma opinión que	has dicho porque
I have the same opinion as	I think that it is more complicated/complex than you
	have said because
No hay duda tu punto do vista os vordad poraus	
• No hay duda, tu punto de vista es verdad porque	
There is no doubt that your point is true because	• Entiendo lo que dices pero
	l understand what you are trying to say but
• En mi opinión, tu idea es convincente / poderosa /	
relevante porque	• Lo siento pero en mi opinión
In my opinion, your idea is convincing/powerful/relevant	I am sorry but in my opinion
because	
	Estav on contra do novemo
l	• Estoy en contra de porque
• El punto de vista detiene sentido porque	l am against''s point because
point makes sense because	
	• Veo las cosas diferentes a porque
	I see things differently tobecause
Add to Prompts	<u>Paraphrasing</u>
•	·
<u>Añadimos las respuestas</u>	<u>Parafrasear</u>
Además, puedo decir que	• En otras palabras diría que
In addition, I could say that	In other words, said that
• El argumento de era verdad pero me gustaría	• Así queesta diciendo que
añadir algo	So is saying that
I	30 is saying mar
''s argument was true but I would like to	
add something	
	• Para resumir el punto de vista de
	To summarise's point
la Adamés has	ο συπιπατίσε ο ρυπι
• Además, hay	
Also, there is	
	• En otras palabras
	In other words
	00 00
• Entiendo, y me gustaría añadir	
I understand, and would like to add	

Quest for Knowledge - Assessment Cycle One - English Big Question: How Do I Craft Texts?

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

<u>Sentence Starters</u>	<u>Examples</u>
Preposition (Place)	Relates to the position of a noun (e.g. beneath near under by).
Preposition (Time)	As/ While.
Fronted Adverbial	A word that describes a verb (usually end in —ly).
Ing Verbs	Using a verb at the start of the sentence. (e.g. running falling sitting)

<u>Structure</u>	<u>Freytag</u>
Exposition	Start/Introduction/Setting a Scene.
Inciting Incident	Moment that begins action/ conflict.
Rising Action	Develops conflict; builds tension.
Climax	Greatest suspense; highest tension.
Falling Action	Offers reflection; decreases suspense.
Resolution	Ending.

Quest for Knowledge - Assessment Cycle Two - English Big Question: Are We All Equal?

<u>Characters</u>	<u>Description</u>	What they represent in society
Mr. Jones	Owner of Manor Farm	Dangers of unchecked power.
Old Major	Founder of Animalism	Naivety of leaders who attempt to promote equality.
Snowball	Opposed Napolean	Highlighting the myth of benevolent dictators.
Napolean	Becomes leader	Dangers of unchecked power.
Squealer	Supports Napoleon	The power of propaganda.
Boxer	A loyal worker.	Highlighting the danger of unquestionable loyalty.
Benjamin	A miserable donkey	Criticising intellectuals who ignore immoral policies.
Moses	A raven; talks about 'Sugarcandy Mountain'.	The power of propaganda.

<u>Terminology</u>	
Utopian Society	ldealist/perfect.
Tyranny	Unquestionable power.
Rebellion	Going against a government/ leader.
Usurp	Take a position of power by force.
Propaganda	Biased or misleading information used to promote a point of view.
Purges	Removing or executing people; believed to oppose the government.
Totalitarian State	The government has complete control.
Dictator	A leader who has absolute power.

Quest for Knowledge - Assessment Cycle Three - English Big Question: How Are Ideas About Nature Presented In Poetry?

<u>Form</u>	
Elegy	A poem of serious reflection. It usually expresses grief, sadness or loss.
Free Verse	A poem that has no regular rhythmic pattern or rhyme scheme.
Dramatic Monologue	A poem written as a speech by a speaker who is not the poet; it encourages the reader to question the speaker's authority or intention.
Sonnet	A 14-line poem with a formal rhyme scheme.

<u>Language</u>	
Symbolism	An image which represents a hidden deeper meaning.
Allusion	A reference to an event, person, myth etc. that is well known.

<u>Structure</u>	
Enjambement	A pause in a line of poetry, marked by punctuation.
Caesura	The continuation of a line (no punctuation).
In Media Res	Beginning a narrative in the middle of its action when most of the action has occurred.
Volta	A change or shift in tone or meaning in a sonnet, generally used to sum up ideas, introduce a new feeling or thought or create an impact.

Background Information	
The Sublime	The belief that nature inspires feelings such as awe and terror.
Romanticism	Poetry that explores the power of nature/ champions nature.

Quest for Knowledge - Assessment Cycle Four - English Big Question: Is Macbeth A Tragic Hero?

	Plot Summary	
Part of the play	<u>Events</u>	
Exposition	Witches meet; Norway Vs Scotland.	
Inciting Incident	Witches' Prophecy	
Rising Action	Letter; Duncan's arrival; plotting.	
Climax	Regicide	
Falling Action	Banquo's murder and ghost; Witches Prophecy; Macduff's family.	
Catastrophe	Madness; Malcolm's army; Macbeth killed.	
Restored order	Malcolm becomes King of Scotland	

<u>Context</u>		
The Divine Right of Kings	Belief/Idea that a Kings' authority comes from God.	
Regicide	The killing of a monarch; regarded as a mortal sin.	
The Natural Order	God State Man Woman Nature	
Patriarchal Society	Women in 1600s: Excluded from economic, political and social life; Dominant Woman = Unnatural	
Witchcraft	The Three Fates	
Biblical	Adam and Eve (Genesis); Cain and Abel; Pontius Pilate	

	Criteria: Shakespearian Tragic Hero	
High Status	Audience must view him as worthwhile	Hamartia
Internal (tortured conscience) and external (isolation/attacked) suffering	Recognition of mistakes	Death

Macbeth		
Part of the Play	<u>Quote</u>	<u>Method</u>
	"Fairfoul"	Contrast
Exposition	"carved out his passage"	Violent Imagery & Foreshadowing
	"unseam'd"	Violent Imagery & Foreshadowing
	"vaulting ambition"	Personification
Rising Action	"hostkinsmanvirtuesangels"	Listing
	"dagger"	Symbolism
	"blood"	Motif
	"knocking"	Stage Directions
	"scotch'd the snake"	Symbolism
Falling Action	"scorpions"	Animal Imagery
	"gory locksshadow"	Imagery
	"firstlings of my hearthand"	Repetition
	"devil damn…black…cream"	Contrast
Catastrophe	"dead butcher"	Metaphor

Lady Macbeth		
Part of the Play	<u>Quote</u>	<u>Method</u>
Rising Action	"Raven"	Animal Imagery
	"milk for gall"	Contrast
	"serpent"	Symbolism
Falling Action	"bloodwater clears"	Motif
	"Are you a man?"	Repetition
Catastrophe	"Out, damned spot!"	Imperative/Motif
	"fiend-like queen"	lmagery

<u>Quest for Knowledge – Assessment Cycle One – Maths</u> <u>Big Question: What Makes a Shape Unique?</u>

<u>Key Term</u>	Essential Knowledge	
Polygon	Polygons are 2-dimensional shapes. They are made of straight lines, and the shape is "closed" (all the lines connect up).	
Regular Polygon	A regular polygon has all sides equal and all angles equal.	
Irregular Polygon	A polygon that is not regular.	
Perimeter	Perimeter is the total distance around the outside of a shape.	
Equidistant	The same distance away (from each other, or in relation to other things).	
Radius	The distance from the centre to the circumference of a circle.	
Diameter	The distance from one point on a circle through the centre to another point on the circle.	
Circumference	The distance around the outside of a circle (its perimeter); $\mathcal{C}=\pi d \text{ or } \mathcal{C}=2\pi r$	
Area of a Circle	$A = \pi r^2$	
Sector	A "pie-slice" part of a circle - the area between two radii and the arc.	
Area of a Sector	$\frac{\theta}{360} \times \pi r^2$	
Arc	Part of the circumference of a circle or part of any curve.	
Arc Length	$\frac{\theta}{360} \times \pi d$	
Area of a Triangle	$A=rac{base imes height}{2}$ or $A=rac{1}{2}bh$	
Parallel Lines	Lines that never meet and are always the same distance apart.	
Perpendicular Lines	Lines that meet at a ninety degree angle.	
Parallelogram	A quadrilateral with 2 pairs of parallel sides.	
Area of a Parallelogram	A=base imesperpendicular height or $A=bh$	
Trapezium	A quadrilateral, with one pair of parallel lines.	
Area of a Trapezium	$A=rac{1}{2}(a+b)h$ or $A=rac{a+b}{2} imes h$ where h is the perpendicular height.	
Volume	The space inside a 3D shape.	
Volume of a Cuboid	V = length $ imes$ width $ imes$ height or $V=lwh$	
Cross Section	The face that runs through the 3D shape.	
Prism	A 3D shape with the same cross section along its length.	
Volume of a Prism	V = cross-sectional area $ imes$ length $$ or $$ $V = ext{CSA} imes l $	
Surface Area	The total area of the surface of a three-dimensional object.	

Quest for Knowledge - Assessment Cycle Two - Maths Big Question: How Can Movement Be Described Mathematically?

<u>Key Term</u>	<u>Essential Knowledge</u>	
x axis	The line on a graph that runs horizontally (left-right) through zero. The equation of the line is $y=0$.	
y axis	The line on a graph that runs vertically (up-down) through zero. The equation of the line is $x=0$.	
Co-ordinates	A set of values that show an exact position along the x and y axes. Coordinates are in the form (x,y) .	
Origin	The centre of a set of axes; the point (0, 0).	
Column Vector	$\begin{pmatrix} x \text{ direction} \\ y \text{ direction} \end{pmatrix}$	
Translation	Moving a shape.	
Translation (Describe)	Column vector.	
Rotation	A circular movement around a fixed point (the centre of rotation).	
Rotation (Describe)	Direction, angle, centre of rotation.	
Reflection	An image or shape as it would be seen in a mirror.	
Reflection (Describe)	Mirror line written as an equation.	
Enlargement	Make a shape larger or smaller.	
Enlargement (Describe)	Scale factor, centre of enlargement.	
Centre of Enlargement	A fixed point that determines the location of an enlarged shape.	
Scale Factor	All sides of an enlarged shape have been multiplied by this.	
Angle	Measure of turn (in degrees).	
Angles in a Triangle	Add up to 180° .	
Angles on a Straight Line	Add up to 180° .	
Angles in a Quadrilateral	Add up to 360° .	
Angles Around a Point	Add up to 360°.	
Obtuse Angle	An angle that is larger than 90° but less than 180° .	
Acute Angle	An angle less than 90°.	
Reflex Angle	An angle greater than 180°, but less than 360°.	
Interior Angle	An angle inside a shape, between two joined sides.	
Sum of Interior Angles	$(n-2) \times 180^{\circ}$	
Exterior Angle	The angle outside a shape, made by extending the adjacent side.	
Sum of Exterior Angles	Always 360°.	
Sum of Interior and Exterior Angle	180°	

Quest for Knowledge – Assessment Cycle Three – Maths Big Question: What's So Special About Triangles?

Key Term	Essential Knowledge
Similarity	When one shape is an enlargement of another, through using a scale factor.
Congruence	The property of being identical in shape and size (could have been rotated or reflected).
Congruence (SSS)	Side, Side.
Congruence (SAS)	Side, Angle, Side.
Congruence (ASA)	Angle, Side, Angle.
Congruence (RHS)	Right Angle, Hypotenuse, Side.
Pythagoras' Theorem	$a^2 + b^2 = c^2$
Pythagorean Triple	A set of three integers that are possible side lengths of a right-angled triangle. Examples: [3, 4 and 5], [5, 12 and 13] or [8, 15 and 17].
Hypotenuse (Pythagoras' Theorem/Trigonometry)	The side directly opposite the right angle in a right-angled triangle. This is always the longest side.
Adjacent (Trigonometry)	The side in a right-angled triangle that is next to (adjacent to) the identified angle $ heta.$
Opposite (Trigonometry)	The side in a right-angled triangle that is opposite to the identified angle $ heta.$
sin heta	$ heta = rac{ ext{opposite}}{ ext{hypotenuse}}$
$\cos heta$	$\cosoldsymbol{ heta}=rac{adjacent}{hypotenuse}$
tan $ heta$	tan $oldsymbol{ heta} = rac{opposite}{adjacent}$
Trigonometry (Labelled Diagram)	Adjacent Opposite
Angle of Elevation	The "upwards" angle from the horizontal to a line of sight from the observer to a point of interest.
Angle of Depression	If the angle goes "downwards" it is called an angle of depression.

Quest for Knowledge – Assessment Cycle Four – Maths Big Question: Does Maths Agree With Our Intuition?

<u>Key Term</u>	<u>Essential Knowledge</u>
Data	A collection of facts, such as numbers, words, measurements, observations or descriptions of things.
Continuous Data	Data that can take any value within a range, including decimals.
Discrete Data	Data that can only take certain values, usually whole numbers.
Sample	A selection taken from a larger group (the population) that may be used to represent the larger group.
Average	A calculated central/typical value of a set of data. Mode, median and mean are different ways of calculating the average.
Mean	A type of average. Add all the numbers, then divide by how many numbers there are.
Median	A type of average. The 'middle' value when the numbers are listed in order.
Median (Position)	The middle value of a set of n numbers can be found at position $rac{n+1}{2}$.
Mode	A type of average. The number which appears most often in a set of numbers.
Range	A measure of spread. The difference between the lowest and highest values.
Positive Correlation	A relationship between two variables such that as the value of one variable increases, the other increases.
Negative Correlation	A relationship between two variables such that as the value of one variable increases, the other decreases.
No Correlation	No relationship between the two sets of data.
Probability	The chance that something will happen, represented by a number between 0 and 1. Can be either a fraction, decimal or percentage.
Frequency	How often something happens (usually during a period of time) or the amount of something there is.
Set	A collection of 'things' (objects or numbers, etc.) called elements.
Universal Set	The set that contains all possible elements.
Intersection	The intersection of two sets contains only the elements common to both sets.
Union	The set made by combining the elements of two sets.
Complement	The set that includes all the elements of the universal set that are not present in the given set.

Quest for Knowledge - Assessment Cycle One - Science

Quesi for Knowledge - Assessment Cycle One - Science			
Manufa 9 Faula	Biology Big Question: What are the building blocks of our universe?		
Key Words & Facts	<u>Description</u>		
Eukaryotes	Eukaryotes are multicellular organisms that have a nucleus. Examples include plant and animal cells.		
Prokaryotes	Prokaryotic cells are unicellular and do not	have a nucleus. An example is bacteria.	
Animal Cells	Animal cells contain a nucleus, cytoplasm, mitc	ochondria, ribosomes and a cell membrane	
Plant Cells	Plant cells contain a nucleus, cytoplasm, mitochondria, r a vacu		
Magnification	lmage size = actual si	ze x magnification	
Specialised Cells	A specialised cell is a cell that has become differentiate sperm cell, muscle cell, nerve cell and root he	· · · · · · · · · · · · · · · · · · ·	
Stem Cells	A stem cell is an undifferentiated cell that can become adult stem cells and er	· · ·	
Mitosis	Mitosis is a type of cell division which produces two o		
	Chemistry Big Question: What are the building bloc	ks of our universe?	
Key Words & Facts	<u>Descriptio</u>	<u>n</u>	
Atoms	Atoms are made up of protons (positive), neutr	ons (neutral), and electrons (negative).	
Elements	An element is a substance that consists of only one type of atom and it cannot be broken down into any other substance.		
Compound	A compound is a substance that contains two or more elements that are chemically combined		
Mixture	A mixture consists of two or more different substances, not chemically joined together.		
Filtration	Filtration is used to separate an insoluble solid from a liquid.		
Distillation	Simple distillation is used to separate a solvent from a solution		
Fractional Distillation	Fractional distillation the separation of components in a mixture with similar boiling points.		
Chromatography	Chromatography is used to separate different substances dissolved in a liquid.		
	Physics Big Question: What happens when ch	arges move?	
Key Words & Facts	<u>Descriptio</u>	<u>n</u>	
Q=I I	Quantity of Charge (C) = Current (A) x Time (t)		
V=IR	Potential difference (V) = Current (A) x Resistance (Ω)	—o_ o— switch (open) — lamp	
Quantity of Charge	The total amount of charge passing during a set amount of time. Measured in Coulombs.	switch (closed) fuse	
Current	The rate of flow of charge. Measured in Amps	voltmeter	
Potential Difference	The difference in energy between two points. Measured in Voltage.	——————————————————————————————————————	
Resistance	The opposition in an electrical component to the movement of electrical charge through it. Measured in ohms.		
Solids	Particles in a solid are compact, have a regular pattern and have low energy.	variable resistor LDR	
Liquids	Particles in a liquid are randomly arranged, move around each other and have greater energy.	LED LED	
Gas	Particles in a gas are randomly arranged, move randomly and have the highest energy.		

Quest for Knowledge - Assessment Cycle Two - Science

Biology Big Question: How do substances move around cells?		
Key Words & Facts	<u>Description</u>	
Diffusion	Diffusion is the movement of molecules from an area of higher concentration to an area of lower concentration.	
Rate of Diffusion	The rate of diffusion is dependent on the concentration gradient, temperature, surface area and distance.	
Osmosis	Osmosis is the diffusion of water molecules, from a region where the water molecules are in higher concentration, to a region where they are in lower concentration, through a partially permeable membrane.	
Active Transport	Active transport is the movement of particles from a region of low concentration to a region of high concentration.	
Exchange Surface	An exchange surface is where substance move across membranes.	

Chemistry Big Question: How are elements in the periodic table different from one another?		
Key Words & Facts	<u>Description</u>	
Periodic Table	The periodic table represents all known elements in order based on atomic number.	
Atomic Number	The atomic number is the total number of protons.	
Atomic Mass	The atomic mass is the total number of protons and neutrons.	
Alkali Metals	Group 1 elements (alkali metals) increase in reactivity as you go down the group. They react violently with water. Group 1 metals have 1 electron on their outer shell. Alkali metal + water -> metal hydroxide + hydrogen	
Halogens	Group 7 elements (halogens) decrease in reactivity as you go down the group. They have 7 electrons on their outer shell.	
Displacement Reaction	A more reactive element can displace a less reactive element out of its compound during a chemical reaction.	
Noble gases	Group 0 Elements (noble gases) are unreactive because they have a complete outer shell of electrons.	

	Physics Big Question: Where does our electricity come from?		
Key Words & Facts Description			
Live Wire	The brown wire is the live wire it is held at a voltage of 230V and provides the current.		
Neutral Wire	The blue wire is the neutral wire and it completes the circuit.		
Earth Wire	The green and yellow stripped wire is the earth wire which stops the appliance becoming live.		
E=pt	Energy Transferred (J) = Power (W) x Time taken (s)		
Power	Power is the rate in which energy is transferred or the rate in which work is done.		
Alternating Current	Alternating current is a current that is constantly changing direction.		
Direct Current	Direct current flows in the same direction. Cells and batteries supply direct current.		
National Grid	The National Grid distributes electricity across the country. The National Grid connects power stations to homes, workplaces and public buildings all around the country.		

Quest for Knowledge - Assessment Cycle Three - Science

Biology Big Question: What happens to our food?		
Key Words & Facts	<u>Descr</u>	<u>iption</u>
Organisation	The six levels of organisation (from smallest to largest) are organelle, cell, tissue, organ, organ system, organism.	Mouth
Enzyme	An enzyme is a protein that catalyses or speeds up a chemical reaction.	Oesophagus
Mechanical Digestion	The breakdown of food into smaller pieces without chemical change to the food molecules.	Liver
Chemical Digestion	The breakdown of food into small, soluble molecules with the use of digestive enzymes	Pancreas Small intestine
Food Tests (Glucose)	Benedict's solution will change colour if glucose is present from blue to green, orange or red.	Appendix Large intestine
Food Tests (Starch)	lodine solution will change colour from brown to black if starch is present.	Rectum
Food Tests (Protein)	Biuret solution will turn purple if protein is present.	
Food Tests (Lipids)	Sudan III is used to test for lipids. If lipid is prese	nt in the sample, a red layer will form at the to

Chemistry Big Question: How and why do atoms join together?		
Key Words & Facts Description		
lon	lons are electrically charged particles, formed when an atom or molecule gains or loses electrons.	
Ionic Bond	lonic bonding forms between two atoms when an electron is transferred from one atom to the other, forming a positive-negative ion pair.	
Covalent Bond	A covalent bond forms when two non-metal atoms share a pair of electrons.	
Monomer	A small reactive molecule that can be joined with other monomers to form long chains	
Polymer	Polymers are long chain molecules that occur naturally in living things and can also be made by chemical processes in industry.	

Physics Big Question: How does energy influence our 21st Century lives?		
Key Words & Facts	<u>Description</u>	
Law of Conservation of Energy	The law of conservation of energy is that energy can be neither created nor destroyed.	
Kinetic Energy	Kinetic energy is the energy an object possesses due to its motion.	
$E_k = 0.5 \times m \times V^2$	Kinetic energy (J) = $0.5 \times \text{mass}$ (Kg) $\times \text{velocity2}$ (m/s)	
Gravitational Potential Energy	Gravitational potential energy is the energy an object has due to its position above the surface of the Earth.	
$E_p = m \times h \times G.F.S$	Gravitational potential energy (J) = mass (kg) x height (m) x Gravitational field strength (N/Kg)	
Elastic Potential Energy	Elastic potential energy is the energy stored in squashed, stretched or twisted materials.	
$E_{\rm e} = 0.5 \times k \times e^2$	Elastic potential energy (J) = $0.5 \times \text{spring constant (N/m)} \times \text{extension 2 (m)}$	

Quest for Knowledge - Assessment Cycle Four - Science

Biology Big Question: How do cells work together to keep an organism alive?		
Key Words & Facts	Description	
Respiratory System	Respiratory system is adapted to allow air to pass in and out of the body, and for efficient gas exchange to happen.	Pulmonary artery Aorta (artery)
Circulatory System	The circulatory system is made up of the heart, blood vessels and blood that delivers nutrients and other essential materials to cells whilst removing waste products.	Vena cava (vein) Right atrium Left atrium
Arteries Veins	Arteries have a thick muscular wall and small lumen to carry blood away from the heart under high pressure.	Tricuspid valve Septum
	Veins have a thin muscular wall, large lumen and valves to carry blood to the heart under low pressure.	Right ventricle
Capillaries	Capillary walls are one cell thick and are where gas exchange takes place	
Non-Communicable diseases		
Cancer		

Chemistry Big Question: How does the structure of a substance affect its properties?		
Key Words & Facts	Description	
Allotropes of Carbon	The allotropes of carbon are diamond; graphene; graphite and fullerenes.	
Diamond	Diamond is hard because it has four strong covalent bonds. Diamond has a high melting point because it requires a lot of energy to break the covalent bonds. Diamond does not conduct electricity because there are no free electrons.	
Graphene	Graphene is hard because it has 3 strong covalent bonds. Graphene has a high melting point because it takes a lot of energy to break the strong covalent bonds. Graphene conducts electricity because it has free electrons.	
Graphite	Graphite is soft because weak intermolecular bonds between layers of graphene. Graphite has a high melting point because it takes a lot of energy to break the covalent bonds in the individual graphene layers. Graphite conducts electricity because it has delocalised electrons in the individual layers of graphene.	
Metallic Bonds	A metallic bond is the force of attraction between these free-moving (delocalised) electrons and positive metal ions.	

Physics Big Question: Where does our electricity come from?		
Key Words & Facts Description		
Non-Renewable Energy	Non-renewable energy is a resource that cannot be replaced when it is used up, such as oil, natural gas or coal.	
Non-Renewable (Advantages)	Advantages of non-renewable energy is that it is cheap, readily available and infrastructure is in place.	
Non-Renewable (Disadvantages)	Disadvantages are that many give off atmospheric pollutants such as carbon dioxide and greenhouse gases.	
Renewable Energy	Renewable energy is a sources that can be replenished and not exhausted, e.g. solar power.	
Renewable Energy (Advantages)	Advantages are that renewable energy resources do not release pollutants and there is a continuous supply.	
Renewable energy (Disadvantages)	Disadvantages are that renewable energy sources can be expensive to manufacture and implement.	
Efficiency	Efficiency is the fraction of energy supplied to a device which is transferred in a useful form.	
Percentage Efficiency	Percentage efficiency = (useful energy transferred $/$ total energy supplied) x 100	

Quest for Knowledge - Assessment Cycle One and Two - History Big Question: How Do Genocides Happen?

-	<u>big Question: now Do Genociaes nappen?</u>				
W	Key Content	<u>Description</u>			
	Stereotypes	ldeas about groups of people, often offensive or incorrect.			
	Judas Iscariot		Disciple who betrayed Jesus to the Romans for thirty pieces of silver.		
1	Blood Libel		The lie that Jews murdered Christian babies to use their blood for religious bread.		
	9 million		The Jewish population of Europe in 1939.		
	Conspiracy		The idea that Jews were part of a secret plot to control the world.		
	Wall Street Crash	Find	ancial crisis in 1929, starting on the US stock market and leading to the Great Depression.		
	January 1933		Hitler becomes Chancellor (leader) of Germany.		
2	Totalitarianism		The idea that a person or political party should have total control over society.		
	Propaganda		Biased or misleading political information, designed to persuade the population.		
	Joseph Goebbels		Appointed as Hitler's Minister of Propaganda in 1933.		
	Nuremberg Laws	Passed in 1	1935, these laws restricted the freedom of Jews in Germany and said they could not be German citizens.		
	Aryanisation	Proce	ess of Jews being forced out of businesses and property, to the benefit of 'Aryan' Germans.		
	Kristallnacht		9 th November 1938 – the 'Night of Broken Glass'.		
3	Concentration Camps		20,000 Jews were arrested and sent to Concentration Camps during Kristallnacht.		
	191		Number of synagogues destroyed during Kristallnacht.		
	Collective Punishment		Germany's Jews were fined \$400m for Kristallnacht.		
	Ghetto	A walled-off	section of a city, to which Jews were forcibly relocated, mainly in Eastern Europe. Warsaw Ghetto was the largest of these.		
	Forced starvation	The Nazis, intent on starving the ghetto within months, allowed no more than a daily intake of 180 calories per prisoner (1/10 of the recommended).			
4	Black Market	An illegal market where smuggled goods are sold. Jewish people were forced to rely on these within the Ghettos to get enough food.			
	Warsaw Ghetto Uprising	Jewish uprising against the Nazis in 1943.			
	Liquidation		The final destruction of the Warsaw ghetto by the Nazis after the uprising.		
	Wannsee Conference	Meeting of top Nazis in January 1943 to agree 'the Final Solution to the Jewish Question'.			
	Heydrich	High-ranking SS officer and one of the key men behind planning the Holocaust.			
	Intentionalism	The idea that the Holocaust was planned by Hitler all along.			
5	Functionalism	The idea that the Holocaust was not planned from above, but emerged step by step as the War went			
	Final Solution	Nazi name for the plan to exterminate the Jews of Europe.			
	6 million	Approximate number of Jews killed during the Holocaust.			
	Gas Chambers	Facilities designed and used to poison and kill huge numbers of prisoners.			
	Sterilisation	Removing someone's ability o have children.			
	Euthanasia		Intentionally killing someone, to relieve pain or suffering.		
6	Aktion T4	Nazi pr	ogramme of involuntary (no choice) euthanasia, targeted at those with illnesses or disabilities.		
	Roma/Sinti		Traditionally nomadic communities of Eastern Europe, targeted for Nazi persecution.		
	Slavs		Eastern European ethnic group, targeted for Nazi persecution.		
	<u>S</u> ource Co	ntent	The words and images in the source itself.		
		<u>N</u> ature	What type of source is it? (e.g. newspaper, diary entry, photograph)		
7/0	Provenance	<u>O</u> rigin	The origins of the source (who produced it, when it was produced, etc.) For example, a diary entry of a soldier from 1912.		
7/8	[<u>P</u> urpose	Why was the source produced? What effect was it meant to have on the reader/audience?		
	Reliability		How trustworthy is the source in regards to who the author is and what their intention is. For example, a first-hand account has increased reliability.		
			,		

Quest for Knowledge — Assessment Cycle Three and Four - History Big Question: Why Did America Find It So Hard To Win the Vietnam War?

w	Key Content	Description
\vdash	Capitalism	Political ideology based around profit and private property.
1	Individual Liberty	The idea that people should be free to make their own decisions.
	Liberal Democracy	Democratic systems including ideas of capitalism, liberty and the rule of law.
	Communism	Political ideology based around social/communal ownership of property/business.
	Dictatorship	, , , , , , , , , , , , , , , , , , , ,
\vdash	Dicialorship	System of government where one person has complete authority. The confrontation between the capitalist 'West' (led by the USA) and the communist 'East' (led
	Cold War	The confrontation between the capitalist 'West' (led by the USA) and the communist 'East' (led by the USA) and the communist 'East' (led by the USA).
	Nuclear Weapons	Hugely destructive explosive devices, capable of destroying entire cities in a single blast.
	Nagasaki, Hiroshima	The sites where the first atom bombs were used by America in Japan in August 1945.
2	August 1949	USSR tested its first atomic bomb and NATO formed as a response.
	M.A.D.	Mutually Assured Destruction – the idea that having nuclear weapons deters war.
	80,000	Number of Nuclear weapons in existence at the height of the Cold War.
	1955-1975	Dates of the Vietnam War – it ended with victory for North Vietnam.
	Nationalism	ldea of political independence for a particular country or people.
	Ho Chi Minh	Communist leader of North Vietnam, 1945-1969.
	Domino Theory	ldea that communism would spread though south-east Asia, if left unchecked.
	Containment	Strategic US policy to stop the spread of communism in south-east Asia.
	Gulf of Tonkin incident	1964 clash with North Vietnam, leading to greater US involvement in the war.
	Viet Cong	North Vietnamese guerrilla force that fought US and South Vietnam.
3	Asymmetric warfare	Unconventional tactics (e.g. guerrilla warfare) between differently-sized forces.
	Punji Sticks	Example of a booby trap set by Viet Cong with sharp, hidden sticks covered in dirt.
	Effectiveness of booby traps	2% of all casualties were caused by Punji sticks, and this was as high as 70% in 1965.
	Guerrilla Warfare	'Hit and run' tactics of small armed groups against a larger military force.
	Cu chi Tunnels	75 miles of underground tunnels used to allow Viet Cong fighters to carry out hit-and-run
	Co cili Tollileis	attacks.
	Agent Orange	Herbicide used by US forces to destroy 12,000 sq. miles of Vietnamese Jungle.
	Operation Rolling Thunder	US heavy bombing campaign against North Vietnam in 1965.
	162,000	The number of innocent civilians killed in Operation Rolling Thunder.
4	Search and Destroy	US tactic of moving into enemy territory and killing a few enemies, before withdrawing.
	Operation Junction City	A search and Destroy operation where the US killed over 720 Viet Cong members.
	Draft	Compulsory military service in the US military.
	Draft Dodgers	Those who sought to avoid military service in Vietnam.
	'Media War'	Vietnam was the first conflict widely watched by television audiences.
	87 %	US households with a television in 1975. In 1965, it was only 9%.
	Tet Offensive	Huge wave of North Vietnamese attacks in 1968, destroying ideas of US power.
5	US Embassy (Saigon)	US embassy attacked by 19 Viet Cong fighters who take multiple buildings and kill 4 Americans.
	Counter-Culture	Rejection of traditional social norms, such as hard work and obedience, often by the younger generation.
	My Lai Massacre	Massacre of 354 civilians by US troops initially denied and covered-up by the US military.
	Moratorium March 1969	November 15 th 1969 15 million Americans take part in a Moratorium march to stop the war.
6	Paris Peace Accords	Peace deal signed between the US and North and South Vietnam, January 1973.
	Fall of Saigon	April 1975, Saigon, the capital of South Vietnam, falls to North Vietnamese forces.
	Reunification	In 1076 Vietnam is requisited under communist control as the Socialist Population of Vietnam
	1.00mmedilon	11 1970, Vietnam is reunified under communist control as the Socialist Republic of Vietnam.

Quest for Knowledge - Assessment Cycle One and Two - Geography Big Question: What Are the World's Dynamic Places?

Big Question: What Are the World's Dynamic Places?				
1	Erosional Processes	Erosion is the process by which rocks are broken down. There are four processes of erosion; hydraulic action, abrasion, attrition and solution.		
2	Stack	A large column of rock, which is created by physical processes. An example of a stack is Old Harry located in Dorset, England.		
3	Coastal Management	Coastal management is protecting the coast from erosion and flooding.		
4	Hard Engineering	Hard engineering is using man-made artificial structures to protect the coast. Example: Sea walls.		
5	Soft Engineering	Soft engineering is a more sustainable and natural approach to coastal protection. Example: Beach nourishment and reprofiling.		
6	Glacier	A slow moving body of ice.		
7	Plucking	A glacial process of erosion. Plucking occurs when rocks become frozen to the base or sides of the glacier and are removed from the ground or rock face as the glacier moves.		
8	Corrie	A corrie is an armchair-shaped hollow found on the side of a mountain.		
9	U-Shaped Valley	U-shaped valley is a valley with a flat floor and steep sides created by a glacier.		
10	Social Impact	Social impacts are impacts that affect people.		
11	Economic Impact	Economic impacts are impacts which have a financial impact.		
12	Plate Tectonics	Plate tectonics is a theory explaining the structure of the Earth's crust and how movement causes tectonic hazards.		
13	Destructive Plate Margin	When two tectonic plates move towards each other.		
14	Constructive Plate Margin	An area where two tectonic plates are moving away from each other.		
15	Conservative Plate Margin	When two tectonic plates are moving past each other in opposite directions or in the same direction at different speeds.		
16	Tectonic Hazards	Tectonic hazards are threats caused by the movement of tectonic plates that have the potential to cause damage to the environment and affect humans, e.g. a volcanic ash cloud.		
1 <i>7</i>	Composite Volcano	Composite volcanoes are cone-shaped volcanoes built up from many layers of lava and ash.		
18	Shield Volcano	Shield volcanoes have gentle slopes and are flatter in shape.		
19	Immediate Response	Short-term responses that are the reaction that people have in the immediate aftermath of a hazard. An example would be providing search and rescue teams.		
20	Long-Term Response	Long-term responses are later reactions, which happen in the weeks and months after the event. An example would be rebuilding houses.		
21	Tsunami	A tsunami is a long, high sea wave caused by a tectonic event or other disturbance.		
22	Epicentre	The epicentre is the point on the Earth's surface directly above the focus of an earthquake.		
23	Focus	The focus is the point inside the crust where the pressure is released and the earthquake starts.		
24	Seismic Waves	Seismic waves are waves of energy that travel through Earth's layers, and are a result of earthquakes or volcanic eruptions.		
25	World City	A world city is a city with global economic importance.		
26	Favela	Favela is the word used in Brazil for a squatter settlement, usually found at the edge of a city.		
27	Urban Regeneration	Urban regeneration is when an urban area is redeveloped.		
28	Infrastructure	Infrastructure is the necessary systems for society to function, e.g. transport or energy.		
29	Sustainability	Sustainability is the practice of using natural resources responsibly, so they can support both present and future generations.		

Quest for Knowledge – Assessment Cycle Three and Four - Geography Big Question: What Are the Biggest Threats to Humanity?

	Big Question: What Are the Biggest Threats to Humanity?			
1	Threat to Humanity	A threat to humanity is something that can be expected to cause a global environmental crisis or declining living standards for most people.		
2	Resource	A resource is something that people put to use, e.g. oil, water, copper or trees.		
3	Essential & Non- Essential Resources	Essential resources are resources that humans cannot live without. Non-essential resources are resources that are not essential to life but are desirable.		
4	Finite & Infinite Resources	Infinite resources are sources of energy which will never run out or will enable energy to be generated forever. Finite resources are energy resources which will run out one day as it is being used faster than it is being produced.		
5	Water Stress	Water stress is when large amounts of water are needed but not enough is available.		
6	Food Security	Food security is a measure of the availability of food required to support people of a specified area.		
7	Hydroponics	Hydroponics is the process of growing plants in sand, gravel, or liquid, with added nutrients but without soil.		
8	Indoor Vertical Farming	Indoor vertical farming is the practice of growing produce stacked one above another in a closed and controlled environment.		
9	The Antarctic Treaty (1959)	The Antarctic Treaty was signed by over 50 countries and controls human activity in Antarctica. It ensures that the continent is only used for peaceful reasons and scientific research.		
10	Superpower Country	A superpower is a country with the ability to project its dominating power and influence in other areas of the world.		
11	Nuclear Power	Nuclear power is the use of nuclear reactions to produce electricity.		
12	The Chernobyl Nuclear Disaster	The Chernobyl disaster was a nuclear accident that occurred in 1986 at the Chernobyl Nuclear Power Plant. It is considered the worst nuclear disaster in history both in cost and casualties.		
13	The Great Pacific Garbage Patch	The Great Pacific Garbage Patch is a collection of waste in the North Pacific Ocean.		
14	Climate Change	Climate change is the long-term shifts in temperatures and weather patterns. This is currently being caused by the human-enhanced greenhouse effect.		
15	Global Warming	Global warming is the gradual increase in the average surface temperature of the Earth.		
16	Human Enhanced Greenhouse Effect	The human enhanced greenhouse effect where the increased concentration of greenhouse gases in the atmosphere prevent solar radiation escaping the Earth's atmosphere, leading to global warming.		
17	Coral Reef	A coral reef is an underwater ecosystem made up of a ridge or mound of coral. Coral are tiny ocean organisms.		
18	Coral Bleaching	Coral bleaching is when coral turns white due to higher ocean temperatures.		
19	Mitigation	Mitigation strategies aim to reduce or prevent the causes of climate change.		
20	Adaptation	Adaptation strategies do not aim to reduce or stop global warming. Instead, they aim to respond to climate change by limiting its negative effects.		
21	Megacity	A megacity is a city with a population of over 10 million people.		
22	Globalisation	Globalisation is the process by which the world is becoming more interconnected as a result of increased trade and cultural exchange.		
23	Pandemic	A pandemic is an epidemic of an infectious diseases that has spread across a large region, for instance multiple continents or worldwide.		
24	Civil War	A civil war is conflict within a country.		
25	Theories of Resource Consumption	Theory 1: the rate of population growth will be faster than the rate that food supplies can grow, this will lead to starvation and the population will then level out. Theory 2: having a large and growing population will lead to innovation; more people means more ideas. People will come up with new ways to increase food supply.		

Quest for Knowledge – Assessment Cycle One and Two – R.S Big Question: Can A Loving God Exist?

	Big Question: Can A Loving God Exist?			
	<u>Key Words</u>	<u>Description</u>		
1	Omnipotent	God is all powerful and able to do anything. There is no limit to God's power.		
2	Benevolent	God is all loving.		
3	Omniscient	God is all knowing. God knows the past, present and future.		
4	Philosophy	The study of the nature of knowledge, reality, and existence.		
5	The Design Argument	An argument put forward by William Paley in 1802 to conclude that God must exist. He argued that if we found a watch we would see evidence of intelligent design, the watch must have had a designer or creator. He argues that the world also shows features of complexity and design and so must also have a designer. The only being powerful enough to create the world is God, therefore God must exist.		
6	Hume's Criticism	Hume criticised William Paley with two criticisms: 1. If there was a creator the world would have been made perfect. 2. The world is not ordered, it is a product of chance.		
7	Religious Experience	When someone feels they have had a direct, or personal experience with God. Some will use this to argue that God exists if he communicates with humans.		
8	Lourdes	In 1858, at the age of 14, Bernadette is believed to have had a series of visions from the Virgin Mary. Mary revealed herself to Bernadette and gave her messages and affirmations. Despite criticisms, millions of people visit Lourdes in France to remember Bernadette's religious experience.		
9	William James	Williams James gave four features of religious experience: 1. Passive: the person is not in control; 2. Ineffable: the experience is difficult to describe; 3. Noetic: it brings knowledge and understanding about God and 4. Transient: the experience is temporary.		
10	Natural Evil	Evil that occurs naturally in the world today, without human intervention. Examples would be: earthquakes, tsunamis and hurricanes.		
11	Moral Evil	Natural that occurs as the result of human action. Examples would be: violence, arson, mistreating animals or the environment.		
12	Problem of Evil	An argument that asks why God would allow evil and suffering if they are all loving? The existence of evil conflicts with the nature of God.		
13	Inconsistent Triad	If evil exists, then God cannot be loving, powerful and all knowing. Only three of these can exist in a triad.		
14	Theodicy	An argument that attempts to justify that God can be benevolent and evil exists at the same time.		
15	Veil of Soul Making	A theory put forward by John Hick. He argues that evil exists as a way to develop our souls and make them fit for heaven. God made humans imperfect and evil helps us grow to be in God's image and likeness. We can learn certain values by experiencing hardships and overcoming them.		
16	Freewill Defence	An argument put forward by Alvin Plantinga. He argues that God gave humans freewill and he cannot control what we choose to do with it. Evil exists as a result of humans misusing their freewill, it is not fault of God.		
1 <i>7</i>	Test of Faith	An argument for the existence of evil, that it is a way to test our loyalty to God. God puts us through suffering, that he knows we are able to cope with to see who turns away from their faith.		
18	Job	The Bible tells the story of a man called Job who is described as a righteous man. Satan challenges God, saying that Job is only good because he has a happy life. God allows Satan to put Job's faith to the test by causing him to suffer. Despite his suffering, Job never loses his faith.		
19	Karma	The idea that actions have equal consequences. Whatever behaviour and actions are put out, we will receive back. Karma affects rebirth in the next life.		
20	Reincarnation	The idea that after death, the physical body will be cast off and the soul will be reborn into another form. Rebirth depends on karma and how we have lived this current life.		
21	Three Poisons	The Buddha taught there are three poisons or reasons that cause human suffering. Buddhists should try to reduce or destroy these poisons in their life. They are: greed; hate and ignorance.		
22	Innate Knowledge	A philosophical idea that we are born with knowledge, beliefs and ideas. The mind is not blank at birth and there are certain things we can know without experiencing them.		
23	Tabula Rasa	A philosophical idea that the mind is born blank at birth. We have no prior knowledge.		
24	Original Sin	Adam and Eve were tempted by the serpent to eat fruit from the tree that God had commanded them not to. When they ate this, they became aware of good and evil. As a result of their sin, humans that descend from them are born with an innate desire or tendency to be sinful.		

Quest for Knowledge – Assessment Cycle Three and Four – R.S Big Question: How Do People Put Faith Into Action?

	Key Words	<u>Description</u>	
1	Worship	An act of religious devotion to show adoration and respect to God.	
2	Liturgical	Worship that is traditional and follows a structure. This may include set prayers, hymns and other traditional practices such as Holy Communion.	
3	Non—Liturgical	Worship that is more informal and is not set or structured. This can be more personal and up to the believer. Including charismatic worship where the Holy Spirit is present.	
4	Charismatic Worship	A kind of informal worship practised by Christians who believe that the Holy Spirit is with them when they pray.	
5	Missionary	When Christians undertake missions to perform good actions, for example helping to build a school, or delivering medical care to a community in need. Some Christians feel called by God to complete a mission.	
6	Evangelist	The act of preaching and sharing the gospels with others to spread the Christian faith.	
7	The Great Commission Matthew 28:16-20	"Then the eleven disciples went to Galilee, to the mountain where Jesus had told them to go. Then Jesus came to them and said, "All authority in heaven and on earth has been given to me. Therefore go and make disciples of all nations, baptising them in the name of the Father and of the Son and of the Holy Spirit, and teaching them to obey everything I have commanded you."	
8	Disciples	Jesus had twelve disciples, they were his personal friends and followers.	
9	Sewa	In Sikhi this is 'selfless service.' It involves doing things with good and wholly selfless intention and to serve others. There are three types: tan (physical); man (mental) and dhan (material) sewa.	
10	Pilgrimage	Journey to a place of religious significance.	
11	The Golden Temple	Also called Harmandir Sahib. The Golden Temple is located in Amritsar in India. The temple is surrounded by a pool of water, often called 'a pool of nectar'. Many Sikhs journey here as a place of pilgrimage to gather together as a community.	
12	Langar	Within the Gurdwara, this is a free kitchen that is open to all. The langar was set up by Guru Nanak. Vegetarian food is served and all of those who attend sit on the floor to show equality between all.	
13	Hajj	The fifth pillar of Islam is a pilgrimage to Mecca in Saudi Arabia. All Muslims should undertake this at least once in their life, if they are able to. Muslims will perform religious rites as told by the Prophet Muhammad during Hajj. One of the most important acts is the circling of the Ka'bah (Kaaba).	
14	Eid—Al-Adha	A festival in Islam that marks the end of the Hajj pilgrimage to Mecca. Muslims around the world will celebrate the festival with friends and family.	
15	Prophet	A messenger of God.	
16	Monk	A monk is a person who practices religious asceticism by living a monastic lifestyle, either alone or with any number of other monks.	
16	Ascetic	A life of self-discipline and abstention from all forms of indulgence and luxury.	
17	Shaolin Temple	The Shaolin Temple is a monastery located in the Henan Province of China. It is known for its practice of martial arts or 'warrior monks'.	
16	Census	An official count or survey, of a population. Conducted every ten years in the UK.	

Quest for Knowledge - Assessment Cycle One - French

Big Question: Comment peut-on décrire la vie scolaire? How can we describe school life?

Key Verbs	Meaning in English
Nous avons	We have (formal)
lls / elles ont	They have
Nous sommes	We are (formal)
lls / elles sont	They are
J'apprends	l am learning/l learn
Je quitte	l leave
Ce serait	It would be

Key Infinitive Verbs	Meaning in English
apprendre	to learn
choisir	to choose
durer	to last
étudier	to study
interdire	to forbid
rêver (de)	to dream (of)

Key Adjectives	Meaning in English
allemand	German
espagnol	Spanish
différent	different
gratuit	free
important	important
utile	useful
inutile	useless
juste	fair
meilleur(e)*	better, best
pire*	worse, worst
terrible	terrible
excellent*	excellent

^{*} These adjectives go before the noun they describe.

Key Adverb	Meaning in English
surtout	especially
seulement	only
également	as well, equally

Key Grammar	Rule		
The Comparative	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. The comparative is used when expressing terms such as: more (than), less (than) or as (as).		
	The words in French are: plus (que) → more (than) moins (que) → less (than) aussi (que) → as (than)	E.g. Je pense que l'esp que l'allemand. I think useful than German.	-
The conditional is used to express what would , could or should hap used to say what would happen if certain conditions were fulfilled. To form it, use the infinitive for -er and -ir verbs, and the infinitive new the correct ending. The correct ending person singular $(I - ie)$ is -ais ; for the third person singular $(he/she - ie)$			fulfilled. infinitive minus rrect ending for the first
Tense (would)	ait.	Example	English
		je regarderais	I would watch
		il/elle/on jouerait	he/she/it would play

Quest for Knowledge - Assessment Cycle Two - French

Big Question: Que fais-tu pendant ton temps libre? What do you do during your free time?

Key Verbs	Meaning in English
Je me lève	l wake up
Je me prépare	l get ready
Je me couche	l go to bed
Je me lave	l wash (myself)
On s'amuse	We have fun (informal)

Key Adjectives	Meaning in English
préféré(e)	favourite

Key Adverbs	Meaning in English
normalement	normally
d'abord	firstly
ensuite	next
puis	then
enfin	finally
finalement	finally, eventually

Key Adjectives	Meaning in English
joli(e)	pretty
commercial(e)	commercial
court(e)	short
long(ue)	long
actuel(le)	current
quotidien(ne)	daily
moderne	modern
simple	simple

Key Infinitive Verbs	Meaning in English
dormir	to sleep
participer à	to participate in
dépenser (de l'argent)	to spend (money)
coûter	to cost

Jimple -			3111	1				
Key Grammar	Rule							
The	bigges	Use superlatives to say something is the most or the least interesting/ exciting, the biggest/smallest or the best/worst, and so on. In French, use the definite article , (le/la/les) then plus or moins. The adjective must still agree with the noun .						
Superlative		Masculine s	ingular	Feminine singular		Masculine plural	F	eminine plural
30 perianve		le plus intére	ssant	la plus intéressante		les plus intéressants	les pl	us intéressantes
		le moins inté	ressant	la moins intéressa	inte	les moins intéressants	les m	oins intéressantes
				of regular -er (and	-ir verbs by taking	the i	nfinitive and a
The Cimple		Subject	Fu	ture ending		Example		English
The Simple Future (Will)	je		-ai		je m	anger ai		I'll eat
ruture (Will)								
	ıl/el	le/on	-a		il/el	le/on regarder a		they'll watch

<u>Quest for Knowledge – Assessment Cycle Three - French</u> <u>Big Question: Quelle est ton identité?</u> What is your identity?

Key Verbs	Meaning in English
C'était	It was
J'étais	I used to be, I was
J'avais	I used to have, I had
On avait	We used to have, we
On avail	had (informal)
Je faisais	I used to do
II/elle faisait	He/she used to do

Key Adjectives	Meaning in English	
bavard(e)	talkative	
embêtant(e)	annoying	
fou, folle	crazy	
gentil(le)	nice	
*meilleur(e)	best	
* This adjective goes before the noun it describes.		
Key Opinions	Meaning in English	
à mon avis	in my opinion	

Je pense que

Je dirais que

I think that

I would say that

Key Infinitive Verbs	Meaning in English	
se marier	to get married	

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

Key Phrases	Meaning in English	
En ce moment	At the moment	
II faut + infinitive	One must + verb	
Par contre	On the other hand	
Tout le monde	Everyone	

Wow phrase!	Meaning in English	
Si j'avais le choix (followed by the conditional)	If I had the choice	
Quand j'étais plus jeune (followed	When I was	
by the imperfect)	younger	

Key Grammar	Rule						
The	•	To say 'not', use ne and pas, on either side of the conjugated verb . Use n' before a vowel or 'h'. In the present tense , they are placed around the main verb in the sentence: subject + ne or n' + conjugated verb + pas					
Negative Form	When two verb Key phrases:	nejamais nepas nepersonne nerien	never, not evented not anyone, not onto	no one	as goes around the first. E.g. Je n'étais jamais embêtante. I was never annoying.		
The Imperfect Tense (used to)	something or so To form the imp	meone in the past	•		o happen, and to describe		

Quest for Knowledge - Assessment Cycle Four - French

<u>Big Question: C'est quoi l'identité du monde francophone?</u> What is the identity of the Francophone world?

Key Vocabulary	Meaning in English	
la fête	the celebration	
l'anniversaire	the birthday	
le gâteau	the cake	
la nourriture	the food	
l'Aïd	Eid	
le cadeau	the gift	
le concert	the concert	
le défilé	the parade, procession	
Noël	Christmas	
Pâques	Easter	
Diwali	Diwali	

Key Verbs	Meaning in English
Je crois	l believe
II/elle croit	He/she believes

Key Adverbs	Meaning in English	
Aujourd'hui	Today	
Maintenant	Now	
Ensemble	Together	
lci	Here	
Là-bas	Over there	

Key Words	Meaning in English	
feu d'artifice	firework display	
avant	before	

Key Adjectives	Meaning in English
autre*	other
chaque*	each, every
historique	historical
férié	public holiday
ouvert(e)	open
gratuit(e)	free
traditionnel(le)	traditional
culturel(le)	cultural
étranger, étrangère	foreign
fier, fière	proud

* These adjectives go before the noun they describe.

Key Infinitive Verbs	Meaning in English
célébrer	to celebrate
danser	to dance
partager	to share
rencontrer	to meet
durer	to last
chanter	to sing

Wow phrase!	Meaning in English
La fête que je préfère	The celebration that I prefer
Il faut que je fasse	It is necessary that I do
Bien que je sois	Although I am

Key Facts	Rule
Le Tour de France	The Tour de France is the world's biggest annual sporting event. Normally held in July, the event sees nearly 200 cyclists from all over the world race over 2,000 miles in just 23 days. While most of the race takes part in the towns, cities, countryside and mountains of France it also often starts in a foreign country. And it's absolutely free to watch - you just have to get there early to beat the
	crowds and find a place to stand!

Quest for Knowledge - Assessment Cycle One - Spanish

Big Question: ¿Cómo se puede describir la vida escolar? How can we describe school life?

Key Verbs	Meaning in English
Tenemos	We have
Tienen	They have
Somos	We are
Son	They are
Aprendo	l learn
Dejo	l leave
Sería	It would be

Key Infinitive Verbs	Meaning in English
Aprender	To learn
Elegir	To choose
Durar	To last
Estudiar	To study
Prohibir	To forbid
Soñar con	To dream (of)

Key Adjectives	Meaning in English
Alemán	German
Español	Spanish
Diferente	Different
Gratuito(a)	Free
Importante	Important
Úŧil	Useful
Inútil	Useless
Justo(a)	Fair
Mejor	Better, best
Peor	Worse, worst
Terrible	Terrible
Excelente	Excellent

Key Adverb	Meaning in English
Sobre todo	Especially
Solamente	Only
También	As well, equally

Key Grammar	Rule	
The Comparative	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. The comparative is used when expressing terms such as: more (than), less (than) or as (as). The words in Spanish are: más (que) → more (than) menos (que) → less (than) tan (como) → as (as)	
The Conditional Tense (would)	The conditional is used to express what would , could or should happen. It is used to say what would happen if certain conditions were fulfilled. To form it, use the infinitive and add the correct ending. The correct ending the first person singular (I — Yo) is —ía ; for the third person singular (he/she —él/ella) is —ía . Example Example English (yo) jugaría I would play Él/ella jugaría He/she would play	for

Quest for Knowledge - Assessment Cycle Two - Spanish

Big Question: ¿Qué haces durante tu tiempo libre? What do you do during your free time?

Key Verbs	Meaning in English
Me despierto	l wake up
Me preparo	l get ready
Me acuesto	l go to bed
Me lavo	l wash (myself)
Nos divertimos	We have fun

Key Adjectives	Meaning in English
Bonito(a)	Pretty
Comercial	Commercial
Corto(a)/ bajo(a)	Short
Largo(a)	Long
Actual	Current
Diario(a)	Daily
Moderno(a)	Modern
Simple	Simple

Key Adjectives	Meaning in English
Favorito(a)	Favourite

Key Adverbs	Meaning in English	
Generalmente	e Normally	
Primero	Firstly	
Enseguida	Next	
Después	Then	
Finalmente	Finally, eventually	

Key Infinitive Verbs	Meaning in English	
Dormir	To sleep	
Participar	To participate	
Gastar (dinero)	To spend (money)	
Costar	To cost	

Key Grammar	Rule					
The	Use superlatives to say something is the most or the least interesting/ exciting, the biggest/smallest or the best/worst, and so on. In Spanish, use the definite article , (lo/la/los/las) then más or menos. The adjective must still agree with the noun .					
Superlative	Masculine singular	Feminine singular	Masculine plural	Feminine plural		
	Lo más interesante	La más interesante	Los más interesantes	Las más interesantes		
	Lo menos interesante	La menos interesante	Los menos interesante	Las menos interesantes		
	adding the following en	•	Example	aking the infinitive and English		
The Simple	Yo	-é	hablaré	l'II talk		
Future (Will)	ÉI/EIIa	-á	hablará	He/she/it will watch		
	There are some irregular verbs, which change their stem before adding those endings. Those are the irregular verbs: tener → tendr hacer → har salir → saldr venir → vendr poner → pondr haber → habr caber → cabr querer → querr saber → sabr decir → dir					

Quest for Knowledge - Assessment Cycle Three - Spanish Big Question: ¿Cuál es tu identidad? What is your identity?

Key Verbs	Meaning in English	
Era	lt was	
Era	I used to be, I was	
Tenía	I used to have, I had	
Teníamos	We used to have, we had	
Hacía	I used to do	
Hacía	He/she used to do	

Key Adjectives	Meaning in English
Hablador(a)	Talkative
Molesto(a)	Annoying
Loco(a)	Crazy
Amable	Nice
*Mejor	Best

* This adjective goes before the noun it describes.

Key Opinions	Meaning in English		
En mi opinión	In my opinion		
Pienso que	I think that		
Diría que	I would say that		

Key Infinitive Verbs	Meaning in English
Casarse	To get married

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

Key Phrases	Meaning in English		
En este momento	At the moment		
Se debe/ Hay que	One must + verb		
Por otro lado	On the other hand		
Todo el mundo	Everyone		

Wow phrase!	Meaning in English
Si tuviera la opción (followed by	If I had the
the conditional)	choice
Cuando era más joven (followed by the imperfect)	When I was younger

Key Grammar	Rule						
The Negative	To say 'not', use "no " before the verb, at the beginning of the sentence or after the subject. There are other words to express the negation, as those below: Nunca never, not ever						
Form	No Nadie/ninguno(a)/os(as)		no	not			
		Nada		nothing, not anything			
The	The imperfect tense is used to describe something that used to happen, and to describe something or someone in the past. To form the imperfect tense remove the -ar, -er, ir and						
The	add the tollow	following endings: -AR			-ER/IR	_	
Imperfect	Yo	-aba			-ía		
Tense	Tú	-abas			-ías		
(used to)	Él/ella	-aba			-ía -		
	Nosotros Ellos/ellas	-ábamos -aban			-íamos -ían		

Quest for Knowledge - Assessment Cycle Four - Spanish

Big Question: ¿Cuál es la identidad del mundo hispanohablante? What is the identity of the Hispanic world?

Key Vocabulary	Meaning in English		
La fiesta	The celebration		
El cumpleaños	The birthday		
La tarta/el pastel	The cake		
La comida	The food		
Eid	Eid		
El regalo	The gift		
El concierto	The concert		
El desfile	The parade, procession		
La Navidad	Christmas		
La Pascua	Easter		
Diwali	Diwali		

Key Verbs	Meaning in English
Pienso	l think
Piensa	He/she thinks

Key Adverbs	Meaning in English	
Hoy	Today	
Ahora	Now	
Juntos(as)	Together	
Aquí	Here	
Allí	Over there	

Key Words	Meaning in English
Fuegos artificiales	Fireworks
Antes	Before

Key Adjectives	Meaning in English
*Otro(a)	Other
*Cada	Each, every
Histórico(a)	Historical
Feriado	Public holiday
Abierto(a)	Open
Gratis	Free
Tradicional	Traditional
Cultural	Cultural
Extranjero(a)	Foreign
Orgulloso(a)	Proud

* These adjectives go before the noun they describe.

Key Infinitive Verbs	Meaning in English
Celebrar	To celebrate
Bailar	To dance
Compartir	To share
Encontrarse con	To meet
Durar	To last
Cantar	To sing

Wow phrase!	Meaning in English
La fiesta que prefiero	The celebration that I prefer
Es necesario que haga	It is necessary that I
Aunque sea	Although I am/it is
¡Qué guay!	How cool!

Key Facts	
La Semana Santa	The Holy Week (Semana Santa) is a Catholic religious celebration, celebrated in Spain every year through processions on the streets of almost every Spanish city and town, the week immediately before Easter.

Quest for Knowledge - Assessment Cycle One - Citizenship Big Question: Is the British Political System Fit for Service?

1	Key Content Representative	Description
1	Representative	
1	Democracy	Where the public don't vote directly on political matters, but instead vote for MPs to represent their views in Parliament.
_	Direct Democracy	Where the public vote directly on political matters; e.g. referendums.
	Liberal Democracy	A system of democracy where certain freedoms of individuals are upheld; e.g. freedom of speech.
	Theocracy	Where religious leaders run a country.
ļ	Constitution	A set of principles and rules by which a country is organised and usually contained in one document.
	British Constitution	The British constitution is unwritten and uncodified — it can't be found in one text, but instead exists across many (e.g. Magna Carta 1215).
	British Constitution Examples	PM and Cabinet; The Opposition; Monarch; Judiciary; Civil Service
	Parliament	The supreme legislative body of the UK; they debate and pass laws.
2	MPs in Parliament	There are 650 MPs in Parliament, each representing a constituency.
	Legislature	The body that passes laws — Parliament is made up of the House of Commons and the House of Lords.
	Executive	The politicians responsible for running the country, and putting laws into action.
	Judiciary	Judges and the courts. They judge the effectiveness of laws and ensure they are applied equally.
[Cabinet	The group of 22 MPs who are selected by the PM to help run the country.
	Bicameral	Parliament is split in two: House of Commons debate and propose laws; the Lords scrutinise them.
	Council Tax	Money collected by local government to fund public services (e.g. bin collection, libraries).
3	Mayors	Ceremonial position held on the local council.
	Directly Elected Mayors	An elected official for major cities in the UK e.g. Manchester, London.
	Devolved Powers	The transfer of power by a central government to local or national governments – e.g. health.
	Reserved Powers	Powers that are retained by the central government e.g. defence.
4	National Parliaments	Scottish Parliament (Holyrood); Welsh Parliament (Senedd), Northern Irish Assembly (Stormont).
	The Good Friday Agreement	Signed in 1998 – an agreement between Northern Ireland and UK that gave Northern Ireland more power to make their own decisions (devolution).
	First Past the Post	Voting system used in general elections, where the candidate with the most votes wins.
	FPTP Pros	Easy and quick to use; leads to a strong government; each area has a local representative.
	FPTP Cons	Difficult for small parties to win seats; less fair; overall vote doesn't match who 'wins'.
5	Proportional Representation (PR)	Electoral system in which parties gain seats in proportion to the number of votes cast for them.
	Single Transferable Vote (STV)	Electoral system in which voters rank the candidates — if their first-choice is eliminated, their 2 nd -choice is used instead. Used in local elections in Wales and Scotland.
[Constituencies	A group of around 70,000 voters in a specified area who elect an MP.
	VAT	Value Added Tax – a tax added to certain goods and services e.g. alcohol.
	Income Tax	A portion of a person's wages given to the gov. to pay for services e.g. NHS, transport.
ſ	National Insurance	Percentage of income that is used to pay for pensions, maternity pay, sick pay, etc.
	Command Economy	Where all elements of the economy are controlled by the government (e.g. Communism).
6	Market Economy	Where the government don't interfere in the economy and leave it up to businesses (e.g. USA).
ſ	Mixed Economy	Where some parts of the economy are managed by the government (e.g. Britain).
ſ	Autumn Statement	Where the Chancellor outlines their plans for the economy/budget/tax.
Ī	Factors impacting budget	The beliefs or philosophy of the party in charge; Crises that impact the government (e.g. inflation, Grenfell); the wealth/debt of the government (GDP).
o	Left Wing	The support of social equality, usually helping those who they see as socially disadvantaged.
8	Right Wing	The support of certain more traditional hierarchies in society, both social and economic.

Quest for Knowledge - Assessment Cycle Two - Citizenship Big Question: How Can Ordinary People Make a Change?

W	Key Content	<u>Description</u>
	Minister	An MP who becomes a member of the cabinet and has a particularly area to manage (e.g. health, education).
	Backbencher	An MP without a formal position within the party; they sit at the back of Parliament and can generally 'speak their mind'.
1	Speaker	The MP selected to chair the debates.
	Surgery	When an MP publicly meets their constituents.
	Whip	The MP in charge of party discipline; ensuring MPs vote a certain way.
	Lobby	When groups put pressure on the government to change policy.
	Scrutiny	MPs have a responsibility to carefully look over laws before they are passed.
	Private Member's Bill	When an individual MP gets the opportunity to put forward a law.
	Royal Assent	When the Queen officially signs off a law.
2	Public Bill	A proposed law that will impact the lives of the entire population.
	Legislative Process	In Britain, a bill must go through many stages (committee, report, etc.) before it becomes a law.
	EU	It aimed to encourage trade between members and allow for the free movement of people.
	UN	An international body set up in 1945 to maintain international peace and cooperate in solving international problems.
3	NATO	An intergovernmental military defence alliance established in 1949.
	Security Council	Britain are one of 5 permanent members on the UN Security Council – they have the power of veto.
	Why join international organisations?	Britain gain status/prestige from their prominent role in these organisations.
	Mediation	A process by which conflict is resolved by discussion and finding a peaceful compromise.
	Good Friday Agreement	An example of mediation between N Ireland and Britain in 1998. This ended The Troubles.
4	Military Action	The use of military presence to solve a conflict.
	Economic Sanctions	Refusing to trade with a country to resolve a conflict.
	Embargo	Britain refused to sell weapons to China after the Tiananmen Square incident.
	Humanitarian Aid	Britain gives 0.7% of its GGDP to organisations like the Red Cross.
	Voter Apathy	When citizens choose not to vote.
	Turnout	The $\%$ of the population who vote in an election.
	Turnout Stats	57% of young people voted in 2017, as opposed to 84% of people aged 70+.
5	General v Local	Turnout in local elections is much lower than general elections.
	Methods to improve voter turnout	Lower voting age; e-petitions; digital democracy.
	E-petition	If a petition gets over 100,000 signatures, it must be debated in Parliament.
	Pressure Group	Organisations who work together in regard to a specific issue to bring about change, often through campaigning.
6	Single-cause groups	A pressure group with a particular focus (e.g. HS2).
	Multi-cause groups	A pressure group who seek to influence policy in relation to many issues (e.g. Greenpeace).
	Methods used	Direct action (protest), canvassing, petitions; public stunts.
	Factors of success for Pressure Groups	Media attention, public opinion and government support.
o	Fathers 4 Justice	Fathers4Justice used public stunts to spread awareness of the unfairness of custody rights.
9	i dilicis 7 Justice	F4J became unpopular when the media turned against them.
	Feed Me Better	Feed Me Better was a campaign that used the media to discuss unhealthy food in schools.
	Save the Badgers	Save the Badgers used an advocate (Brian May) to spread awareness of badger culling.

Quest for Knowledge — Assessment Cycle Three — Citizenship Big Question: What Are Our Rights and Responsibilities as British Citizens?

W	Key Content	Description
	Human Rights	A right which belongs to every person e.g. the right to a fair trial.
	UDHR	"Universal Declaration of Human Rights". A charter signed in 1948 which outlined the rights that every human being is entitled to around the globe.
1	ECHR	"European Convention of Human Rights". A charter signed 1953 to protect Human Rights and political freedoms in Europe.
	UDHR problems	UDHR is not compulsory or legally binding; many countries sign but choose to ignore it.
	ECHR strengths	ECHR is codified in British law under the Human Rights Act in 1998.
	Trade Union	An association of workers in the same profession, formed to protect their rights and interests.
	Strike	When unions make a collective choice to not work to put pressure on employers to change.
2	Early trade unions	Activity banned and declared illegal — 1800 Combination Acts.
_	Trade union growth	19th Century growth leads to creation of Labour Party in 1900 which represents worker's rights.
	Trade Union power	Union power peaks in 1970s — General strikes; secondary action; closed shops etc.
	Unions today	In private sector, only 13% of people belong to a union. Often seen as irrelevant.
	Rule of Law	The idea that everyone is equal before the law.
	Presumption of Innocence	Innocent until proven guilty — you are treated as innocent until a court proves your guilt.
3	Laws, Police and Courts	These are the three powers who stop crime and uphold laws.
3	Powers of Police	Stop and search; Arrest; Entry, Search and seizure
	PCSOs	Volunteer police officers with some of the same powers as police.
	Police Crime Commissioner	Someone voted in to manage a regional police force.
	Statute Law	Laws passed by Parliament.
	Common Law	Decisions made by judges that are carried forward and used in other similar cases in the future.
4	Civil Law	Used to resolve claims between individuals (e.g. compensation owed).
•	Criminal Law	Used to determine guilt.
	Crown Court	Serious criminal cases go here.
	Magistrates Court	Less serious criminal cases go here.
	Recorded Crime	Data collected from police records of crimes that have been reported.
5	CSEW	Data collected on crime from interviewing a sample of the country.
	Factors that cause crime	Poor education; unemployment; poverty; family issues; mental health.
	Sentence	The punishment assigned to a offender found guilty by a court, or fixed by law for a particular offence.
	Custodial Sentence	A type of sentence where the offender must remain in "custody". This usually means they are imprisoned.
6	Non-Custodial Sentence	A general term for all the other ways a judge can sentence/punish an offender.
	Reoffending rate	The likelihood of as criminal committing another crime after being punished.
	Purposes of punishment	Rehabilitate; deter crime; protect community.
	Jury	A group of local people chosen randomly to make a decision in a legal case.
8	Neighbourhood Watch:	Local active citizens monitoring their local community, and working with the police to report issues of concern.
	Magistrate	A volunteer judge with no legal experience who decides on less serious cases.
9	Judicial Review	When a higher court looks at a specific case made by another court to see if they've made the correct decision. These decisions can be overruled.

<u>Quest for Knowledge – Assessment Cycle Four - Active Citizenship</u>

W	Key Content	<u>Description</u>
	Primary Research	A primary source is information collected first-hand by an individual — e.g. a questionnaire.
1	Secondary Research	A secondary source is information collected by someone who did not experience first-hand or participate in the events or conditions you're researching — e.g. watching a news clip in which the reporter has already carried out the research.
	Volunteering	When one person gives their own time to help others without being paid.
	Active Citizenship	Participating in society to bring about a change. For example: Organising and $/$ or collecting food for food banks.
	ldentifying	Understanding the issue which the project will be built around.
	Researching	Finding out more, through primary and secondary research.
	Our Research	Channel 5 News Report 2022; Trussell Trust's State of Hunger report; Interview with Trussell Trust
	Our Planning	Food Collection; Raising money for the Food Bank. What products to collect (alongside non-perishables, sanitary products and clothing). Lobby individuals within our school to encourage participation in the project e.g. Mr. Lee, Parents. Use social media and the newsletter.
	Action	Carrying out the project.
2	Our Action	Held a food drive to collect non-perishable goods/sanitary items/clothes.
	Measuring	Judging the impact of the project.
	Evaluating	Weighing up the project's strengths and weaknesses.
	Our Evaluation	Could students have collected more food or raised more money? Could the collection process have lasted longer thus allowing more food to be collected? Could it have started in September or October? Was the research stage robust and up to date enough? Do we need to use more tutor time to raise awareness? Was the campaign far reaching enough? Could we have gathered more food from more pupils and the local community? Could we have contacted the other schools in the trust?
3	Lobbying	A person or group of people meeting or taking action to try to persuade another to take up their cause. We lobbied Mr. Lee to allow the harvest food collection to take place at Q3 Academy Langley.
	Advocacy	Public support for or recommendation of a particular cause or policy.
	The Trussell Trust	The Trussell Trust is an organisation that supports a nationwide network of food banks and they provide emergency food and support. There are over 1,200 Trussell Trust food banks in the UK.
4	Food Poverty	Food Poverty = the inability of individuals and households to secure an adequate and nutritious diet. Over 2.5 million food parcels were provided in 2022 to families in the UK in food poverty.
		We found out that $2/3$ of food bank users had problems with benefits.
		Also, 54% come from homes affected by poor mental health.
5	Citizenship Skills	What Citizenship skills have you developed? Empathy and communication skills; Fundraising skills; Participation — active citizenship skills; Research skills — finding out about a particular issue; Better understanding about the use of social media; Deeper understanding around charitable activity.

The aim within your Cloud9 project is to create a creative and sustained body of work that shows a secure understanding over techniques and skills.

<u>Term</u>	<u>Description</u>	
Consistency of Paint	How thick or thin the paint is. If you use more water it will make your paint thinner and lighter, less water and it will be thick and darker.	
Photography Composition	Photo composition is how a photographer arranges visual elements within their frame.	
Lino Printing	A linocut is a type of relief. Essentially, the artist carves an image into a lino block and what's left of the block is inked and printed.	
Francisco Valle	Digital artists born in Weslaco, Texas. Key words: portraiture, floral, colour, detail.	
Ceramics	Ceramics are typically hard and chemically non-reactive and can be formed or densified with heat. We are using clay to create our pieces of Ceramics.	
Clay	The raw material used in ceramics. It is a very versatile material that can be transformed into a wide variety of shapes. When heated to high temperatures in a kiln, it hardens and permanently sets in shape.	
Proficiency	A high degree of skill; expertise.	
Colour Theory Through Painting	Warm colour – Purples, Blues, Greens Cool colours – Reds, Oranges, Yellows	

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

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

<u>Term</u>	<u>Definition</u>
Tone	Tone refers to the lightness or darkness of colours used, this can be shown with tonal pencil using different pressures, the amount of paint used (consistency), amount of coffee used.
Line	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 when drawing your Skulls and working from your own photographs.
Colour	Colour is present when light strikes an object and it is reflected back into the eye, As well as refining knowledge of primary, secondary and tertiary colours, there are also warm (Reds, Oranges and Yellows) and cool (Blues, Purples and Greens) colours.
Composition	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 taking your photographs and designing your lino print.
Form	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 for example the form of your piece of ceramics.
Shape	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 need to consider shape when using clay, lino cutters and each of your drawings.
Mood	Mood is the atmosphere in a piece of artwork, or the feeling expressed. Does the mood change the aesthetics of the work?
Texture	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 clay pieces, lino prints and paintings.

Quest for Knowledge - Assessment Cycle One and Two - Music Big Question: To What Extent Does Music Enhance (or Detract From) the Visual Scene in a Film?

Topic: Sonority, Harmony, Texture & Rhythm (Music for Screen)

- Developing an understanding of sonority and choice of instruments
- Developing ensemble skills through performance

<u>Key Words</u>	<u>Description</u>	
Diegetic music	Music or source of music on-stage/on-screen that is part of the fictional setting so is heard by the characters. E.g. the phone ringing or car radio playing.	
Non-Diegetic music	Music or sound on stage/on-screen that doesn't originate from the world of the fictional setting. Typically music added after to create an atmosphere or emotion.	
Soundtrack	Recorded music accompanying and synchronised to the images of an on-screen motion picture.	
Leitmotif	A short recurring musical phrase associated with a character, place or idea in a film.	
Dissonant	A combination of pitches in a chord which are relatively harsh and seem to 'disagree' and clash to give an unsettled feeling.	
Consonant	A combination of pitches in a chord which are pleasing and where all the notes 'agree' with each other to give a pleasant sound.	
Disjunct movement	When the melody leaps upwards and downwards, jumping about rather than moving by step.	
Conjunct movement	When the melody moves upwards and downwards by step like a scale.	
Chromatic movement	A scalic movement up or down in pitch that moves one semitone at a time. E.g. C C# D D# E F F# G G# A A# B C	
Sonority	The word used to describe the tone quality of a sound, voice of or instrument. E.g. the brightness, darkness, mellowness or purity of a sound heard.	
Sequence	A restatement of a phrase of melody in the same part at a higher or lower pitch.	
Imitation	The repetition or a melody or phrase in a different part. Essential copying from one part to another.	
Foley	Sound effects for a film that are created manually using every items and objects.	

Film music is a type of descriptive music that represents a mood, story, scene or character through music. It is designed to support the action and emotions of the film on screen: 1. Create or enhance a mood 2. Function as a leitmotif 3. To emphasise a gesture 4. Provide unexpected juxtaposition/irony 5. Link one scene to another providing continuity 6. Influence the pacing of a scene making it appear faster/slower 7. Illustrate the geographic location or historical period G A

G A

B

Quest for Knowledge - Assessment Cycle Three and Four - Music Big Question: What Happened to Music When Computers Were Invented?

Topic: Music Technology

- Inputting and recording music using a Digital Audio Workstation
- Developing an understanding of music technology

<u>Key Words</u>	<u>Description</u>
Sampling	Reusing a portion of a sound recording or a piece of existing music in another recording.
Synthesizer	An electronic musical instrument that generates audio signals and replicates electronic instrument sounds.
Loop	A repeating section of music in a DAW. Short sections can be repeated to create an ostinato or riff pattern using the loop function.
DAW	A Digital Audio Workstation (DAW) is an electronic device or software used to record, edit and produce sound files.
Quantising	Quantising is the process of moving recording notes into a DAW in line with the 'grid'/beats which make it rhythmically precise.
ВМР	The pulse of the music is measured in Beats Per Minute (BPM).
Metronome	A device that produces an audible click track at a regular interval that marks out the number of beats per minute (BPM).
Transport bar	The transport bar contains the main functions required for recording onto a DAW such as record, play, rewind, fast-forward and stop.
MIDI Keyboard	A Musical Instrument Digital Interface (MIDI) which allows you to play in musical data into a DAW.
Software Instrument	A computer software sound that is found within the DAW.
Step Sequencer	A step sequencer is a MIDI-based tool that divides a measure of music into a number of note values called 'steps'. It is laid out as a grid in which the each step can be triggered to make a sound.
Piano Roll Editor	The piano roll editor shows each note event in MIDI regions as editable rectangles on a time grid that is laid out as a piano.
Audio	A real sound or noise in a range that can be heard.
Panning	Moving sound anywhere in the stereo field sot the they are perceived as coming from the left or right speaker.
Mixing	Mixing involves combining all the sounds received from the multitrack recording and balancing them in levels.
Automation	Automatically performs tasks over time, particularly moving knobs, faders, and switches for you.

Bandlab Shortcuts

Key	Function	Key	Function
Space	Play/Pause/Stop Recording	CTRL + C	Copy Region
R	Record	CTRL + V	Paste Region
S	Cut Region	CTRL + Z	Undo
Α	Automation open/close	CTRL + SHIFT + Z	Redo

Quest for Knowledge - Assessment Cycle One, Two, Three and Four - Drama <u>Big Question:</u>

Cycle One and Two - What is the Purpose of Performing Arts? Cycle Three and Four - How Can We Unlock Our Creativity?

Elements of Stagecraft	
<u>Terminology</u>	<u>Description</u>
Gestures	The way we use our hands and arms to express the character's emotions.
Facial Expression	The way we manipulate the face to express the character's emotions.
Movement	The way we move our bodies on stage to express the character's emotions.
Stillness	The use of pause and lack of movement to express the character's emotions.
Posture	The way we stand to express the character's emotion or personality traits.
Gait	A mixture of their posture and movement to create a distinct way of walking.
Positioning/Proxemi cs	The place we stand on stage in relation to other characters to show the characters' relationships, status or emotions towards another character.
Voice	How we manipulate the way we say things to express the character's emotions.
Volume	How loud or quiet a sound is.
Pitch	How low or high a sound is.
Pace	How fast or slow a sound or movement is.
Tone	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>
Playwright	The person who writes the play.
Director	The person who has an initial vision for a piece of theatre who will see the piece from conception to creation to performance.
Artistic Intention	The vision of the Director and/or Choreographer of the piece of theatre, including the message they want to convey and how they want to use actors and design elements to convey this to the audience.
Atmospheric Music	Music used within a piece to set the location, mood and/or atmosphere of the piece.
Sound FX	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.
Lighting	Used in order to set the location, mood or atmosphere of the piece.
Set	Furniture and or objects to create specific locations naturalistically or could be symbolic or representative of places or themes.
Props	Objects used on stage, naturalistically or non-naturalistically that represent something a character might hold or use.
Costume	The clothing worn by a particular character this could be naturalistic (true to real life) or non-naturalistic (representative).
Semiotics	The combined use of lighting, sound, music, props, costume and makeup to create a message or communicate a mood or atmosphere.
Symbolism	A way of communicating to an audience a message through image, colour, object or sound. It is a subtle way of highlighting or linking ideas through abstract concepts.

Quest for Knowledge - Assessment Cycle One, Two, Three and Four - Drama <u>Big Question:</u>

Cycle One and Two - What is the Purpose of Performing Arts? Cycle Three and Four - How Can We Unlock Our Creativity?

Theatrical Conventions Cycle One and Two	
<u>Terminology</u>	<u>Description</u>
Narration	When the action in a story is told to the audience in 3 rd person speech with the accompaniment of role-play or mime. It helps to move the story along or change location or time period.
Flashback	In a nonlinear plot, to go back in time to a previous event.
Marking the Moment	A theatrical convention used to highlight a key moment in a scene or improvisation.
Still Image	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.
Thoughts Aloud	When a character in a scene says out loud a thought they are having that they wouldn't necessarily want anyone else to hear.
Exaggeration	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.
Role-play	Naturalistic acting of scenes that we would see in everyday life using character dialogue.
Cross-Cutting	Two or more scenes which are performed on stage at the same time.
Dramatic Irony	When the audience know something that the characters onstage do not know.

Theatrical Conventions Cycle Three and Four	
Physical Theatre	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.
Direct Audience Address	When a character (or a group of characters) speaks directly to the audience rather than speaking to another character or simply musing aloud.
Choreographed Movement	The art of practice of designing sequences of movements of physical bodies in which motion, form or both are specified.
Improvisation	The spontaneous use of movement and speech to create a character or object in a particular situation; acting done without a script.
Choral Work	Working physically and/or vocally in unison.
Chair Duets	A technique created by Frantic Assembly when you sit next to a partner and use a series of improvised contact movements.
Swipe Duets	Similar to Colombian Hypnosis this is a technique where one person controls the physical movement of another from a distance making it look as though they can physically control their movements
Lifts	A technique used by Frantic Assembly where a group of performers raise someone higher than they would be able to do alone.

Theatre Practitioners	
Theatre de Complicité	ls an international touring theatre company founded by Simon McBurney in 1983.
Frantic Assembly	ls an international physical theatre company led by Artistic Director and co-founder Scott Graham.

Quest for Knowledge - Assessment Cycle One - Physical Education Big Question: Why Are Key Values Important in Sport?

-	Big Question: Why Are Key Values Important in Sport?
	Key Terminology
Key Words & Facts	<u>Description</u>
Invasion Games	Sports that involve scoring a goal in the opponent's space
invasion Games	e.g. netball, football, basketball.
Striking and Net	Sports that involve scoring points by striking an object with a racket or bat
Games	e.g. badminton and cricket.
	Head: All Concepts
Key Words & Facts	<u>Description</u>
Tactic	A tactic is a strategy used to help performers to score the most goals, points or win a race.
	1) Select a performer
	2) Watch their performance
Analyse	3) Refer to essential knowledge
	4) Communicate feedback using WWW/EBI
-	Heart: All Concepts
Key Words & Facts	<u>Description</u>
Resilience	Working towards a goal, even after experiencing failure.
	Hands: Invasion Games
Key Words & Facts	<u>Description</u>
Netball Mastery Skill:	1) Hands in W position on the ball
_	2) Step into the pass
chest pass	3) Hands point to receiver on follow through
	1) Track the ball
ootball Mastery Skill:	2) Use inside of the foot
first touch	3) Cushion the ball
	1) T-position (side on to player)
Netball: stage 1	2) Balls of feet
defence	3) As close as possible without pushing the player
	1) Sprint towards attacker
	2) Slow down around 5 metres from them
Football: striking	3) Get into surfer position.
	4) Low and eyes on the player
	5) Make a tackle when the opportunity arises .
	Hands: Striking and Net Games
Key Words & Facts	<u>Description</u>
	1) Feet shoulder width apart
Badminton: ready	2) Knees bent
position	3) Weight low and forward over toes
	4) Racket in front and away from the body
Badminton: drop shot	1) Hit the shuttle needs to be hit downwards
	2) Strike down towards the opponent's fore-court,
	3) Aiming for it to go just over the net.
	1) Start in the ready position
Badminton: smash shot	2) Strike on the top of the shuttle
	3) Strike at the shuttle's highest point
	4) Use a whipping action
	5) Twist hins

5) Twist hips

Quest for Knowledge — Assessment Cycle Two and Three — Physical Education Big Question: Why Does Effective Analysis Lead to Improved Performance in Sport?

	Key Terminology
Key Words & Facts	<u>Description</u>
Outdoor Adventurous Activities	Sports that are performed in a outdoor environment e.g. orienteering, problem solving, climbing.
Aesthetics	Sports that involve scoring points by making a routine look aesthetically pleasing e.g. trampolining and dance.
Health Related Fitness	An activity that promotes improving health and fitness e.g. circuit training.
Athletics	An activity that includes a variety of throwing, running and jumping events e.g. the 100m sprint in outdoor athletics.
	Head: All Concepts
Key Words & Facts	Description
Tactic	A tactic is a strategy used to help performers to score the most goals, points or win a race.
144114	1) Select a performer
, . l	2) Watch their performance
Analyse	3) Refer to essential knowledge
	4) Communicate feedback using WWW/EBI
	Heart: All Concepts
Key Words & Facts	<u>Description</u>
	Doing the right thing, even when nobody is watching.
Integrity	An example in P.E is telling a referee that you kicked the ball out in football.
	Hands: Outdoor Adventurous Activities
Key Words & Facts	<u>Description</u>
	1) Look at surrounding features
rienteering Mastery Skill:	2) Locate where you are
Setting a Map	3) Thumb the map
3	4) Thumb, feet and face in same direction
	5) Turn the map accordingly
	Hands: Health Related Fitness
Key Words & Facts	<u>Description</u>
Health-Related Fitness	1) Feet shoulder width apart
Mastery Skill 1:	2) Heels down
Squat	3) Bend knees to 90 degrees
	4) Back straight, arms across chest
Health-Related Fitness	1) Feet flat
Mastery Skill 2:	2) Hands across chest
Sit Up	3) Elbows touch knees
Health-Related Fitness	1) Shoulders over hands
Mastery Skill 3:	2) Flat back 3) Bend elbows
Half Press Up	4) Tense stomach
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.
Koy Wards 9 Easts	Hands: Aesthetics
Key Words & Facts	<u>Description</u> Tension
	1) Contract muscles
ımpolining Mastery Skills:	2) Maintain a body shape
Tension and Extension	Extension
	1) Lock joints
	2) Point fingers and toes
	1) Track the crash mat

2) Jump forward3) Push hips up and over

4) Land on upper back5) Legs 45 degrees from hips

6) Arms above head

Trampolining: back drop

Quest for Knowledge - Assessment Cycle Four - Physical Education Big Question: How Do Tactics Lead to Success in Sport?

	Key Terminology
Key Words & Facts	<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
Kara Wanda Q Frata	December 2012

	Head: All Concepts
Key Words & Facts	<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) Select a performer 2) Watch their performance 3) Refer to essential knowledge 4) Communicate feedback using WWW/EBI

	Heart: All Concepts
Key Words & Facts	<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
Key Words & Facts	<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
Key Words & Facts	<u>Description</u>
Basketball Mastery Skill: triple treat	1) Ball at the hip 2) Dominant foot out 3) Knees bent 4) Leaning forward — "nose over toes" 5) Head up
Basketball: defensive position	1) Feet shoulder width apart 2) Back straight 3) Head up 4) Hands in front 5) Palms up

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

Quest for Knowledge - Assessment Cycle One and Two - Computing Big Question: How Does Programming in Python Compare to Programming in Scratch?

Key Words & Facts	<u>Description</u>
Bug	A piece of code that is causing a program to fail or run properly or at all.
Casting	The process of converting one data-type into another. For example, sometimes a number may be stored as text but need to be converted to an integer. This can be done like this :int("3")
Commenting	Some text in a computer program that is for the human reader and is ignored by the computer when running the program. In python all comments begin with a hash symbol #
Comparative Operator	Sometimes called logic operators, they allow us to compare data in a program. They include == and >
Constant	A value that does not change. It is good practice to name constants in capitals e.g. SPEED_OF_LIGHT
Data-type	Different types of information stored by the computer, for example floats, integers and strings.
Default	A value given to a variable as a starting point.
Equals Operator	The equals sign is used to assign a value to a variable in coding, for example $n=2$ assigns the value 2 to the variable n .
Float	A number data-type that has a decimal value.
Function	A reusable piece of code.
IDLE	Stands for Integrated Development Environment.
Infinite Loop	A piece of code that keeps running forever. This is usually a bad thing.
Input	input() It allows you to get input from the user by showing a prompt. Then this function returns the data inputted by the user in the string format. It is a string no matter if the user typed '42' or 'I like coffee'.
Integer	A number data-type that cannot have a decimal value and must be a whole number.
Interactive Mode	This is when we use IDLE to try out snippets of code without saving them.
Loop	A piece of code that keeps repeating until a certain condition is met.
Mathematical Operator	An operator that performs some mathematical function on some numbers. e.g. multiplication or addition.
Operator	A symbol that performs a simple function on some code such as multiplying two numbers or comparing them to see if they are equal.
Output	Data that is sent from a program to a screen or printer.
Print	The print() function literally prints the result to the screen. To use (or call) this function, you simply type: print().
String	Text data Which can be stored in a variable.
Syntax Error	An error produced when a computer fails to run a program because it cannot recognise the format of the code supplied. e.g. a syntax error would be produced if a bracket had not been closed.
Variable	A name that refers to a place in a computer's memory where data is stored.
While Loop	A loop that repeats code while comparative statement returns true.

Quest for Knowledge — Assessment Cycle Three and Four — Computing Big Question: How Do the Components of a Computer Work Together To Support Our Modern Lives?

Key Words & Facts	<u>Description</u>
Meaning of Hardware	The physical components that a computer system requires to function.
Meaning of Software	The programs that run on your computer.
Examples of Hardware	Motherboard, ram, CPU, keyboard, monitor, mouse.
Examples of Software	Operating system – Windows, MS word, MS PowerPoint, MS Excel.
What are computers made up of?	All computers are made up of hardware and software.
What does CPU stand for?	Central processing unit.
What is the CPU also known as?	The brain of the computer.
What is the CPU made of?	Control Unit, Arithmetic Logic Unit, Registers and Cache memory.
What does the control unit do?	Controls data moving through the processor, and controls the timing of operations and the instructions sent to the processor and the peripheral devices.
What does the arithmetic logic unit do?	The ALU performs simple addition, subtraction, multiplication, division, and logic operations.
What does the cache memory do?	Temporarily stores frequently used instructions and data for quicker processing by the central processing unit (CPU) of a computer.
Fetch-execute Cycle	The complete process of retrieving an instruction from store, decoding it and carrying it out. Also known as the instruction cycle.
Register	Tiny areas of extremely fast memory located in the CPU normally designed for a specific purpose, where data or control information is stored temporarily e.g. The MAR , MDR etc.
Clock Speed	Measured in Hertz, the clock speed is the frequency at which the internal clock generates pulses. The higher the clock rate, the faster the computer may work.
Cache Size	A part of the main store between the central processor and the rest of the memory. It has extremely fast access, so sections of a program and its associated data are copied there to take advantage of its short fetch cycle.
Cores	A part of a multi-core processor. A multi-core processor is a single component with two or more independent actual CPUs, which are the units responsible for the fetch-decode-execute cycle.
RAM	Volatile, stores current programs and data in use, can be read and written to.
ROM	Non-volatile, stores BIOS, can only be read.
Optical Storage	Storage device that records data by burning pits and lands into a disk.
Magnetic Storage	A storage device that reads data using magnetic polarities on a disk read by a machine head.
Solid State Storage	A storage device that uses the presence of electrons detected by a flash of current to read data.
What is a network?	A network is two or more computers - or other electronic devices - that are connected together for the purpose of communication.
How are computers connected in the network?	They are connected by a wired medium such as cables or by a wireless medium such as Wi-Fi.
What are the advantages of networks?	File sharing, hardware, communication updates, roaming access/user accounts, centralised security, levels of access.
What is a LAN and what does it do?	Local Area Network and it covers a small geographical area – such as a school.

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

<u>Term</u>	<u>Description</u>	
Graphic Designer	A person who combines text and pictures in advertisements, magazines, or books.	
ACCESSFM	ACCESSFM is a designers tool used to make you think about products in a critical and analytical way.	
A = Aesthetics	What does the product look like? Consider colour, finish, texture, theme and inspiration.	
C = Cost	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?	
C = Customer	Who has the product been designed for? Identify a Target Market, considering age, gender and interests.	
E = Environment	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?	
S = Size	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?	
S = Safety	Is the product safe? What makes it safe? Are there any potential dangers? Consider the user, size, finish and environment.	
F = Function	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?)	
M = Materials	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.	
Product Specification	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.	
Design Brief	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.	

Quest for Knowledge - Assessment Cycle One, Two, Three and Four - Food Big Question: How Can Meal Planning Benefit Our Health and Wellbeing?

<u>Term</u>	<u>Description</u>
Bacillus Cereus	A food poisoning bacteria related to: cooked rice, meat and dairy products, cereals.
Campylobacter	A food poisoning bacteria related to: raw meat and raw poultry, dairy.
Clostridium Perfringens	A food poisoning bacteria carried in the intestines of animals and humans. Related to raw meat, soil on vegetables, manure.
E.coli	A food poisoning bacteria related to: raw and undercooked meat, raw poultry, untreated milk. Located in the intestines of animals and humans.
Listeria	A food poisoning bacteria related to: cook-chill foods, untreated dairy.
Cook-chill Foods	Foods that have been cooked above 75c, then chilled down between 0-5c. These foods are stored in the fridge until they are later reheated to 80c. Example: Ready Meals.
Salmonella	A food poisoning bacteria related to: eggs, raw poultry, pets and rodents.
Staphylococcus Aureus	A food poisoning bacteria related to: people. This bacteria can live on the skin, in the nose or on the fingers of infected people.
Food Waste	Food that is thrown away due to large portion sizes, over-buying or food going out of date.
Ambient Foods	Foods stored at normal room temperature e.g. canned food, jars, cereals, fruit and vegetables.
Chilled Storage	High-risk foods which require refrigerated storage e.g. raw meat, fish and poultry.
Use-by-dates	Food must be eaten or frozen by this date, or it will become a potential food poisoning risk.
Best Before Dates	This date refers to the quality of a product. Foods can be eaten after this date, but may not be their best quality e.g. a cake may be a little stale. These are on foods with little or no risk of food poisoning.
Food Insecurity	Is the state of being without reliable access to a sufficient quantity of affordable, nutritious food. Also known as 'food poverty'.
Nutritional Analysis	The process of calculating the nutritional content of food.
Kilojoules	The energy we get from food and drink is measured in kilojoules (kJ). This is the metric term for calories. Kilojoules and calories represent the same thing. One calorie is about four kilojoules.
Calories	Units of energy that a food or drink provides. Men should consume approx. 2500 calories each per day and women should aim for 2000 calories per day.
Reference Intake (RI)	A guideline to help you make healthy dietary choices and balance your daily intake. An average of how much you should consume of a product.



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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