Learning: The Ruskin Way

At Ruskin all students to **learn together** and **achieve high standards**. Students follow our **Core Values** to become a **Ruskin Learning Ready Student**.

RESPECT: A Ruskin Learning Ready student is **respectful** towards peers, teachers, support staff and visitors. Within our diverse school community, they demonstrate **kindness** and **tolerance**. They show **self-respect** by striving to be the best they can be and by being **organised** and **prepared** to learn.

HIGH ASPIRATIONS: A Ruskin Learning Ready student is **ambitious** both inside and outside of the classroom. They **love to learn** and appreciate all of the **opportunities** offered to them. Because of their high aspirations, they **strive** to be the **best** that they can be.

CONFIDENCE: A Ruskin Learning Ready student is **confident** in their **abilities** and **strengths**. They are **not afraid** to make mistakes and will **ask questions**. They take an **active role** in their learning and demonstrate **independence**.

WE ARE A COMMUNITY: A Ruskin Learning Ready student works well with others and is a team player. They care for others and are proud to be part of the Ruskin community.

A Ruskin Learning Ready Student

PREPARED:

- Has a good night's sleep
- · Eats well and stays hydrated
- Arrives at school and lessons on time
- · Wears their uniform correctly
- Enters the room calmly and is ready to learn

ORGANISED:

- · Brings the correct equipment
- · Manages their time appropriately
- Completes all work, including homework, to the deadline set and to the best of their ability

RESPECTFUL

- Is respectful, kind and tolerant of all people in our diverse school community
- Is a team player
- · Listens to others without judgement
- Demonstrates self-respect and takes pride in their work and progress



- Has confidence is their own abilities and strengths
- Is not afraid to ask for help and support
- Can communicate and read with confidence
- Is inquisitive and takes an active role in their learning

AMBITIOUS:

- Has high aspirations for themselves and their future
- Strives to be the best they can be
- Relishes the opportunities offered to them

REFLECTIVE:

- Listens to and responds to their teachers' feedback
- Is able to identify their next steps and areas for improvement
- · Strives to improve



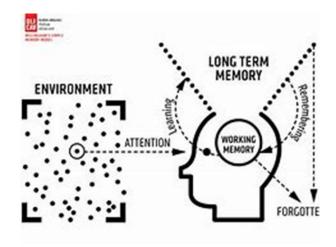
Independent Learning at Ruskin

Independent Learning is all about helping you to build on the knowledge that you learn in class so that you **know more**, **remember more**, and **can do more**. This means you will experience lasting changes in your **long-term memory**, and develop a deep understanding of what you cover in class.

When you have truly learnt something, you can:

- Remember it later
- Understand how it connects to other things you know
- Explain it in detail
- Apply it to different situations

Quiz It, Map It, Link It is a structured programme of independent learning and revision activities that will help you to do all of the above. By using your Core Knowledge Questions Booklet in multiple different ways, you will go from simply memorising the facts, to really understanding them, and being able to use the knowledge much more confidently and effectively.



Our Core Values:



We want you to feel **confident** with the **new knowledge** that you acquire and you should feel **assured** about how best to learn this **new knowledge**. Your **Core Knowledge Questions Booklet** and **Quiz It, Map It, Link It** will help with this.



We want you to be the **best that you can be** and to "**think big**" for yourselves. By using your **Core Knowledge Questions Booklet** and **Quiz It, Map It, Link It,** you will demonstrate a **positive attitude to learning**, and also push yourself to reach your **goals**.



We want you to have **self-respect** and understand the important of working **independently**. Completing **Quiz It, Map It, Link It** activities highlights your ability to recognise your **strengths** and also **areas for development**.



Our Evidence-Informed Independent Learning and Revision Strategies



Quiz It — what can you remember about your Core Knowledge Questions? What more do you learn and remember?



Map It — use mind maps to create revision resources. These can then be used to learn the core knowledge.



Link It — what other subjects/topics that you have studied does this knowledge link to? Why and how does it link?

Independent Learning: How to Quiz It



Quiz It — what can you remember about your Core Knowledge Questions? What more do you learn and remember?

How you use this strategy depends on whether you are **rehearsing** (the information is new to you) or **retrieving** (trying to recall knowledge you have already learnt) The majority of your Quiz It work should be **Retrieval Practice** as this will help you to **remember more**.

Step 1: LOOK

- Pick a subject/topic and read over the Core Knowledge Questions (you may not pick all of them from one subject/topic depending on what you have learnt already).
- You may need to re-read.
- Copy out the questions on a blank template.

Step 2: COVER

• Turn over your Core Knowledge Questions or cover up them up.

Step 3: WRITE

- On your blank template, write in the answers.
- Use black or blue pen.

Step 4: CHECK

- Uncover the answers.
- Using green pen, check your answer.
- Tick every correct item and correct any mistakes this is the most important part of the process.

Step 5: REPEAT

- Complete the process again for any questions that you got wrong.
- Add more questions to your blank template and complete the process again.





Independent Learning: How to Map It

Map It — use mind maps to create revision resources. These can then be used to learn the core knowledge.

Step 1: Identify the knowledge

- Pick a topic that you wish to revise. This will go in the centre of your mind map.
- Have your Core Knowledge Questions ready.

Step 2: Identify the Core Knowledge Questions

- These questions will become the main branches of your mind map.
- Write out the questions carefully and leave space around them.

Step 3: Branch Off

- Branch off your Core Knowledge Questions with the answers.
- Copy the answers carefully.

Step 4: Use Images and Colour

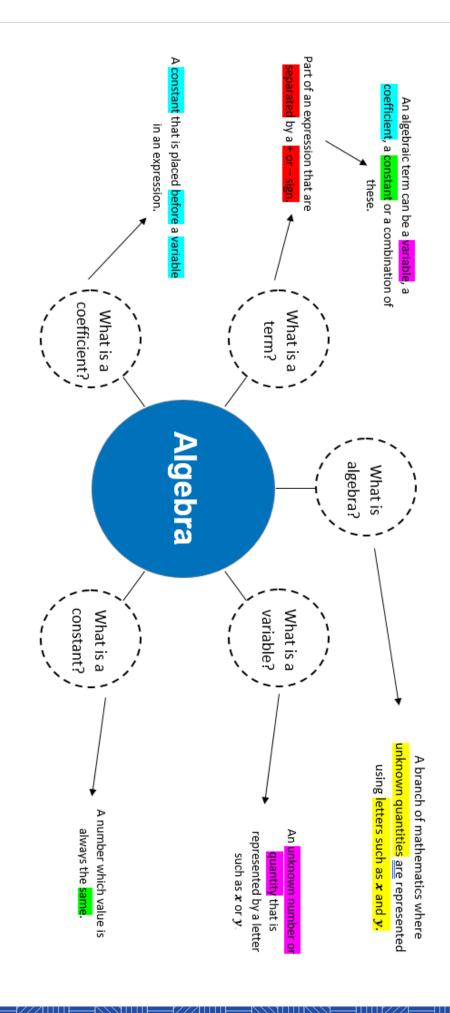
- Use images and colour to help answers stick in your mind.
- Highlight the key words that you need to remember.

Give yourself plenty of space to write the Core Knowledge Questions and the answers. You need to be able to visualise the information when you are trying to recall it.





MAP IT EXAMPLE





Independent Learning: How to Link It



What other subjects/topics that you have studied does this knowledge link to? Why and how does it link?

- Choose 2 Core Knowledge Questions from a specific topic.
- Write three sentences to show how these link to other topics that you have studied. Don't forget that these topics could be from different subjects and/or from learning that you did in a previous year.
- Use the Link It proforma to answer the two questions (using all of your knowledge) and also how they link together.

You could:

Compare and Contrast:

- X is similar to/different from Y because...
- X is more/less...than Y because...
- In a similar way to X, Y is...
- In a different way to X, Y is...

Cause and Effect:

- X happens because of Y...
- X and Y work together because...
- X happens because...

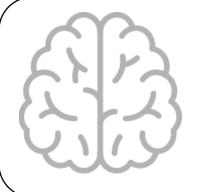
Support/Refute:

- X supports the ideas of Y because...
- X refutes the ideas of Y because...





LINK IT EXAMPLE



What is Photosynthesis?

Photosynthesis is the chemical reaction that makes glucose (the plant's food) using light energy. The reaction occurs between carbon dioxide gas from the air absorbed by the leaves and water which is absorbed through the roots. Glucose is made in the leaves and oxygen is released back into the air as a bi product.



The link between them is that water is a necessary for both the process of photosynthesis and transpiration is the constant stream of water moving through the plant from roots to leaves.



What is Transpiration?

Transpiration is the loss of water from the plant as it moves into the roots, up the stem to the leaves for photosynthesis. Some water is lost through the leaves, by the stomata or pores by evaporation.





LINK IT EXAMPLE

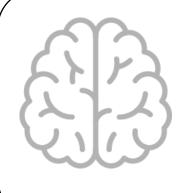


Who is Scrooge?

Scrooge is a misanthropic miser whose obsession with money has corroded the important relationships in his life. At the start of the text, he is "solitary as an oyster". However, through his journey with the spirits he metamorphizes into a benevolent character. Through Scrooge, Dickens highlights our ability to change our worldview and shines a light on the importance of sharing



The link between Mr. Birling and Scrooge is that they both represent negative aspects of humanity—selfishness, greed, and a lack of empathy—but they differ in their responses to these characteristics. Scrooge ultimately experiences redemption and personal growth, while Mr. Birling's character serves as a critique of those who prioritise their own interests over social responsibility.



Who is Mr Birling?

Mr. Birling is a capitalist who holds conservative views. Despite his wealth, Mr. Birling is depicted as an insensitive and callous character. He is dismissive of the concerns of the working class. Mr. Birling's character is a representation of the narrow-mindedness and lack of social responsibility that Priestley criticises in the play. Through his character, Priestley explores themes of social inequality, responsibility, and the interconnectedness of individuals in society.



Year 8 Core Knowledge Questions

ART

1	What is a tonal gradation range?	Value steps going from light to dark
2	What is the form?	Form is a 3D shape. It can be expressed in 3D or using tone to create the illusion of 3D. (length, width and depth)
3	What is a light source?	Natural light from the sun, or artificial from light bulbs.
4	What is a shadow?	The dark side of an object not facing the light.
5	What is a cast shadow?	A shadow cast by an object or figure.
6	What career did Antoni Gaudi have?	Architect.
7	What does an architect do?	Design and create plans for buildings and structures.
8	What does an illustrator do?	Creates 2D images to portray a message or idea. They work for various companies and industries for example magazines, books, advertising, fashion.
10	Where did Antoni Gaudi work?	Barcelona, Spain
11	What was Antoni Gaudi influenced by?	Nature
12	What was an important part of Georgia O'Keeffe's work?	An important part of her work was focused on the relationship between light and dark.
13	What is cross hatching?	fine parallel lines drawn closely together.
14	What is a contour?	drawing lines, essentially an outline
15	What is texture?	Texture is the surface quality of an object. In art it can refer to the illusion of texture by the types of marks added.
16	What is zentangle?	Zentangle is structured patterns (tangles).

COMPUTING

1	State 3 components inside a computer and describe each one	CPU – the brain of the computer
1	state 3 components inside a computer and describe each one	 RAM – short term memory ROM – long term memory Hard Drive – storage of long-term memory
		 GPU – graphics processing unit Motherboard – connects all of the
		components
	Paradha a da da da da	PSU – power supply unit
2	Describe an input device	 Keyboard – inputs characters Mouse – moves the mouse
		pointer
		Microphone – detects sound and
		converts
3	Describe an output device	Monitor/Screen – shows the work
	· ·	that is being completed
		 Speakers – allows us to hear
		sound
4	What does a CPU do?	Brain of the computer
		Carries out the fetch – decode –
		execute cycle
5	What does formatting mean in a spreadsheet?	To change the appearance
6	In what way can a spreadsheet be formatted?	Alignment
		Font style
		Colour
		Font size
		Borders
		Font effect
7	What does a formula begin with?	=
8	Which is the correct cell reference 1A or A1?	A1
9	What is the difference between a formula and a function?	 A formula is an arithmetic operation (+-/*). Just an = A function is a predefined calculated and has a word e.g. =SUM
10	What does SUM do?	Adds together a range of values.
11	What does MIN do?	Finds the smallest (minimum) value.
12	What does MAX do?	Finds the largest (maximum) value.
13	What does AVERAGE do?	Finds the average (mean) number.

14	What does COUNT do?	Counts how many of a certain value
		there are.
15	How can a spreadsheet be organised to make it easier to	• Filter
	interpret?	• Sort
		 Tables
		 Charts/graphs
16	What symbol is used to indicate an absolute cell	\$
	reference?	
17	What does conditional formatting do?	Changes the format of a cell(s) if a conditional has been met.

DANCE

1	What are actions?	What a dancer does.
2	What are the 8 key dance actions?	Gesture, elevation, travel, transfer of weight, stillness, use of different body part, rotation, floorwork.
3	What is travel?	Moving from one place to another.
4	What is elevation?	The action of 'going up' without support, such as in a jump.
5	What is a gesture?	The use of hand or arms.
6	What is transfer of weight?	The weight is moved from one supporting foot (or supporting limb/body part) to another one fully or partially.
7	What is stillness/balance?	A steady or held position achieved by an equal distribution of weight.
8	What is use of different body part?	Expressing an idea or emotion with a different limb.
9	What is rotation?	A turning sequence.
10	What is floorwork?	Movements performed on the floor.
11	What is space in dance?	Where the dancer moves e.g. pathways, levels, directions, size of movements, patterns, spatial design.
12	What are dynamics in dance?	How the dancer moves e.g. fast/slow, sudden/sustained, acceleration/deceleration, strong/light, direct/indirect, flowing/abrupt.
13	What is relationship in dance?	Relationship refers to the connection that a dancer has to everything else: this can be space, to time, to music and to other dancers.



14	<u> </u>	The art of making dances, the gathering and organisation of movement into order and pattern.
15	What is a stimulus?	Inspiration for an idea or movement.
16	What is a formation?	Shapes or patterns created in space by dancers.
17		Unison is when two or more people perform the same movement at the same time.
18	What does canon mean?	When the same movements overlap in time.
19		A movement phrase capturing an idea that is repeated and developed throughout the dance.
20	What is safe working practice?	Personal care, respect for others, safe execution and preparation and recovery from dancing.
21	What is safe execution of movement?	Carrying out actions safely.

DRAMA

1	What is a duologue?	This is where you have two speakers.
2	What is a monologue?	A monologue is any speech of some duration spoken by a character to a second person.
3	What is cross-cutting?	Cross-cutting is a drama technique where two or more scenes are performed on stage at the same time.
4	What is characterisation?	Characterisation in drama is the process of producing a character through actions, words, and thoughts.
5	What is a gesture?	The use of hand or arms.
6	What is exaggerated acting?	When performing, the command 'bigger' is called and performers should exaggerate their physicality.
7	What are facial expressions?	A look on your face which shows emotions.
8	What does diction mean?	The use of words or phrases in speech.

9	What is eye contact?	Eye contact is used to reveal the status and relationship between characters.
10	What is non-verbal communication?	Non-verbal communication is facial expressions, gestures and movements.
11	What is projection?	The energy you give out to the audience.
12	What is posture?	The way an actor sits or stands.
13	What is gait?	The way an actor walks.
14	What is blocking?	The way an actor is facing and the distance between actors on stage.
15	What is pitch?	How high or low your voice is.
16	What is tone?	The way your voice is affected by emotion.
17	What is accent?	How your voice is affected by where you come from.
18	What is volume?	How loud or quiet your voice is.
19	What is pace?	How quickly or slowly you speak.
20	What is pause?	Putting a break between words.
21	What is emphasis?	Putting stress on a word or section.
22	What are stage directions?	Any additional instruction for the actors that aren't spoken out loud. They need to be put in italics
23	What is a stimulus?	Something that gives you an idea – an inspiration, a starting point. It is the beginning of the creative process.
24	What is role play?	Role play is used to act as a mirror.
25	What is vocalisation?	A sound or word produced by the voice.
26	What is still image/freeze frames?	Still image is a frozen picture which communicates meaning.

27	The characters inner voice and provides deeper insight into their thoughts and feelings.
28	Non-naturalistic drama is acting away from the norm such as walking in an unusual way.

DT

1	What is the impact of a 'throwaway' culture?	The impact is 3-fold. Pollution and waste. Climate change and the loss of nature and biodiversity.
2	What is the meaning of sustainability?	Sustainability consists of fulfilling the needs of current generations without compromising the needs of future generations, while ensuring a balance between economic growth, environmental care and social wellbeing
3	What is the meaning of Eco-Design?	Ecological design or eco-design is an approach to designing products and services that gives special consideration to the environmental impacts of a product over its entire lifecycle
4	What does it mean to be an environmentally responsible designer?	As a sustainable designer, you are responsible for creating products and designs that have a minimal negative impact on the environment. This can be achieved through the use of sustainable materials, energy-efficient production methods, and recyclable or biodegradable packaging.
5	What is a product lifecycle analysis?	Extraction of resources – Material processing – Product Manufacture – distribution – use – end of life.
6	What is problem solving through effective design?	As a sustainable designer, you are responsible for creating products and designs that have a minimal negative impact on the environment. This can be achieved through the use of sustainable materials, energy-efficient production methods, and recyclable or biodegradable packaging.
7	What is design communication?	Where ideas are presented through a variety of visual methods. Mainly modelling, annotation & sketches.
8	What are material properties?	Physical or mechanical properties determine the use and functionality of a material. Essentially, how and why it is used.

9	What is textiles construction?	Fabric construction refers to the way in which the yarns or fibres are organized and combined to create a fabric. It involves various techniques, such as weaving or knitting. The fabric construction process influences factors such as fabric strength, stretch, drape, breathability, and texture.
	What is textiles manufacture?	
		Constructing a functional product with textiles using a range of sewing techniques, such as seams, hems and finishes.
10	What is CAD?	Computer Aided Design
	What are the benefits of using CAD to create design outcomes?	It is fast – it is accurate – it can be replicated
11	What is analysis?	Looking and asking questions about a product.
12	What are the stages of iterative design?	Empathise – Define – Ideate – Prototype - Test

ENGLISH – FRANKENSTEIN

1	What is the writer of a play called?	A playwright.
	Who is a play intended for?	An audience.
2	What is a play split up in to?	Acts and scenes
3	What is the purpose of the stage directions in a play?	To give instructions to the director and the actors about how to deliver the script.
4	What is a dramatic convention?	A convention is a technique employed regularly in the drama so that the audience come to attach specific meaning to it. For example, use of an 'aside'.
5	What is context?	Context is the circumstances in which a text is written and also the circumstances in which the text is read.
6	What is the play adapted from? What is the name of the author of the original text?	A novel called 'Frankenstein' by Mary Shelley.
7	What century did Gothic literature originate?	The 18 th Century
8	What is a convention of Gothic literature?	Gothic literature can be recognised by its use of particular features, settings and characters. Common conventions of the Gothic genre include the following: the power of nature, the supernatural and abandoned buildings.

9	What is the reason for the original text	It was an age in which many people were superstitious
	being popular with Victorian readers?	and believed in the supernatural.
10	What term do we use when we refer to	The playwright's intentions.
<u> </u>	why the playwright has written the play?	
11	What is a soliloquy?	It is a speech in a play that the character speaks to
		himself or herself or to the people watching rather than
		to the other characters.
12	What does the word ominous mean?	Suggesting that something unpleasant is likely to
		happen.
13	What is foreshadowing?	Foreshadowing means there is a warning or indication
		of a future event.
14	What is pathetic fallacy?	Pathetic fallacy is a type of personification. It's the term
	Time to passione rando,	used when human emotions are attributed to the
		natural world.
15	What is meant by the term tension?	Tension in a literary context is the sense something
13	what is meant by the term tension.	ominous is right around the corner.
16	What does subvert mean?	To go against someone's original thought.
17	What is the name of the debate about	Nature versus nurture.
17	whether our genetics or upbringing	ivature versus nurture.
	determines who we are as a person?	
10		The shility to share company also's feelings or
18	What is empathy?	The ability to share someone else's feelings or
		experiences by imagining what it would be like to be in
10		that person's situation.
19	What questions are raised by this play?	The play questions many concepts:
		the ethical implications of scientific discovery;
		the boundaries of knowledge;
		the consequences of playing god;
		the responsibility of the creator for their
		creation.
20	What is a thesis statement?	A thesis statement is a sentence that sums up the
		central point of essay.
21	What literacy/SPaG checks do I need to	When you check your work, you should ensure you
	complete before handing in my work?	have
		1. Used capital letters correctly
		2. Used the correct punctuation at the end of each
		sentence (e.g. full stop, question mark, exclamation
		mark)
		3. Used paragraphs where necessary
		4. Presented your work neatly and appropriately
		5. Used the key words from the lesson
		Used the key words from the lessonUsed challenging vocabulary where necessary

ENGLISH – CONFLICT POETRY

1	What is context?	Context is the circumstances in which a text is written and also the circumstances in which the text is read.
2	What is poetic form?	There are many different forms of poetry. Common poetry forms, such as the ballad, sonnet, haiku, limerick, ode, epic and acrostic.
3	What is meant by the term propaganda?	Information, especially of a biased or misleading nature, used to promote a political cause or point of view.
4	What is a paragraph in a poem called?	Stanza.
5	What is meant by the term rhyme scheme?	The ordered pattern of rhymes at the ends of the lines of a poem or verse.
6	What is meant by the term repetition?	The action of repeating something that has already been said or written.
7	What is meant by the term anaphora?	Repetition of a word or expression at the beginning of successive phrases, clauses, sentences, or verses.
8	What is meant by the term enjambment?	Enjambment is a literary device in which a line of poetry carries its idea or thought over to the next line without a grammatical pause.
9	What is caesura in a poem?	A caesura is a pause that occurs within a line of poetry, usually marked by some form of punctuation such as a period, comma, ellipsis, or dash.
10	What is meant by the term onomatopoeia?	A word that mimics the sound it makes.
11	What is juxtaposition?	Juxtaposition is the idea of placing two things together so we can see the contrast between them.
12	What is an oxymoron?	The combination of contradictory words with opposing meanings. E.g. deafening silence.
13	What is alliteration?	The repetition of consonant sounds in consecutive words. E.g hedgehogs hog the hedge
14	What is sibilance?	The repetition of the 's' or 'sh' sound in consecutive words. E.g sweet smell of success
15	What is foreshadowing?	Foreshadowing means there is a warning or indication of a future event.
16	What is meant by the term iambic pentameter?	A line composed of 10 syllables with 5 stressed and 5 unstressed.
17	What is meant by the term personification?	Personification is giving an inanimate object human feelings or actions.



18	How can I embed quotations?	To successfully embed quotations into your sentences, only quote the important key words or phrases. Try to integrate the evidence into your explanation. Instead of saying: David clearly thinks Harry is like an angry animal and feels threatened by him. This is shown when it says 'he growls in my ear'. Embed the quotation: When Harry 'growls in' David's ear, it is clear David feels threatened by him as he is behaving like an aggressive animal warning David he might attack.
19	What is a semantic field?	A semantic field is a set of words (or lexemes) related in meaning. (For example, words linked to the military or hospitals.)
20	What is a thesis statement?	A thesis statement is a sentence that sums up the central point of essay.
21	What literacy/SPaG checks do I need to complete before handing in my work?	 When you check your work, you should ensure you have Used capital letters correctly Used the correct punctuation at the end of each sentence (e.g. full stop, question mark, exclamation mark) Used paragraphs where necessary Presented your work neatly and appropriately Used the key words from the lesson Used challenging vocabulary where necessary

FOOD

1	What is the EWG?	Advice regarding what you need to eat from each food group to achieve a healthy balanced diet.
2	What are the 5 basic nutrients?	 Fat Carbohydrate Protein Vitamins Minerals
3	What is a balanced diet?	A diet that contains all of the nutrients that you need to maintain good health.
4	What are the other two aspects of your diet that you need to have each day?	FibreWater



5	What causes bacteria to grow?	 Heat Moisture Food high in protein Time
6	What are the important temperatures to consider when storing food?	 The danger zone 5-62 Minus 18 0 to minus 5 degrees Boiling point 75 degrees kills bacteria
	Which groups of people are most at risk from food illness?	Very young peopleOld peoplePregnant women
8	What are high risk foods?	 Food high in protein, Food that is warm Food that has moisture
9	What are the 4 main factors that influence food in a region?	 Land Environment Economy Culture and Religion
10	What is the difference between culture and lifestyle?	 Culture - Ideas, customs and social behaviours of a particular people or society. Lifestyle - how you lead your life, interests and hobbies e.g. sport.
	What is the impact of religion on food choice?	Some religions have strict customs and rules to follow
	What ingredients do we use to make a stir fry?	Beansprouts, vegetables, soy sauce. meat
	What skills do we use when we make stir fry?	Knife skills and frying
14	What ingredients do we use to make a mac and cheese?	Cheese, pasta, milk margarine, flour
	What skills do we use when we make mac and cheese?	Boiling, grating, blending
	What ingredients do we use to make a spaghetti Bolognese?	Pasta, mince, onion, tomato sauce, seasoning.
	What cooking methods do we use when we make spaghetti Bolognese?	Frying, simmering, boiling

18	What is the best way to evaluate a dish?	By using your senses

FRENCH – CORE KNOWLEDGE QUESTIONS FOR FRENCH SHOULD BE USED ALONGSIDE YOUR VOCABULARY BOOKLET.

1		The name of a person, place, object or thing. All nouns are masculine or feminine.
2		Which groups nouns belong to.
3	What is an article?	The words "the", "a", "some".
4	What is the definite article?	The word "the"
5	What are the 3 definite articles in French?	Le, la, les
		It becomes I'
6		A, some
7	What are the 3 indefinite articles in French?	Un, une, des
8	What is the word for and what type of word is it?	Et It is a connective
9	_	A word in another language that looks or sounds like it's English meaning.
10		A word in another language that looks or sounds English but does NOT mean the same.
11	Why do letters sound different in MFL	Their phonetic pronunciation is different.;
12	How do you make a sentence negative	Put ne pas around the verb
13	What is special about days and months in French?	They DON'T start with a capital letter.
14	How do you know if a country is feminine	It ends in E
15	What are the words for 'in' a country	Au (M) En (F) aux (PL)

16	Why are there 2 versions of nationalities? Which one do we use for a language?	Masculine & feminine Masculine
17	What verb do you need to form the near future tense in French?	aller
18	What is an infinitive?	A verb that ends in ER/IR/RE The 'to' bit of the verb
19	Where does the infinitive go in sentences in the future tense in French?	After the part of aller you want to use
20	How do you say I would like in French?	Je voudrais J'aimerais
21	What does the word currency mean?	The money used in a particular country
22	What is the currency used in France?	Euros and Euro cents

GEOGRAPHY

1	What is urbanisation?	Increase in number of people living in a town or city.
2	What are the two causes of urbanisation?	Rural-urban migration and internal growth.
3	Where is the most rapid urbanisation happening?	NEEs and LICs
4	What is a megacity?	City with over 10 million people.
5	There were only two megacities in the world in 1950. Where were they?	New York City and Tokyo
6	Where is the highest concentration of megacities found today?	Asia
7	What is rural-urban migration?	Movement of people from the countryside to towns or cities.
8	What are push factors?	Reasons why people leave an area.
9	What are pull factors?	Reasons why people choose to live in an area.
10	What is a brownfield site?	An old industrial or inner-city site that is cleared for a new building development.



11	What is a greenfield site?	An area of land that has not been developed previously.
12	What are the three settlement types?	Dispersed, nucleated and linear.
13	What is Colonisation?	When a country or a nation takes control of others lands.
14	What is migration?	The movement of people from one permanent home to another.
15	What is the world's largest continent?	Asia
16	What is the world's second largest continent?	Africa
17	What are some natural resources found in Africa?	Diamonds, Oil, Gas, Cobolt, Gold, Iron, Copper, Uranium Also many cash crops are grown such as Cotton, Tea, Coffee and Rubber.
18	Give one negative impact of diamond mining.	Blasting causes respiratory problems/ children forced to work in dangerous conditions/ mining can make the land infertile/ mines affect the biodiversity of the area.
19	How is a cactus adapted to live in a hot desert?	Spines instead of leaves, stems can store water, small surface area to minimise evaporation, widespread root system.
20	What biomes does Africa have?	Hot desert, rainforest, savanna and semidesert.
21	How does deforestation in the mountain biome cause flooding?	Deforestation causes flooding because trees help to soak up water and hold it in the soil. When a large number of trees are cut down, the root system is destroyed, and there is nothing to soak in the extra water, which flows freely, flooding the entire area.
22	What mountain range is Everest a part of?	The Himalayas
23	What is a monsoon?	A seasonal change in the direction of the prevailing, or strongest, winds of a region
24	Why are monsoons important in India?	They rely on the rains to grow crops for food and export.
25	What are the effects of flooding in the mountain biome?	Loss of property/land/livelihood/life.

GERMAN - CORE KNOWLEDGE QUESTIONS FOR GERMAN SHOULD BE USED ALONGSIDE YOUR VOCABULARY BOOKLET.

1	What is a noun?	The name of a person, place, object or thing.
	What is special about nouns in German?	All nouns are masculine, feminine or neuter All nouns begin with a capital letter
2	What does gender mean in MFL?	Which groups nouns belong to.
3	What is an article?	The words "the", "a", "some".
4	What is the definite article?	The word "the"
5	What are the 3 definite articles in German?	Der, die and das
6	What is the indefinite article?	"a", "some"
7	What are the 3 indefinite articles in German (object)?	einen, eine and ein
8	What is the word for and ? What type of word is it?	und It is a connective
9	What is a cognate?	A word in another language that looks or sounds like its English meaning.
10	What is a false friend?	A word in another language that looks or sounds English but does NOT mean the same.
11	Why do letters sound different in MFL	Their phonetic pronunciation is different.
12	What is an accent?	A mark over or under a letter which changes its sound.
13	How do you pronounce ß in German?	SS
14	How do you make a sentence negative?	Put a k infront of einen/eine/ein
15	What is a pronoun?	Used to describe individuals or groups without using their names.
16	What are the German pronouns for "I" and "you" (singular)	lch Du
17	What verb do we use with ages in German?	sein

	, , , , ,	Mein Geburstag ist am elften Novemeber OR Ich habe am elften November Geburtstag
	What is special about the letter J in German?	It is pronounced differently: ' y ' sound
20	How do I write Monday 19 th September?	Montag. <mark>19.</mark> (full stop) September

HISTORY

1	How much did the population of Britain increase by between 1750-1900?	30 million
2	What factors led to an increase in the number of births in Britain after 1750?	 People got married at a younger age, which meant they had more time to have children. Families began to have more children so they could send them to work at factories to make money.
3	What factors led to a decrease in the number of deaths in Britain after 1750?	 There were improvements in the care of pregnant women by midwives Farmers produced more food, people had a healthier diet and were more likely to be able to fight disease Cotton was used for clothes instead of wool which was easier to clean 1796 – Jenner's vaccination for smallpox Soap became widely available Improvements to towns and cities e.g. Clean water supplies, sewers installed, better housing, wider lit streets, parks Literacy improved as more children went to school, this meant they were educated on how to live a healthier life
4	What is the different between the domestic system and the factory system?	 The Domestic System was when families made goods such as clothes in their own home. Everything was done on a small scale and took a long time. The Factory System was when people worked in factories in cities. They used large machinery on a large scale, and goods were made quickly.

5	Why was life difficult for children working in factories?	 A twelve-hour working day was common Factory rules were very strict and punishments were harsh
6	How did Robert Owen treat his factory workers differently?	 Built quality houses, schools, shops and parks Provided recreational activities Made sure his workers had access to healthy food.
7	Why were industrial towns unhealthy?	 Poor ventilation due to houses being built closely together People drank water from a pump that was connected to a river contaminated with dirt and human waste Everyone shared a toilet which had to be emptied by hand Two or more families shared a house Houses were prone to damp Rubbish lay in the street which encouraged disease carrying rodents
8	What diseases were common in Industrial towns?	 Tuberculosis (TB) Typhoid Cholera Measles Whooping cough Influenza Scarlet fever
9	What did John Snow discover?	Cholera was caused by people drinking contaminated water from the Broad Street pump.
10	How did the beliefs about the cause of disease differ for miasmatists and contagionists?	 Miasmatists believed disease was carried through the air. Contagionists believed disease was passed on by touch.
11	Why was Joseph Bazalgette important?	Created the first sewer system which led to the average life expectancy increasing from 30 in 1801 to 50 in 1901.
12	In 1750, what were the two main enemies of a patient in a British hospital?	Pain and infection.

13	How did surgery improve during the industrial period?	 Anaesthetics – Chloroform and ether Louis Pasteur discovered germs and pasteurisation Joseph Lister used carbolic acid as an antiseptic during operations.
14	What did Edward Jenner discover?	Jenner discovered that people who were infected with cowpox did not become ill from smallpox. Created the first vaccination.

MATHS

1	What do we mean by rounding a number?	Rounding means making a number simpler but keeping its value close to what it was. The result is less accurate, but easier to use.
2	What is a significant figure?	A significant figure is the most important figure in a number.
3	What do we mean by estimating?	This is when a number is approximated to a given number significant figures or decimals places to make a calculation easier.
4	What is a term?	A term is a number in a sequence.
5	What is a linear sequence?	A number pattern which increases by the same amount each time.
6	What is a non-linear sequence?	In Non-linear sequences the difference between terms is not the same each time.
7	What does 'n' mean in the nth term?	The letter n stands for the term number or position in the sequence.
8	Name the axes of a graph?	Vertical axis is the y axis and the horizontal axis is the x axis?
9	What is a pair of co-ordinates?	A set of values that shows an exact position in the format (x,y).
10	What is meant by the gradient of the graph?	The gradient is how steep the graph is.
11	What is meant by the y-intercept?	The point where the graph crosses the y-axis.
12	What does m and c stand for in the equation y = mx + c?	M is the gradient and c is the y-intercept.
13	What is meant by the 'midpoint' of a line?	The midpoint is the middle of the line.

14	What does solve mean in solving an equation?	Working out the value of the unknown variable.
15	What does 'inverse operation' mean?	The inverse operation is the operation that undoes what was done by the previous operation.

MUSIC

1	What is a melody?	Melody is the main tune, consisting of different pitches.	
2	What is pitch?	Pitch is how we identify and categorise a sound as 'high' or 'low' in terms of musical notes.	
3	What is duration?	Duration is the length of time a note is sounded in a piece of music.	
4	What are dynamics in music?	Dynamics refer to the volume of the music. It's about the variation in loudness between notes or phrases, which can add expressiveness to the music.	
5	What is tempo?	Tempo is the speed at which a piece of music is played. It's usually measured in beats per minute (BPM).	
6	What is timbre?	Timbre, also known as tone colour, refers to the quality of sound that distinguishes one voice or instrument from another. It's what makes a piano sound different from a violin, even when they play the same note.	
7	What is texture in music?	Texture in music refers to the way multiple voices or instruments interact in a composition. Texture can me Thick (many sounds) or Thin (few sounds).	
8	What is staff notation?	Staff notation is a traditional way of writing music down on a staff, using the 5 horizontal lines and 4 spaces.	
9	What is a Pulse?	Pulse is a steady beat, like a ticking clock.	
10	What is rhythm?	Rhythm is a pattern of long and short sounds.	
11	What are note values?	Note values are how long each note lasts for.	
12	What is a crotchet?	A crotchet is a 1 beat note.	
13	What is a minim?	A minim is a 2 beat note.	
14	What is a quaver?	A quaver is a half beat note.	
15	What is a semibreve?	A semibreve is a 4 beat note.	



16	What is a semiquaver?	A semiquaver is a quarter beat note.
17	What is a melody?	Melody is the main tune, consisting of different pitches,
18	What is timing?	To all play together in time, as an ensemble.
19	What are ensemble skills in Music?	The ability to work together in a group to create a musical performance
20	What is a treble clef?	A treble clef is the sign at the start of the music that indicates the pitch of written notes
21	What is a chord?	3 notes played together
22	How do you work out the notes in a chord?	Play one, Miss one, Play one, Miss one, Play one
23	What 3 notes are in a C chord?	CEG
24	What 3 notes are in a F chord?	FAC
25	What 3 notes are in a G chord?	G B D
26	What 3 notes are in a Am chord?	ACE
27	What 3 notes are in a Dm chord?	D F A

PΕ

1	Why do we warm up?	To gradually prepare the body for exercise and to avoid injury.
2	What are the 3 components of a warm-up?	 Pulse raiser (running, skipping, etc) Dynamic Stretches Sport Specific Drill
3	What happens to the body when we warm up?	Muscles require higher amounts of oxygen: heart rate and oxygen intake thus increase to transport oxygenated blood to the working muscles via the blood vessels. This increases blood flow prepares the body for exercise.



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4	What is the difference between a static and dynamic stretches?	Static means to stretch and not move. Dynamic means movement stretches
5	Give an example of a sport's specific warm-up.	Dribbling with a ball, passing, controlling shots. This is all done at a low to medium level of intensity.
6	Discuss how students should keep safe when taking part in PE	 Proper and full warm-up Remove jewellery Listen to all instructions Follow the rules of the game/activity
7	How do we assess in PE?	Through a combination of 5 physical assessments and 5 holistic assessments (social, thinking, leadership, health and fitness and creative)
8	How do we give effective feedback to others in PE lessons?	 Watch your partner Look out for the key teaching points Tell them what they are doing well Tell them what they need to improve. Use full sentences and refer to the teaching points
9	How do we test speed?	30 metre sprint tests
10	Provide an example of a sport or athlete who would need high levels of coordination. Explain why.	Student response based on knowledge of sports/ athletes that will need coordination and can provide example in competitive situation.
11	Discuss three rules you must follow when you play badminton. Consider the start of the game and how to win points.	 Serve below the shoulders Shuttle must not be thrown in the air before hitting this to start the game You cannot hit the shuttle twice The shuttle must go over the net The shuttle must land in the court area
12	When you are acting as a leader/official in your PE lesson, what characteristics should you show?	 Talk clearly Project your voice Follow the rules of the game Make sure you keep the score Stand is a clear and visible area of the pitch/court

RELIGIOUS STUDIES

1	What does the word 'identity' mean?	The word identity is everything that makes me, me.
	What are all are	Construction on the desired
2	What are values?	Core beliefs somebody holds.
3	What is ethnicity?	A person's cultural background.
4	Name the 6 world religions.	Judaism, Christianity, Islam, Hinduism, Sikhism, Buddhism
5	What is the religious makeup of the world?	Population – 7.7 billion Religious population – 5.3 billion Non-religious population – 1.2 billion
6	What is meant by representation?	When everybody is represented/seen.
7	Name the three Gods in the Trimurti.	Brahma, Shiva, Vishnu
8	What is meant by 'rebirth'?	To be born again into another body after you die
9	What is meant by 'karma'?	The law of cause and effect/every action has a consequence.
10	Who is named the 'preserver' in Hinduism?	Vishnu
11	Who is named the 'destroyer' in Hinduism?	Shiva
12	Who is named the 'creator' in Hinduism?	Brahma
13	Who is the one God who makes up everything?	Brahman
14	What is meant by 'monotheistic'?	A religion that follows one God.
15	What is meant by 'polytheistic'?	A religion that follows many Gods.
16	What is the meaning of Atman?	The spiritual essence of somebody/the soul
17	What is the meaning of Dharma?	A person's duty in life (depending on their caste)
18	What is the meaning of Moksha?	This is the end of samsara/freedom from the cycle

19	What is the meaning of Samsara?	The cycle of birth, death and rebirth.
20	What was the Caste System?	A system that grouped people into 4 groups depending on their wealth.
21	How does karma link to the Caste System?	It was believed that karma impacted what would happen to you in your next life; good karma means going up in the Caste System, bad karma means going down.
22	What jobs would the following groups have? a) Brahmins — b) Kshatriyas — c) Vaishyas — d) Shudras — e) Dalits	a) Brahmins – Priests/religious teachers b) Kshatriyas – Warriors, armed forces, police c) Vaishyas – Merchants, shop keepers, lawyers d) Shudras – Cleaners, brick layers, physical work e) Dalits – Not counted as a caste, sewage workers
23	What was the original purpose of the Caste System?	To divide society into sections so the wealthy stayed wealthy and the poor stayed poor.
24	How is the Caste System different today?	The Caste System is not followed today/People can now marry between castes
25	What does 'puja' mean?	Worship
26	What story does Diwali commemorate?	The story of Rama and Sita
27	What is Diwali known as?	The festival of lights.

SCIENCE

1	Name the 3 magnetic metals.	iron, cobalt, nickel
2	What is an "electric field"?	An area surrounding an electric charge that may influence other particles.
3	What happens when you rub an acetate plastic rod with a duster?	Electrons move from the rod to the duster > duster becomes negatively charged and the rod becomes positively charged.
4	How can objects become charged with static electricity?	Rubbing two surfaces together transfers charge (electrons).
5	What does "repulsion" mean in terms of magnets?	when two objects repel each other because they have like charges (both positive or both negative).



6	What does "attraction" mean in terms of magnets?	when two objects attract each other because they have opposite charges (1 is positive, 1 is negative).
7	What is "weight"?	The force of gravity on an object.
8	Name the force that keeps planets and moons in orbit around larger objects	Gravity
9	What is "pressure"?	The force exerted over a specific area.
10	What causes pressure in a fluid?	Particles hitting the surface of the container.
11	Why does an object float?	When upthrust force from the liquid balances the weight of the object.
12	What happens to the pressure of a gas when it is heated?	Pressure increases.
13	State the two ways that pressure on a surface can be increased.	Increase the force decrease the area
14	What role do plants occupy in food chains?	Producers.
15	What is the name of the process where plants absorb light and use it to produce glucose and oxygen from carbon dioxide and water?	Photosynthesis.
16	How are leaves well adapted for photosynthesis?	Broad leaves/Thin/Have chlorophyll/Air spaces/Guard cells to regulate stomata opening.
17	How do gases move into and out of leaves?	Through tiny holes in the underside of the leaves called stomata.
18	What is the function of root hair cells in plants?	Absorb water and minerals from the soil.
19	What are the key minerals needed by plants for healthy growth often found in fertilisers?	Nitrates, phosphates, potassium compounds.
20	What do food webs show?	How all the food chains in an ecosystem interact.
21	What do food chains show?	The flow of energy from one organism to another and the feeding relationships between organisms.

22	How can insects help plants reproduce?	By carrying pollen for pollination.
23	How do toxins enter the food chain?	Animals eat or swallow polluted soil or water. The toxins that they ingest travel through the food chain with the predators at the top ending up eating toxic prey.
24	What are the advantages of using pesticides?	more food is produced; diseases can be eradicated or controlled.
25	What are two common household acids and their uses?	Vinegar (acetic acid) which is used for cooking and cleaning, and lemon juice (citric acid) which is used for flavouring food and drinks.
26	Give an example of an alkali.	sodium hydroxide (NaOH)
27	What is the purpose of indicators in chemistry experiments and how do they work?	Indicators determine the pH of a substance. They work by changing colour depending on the acidity or alkalinity of the solution they are added to.
28	How does universal indicator help us determine the pH of a substance?	Universal indicator is a type of indicator that can show a range of colours across the pH scale to help us determine the approximate pH of the substance.
29	What happens when an acid reacts with an alkali?	This is called a neutralisation reaction. A type of salt and some water is always produced.
30	How are salts formed? Provide an example of a common salt.	Salts are formed through the neutralization reaction between an acid and a base (alkali). One example of a common salt is sodium chloride (NaCl).
31	What happens when an acid reacts with a metal?	When an acid reacts with a metal, hydrogen gas is produced, and a salt is formed.
32	What happens when an acid reacts with a carbonate?	When an acid reacts with a carbonate, carbon dioxide gas is released, and a salt is formed.
33	Why are acids and alkalis important in our daily lives? Give some examples.	Acids are used in cooking (e.g., vinegar for salad dressing), cleaning (e.g., lemon juice for removing stains), and manufacturing processes (e.g., sulfuric acid for making fertilizers). Alkalis are used in household cleaning products (e.g., sodium hydroxide in drain cleaners) and in the production of soap and detergents.
34	What is combustion, and what are the conditions required for it to occur?	Combustion is a chemical process in which a substance reacts with oxygen, typically producing heat, light, and flame. The conditions required for combustion to occur are fuel, oxygen, and an ignition source (such as heat or a spark).

35	How does the combustion of fuels produce energy? Provide examples of different types of fuels.	The combustion of fuels produces energy by releasing the stored chemical energy within the fuel. The heat and light energy released during combustion can be harnessed for various purposes. Examples of different types of fuels include gasoline, natural gas, coal, and wood.
36	What are the environmental effects of burning fuels?	The release of pollutants into the atmosphere, leading to air pollution. Burning fuels can emit substances like carbon dioxide (CO2), which contributes to climate change, as well as pollutants such as sulfur dioxide (SO2) and nitrogen oxides (NOx) that contribute to smog formation and acid rain.
37	What is acid rain, and what are its causes?	Acid rain is a type of rain or precipitation that has a lower pH than normal, due to the presence of sulfur dioxide (SO2) and nitrogen oxides (NOx) in the atmosphere. These gases are released from burning fossil fuels and industrial processes.
38	What are the harmful effects to the environment of acid rain?	Acid rain can have harmful effects on ecosystems, including the acidification of lakes and rivers, damage to vegetation, and corrosion of buildings and statues.