

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**.

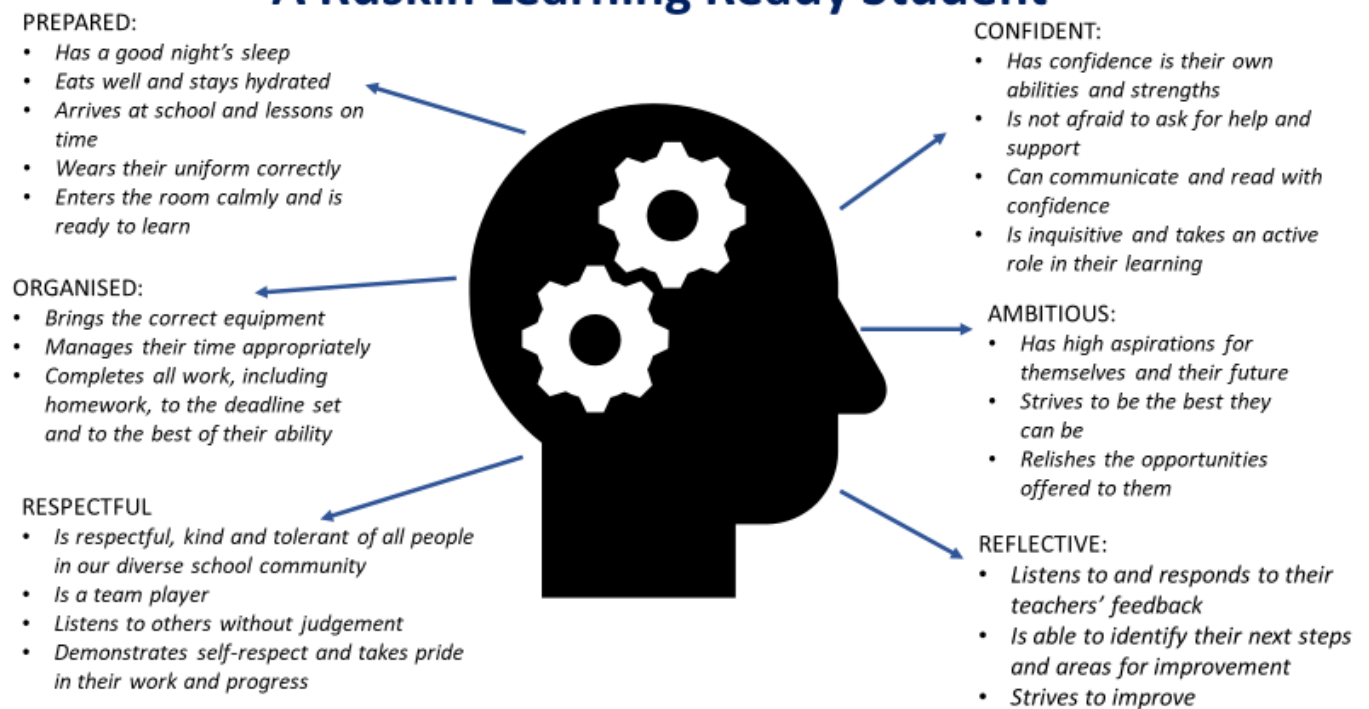
RESPECT: A Ruskin Learning Ready student is **respectful** towards peers, teachers, support staff and visitors. Within our diverse school community, they demonstrate **kindness** and **tolerance**. They show **self-respect** by striving to be the best they can be and by being **organised** and **prepared**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



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 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** 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** 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**.

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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.

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Year 11 Core Knowledge Questions

ART

1	what are the 7 visual elements of art? <i>(general)</i>	Line, tone, shape, space, form, texture, colour
2	How could you use the 7 visual elements of art in your work? <i>(general)</i>	<p>Line- through exploring lines as a contour (outline), sketching. Lines can be used to give the impression of different textures and tones, as well as simply showing where the edge of an object meets space.</p> <p>Tone – exploring the light and dark areas of work.</p> <p>Shape – creating and exploring organic and geometric shapes within work. Using shapes to create patterns in a regular or irregular way.</p> <p>Space – considering the composition of work to show depth of perspective, or thinking about both the positive and negative space.</p> <p>Form – creating the illusion of 3D or creating in 3D.</p> <p>Texture – using mark making, collage or paint application to create an illusion or actual texture to the surface.</p> <p>Colour – consider contrasts, show emotion, look at colour harmonies, set a tone or mode.</p>
3	What is experimentation? <i>(AO2)</i>	This is when you practice, experiment and trial different techniques to ensure they are suitable for the chosen final piece in intentions.
4	What does techniques mean? <i>(AO2)</i>	The method used to complete the art work, can be generic such as painting or more focused such as blending.
5	What does refinement mean? <i>(AO2)</i>	Refinement is the improvement of the idea. It does not involve radical changes, but it is about making small changes which improve the idea in some way.
6	What is - media and materials? <i>(AO2)</i>	Media/medium is the substance that an artist uses to make art. E.g. an acrylic painting is painted using the medium of acrylic paint. Materials, same as media but can also refer to the basis of the art work e.g canvas, paper, clay.
7	What does it mean by realising your intentions? <i>(AO4)</i>	This is the plan of something you would like to do or achieve through your work and is usually evidenced by your final piece.
8	What is a final piece <i>(AO4)</i>	A final piece is a single or series of works that conclude your project and the journey you have been on., it shows you realising your intentions. Your final piece should showcase how you have refined and developed your ideas as well as your use of materials, techniques and processes.

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9	What is composition and why is it important? (<i>General</i>)	The placement or arrangement of the formal elements of art. It is important because it impacts on what viewer sees.
10	What is content? (<i>AO1</i>)	Content is when you are looking at and discussing the subject of the work. <ul style="list-style-type: none"> • What is it? What can you see? • What does the artist call the work? What is the theme of the work?
11	What is mood? (<i>AO1</i>)	Mood is looking at the communication of moods and feelings in art work. <ul style="list-style-type: none"> • How does the work make you feel? • Why do you feel like this? Does the colour, texture, form or themes affect your mood?
12	What is process (<i>AO1</i>)	Process is how the work has been developed and made. <ul style="list-style-type: none"> • What materials and tools have been used? What is the evidence for how it has been made? Painted, drawn, woven, printed, stitched, collaged etc.

BTEC SPORT – Learning Aim A

1	Name the three types of sport and physical activity?	Sports – competitive activities that involve physical exertion, have rules and regulations and a National Governing Body Team sports Individual sports
2	List 3 benefits of taking part in sport?	Improve fitness, meet new people, develop leadership skills, learn team work skills, resilience and self-confidence from competition.
3	Explain what outdoor activities are?	Activities carried out outdoors or in recreation areas that are adventurous.
4	List 3 benefits of taking part in outdoor activities?	Positive risk taking activities, improved self-confidence and self-esteem, meet new people, learn new skills, time away from life stresses and electronic devices.
5	Explain what physical fitness activities are?	Activities to increase fitness.
6	List 3 benefits of taking part in physical activities?	Meet new people, set fitness goals, improve confidence, improve body composition, improve physical health.
7	Name the three provisions/sectors of physical activity?	Public sector Private sector Voluntary sectors
8	Briefly explain each provision/sector and their characteristics?	Public sector to include local authorities and school provision Private sector – provided by organisations who aim to make a profit Voluntary sectors – activities provided by volunteers who have a common interest in the sport /activity. Characteristics; funding source, aims, quality of provision, accessibility.

9	Choose one of the provisions and explain the advantages and disadvantages of sport to the participant?	Types and range of sport and physical activities provided Types and range of equipment available o cost of participation Access to different types of sport and physical activities Additional products or services to include creche facility, refreshment facilities, hire of equipment, access to sport sector professionals, e.g. sports therapist, personal.
10	Name 2 ways participants can be grouped?	Age, gender, disability and race.
11	State the different age groups of participants and put them in age order?	Primary school aged children (aged 5–11 years) Adolescents (aged 12–17 years) Adults (aged 18–49 years) Older adults (aged 50 years and up).
12	State 2 categories of disabled participants?	Visual, hearing and physical disabilities
13	Name 2 long term health conditions?	Asthma, type 2 diabetes, high blood pressure, coronary heart disease (CHD).
14	Explain the physical activity needs of participants?	Government recommended guidelines for types, frequency and intensity of physical activity for different types of participant. Physical health needs – improve fitness, body composition, sleep, immunity to help prevent illness, symptoms of long-term health conditions. Social health needs – meet new people, make friends, have fun, develop leadership and team working skills, decrease loneliness. Mental health needs – decrease stress levels, improve work life balance, decrease risk of depression, improve mood, increase self-confidence and self-esteem.
15	Name the 5 barriers to participation?	Cost, access, time, personal and cultural.
16	Explain 1 of the barriers to participation?	Cost of participation: – clothing – equipment – transport Access to sport or physical activity: – location of sport or physical activity – limited accessible transportation – resources – types of sport or physical activity available Time – lack of time due to other commitments: – family – school – work Personal barriers: – body image – lack of self-confidence – parental or guardian influence – limited previous participation – low fitness levels – extended time off from previous participation – concerns that taking part in sport or physical activity may make existing health conditions worse Cultural barriers: – single sex sport or physical activity sessions – social norms of participating in unconventional clothing and availability of appropriate clothing to participate – lack of role models from own cultural background
17	Explain 1 method to address the barriers to participation?	Cost: discounted pricing, hiring of equipment, free car parking.

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		<p>Access: public transport discounts, cycle hire to access, the facility, free parking, taster days, staff training to support all types of participant and their needs, increased range of provision of sports and physical activities, ramps, assistive technology.</p> <p>Time: creche facilities, extended opening hours</p> <p>Personal barriers: private changing rooms, allowing participants to wear clothing they feel most comfortable in, use of variety of images of people with different body shapes, parent and child activity sessions to create familial culture of sport, campaigns to increase participation.</p> <p>Cultural barriers: women only physical activity sessions staffed by females, diversity of staff working at sport or physical activity facility, staff training in cultural awareness.</p>
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BTEC SPORT - Learning Aim B

1	Give 2 examples of sports clothing?	Sports kit, waterproof clothing, training clothing, e.g. bibs.
2	Give 2 examples of sports footwear?	Trainers, studded boots, sport specific footwear.
3	In terms of Sport specific equipment, give an example for each of the following: <ul style="list-style-type: none"> Participant equipment Travel related equipment Scoring equipment Fitness training equipment 	Participation equipment, e.g. balls, rackets; Travel related equipment, e.g. kayak; Scoring equipment, e.g. goalposts; Fitness training equipment, e.g. dumbbells.
4	Give 2 examples of protection equipment?	Mouth protection, head protection, eye protection, body protection, floatation devices
5	Give 2 examples of safety equipment?	First aid equipment – ice packs, bandages, defibrillator.
6	Give 1 example of equipment for people with disabilities or assistive technology?	Wheelchair, e.g. adapted wheelchair for wheelchair tennis
7	Give 2 examples of indoor facilities?	Sports halls, gyms;
8	Give 2 examples of outdoor facilities?	Outdoor pitches, climbing wall, artificial snow domes.

[Type here]

9	Give 2 examples of officiating equipment?	Whistle, microphone, earpiece.
10	Give 2 examples of performance analysis equipment?	Smart watches, heart rate monitors, applications.
11	Select 1 piece of sports clothing and explain how it would improve sports performance or experience?	State piece of equipment and explain how it improved thermoregulation, clothing designed to improve aerodynamics.
12	Select 1 footwear and explain how it improves sports performance?	Sport-specific new designs or materials; improve grip; rebound.
13	Select 1 piece of sports specific equipment and explain how it improves sports performance?	New materials for lightness and strength to include composite materials, e.g. a tennis racquet; new design of equipment to improve performance, e.g. golf driver design.
14	Select 1 piece of protection and safety equipment and explain how it improves sports performance?	Improved protection design; lighter weight; improved performance, e.g. shape of cycle helmets to improve aerodynamics.
15	Select 1 piece of equipment for people with disabilities or assistive technology and explain how it improves or support performance?	Prosthetics; sport-specific wheelchairs; equipment to support people with visual and hearing impairments.
16	Select 1 facility and explain how it stimulates environments to replicate competition in other locations?	Facilities that simulate environments to replicate competition in other locations; all weather surfaces; surfaces to reduce the risk of injury.
17	Select 1 piece of officiating equipment and explain how it improves sports participation?	Computer assisted systems; video assisted decision making.
18	Select 1 piece of performance analysis equipment and explain how it improves sports participation?	Action cameras, GPS, applications, sensors on sports clothing or equipment.
19	Explain why time could be a limitation of using technology?	Setting up, using equipment, compiling data, giving feedback to participant.
20	Explain why access to technology could be a limitation of using technology?	Equality and unfair advantages as not all participants have access to technology.
21	Explain why cost of technology could be a limitation of using technology?	Initial cost and follow-up maintenance of equipment.

22	Explain why accuracy of data provided by equipment could be a limitation of using technology?	Errors can take place which affects the reliability of data/information.
23	Explain why usability could be a limitation of using technology?	Specific training required.

BTEC SPORT - Learning Aim C

1	Explain the types of activities in the pulse raiser and give examples?	Activities that gradually increase in intensity to increase the heart rate.
2	Explain the response of the cardiorespiratory system to the pulse raiser?	Increased heart rate Increased breathing rate Increased depth of breathing Increased supply of oxygen to the working muscles Increased removal of carbon dioxide
3	Explain the response of the musculoskeletal system?	Increased temperature of the muscles Increased pliability of the muscles Reduced risk of muscle strain.
4	Explain the types of activities in the mobiliser?	Activities that take the joints through their range of movement starting with small movements and making these bigger as the warm-up progresses.
5	Explain the response of the cardiorespiratory system to the mobiliser?	Slight drop in heart rate as intensity of exercise lowers. Slight drop in breathing rate as intensity of exercise lowers.
6	Explain the response of the musculoskeletal system to the mobiliser?	Increased production of synovial fluid in the joints to increase lubrication of joint and increase range of movement at the joint.
7	Explain the types of activities in the preparation stretch?	Activities to stretch the main muscles that will be used in the physical activity: Location of main muscles – deltoids, biceps, triceps, erector spinae, abdominals, obliques, hip flexors, gluteus maximus, quadriceps, hamstrings, gastrocnemius Types of static and dynamic stretching for each muscle group: – simple stretches – compound stretches
8	Explain the response of the cardiorespiratory system to the preparation stretch?	Slight drop in heart rate and breathing rate for static stretches Maintained elevated heart and breathing rate for dynamic stretches
9	Explain the response of the musculoskeletal system to the preparation stretch?	Extending muscles so that they are fully stretched and less likely to tear during the sport or activity session.

[Type here]

10	Explain how to adapt a warm up for different categories of participants?	Vary intensity of activities Low impact and high impact options Vary timing of warm-up – longer time frame for beginners, participants with low fitness levels and those aged 50 plus Types of stretch used – simple stretches for beginners, compound stretch for moderate to advanced participants.
11	Explain how to adapt a warm up to make it specific to a physical activity?	Introduction of equipment in the warm-up that is specific to the physical activity Using movements and activities from the physical activity in the warm-up Stretching the main muscles required for the specific physical activity.
12	List what you will include in your session plan?	Pulse raiser Mobiliser Preparatory stretches Timings, key points and equipment
13	Explain what you will consider with the organisation and demonstration of the warm up activities?	Space – areas used Equipment Organisation of participants Timing Demonstrations Positioning.
14	Explain how you would support participants as they take part in the warm up?	Observing participants Providing instructions Providing teaching points Providing feedback to participants.

BUSINESS STUDIES

1	How can businesses grow internally? (organic growth)	New products New markets
2	How can businesses grow externally?	Merger Takeover
3	State internal sources of finance	Retained profit Selling assets
4	State external sources of finance	Loan Selling shares
5	Why might a businesses' aims and objectives change?	Market conditions Technology Performance Legislation Internal reasons (e.g. staffing)
6	How does globalisation affect business?	Import Export Location

[Type here]

7	State some potential barriers to international trade	Tariff Trade bloc Language Exchange rate
8	What changes might a business make due to globalisation related to price?	Currency Exchange rates Tariffs Tax laws Standards of living
9	What changes might a business make due to globalisation related to place?	Technology Cultural differences (e.g. market stalls, online)
10	What changes might a business make due to globalisation related to promotion?	Language differences Cultural differences (e.g. different colours have different meanings)
11	What changes might a business make due to globalisation related to product?	Cultural differences (e.g. average family size, height, weight etc...) Technological differences Taste and cultural preferences
12	What is a trade off in business?	A balance between two opposing objectives e.g. making a profit but being sustainable
13	What techniques might a pressure group use to put pressure on a business?	Boycott Social media campaigns Viral marketing Protests Online petitions Media campaigns Lobbying (trying to influence the government)
14	What are the 3 aspects of the design mix?	Function Aesthetics Cost
15	What are the 4 stages of the product life cycle?	Introduction Growth Maturity Decline
16	State and describe the main pricing strategies	Competitor pricing – similar products priced similarly (Orange juice) Skimming – start high whilst in demand (e.g. Apple) Penetration pricing – start low to encourage sales, then increase as demand grows Cost + pricing – the initial cost and then a % added on e.g. in the hospitality industry Promotional pricing – Sales, BOGOF
17	State different promotion strategies	Advertising Sponsorship Product trials Special offers Branding

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COMPUTER SCIENCE

1	What are the different data types?	String, integer, float/real, Boolean, character
2	What is a variable?	Data that changes
3	What is a constant?	Data that doesn't change
4	What is an array?	A list of data
5	What is sequence?	Code that must be performed in a certain order
6	What is selection?	A condition statement e.g. if
7	What is iteration?	When code repeats
8	What are the 3 modes of file handling?	Read, write, append
9	How can you manipulate a string?	Find the length, get a substring and make it upper/lower case
10	What are the two types of loops?	For and while
11	What are the two types of sub programs	Procedure and function
12	What are the 3 command words in SQL	Select, From, Where

DANCE

Alongside these Core Knowledge Questions, you are required to show critical appreciation of the Professional Set Works. AQA fact files and key knowledge documents are available in your dance folders and on the school website.

Dance work	Dance company	Choreographer
Artificial Things	Stopgap Dance Company	Lucy Bennett
A Linha Curva	Rambert Dance Company	Itzik Galili
Infra	The Royal Ballet	Wayne McGregor
Shadows	Phoenix Dance Theatre	Christopher Bruce
Within Her Eyes	James Cousins Company	James Cousins
Emancipation of Expressionism	Boy Blue Entertainment	Kenrick H2O Sandy

1	What are actions?	What a dancer does.
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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 space in dance?	Where the dancer moves e.g. pathways, levels, directions, size of movements, patterns, spatial design.
4	What are dynamics in dance?	How the dancer moves e.g. fast/slow, sudden/sustained, acceleration/deceleration, strong/light, direct/indirect, flowing/abrupt.
5	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.
6	What are technical skills?	Dynamics, relationships, space, timing, actions, rhythmic content, style.
7	What are physical skills?	Mobility, Isolation, Stamina, Strength, Flexibility, Alignment, Balance, Posture, Extension, Control, Co-ordination
8	What are mental skills and attributes?	Systematic repetition, mental rehearsal, rehearsal discipline, planning a rehearsal, response to feedback, capacity to improve
9	What mental skills do we show when we perform?	Movement Memory, Commitment, Concentration and Confidence
10	Why and how do we warm up?	<ol style="list-style-type: none"> 1. Increase the heart rate 2. Pump oxygen to vital organs and muscles 3. Increase our internal body temperature 4. Mentally prepare for exercise <p>We would start with cardiovascular exercise, mobilise the joints and then stretch.</p>
11	How and why do we cool down?	<ol style="list-style-type: none"> 1. Absorb lactic acid back into the body 2. Decrease heartrate 3. Return the body to its pre-exercised state <p>Gentle stretches, roll down of the spine and slow movements.</p>
12	How do we improve our performances?	<ul style="list-style-type: none"> • Peer/Self or Teacher Assessment • Record your self on film and watch it back • Identify areas of strength and weakness and make these a key target • Rehearsal
13	What is choreography?	The art of making dances, the gathering and organisation of movement into order and pattern.

14	What is a stimulus?	Inspiration for an idea or movement.
15	What is a motif?	A movement phrase capturing an idea that is repeated and developed throughout the dance.
16	What is communication of choreographic intent?	The aim of the dance; what the choreographer aims to communicate.
17	What is the process of choreography	Researching, improvising, generating, selecting, developing, structuring, refining and synthesising
18	What are the main structuring devices and forms?	Binary, Ternary, Rondo, Narrative, Episodic, Beginning/Middle/End, Unity, Logical sequencing and Transitions
19	How do you develop a motif?	Add a move Subtract a move Change levels Change directions Change dynamic qualities Perform it backwards (retrograde) Change a body part
20	What are choreographic devices	Motif and development Repetition Contrast Highlights Climax Manipulation of number Unison and Canon
21	What is climax?	The most important part of the dance
22	What are highlights?	Small moments of interest in the dance, usually building up to the climax.
23	What are aural settings	Song, instrument, orchestral, spoken word, silence, natural sounds, found sounds and body percussion.
24	Why do we use aural settings in dance choreography?	Create a mood and atmosphere Contrast and variety Structure Relationships to the theme/ideas
25	Name the 4 different performance environments	Proscenium arch End stage Site sensitive In-the-round
26	How do you communicate the choreographic intent of a dance?	Consider: Mood(s) Meaning(s) Idea(s)

		Theme(s) Style/Style fusion(s)
27	What are the features of stage and set design?	Projections, furniture, structures, backdrops, screens and features such as colour, texture, shape, decorations and materials
28	What are the features of lighting?	Colour, placement, direction, angles, patterns etc
29	What are the features of properties (props)?	Size, shape, materials and how they are used etc
30	What are the features of costume?	Footwear, masks, make-up and accessories Colour, texture, material, flow, shape, line, weight, decoration and how they define character or gender, identify dancers, enhance or sculpt the body and enhance action.
31	What are the features of dance for camera	Placement, angles, proximity, special effects.
32	What is a Programme Note?	Approximately 120-150 words to support your choreography. It must outline your stimulus, choreographic intent, themes, ideas, moods, style/style fusion and cite the aural accompaniment used.

DT

1	<p><u>Identifying and investigating design possibilities.</u></p> <p>What is analysis of a context?</p> <p>What is analysis of information?</p> <p>What is a past/present professional?</p> <p>What are needs and wants of users?</p> <p>What is primary research?</p> <p>What is secondary research?</p>	<p>The breaking down of a given context. Consider how, why, when, where. User centred.</p> <p>Once information has been gathered we must complete an analysis to assess what is relevant and what are our findings.</p> <p>A designer from the past or present whose work could have influence over your designs.</p> <p>Needs and requirements of specific users or groups.</p> <p>Research that is conducted to gather first hand information for a current problem.</p> <p>When you consider research that has already been completed.</p>
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2	<p><u>Developing a design brief and specification</u></p> <p>What is a design brief?</p> <p>What is a specification?</p> <p>What is ACCESS FM?</p> <p>What is a problem/opportunity?</p>	<p>A statement of what you intend to design and make.</p> <p>A list of what your product will be, broken down into the ACCESS FM headings.</p> <p>Aesthetics – Cost – Customer – Environment – Safety – Size – Function – Materials</p> <p>This is what you need to extract from the context to be able to write your design brief.</p>
3	<p><u>Generating and developing design ideas</u></p> <p>What is a design strategy/technique/approach?</p> <p>What is a social factor?</p> <p>What is a moral factor?</p> <p>What is an economic factor?</p> <p>What is a third party?</p>	<p>This can involve sketching, modelling, drawing, photography etc.</p> <p>These affect lifestyle such as religion, wealth, family etc.</p> <p>Honesty, fairness, equality.</p> <p>These affect the economy as a whole but also groups and individuals.</p> <p>Someone who your product is intended for or who may provide feedback on your product.</p>
4	<p><u>Manufacturing a prototype</u></p> <p>What is a logical sequence?</p> <p>What is a timeline?</p> <p>What is manufacture?</p> <p>What are the working and physical properties and characteristics of materials?</p> <p>What is a surface treatment/finish?</p>	<p>This is the sequence in which your product will be made.</p> <p>This will show the stages of make in order and with time allocations to clearly show how long each step will take.</p> <p>The making of a product.</p> <p>Each material has properties that make them good for specific tasks, eg cotton is lightweight and absorbent. The properties of materials must be considered when designing a product, eg a steel pan handle would conduct too much heat and burn the user, whereas beech would be more appropriate as it is tough but a poor conductor of heat.</p>

		Where a substance is applied to finish a product. This will enhance the finish. Could be paint, varnish, wax etc.
5	<u>Analysing and evaluating design decisions and prototypes</u> What is a response to feedback? What is a modification? What is an evaluation?	 This is a considered response to feedback from a third-party. This is a change to a design or prototype. This is where a process and product is analysed and comments made. These comments are evaluative.

ENGLISH – Component 1 Section A

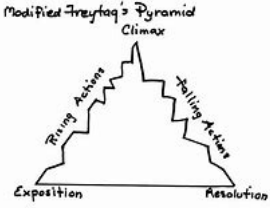
1	What is the difference between fiction and non-fiction?	Fiction is made up - types of fiction include plays, stories and poems. Non-fiction is factual and real – types of non-fiction writing including newspapers, adverts, brochures, reference books and biographies.
2	What are the word classes? (Nouns, Pronouns, Adjectives, Verbs, Adverbs, Prepositions)	Nouns are naming words (person, place, thing). Proper nouns are capitalised (city, name, company, countries etc). Concrete nouns is a physical object in the real world (scissors, car, table). Abstract noun refers to an idea or concept and cannot be physically touched (guilt, fate, love). Pronouns take the place of proper nouns in a sentence. (I, he, she, they, it). Adjectives are words that describes a noun (<i>terrible</i> book, <i>dirty</i> shoe). Verbs can be used to describe an action that's doing something. (singing, floating, bubbling). Adverbs describes a verb (<i>quickly</i> hide, <i>quietly</i> move). Prepositions are words that tell you where or when something is in relation to something else (under, on, inside).
3	What is the difference between implicit and explicit?	Explicit means very clearly explained. Implicit means understood, but not described clearly; implied.
4	What do I do to answer question 1 successfully?	<ul style="list-style-type: none"> • Highlight key words in the question • Find and highlight the quotation in the text • List 6 answers in response • Write in full sentences • Do not copy unabridged quotations • Start each bullet with the necessary noun/pronoun
5	What should I know about question 2?	<ul style="list-style-type: none"> • Highlight key words in the question and use these in your answer • This is worth 5 marks so aim for 4-5 quotations to illustrate your point (<i>point + quotation</i>)
6	What is the difference between a simile and a metaphor?	Similes are indirect comparisons that use the word "like" or "as." Metaphors are direct comparisons that state one thing is another.
7	What types of figurative language could you analyse in component 1a?	Simile, metaphor, personification, onomatopoeia, alliteration, sibilance,
8	What is irony?	Irony is when a person says something or does something that is the opposite of what they were expected to say or do.

9	What should I do before I write my exam answer?	<ul style="list-style-type: none"> • Highlight key words in the question • Mark out the line numbers indicated in the question • Highlight and annotate the quotations I will use in my response
10	What should happen to ensure coverage of the extract?	Track the text chronologically and ensure a spread of quotations from the lines/whole extract to achieve marks for structure
11	What is foreshadowing?	Foreshadowing means there is a warning or indication of a future event.
12	What is tension and how do writers create tension?	Tension is the sense that something ominous is right around the corner. Short sentences, concealing information, appeal to senses, foreshadowing.
13	How can I answer concisely?	<ul style="list-style-type: none"> • Rephrase words from the question • Provide a point and support with a quotation
14	What should I comment on in the response to a 'How' question?	<ul style="list-style-type: none"> • The writer's choice of words and phrases • How a writer manipulates the readers' thoughts and feelings
15	What is meant by tone? What is meant by atmosphere?	Tone refers to the writer's attitude towards a certain topic. Atmosphere is the aura of mood that surrounds a text.
16	What is important about question 3 and 4?	<ul style="list-style-type: none"> • 10 marks so needs around 8 quotations • Writing needs to be concise constantly be thinking '<i>Do I really need that?</i>' • Tracking through the text: <i>At the start, next, then, at the end</i> • For top marks, you must be perceptive and embed judicious quotations
17	What are the key rules for using a quotation in your response?	Choose a short quotation, embed into your response, analyse the impact of the words and phrases.
18	What does it mean to 'evaluate' something?	<i>To judge or determine the significance, worthy or quality of something.</i>
19	What should I do to be successful in answering Q5?	<ul style="list-style-type: none"> • Decide on how far you agree with the statement • Find evidence for your point of view • Use the key words from the question in your response • Track through the whole text • <i>Point + quotation (x8)</i>
20	What are the timings for Component 1a?	<p>Q1 – 5 minutes Q2 – 5 minutes Q3 – 12 minutes Q4 – 12 minutes Q5 – 12 minutes 14 minutes reading time</p>

ENGLISH – Component 1 Section B

1	What are the word classes? (Nouns, Pronouns, Adjectives, Verbs, Adverbs, Prepositions)	<p>Nouns are naming words (person, place, thing). Proper nouns are capitalised (city, name, company, countries etc). Concrete nouns is a physical object in the real world (scissors, car, table). Abstract noun refers to an idea or concept and cannot be physically touched (guilt, fate, love).</p> <p>Pronouns take the place of proper nouns in a sentence. (I, he, she, they, it).</p> <p>Adjectives are words that describes a noun (<i>terrible</i> book, <i>dirty</i> shoe).</p> <p>Verbs can be used to describe an action that's doing something. (singing, floating, bubbling).</p> <p>Adverbs describes a verb (<i>quickly</i> hide, <i>quietly</i> move).</p> <p>Prepositions are words that tell you where or when something is in relation to something else (under, on, inside).</p>
2	What is a simple, compound and complex sentence?	<p>A simple sentence is built from the minimum of a subject and a main verb.</p> <p>A compound sentence joins two simple sentences together. You can use words such as 'and', 'or' and 'but' to join the ideas. These are called coordinating conjunctions (FANBOYS)</p> <p>A complex sentence communicates more than one idea. <i>One part (the main clause) is like a simple sentence: it can stand on its own. The other part (the subordinate clause) gives more detail about the simple sentence, but it cannot stand alone.</i></p>
3	What can I do to avoid run on sentences?	<ol style="list-style-type: none"> 1. Divide the clauses into two sentences. Often in writing, the best way to fix a run-on sentence is to split it into two or more separate sentences. 2. Insert a semicolon between the two clauses. 3. Use a comma and a conjunction.
4	What is parenthesis?	<p>Parenthesis is adding extra information to a sentence using brackets, dashes or commas. For example: 'The case was worn - and very full - and its straps struggled to keep in its contents.'</p>
5	What is a colon?	<p>Colons often introduce an explanation. The phrase that comes after the colon usually explains or expands on what came before it. It is also used before a list, quotation, answer or to provide contrast.</p>
6	What is a semi colon?	<p>A semicolon joins closely connected ideas in a sentence. These sections must be independent and complete sentences, but closely linked in some way.</p> <p><i>It was the best of times; it was the worst of times.</i></p> <p>Semicolons can also be used when writing detailed lists:</p>

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		<i>When I pack for school, I make sure I have my calculator, compasses and ruler for maths and science lessons; drawing pencils, with coloured pastels, for art; shin pads, goalie gloves and boots for football; and my bus money</i>
7	What are the different types of sentence?	<ul style="list-style-type: none"> • Declarative – a statement. • Imperative – a sentence that gives a command/instruction. • Exclamative – a statement that expresses strong emotion. • Interrogative – a sentence that asks a direct question.
8	What is Freytag's Pyramid?	 <ol style="list-style-type: none"> 1. Exposition 2. Raising action 3. Climax 4. Falling action 5. Resolution
9	What is a protagonist?	A protagonist is a hero or main character of a story. In other words, they are usually the person who drives the plot forward and makes things happen.
10	What is an antagonist?	A character who is opposed to, struggles against, or competes with the protagonist.
11	What is cyclical structure?	A cyclical structure means the last section (or even just the last line) of a piece of writing takes you back to the beginning.
12	What is narrative voice?	Narrative perspective is the point of view from which the story is told. There are two that are the most common in fiction: 1 st person and 3 rd person.
13	What is the past tense?	The past tense is used for things that have already happened. Past tense verbs often end in -ed but not always.
14	What are the rules of speech?	<ul style="list-style-type: none"> • A new speaker needs a new line. • You should use a capital letter at the start of each piece of speech. • Punctuation (question marks, full stops and exclamation marks) go inside the inverted commas. • If the person who is speaking is named before the speech, you must use a comma before the first set of inverted commas. For example: <i>Captain Tom</i>

		<i>exclaimed, "Let's go and do some more laps of the garden!"</i>
15	What is tension and how can I build it in my writing?	Writers use tension to keep a reader's interest and keep the plot moving. Tension can be created effectively by building up suspense - starting in the middle of the action, keeping some information back or only hinting at information, creating a plot twist or using a cliff-hanger.
16	What are the different ways in which I vary my sentence openers?	Using adverbs, similes, adjectives, verbs, participles and prepositions.
17	What is a golden sentence?	A carefully crafted sentence to elevate your creative prose. For example, If, if, if, then, The more, the more or a DE:DE sentence.
18	What is characterisation?	Characterisation is the way writers create characters and make them believable. <ul style="list-style-type: none"> - What are the characters like? How do you know this? - What do the characters say (dialogue)? - What do the characters do? - How are they described? - How are they seen by other characters? - What wants and needs do they have? What flaws make them real?
19	What type of figurative language can I use to elevate my creative prose?	Simile, metaphor, personification, alliteration, sibilance, hyperbole, onomatopoeia, pathetic fallacy, motif.

FOOD AND NUTRITION

1	What dishes would be categorised as high skill, middle skill, low skill	Using lots of skills combined eg. Portioning of meat and poultry, pastries, sauces, custards, piping, decorating, pasta One high skill = medium category Low skill using jars, pre made sauces, dried pasta etc
2	What are accompaniments	Dishes that supplement or compliment another dish
3	<u>NEA1 ASSESSMENT</u> What are the different parts to the NEA1 Assessment	Section A :Research and plan of action, Hypothesis Section B :Control, Tests and variables Section C :Evaluations and conclusions
4	What is the maximum word count	2000 words
5	How many hours should I spend on the process?	8 -10 hours at home and at school
6	What is a hypothesis?	A prediction of what I think will happen
7	What is the benefit of completing the NEA1 and how many marks is it worth in my final grade?	It helps me to analyse the function and working properties of ingredients It is worth 15% of my final grade. 35 marks.

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8	What is the meaning of functional properties. What is the meaning of chemical property?	A characteristic of the food product. It shows how the ingredient performs during cooking. Chemical property is the chemical reaction that occurs during the cooking process
9	What tools can I use to evaluate the process and the results	Star charts, Hedonic scale, Pie charts, Ranking Test, profiling chart, Scoring test, Viscosity test, Colour chart
10	What is a conclusion?	A conclusion is the end or finish of an activity or text. It summarises all of the process beforehand
11	What is a bibliography? Where should it go?	A summary of all of the books and websites and research sources that you have used to gather your information. It sits at the end of your document.
12	What dishes would be categorised as high skill, middle skill, low skill	Using lots of skills combined eg. Portioning of meat and poultry, pastries, sauces, custards, piping, decorating, pasta One high skill = medium category Low skill using jars, pre made sauces, dried pasta etc
13	What are accompaniments.	Dishes that supplement or compliment another dish
14	What is expected in the NEA2?	A 2000-word project plus a 3-hour practical with 3 dishes completed in March
15	What will I achieve higher marks for?	High skilled dishes, excellent organisation and a comprehensive project
16	What is a trial lesson?	A lesson when I will practise a dish that has some element of what I might cook in my practical eg Pastry, bread.
17	How many trials should I try to complete before my practical exam?	At least 4
18	How do I decide what to cook in my NEA2?	Choose dishes that meet the question and topic. Dishes include some level of skill and I can present to a good standard.
19	How many portions should I produce of each dish?	2
20	How will I conduct my research	Visit restaurants and cafes, chat with family members and conduct research
21	Should I practice each dish at home?	Yes
22	What is a dovetailed time plan?	A time plan that includes the cooking and preparation of each dish that flows and combines all of the different elements.

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

1	What does the Present tense mean?	Things that are happening now
2	What are the 3 types of verb in French?	ER, IR, RE
3	What does the verb 'jouer' mean	To play
4	What does the verb 'faire' mean	To do/to make
5	What does the verb 'aller' mean	To go
6	How do you say 'I play' in French	Je joue
7	How do you say 'I do' in French	Je fais
8	How do you say 'I go' in French	Je vais
9	How can you express your opinions in French?	J'aime (I like), j'adore (I love), je préfère (I prefer), je déteste (I hate)
10	How do you say because in French?	Parce que / car
11	Where do we put the negative in French?	Around the verb Je n'ai pas de
12	What does the Perfect/Past tense mean?	Things that have happened
13	What auxiliary (help) verb do we need to make most past tenses?	Avoir = to have
14	How do we make past participles in French?	ER verbs: remove the ER and add é IR verbs: remove the IR and add i RE verbs: remove the RE and add u
15	What does the Future tense mean in French?	Things that are going to happen/will happen in the future
16	How do you make the Near Future tense (going to) in French	Use the part of ALLER (to go) for the person you are talking about Use the INFINITIVE (verb ending in ER/IR/RE) of the action you are talking about Je vais jouer = I am going to play

GEOGRAPHY

1	What term is used to describe the progress of the country as it becomes more economically and technologically advanced?	Development
2	Which type of country are those that have a poor quality of life few opportunities and adequate services?	Low Income Country
3	Which type of country is one where most people enjoy a good standard of living based on high levels of income?	High Income Country
4	Where are the majority of the worlds low-income countries located?	Africa
5	Where are the majority of the worlds high-income countries located?	Europe, North America and Australasia
6	What is the development gap?	Variations in levels of development across the world
7	Identify three physical causes of uneven development.	Weather and climate, relief, landlocked countries, tropical environment and water shortages.
8	Why are landlocked countries typically less developed?	Countries without a coastline cannot trade using the sea.
9	How do weather and climate affect development?	Areas that experience extreme conditions such as heavy rainfall, droughts, extreme heat or cold and vulnerability to tropical storms generate challenging conditions but economic development.
10	Identify at least three strategies that can be used to reduce the development gap.	Investment, industrial development and tourism, aid, intermediate technology, fair trade, debt relief and microfinance loans
11	Since the 1970s the UK has moved towards a post-industrial economy. Identify the three main sectors this has involved.	Information technology, service industries, research and development
12	Name the four sectors of industry and which are the most important in the UK today	Primary, secondary, tertiary and quaternary. Tertiary and service are the most prevalent in the UK today following the industrial revolution and de-industrialization.

13	What is the north- south divide?	The north – south divide is used to describe the cultural and economic difference between the South of England and the rest of the UK.
14	Identify some strategies used to reduce this divide?	Planned transport improvements HS2, Enterprise zones and the Northern Powerhouse

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


1	What does the Present tense mean?	Things that are happening now
2	What are the 3 types of verb in German?	ER, IR, RE
3	What does the verb 'fahren' mean?	To travel
4	What does the verb 'bleiben' mean?	To stay
5	What does the verb 'gehen' mean?	To go
6	How do you know whether to use mit or zu with transport?	You onlu use zu with Fuß (by foot)
7	What happens to der/die/das after mit + transport?	Dative der – mit dem die- mit der das- mit dem
8	How do you say 'I will travel'?	Ich werde..... fahren
9	How can you express your opinions in German?	Ich mag (I like)/ Ich <u>verb</u> gern, Ich liebe (I love), Ich <u>verb</u> lieber (I prefer), Ich hasse (I hate)
10	How do you say because in German? What does it do?	weil. It send the verb to the end of the sentence/clause. (subordinating conjunction)
11	Where do we put the negative in German?	After the verb Ich fahre nicht
12	What does the Perfect/Past tense mean?	Things that have happened
13	What auxiliary (help) verbs do we need to make past tense?	haben = to have sein = to be
14	How do we know which auxiliary verb to use?	Verbs of motion use sein.

15	How do form the past participle of weak verbs?	Take 'en' off the infinitive. Replace it with 't' Add 'ge' to the start e.g. gespielt
16	Which verbs do not have separable prefixes (even if they look separable)?	Verbs beginning with be, emp, ent, ger, ver, zer

HEALTH AND SOCIAL CARE

1	What is a care value?	These are the rules that practitioners abide by help individuals feel empowered to make independent decisions.
2	What does self-respect mean?	This means you value yourself.
3	What is a person-centred approach?	This is an approach where the individual's needs are taken into account to ensure they are respected and empowered.
4	What does empowerment mean?	Empowerment is when you feel in control of your life.
5	What does the term respect for others mean?	This is a reference to thinking about other people's feelings, treating them in a courteous way and being respectful to them.
6	What is confidentiality?	It is a person's right by law to have information about them kept private.
7	What is dignity?	When your feelings are respected and you are treated with care e.g. making sure that you deal with an embarrassing situation sensitively and professionally.
8	What does the term empathy mean?	Empathy is being able to understand and share the feelings and views of another person.
9	What does good communication consist of?	Good communication is when an individual adapts their communication style to suit the situation, so the service user feels respected and understands.
10	What does the term safeguarding mean?	Safeguarding is about keeping people safe from harm, e.g. understanding how to spot forms of abuse.
11	What does the term duty of care mean?	Care workers must work in ways that never put individuals at any risk of harm, they must know their responsibilities, be fully trained and follow all procedures.
12	What does the term discrimination mean?	Discrimination means treating a person or group of people unfairly or less well than others.
13	What are the 6 C's?	Care, compassion, competence, communication, courage, commitment
14	What is a SMART target?	A target that is specific, measurable, achievable, realistic and time-related.

HISTORY

1	Who was Hippocrates?	<p>Born in Kos, Greece in 460BC. Hippocrates based his thinking around the Four Humours – these were to be kept in balance if a person was to be healthy.</p> 
2	Who was Galen?	Born in what is now Turkey in AD130. Took Hippocrates' ideas further. He dissected animals in order to better understand the human body. His ideas influenced Western medicine for a long time.
3	When were the Middle Ages?	The period between the Roman Empire AD476 and the Renaissance (1453)
4	How did Christianity influence Medieval medicine?	<ul style="list-style-type: none"> • The Church limited medical progress – they controlled what was taught in universities • Dissection of human bodies was not allowed • Galen's theories were unchallenged • Christians believed that God sent diseases to punish sinners and therefore curing them would be a challenge to God • Belief in miracles
5	What were Medieval hospitals like?	<ul style="list-style-type: none"> • Over 160 hospitals were set up in the 12th and 13th Centuries • They were small and often attached to monasteries • Aim was to keep patients clean and comfortable – not to cure them
6	How did surgery develop in Medieval times?	<ul style="list-style-type: none"> • Surgery actually progressed due to the number of wars • No antiseptics – wine was used to clean wounds • Opium was used as a pain killer but at times was too strong and killed the patient • There were no anaesthetics so operations were performed as quickly as possible

7	What was Islamic medicine like?	<ul style="list-style-type: none"> • Arab medicine was more advanced than Western • Islamic hospitals were a place of education as well as healing • Many important books were written at this time – Canon on Medicine (Avicenna) and Book of Healing (Ibn Sina)
8	What were the beliefs about disease in Medieval England?	<ul style="list-style-type: none"> • God punishes sinners with disease • Diseases caused by miasma and spread by evil people – foreigners or witches • Having too much blood can make you unwell
9	Which cures were used?	<ul style="list-style-type: none"> • Blood letting (to restore balance) • Drilling into the head (to release evil spirits and cure headaches, epilepsy)
10	Who was an apothecary?	Someone who would sell medicines as well as herbs and spices from his shop in a town.
11	Who were barber-surgeons?	A barber who would also carry out minor operations, set broken bones or pull teeth. To become a barber-surgeon you would need to serve an apprenticeship before becoming qualified.
12	What was public health like in Medieval towns?	<ul style="list-style-type: none"> • Towns were overcrowded • Few regulations about building or waste disposal • Clean water was in short supply, often taken from rivers and streams that were contaminated with waste • No 'zoning' – industry and houses mixed together • No rubbish collections so it just accumulated • Cesspits were often next to wells • People had to pay to get their waste removed
13	What was health like in Medieval monasteries?	<ul style="list-style-type: none"> • Much better than towns – monks were educated and therefore understood the dangers of dirt and filth • clean water supply • monks grew herbs used in the treatment of disease • Had access to books and medical texts
14	What was the Black Death and when did it arrive in England?	The Black Death was a bubonic plague that historians believe was spread by rats. It originated in Asia and reached England in 1348. Historians

		estimate that between 50 – 66% of the population died in the epidemic of 1348-9
15	What did people believe cause the Black Death?	<p>Medieval doctors believed that illnesses, including the Black Death, were caused by an imbalance in the <i>four humours</i>. These were black bile, yellow bile, phlegm and blood. A patient diagnosed with excess blood would undergo treatments such as <i>bloodletting</i>, which attempted to rebalance the humours by removing excess blood.</p> <p>Supernatural causes</p> <p>Other ideas were based on religious or supernatural causes. Some people believed God was the cause, as a punishment for people's sins. <i>Flagellants</i> would whip themselves to seek forgiveness from God. Others prayed to God for an end to the plague, seeking divine mercy.</p> <p><i>Astrologists</i> believed the cause was the alignment of the planets. Others still believed in the ancient idea of trepanning, where doctors would drill a hole in a patient's head to release bad spirits that were believed to have caused an illness. Some doctors burst the buboes of patients with bubonic plague. There is some evidence that this may have helped increase chances of survival.</p>
16	What were the symptoms of the Black Death?	<p>The symptoms of bubonic plague were:</p> <ul style="list-style-type: none"> • Swellings under the armpits and on the groin, known as buboes • Fever • Vomiting • Diarrhoea • Fingers toes and parts of the skin sometimes turned black <p>Pneumonic plague</p> <p>Pneumonic plague was spread from one person to another through coughing or sneezing which spread air droplets containing plague bacteria, affecting the victim's lungs.</p> <p>Pneumonic plague had a near 100% mortality rate.</p> <p>The main symptoms of pneumonic plague were:</p>

		<ul style="list-style-type: none"> • Cough • Fever • Headaches • Breathlessness
17	What attempts were made to stop the spread of the Black Death?	<p>To try and stop the spread of Black Death, fines were introduced for people caught dumping waste in the streets. The idea was to deal with the bad smells, or miasma. This may have helped a little in that dealing with waste in the streets may have helped limit the number of the rats that were actually spreading the disease.</p> <p>New jobs were created in London to try and clean up towns. Muckrakers were employed to remove the waste from the streets. <i>Latrines</i> often emptied into pits in the ground. These would often fill up and cause awful smells, so <i>gong farmers</i> emptied cesspits. Surveyors of the payment collected rubbish.</p>

HOSPITALITY AND CATERING

1	What is HASAWA?	Health and safety at work act 1974
2	What is RIDDOR?	Reporting of injuries diseases and dangerous occurrences regulations 1995
3	WHAT IS COSH?	Control of substances hazardous to health regulations 2002
4	What is PPER?	Personal protective equipment at work regulations 1992 http://www.hse.gov.uk/pubns/indg174.pdf
5	What is MHR?	Manual handling operations regulations 1993
6	What are the duties of employers?	<p>To protect the health, safety and welfare of staff</p> <p>Carry out risk assessments</p> <p>To provide and maintain safe equipment and safe systems of work</p> <p>Safe use, handling, storage and transport of articles and substances</p> <p>Provide a safe workplace with a safe entrance and exit</p> <p>Provide information, instruction, training and supervision on how to work safely</p> <p>Provide a written safety policy</p> <p>Make sure there are toilets, places to wash and drinking water for workers</p> <p>Make sure that there is first aid provision</p> <p>Provide PPE for jobs if needed</p>

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		<p>Have insurance to cover injury or illness at work Ventilation lighting and emergency exits</p> <p>Provide a health and safety law poster entitled “Health and Safety law: What you should know” displayed in a prominent position and containing details of the enforcing authority.</p> <p>To take care of themselves and others To follow safety advice and instructions Not interfere with any safety device To report accidents To report hazards and risks</p>
7	What is HSE	The Health & Safety Executive
8	What is a HSE	H.S.E stands for the Health and Safety Executive. The H.S.E will investigate any complaints and safety incidents.
9	What is an accident at work?	<p>All accidents, however minor, should be reported to your supervisor Similarly, all incidents of ill-health (caused from work) should also be reported Accidents include those that resulted in injury or damage and “near misses” – those which COULD have resulted in injury or damage Your supervisor will decide if the incidents needs to be recorded in the accident records Violent incidents are included (this includes verbal threats)</p>
10	What is HSE enforcement?	<p>Magistrate’s court £20,000 per offence Up to 6 months in prison Crown court serious offences Unlimited fines Imprisonment for up to 2 years</p>
11	What is Environmental regulation?	<p>There must be sufficient space to work safely and enough lighting and ventilation Workplaces must be kept generally clean and tidy Chairs must be safe and comfortable Temperature – must be “reasonable” Reasonable means at least 16oC for office work and 13oC where there is physical work In very hot weather, employers only need to provide local cooling e.g. fans</p>

12	What is moving and handling?	<p>You may be asked to lift, carry push or pull a load at work</p> <p>You should always follow safe practice when doing any moving and handling</p> <p>You should never attempt to move anything that is too heavy or difficult – ask for help</p> <p>Employers should provide equipment to help you to move heavy or difficult loads</p>
13	What is equipment?	The term covers everything from a hand tool to a large machine like a stand mixer.
14	What are control measures?	Control measures are put in place by employers to protect staff from hazards and risks that have been identified
15	What is covered by COSHH	<p>SUBSTANCES COVERED BY COSHH:</p> <p>Chemicals including cleaning chemicals</p> <p>Micro-organisms</p> <p>Dusts</p> <p>Medicines, pesticides, gases</p> <p>HSE list (Health and safety executive)</p>
16	What are possible COSHH related health problems?	<p>Contact causing irritation</p> <p>Sensitising substances</p> <p>Toxic fumes</p> <p>Carcinogenic</p> <p>Infectious</p> <p>Fire, explosion</p> <p>Environmental harm problems</p>
17	What are employees' responsibilities under COSHH?	<p>Use control measures and facilities provided by the employer</p> <p>Ensure equipment is returned and stored properly</p> <p>Report defects in control measures</p> <p>Wear and store personal protective equipment (PPE)</p> <p>Removing PPE that could cause contamination before eating or drinking</p> <p>Proper use of washing, showering facilities when required</p> <p>Maintaining a high level of personal hygiene</p> <p>Complying with any information, instruction or training that is provided</p>
18	What are employers' responsibilities under COSHH?	<p>Implement control measures to protect workers from hazardous substances.</p> <p>Preventing or controlling exposure to hazardous substances.</p>

		<p>Providing employees with information, instruction and training, and appropriate protective equipment.</p> <p>Ensuring that control measures are maintained, kept in full working order, and in a clean condition.</p> <p>Drawing up plans and procedures to deal with accidents and emergencies involving hazardous substances.</p> <p>Ensuring that any employees exposed to hazardous substances whilst at work are under suitable health surveillance.</p> <p>Carrying out a COSHH risk assessment.</p>
19	What has to be reported to HSE?	<p>Death</p> <p>Injuries resulting in over 7 days off work (7 day injuries)</p> <p>fractures (except fingers, thumbs and toes);</p> <p>amputation of limbs or digits</p> <p>loss or a reduction of sight;</p> <p>crush injuries</p> <p>serious burns (over 10%)</p> <p>unconsciousness caused by a head injury or asphyxia;</p> <p>any other injury needing admittance to hospital for more than 24 hours. Hypothermia.</p>
20	What is PPE?	PPE is equipment that will protect the user against health or safety risks at work.
21	What are Employees responsibilities under PPER	<p>You must wear the PPE if it has been provided for you.</p> <p>You could be held personally liable if you had an accident which could have been prevented by you wearing your PPE.</p> <p>You must care for it, store it and clean it as necessary;</p> <p>You must report any defects.</p>
22	What are Employers responsibilities under PPER?	<p>Provide the PPE (free) if a risk assessment has shown it to be necessary</p> <p>It must be exclusively for you and fit you comfortably</p> <p>Provide somewhere to store it</p> <p>Provide facilities for it to be cleaned and maintained</p> <p>Replace it when necessary</p> <p>Provide training (if necessary) in how to wear/use it properly</p>
23	What is manual handling?	<p>Any transporting or supporting of a load by hand or bodily force.</p> <p>Lifting, putting down, pushing, pulling, carrying or moving</p>
24	What is a risk assessment?	The assessing of any risk in a given space or task



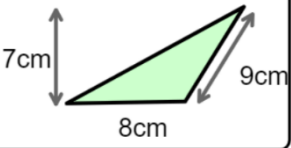
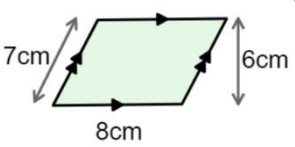
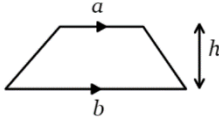
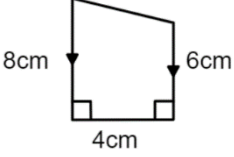


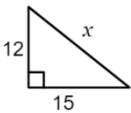
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25	What is a hazard?	A potential danger
26	What are the top 4 injury types in H&C?	<ul style="list-style-type: none"> • Cuts • Burns • Sprains & strains • Slips, trips and falls
27	What is customer safety?	Keeping your customers safe

MATHS

1	What is a like term?	Like terms have the same variable (letter) with the same index (power) e.g. $3a^2$ and $8a^2$ are like terms
2	What does it mean to simplify an expression?	<p>You simplify an expression by adding or subtracting like terms</p> <div style="border: 1px solid black; padding: 5px; margin: 5px;"> <p>Simplify $5y - 6 - 3y + 3$</p> <p>This expression is the sum of: $5y + -6 + -3y + 3$</p> <p>Add like terms: $2y - 3$ ←</p> <p style="text-align: right;"><i>this is equivalent to $-3 + 2y$</i></p> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Simplify $b^3 + b^3$</p> <p>$= 2b^3$</p> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Simplify $7y^2 - 3y^2$</p> <p>$= 4y^2$</p> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Simplify $-3a^2 - a^2$</p> <p>$= -4a^2$</p> </div> </div>
3	What is an equation?	Two expressions that are equal (=) $x + 5 = 2$
4	What does it mean to solve an equation?	To find a value that makes the equation true
		<div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Solve $x + 5 = 2$</p> <p style="margin-left: 20px;">$-5 \quad -5$</p> <p>$x = -3$</p> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Solve $3x = 1.2$</p> <p style="margin-left: 20px;">$\div 3 \quad \div 3$</p> <p>$x = 1.2 \div 3$</p> <p>$x = 0.4$</p> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Solve $\frac{x}{5} = 1.2$</p> <p style="margin-left: 20px;">$x = 1.2 \times 5$</p> <p>$x = 6$</p> </div> </div>
5	What is a simultaneous equation?	<p>Pairs of equations with two unknowns are called simultaneous equations</p> <p>a)</p> $\begin{array}{r} 3x + 4y = 26 \\ 2x + 4y = 24 \end{array}$ $\begin{array}{r} 3x + 4y = 26 \\ -2x + 4y = 24 \quad - \\ \hline x = 2 \end{array}$ <p>Subs. $x = 2$ into $3x + 4y = 26$</p> $\begin{array}{r} 3 \times 2 + 4y = 26 \\ 6 + 4y = 26 \\ 4y = 20 \\ y = 5 \end{array}$

[Type here]

6	What are parallel lines?	 <p>Parallel lines are lines that will never meet. They are the same distance apart. They are marked with arrows.</p>
7	What are perpendicular lines?	 <p>Perpendicular lines are lines that cross (intersect) at right angles (90°)</p>
8	How do you calculate the area of a triangle?	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>Area of a Triangle: $(\text{base} \times \text{perpendicular height}) \div 2$</p> </div> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-left: 20px;"> <p>Calculate the area $= \frac{1}{2} \times 8 \times 7$ $= 28\text{cm}^2$</p> </div> 
9	How do you calculate the area of a parallelogram?	<p>Area of a parallelogram = base x perpendicular height</p> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>Calculate the area $= 8 \times 6$ $= 48\text{cm}^2$</p> </div> 
10	How do you calculate the area of a trapezium?	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>Area of a Trapezium: $\frac{a + b}{2} \times h$</p>  <p>a and b are the parallel sides of a trapezium</p> </div> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-left: 20px;"> <p>Calculate the area:</p>  <p>Area = $\frac{8 + 6}{2} \times 4$ $= \frac{14}{2} \times 4$ $= 7 \times 4$ $= 28\text{cm}^2$</p> </div>
11	What is the area of a circle?	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>Area of a circle = πr^2</p> </div> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-left: 20px;"> <p>Work out the area of this circle. Give your answer to 3 s.f.</p>  <p>area = $5^2 \times \pi = 78.5\text{cm}^2$</p> </div>
12	What is a hypotenuse?	<p>The longest side in a right-angled triangle</p>  <p>The hypotenuse is opposite the right angle</p>
13	What is Pythagoras theorem?	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>Work out the missing side x. Round your answer to 1 decimal place.</p>  <p>$15^2 + 12^2 = x^2$ $369 = x^2$ $19.2 = x$</p> </div> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-left: 20px;"> <p>Pythagoras' Theorem: for any right angled triangle, the squares on the two shorter sides add up to the square on the hypotenuse. This can be summarised as: $a^2 + b^2 = c^2$, where a and b are the shorter sides in a right angled triangle.</p> </div>

MUSIC – Rhythms of the World

1	What are the 6 main instruments in Indian Classical Music?	Sitar, Tambura, Tabla, Sarod, Saranghi, Basuri
2	What are the 9 main instruments in Bhangra Music?	Dhol, Sitar, Tabla, Harmonium, Voices, Synthesizers, Drum kit, Bass, Electric Guitar
3	What are the 7 main instruments in African Drumming?	Djembe, Donno (Talking Drum), Dun dun, Agogo Bells, Cow bells, Maracas, Congas, Bongos,
4	What are the 8 main instruments in Samba?	Surdo, Repinique, Caixa, Ganza, Tamborim, Claves, Chocolo, Agogo Bells
5	What are the 12 main instruments in Calypso?	Bass Guitar, Guitar, Brass (trumpet/trombone), Clarinets/Saxophones Bongos, Conga Drums, Claves, Wood blocks, Maracas, Drum Kit, Vocals, Steel Pans,
6	What are the 10 main instruments in Greek Music?	Strings: Bouzouki, Outi/Oud, Laouto (lute) Lyra, Wind Instruments: Floyera, Karamoudza, Bagpipes Percussion: Daouli, Toubeleki, Defi
7	What are the 10 main instruments in Palestinian Music?	String Instruments Zither, Kanun , Oud Wind Instruments Mijwiz , Arghul, Shababa Percussion Instruments <u>Doumbek</u> , Riq , Deff, Zills
8	What are the 7 main instruments in Israeli Music?	Clarinet, violin, double-bass, guitar, accordion, Percussion Cimbalom
9	What is a Raga?	A scale in Indian Classical Music
10	What is a Tala?	A rhythm pattern in Indian Classical Music
10	What is a drone?	A long held note in Indian Classical Music
11	What are the main musical features of Indian Classical Music?	Use of microtones Bends/Slides – sitar Ornamentation – sitar Layered texture Free Time in the intro and then steady tempo Improvisation
12	What is Bhangra a fusion of?	Punjabi Folk Dance and British Pop Music
13	What language is Bhangra sung in?	Punjabi
14	What is the melody like in Bhangra?	Folk-style melody
15	What is the rhythm in Bhangra called?	Chaal rhythm

16	How many beats in a bar in Bhangra?	4
17	What rhythms are used in African Drumming?	Complex Accents Cross-rhythms Polyrhythms Syncopation
18	What are the musical features of Samba?	2 beats in a bar Fast Son Clave rhythm Complex Accents Cross-rhythms Polyrhythms Syncopation
19	Where is Samba from?	Rio de Janeiro, Brazil
20	What are the musical features of Calypso?	Syncopated 2/2 or 4/4 Clave Rhythm: 3, 3, 2 Verse – Chorus <i>or</i> Strophic Homophonic <i>or</i> Polyphonic
21	Where is Calypso from?	Trinidad and Tobago
22	What tonality is Greek Music?	Modal
23	What is the time signature?	Can be 4/4 Can be 9/8 Can be irregular such as 7/8 or
24	What tonality is Israeli Music?	Can be Minor Can be Modal
25	What are the rhythms like in Israeli music?	Syncopated
26	What are the main musical features of Israeli Music?	<ul style="list-style-type: none"> • Modal scales • Ornamentation • Trills, glissandi • Homophonic texture
27	What are the main musical features of Palestinian music?	<ul style="list-style-type: none"> • Microtones – smaller than a semitone • Monophonic (1 part) • No harmony • Improvisations for variety • Ornamentation makes it heterophonic (2 parts) • Melisma – more than one note per syllable • Ululations – high pitched trills
33	What is a cadence in music?	A progression of 2 chords at the end of a phrase or a piece of music

[Type here]

34	Perfect Cadence	A closed, finished cadence with a strong harmonic ending – Chords V - I	
35	Plagal Cadence	A closed, finished cadence with a soft harmonic ending – Chords IV - I	
36	Imperfect Cadence	An unfinished cadence, that wants to continue. Chords I - V	
37	Interrupted Cadence	An unfinished cadence, that sounds surprising. Chords V - VI	
38	What are the main terms for Dynamics?	<i>Piano (p)</i> <i>Mezzo Piano (mp)</i> <i>Pianissimo (pp)</i> <i>Forte (f)</i> <i>Mezzo Forte (mf)</i> <i>Fortissimo (ff)</i> <i>Crescendo</i> <i>Diminuendo</i> <i>Sforzando</i>	Quiet Fairly Quiet Very Quiet Loud Fairly Loud Very Loud Getting gradually louder Getting gradually quieter Forced Note
39	What are the main terms for Tempo?	<i>Adagio</i> <i>Lento</i> <i>Largo</i> <i>Andante</i> <i>Moderato</i> <i>Allegretto</i> <i>Allegro</i> <i>Vivace</i> <i>Presto</i> <i>Ritardando</i> <i>Rallentando</i> <i>Accelerando</i> <i>Rubato</i>	Leisurely Slow Slow Walking Pace Moderate Quite fast Fast Very fast Very fast Gradually slowing down Gradually slowing down Gradually speeding up Free Time

MUSIC – The Concerto through time

1	What is a Concerto?	A piece of music for a soloist and orchestra
2	What is a Concerto Grosso?	A piece of music for a <i>group of soloists</i> and orchestra <i>Concertino – the group of soloists</i> <i>Ripieno – the rest of the ensemble</i>
3	When was the Baroque Period?	1600 - 1750
4	Name 3 Baroque Composers	Bach, Handel, Vivaldi
5	When was the Classical Period?	1750 - 1820

[Type here]

6	Name 3 Classical Composers	Mozart, Haydn, Beethoven
7	When was the Romantic Period?	1820 - 1900
8	Name 3 Romantic Composers	Liszt, Brahms, Tchaikovsky
9	How big was the orchestra in the Baroque Period?	Small
10	How big was the orchestra in the Classical Period?	Medium-sized
11	How big was the orchestra in the Romantic Period?	Large
12	What were popular solo instruments in the Baroque Period?	Violin, Recorder or Flute, Oboe, Trumpet
13	What is the Continuo and who plays it?	A continuous bass line HARPSICHORD and Cello
14	What were popular solo instruments in the Classical Period?	Piano, Clarinet , Violin, French Horn, Flute
15	What were popular solo instruments in the Romantic Period?	Piano, Violin, Cello
16	Which period is the only 1 to have a harpsichord?	BAROQUE
17	In which period were the clarinet and piano invented?	CLASSICAL
18	What advances were made to Brass instruments in the Classical period?	Valves, to enable them to have a wider range of notes
19	What are the main features of a Baroque melody	Scalic Imitation Ornamentation Repeated Phrases Sequences
20	What are the main features of a Classical melody	Balanced Phrases Clear cadence points Simple and Elegant Ornamentation Often conjunct

[Type here]

21	What are the main features of a Romantic melody	Long phrases Wide Range Often Disjunct Chromaticism																		
22	What was the texture often like in the Baroque period?	Polyphonic																		
23	What was the texture often like in the Classical period?	Homophonic																		
24	What was the texture often like in the Romantic period?	Homophonic																		
25	What were the dynamics like in the Baroque period?	Terraced																		
24	What were the dynamics like in the Classical period?	Gradual Changes eg crescendos and diminuendos																		
25	What were the dynamics like in the Romantic period?	Wide range, eg sudden changes from very quiet to very loud and lots of crescendos and diminuendos																		
26	What was the mood like in the Baroque period?	One mood																		
27	What was the mood like in the Classical period?	More changeable but not overly dramatic																		
28	What was the mood like in the Romantic period?	Changeable and sometimes describing something eg an emotion, setting or story																		
29	What are the main Dynamics Terms?	<table> <tr> <td><i>Piano (p)</i></td> <td>Quiet</td> </tr> <tr> <td><i>Mezzo Piano (mp)</i></td> <td>Fairly Quiet</td> </tr> <tr> <td><i>Pianissimo (pp)</i></td> <td>Very Quiet</td> </tr> <tr> <td><i>Forte (f)</i></td> <td>Loud</td> </tr> <tr> <td><i>Mezzo Forte (mf)</i></td> <td>Fairly Loud</td> </tr> <tr> <td><i>Fortissimo (ff)</i></td> <td>Very Loud</td> </tr> <tr> <td><i>Crescendo</i></td> <td>Getting gradually louder</td> </tr> <tr> <td><i>Diminuendo</i></td> <td>Getting gradually quieter</td> </tr> <tr> <td><i>Sforzando</i></td> <td>Forced Note</td> </tr> </table>	<i>Piano (p)</i>	Quiet	<i>Mezzo Piano (mp)</i>	Fairly Quiet	<i>Pianissimo (pp)</i>	Very Quiet	<i>Forte (f)</i>	Loud	<i>Mezzo Forte (mf)</i>	Fairly Loud	<i>Fortissimo (ff)</i>	Very Loud	<i>Crescendo</i>	Getting gradually louder	<i>Diminuendo</i>	Getting gradually quieter	<i>Sforzando</i>	Forced Note
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30	What are the main Tempo Terms?	<table> <tr> <td><i>Adagio</i></td> <td>Leisurely</td> </tr> <tr> <td><i>Lento</i></td> <td>Slow</td> </tr> <tr> <td><i>Largo</i></td> <td>Slow</td> </tr> <tr> <td><i>Andante</i></td> <td>Walking Pace</td> </tr> <tr> <td><i>Moderato</i></td> <td>Moderate</td> </tr> <tr> <td><i>Allegretto</i></td> <td>Quite fast</td> </tr> </table>	<i>Adagio</i>	Leisurely	<i>Lento</i>	Slow	<i>Largo</i>	Slow	<i>Andante</i>	Walking Pace	<i>Moderato</i>	Moderate	<i>Allegretto</i>	Quite fast						
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		<i>Allegro</i> <i>Vivace</i> <i>Presto</i> <i>Ritardando</i> <i>Rallentando</i> <i>Accelerando</i> <i>Rubato</i>	Fast Very fast Very fast Gradually slowing down Gradually slowing down Gradually speeding up Free Time
31	What is a cadenza?	A solo section for the soloist alone, at the end of a movement in <i>Classical</i> or <i>Romantic</i>	
32	What does Virtuosity mean?	A very complex part for the soloist (Classical or mainly Romantic)	
33	What was the harmony like in the Baroque period?	Diatonic, Simple primary chords (I, IV, V)	
34	What was the harmony like in the Classical period?	Diatonic, Simple primary chords (I, IV, V)	
35	What was the harmony like in the Romantic period?	More complex, added chords, chromaticism, richer	

PE (Core)

1	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
2	How do we do retrieval practice in PE?	At the beginning of the lessons, we recap the previous lesson and retrieve key knowledge and skills.
3	Identify three careers that you can pursue through studying P.E. and Sports.	A range of careers related to sport (e.g. Teacher, coach, sports psychology, nutrition, Sports Science, Logistics etc)
4	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
5	What attributes make a good sports leader?	<ul style="list-style-type: none"> ● Skills (communication, organisation of equipment & knowledge). ● Advanced skills (activity structure, target setting, use of language, evaluation). ● Qualities (appearance, enthusiasm, confidence) Additional qualities (leadership style, motivation, humour, personality).

[Type here]

6	How much physical activity should children and young people do to keep healthy?	aim for an average of at least 60 minutes of moderate or vigorous intensity physical activity a day across the week take part in a variety of types and intensities of physical activity across the week to develop movement skills, muscles and bones reduce the time spent sitting or lying down and break up long periods of not moving with some activity. Aim to spread activity throughout the day
7	What are the benefits of regular sport and exercise?	<ul style="list-style-type: none"> • Boosts energy levels • Enhances your mood • Provides stress relief and releases happy chemicals • Supports relaxation • Decreases anxiety levels • Supports the daily function and improvements in the cardiovascular, respiratory, muscular and skeletal systems.
8	What are the 3 components of a warmup?	Pulse raiser (running, skipping, etc) Mobility Stretches Sport Specific Drill
9	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 increase blood flow prepares the body for exercise.
10	From any sport/activity of your choice, what skills (name 3) do you believe you have done well and think you are a strength.	Student reflective response.

PHOTOGRAPHY

1	What are the formal elements of Photography? (<i>general</i>)	Line, Value, Shape, Space, Texture, Colour, Pattern, Light
2	How could you use the formal elements of photography successfully in your work? (<i>general</i>)	<p>Line- using leading lines, using line to frame subjects.</p> <p>Value – exploring the light and dark areas of work.</p> <p>Shape – creating and exploring organic and geometric shapes. Using shapes to create patterns in a regular or irregular way.</p>

[Type here]

		<p>Space – considering the composition of work to show depth of perspective, or thinking about both the positive and negative space.</p> <p>Texture – Using close up photography, considering the surface texture of subject matter.</p> <p>Pattern – Looking for patterns in your subject matter, creating patterns yourself to create interesting compositions.</p> <p>Colour – consider contrasts, show emotion, look at colour harmonies, set a tone or mode. Consider monochromatic compositions.</p> <p>Light - consider time of day, natural lighting, coloured lighting, use of shadows.</p>
3	What is digital manipulation of an image? (AO2)	Using Photoshop or other software to creatively edit your images. You could use double exposure/merging/colour splash/digital collage and other techniques.
4	What is physical manipulation of an image? (AO2)	Editing an image physically without digital software. This could be weaving/collage/paint/stitch/burning/layering
5	What does refinement mean? (AO2)	Refinement is the improvement of the idea. It does not involve radical changes, but it is about making small changes which improve the idea in some way.
6	What is composition and why is it important? (General)	The placement or arrangement of the formal elements of Photography. It is important because it impacts on what viewer sees.
7	What are the compositional rules which can be used in photography?	Rule of Thirds, Balancing Elements, Framing, Leading Lines, Cropping

8	What does it mean by realising your intentions? (AO4)	This is the plan of something you would like to do or achieve through your work and is usually evidenced by your final piece.
9	What is a final outcome (AO4)	A final piece is a single or series of works that conclude your project and the journey you have been on., it shows you realising your intentions. Your final outcome should showcase how you have refined and developed your ideas as well as your use of manipulations, techniques and processes.
10	What is content? (AO1)	Content is when you are looking at and discussing the subject of the work. <ul style="list-style-type: none"> • What is it? What can you see? • What does the photographer call the work? • What is the theme of the work?
11	What is mood? (AO1)	Mood is looking at the communication of moods and feelings in visual work. <ul style="list-style-type: none"> • How does the work make you feel? • Why do you feel like this? • Does the colour, composition or themes affect your mood?
12	What is process (AO1)	Process is how the work has been developed and made. <ul style="list-style-type: none"> • What equipment, props and tools have been used? • What is the evidence for how it has been made?
13	What is experimentation? (AO2)	This is when you practice, experiment and trial different techniques to ensure they are suitable for the chosen final piece in intentions.
14	How can you creatively compose a photograph?	<ul style="list-style-type: none"> • Mirror box • Water spray • Distortion • Movement • Lighting

15	What needs to be included when annotating a contact sheet?	<ul style="list-style-type: none"> • Opinions on photographs taken – successful & unsuccessful • Potential edits required • Settings used on the camera • Visible Composition rules • Visible Elements of photography
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PSYCHOLOGY – Social Influence

1	What is meant by the term 'obedience'?	Obedience is when a person changes their behaviour in response to a direct order from an authority figure or someone from a higher status?
2	What is meant by 'conformity'?	It is a form of social influence. It occurs when a person's behaviour or thinking changes as a result of group pressure. This pressure can be real or imagined.
3	What was the aim of Asch's study (1955)?	Asch set out to investigate how people respond to group pressure and conformity. He chose to test this in a situation where the answer was clearly wrong to see if even then people are influenced by others.
4	Name the two explanations as to why some people conform more than others.	Dispositional factors and Social factors
5	What is meant by 'the locus of control'?	The sense we each have about what directs events in our lives. Internals believe they are responsible for what happens to them. Externals believe that it is mainly outside forces or luck,
6	Describe an ethical issue surrounding Milgram's study in 1963.	Participants experienced considerable distress and, in some cases, psychological damage as they thought that they were administering electric shocks to the learner each time they answered incorrectly.
7	According to Milgram's Agency Theory, which two states can a person be in when being given orders.	Agentic state, Autonomous state
8	Describe Milgram's Agency Theory	It explains obedience in terms of whether an individual is making their own free choice or acting as an agent for an authority figure.
9	Describe Adorno's theory of authoritarian personality.	<ul style="list-style-type: none"> • Some people have an exaggerated respect for authority • They are far more likely to obey orders • They also look down on people of inferior social status
10	What did Piliavin's subway study 1969 investigate?	Helping behaviour (prosocial behaviour and bystander behaviour)

11	What conclusions did Piliavin's study (1969) find?	Certain characteristics of the victim make a difference to whether they receive help. If they are more deserving, then they are much more likely to receive to receive help.
12	Identify the social and dispositional factors that might explain bystander behaviour.	Social factors: presence of others, cost of helping Dispositional factors: similarity to the victim, expertise
13	What is meant by the term 'collective behaviour'?	Behaviour that emerges when a group of people join together. The group may behave in a way that is different from the way the individuals might have behaved on their own. In other words the group creates its own identity.
14	Who conducted studies into analysing the behaviour of crowds when rioting?	Steven Reicher
15	Define the term 'social loafing'	Individuals make a reduced individual effort when they are part of a group of than when they are on their own.

PSYCHOLOGY – Language, Thought and Communication

1	Define the term 'schema'.	A mental framework of beliefs and expectations that influence cognitive processing. We are born with some schemas but they develop in complexity with experience of the world.
2	How does language depend on thought?	Children develop language by matching the correct words to their existing knowledge of the world. Their first concept comes from a schema and then they learn how to express their understanding of it. So, understanding comes first, then language develops after.
3	Describe the Sapir-Whorf hypothesis.	The language that a person speaks has a great influence on the way they think and perceive.
4	What other research did Benjamin Whorf conduct?	Whorf investigated whether language that we learn affects the way we view the world and our recall of events.
5	What did Brown and Lenneberg's study in 1954 conclude?	They found that the Zuni had more difficulty distinguishing between yellow and orange because of a lack of words for the two colours in the Zuni language.
6	How was von Frisch's research in 1967 significant?	His discovery through researching honey bees changed the way that scientists thought about animal communication.
7	What were the two types of dance that von Frisch observed the bees performing?	The round dance and the waggle dance.
8	What is meant by animal communication>	An exchange of information between the same species using a variety of signals.

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9	What is meant by the term 'language'?	A communication system unique to humans. It consists of a set of symbols through which meaning is conveyed.
10	Identify three types of non-verbal communication.	Eye contact, body language, personal space
11	Name the four types of body language that a person can convey.	Closed posture, open posture, postural echo, touch
12	What might affect personal space?	Culture, gender and status
13	What is Darwin's Evolutionary theory?	A species adapts to its environment over millions of years. Behaviours that increase the chance of survival are naturally selected and passed on to the next generation.
14	What does innate mean?	A product of genetic factors that a neonate (baby) is born with.
15	How can Yuki's (2007) findings be used to understand non-verbal behaviour?	Different cultures interpret facial expressions differently. This may be due to cultural norms and expectations. Some cultures might be brought up to express their emotions more openly than others, using their eyes and mouths to do so.

RELIGIOUS STUDIES

1	Define human sexuality.	How people express themselves as sexual beings
2	Define heterosexual.	A person who is sexually attracted to the opposite sex
3	Define homosexual.	A person who is sexually attracted to the same sex.
4	In what year was same-sex marriage recognised in the law?	In 2013
5	What is meant by the 'age of consent'?	The age you're allowed to have sex.
6	What is the age of consent in the UK?	16 years old
7	Where in the Bible would you find this teaching: Men and women should be united together and 'increase in number'?	Genesis 1 and 2
8	Where in the Bible is it written that sexual relationships between two men are forbidden?	Leviticus 18 or Corinthians 6
9	Does the Bible ever refer to homosexual relationships between women?	No

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10	What does the Catholic Church teach about homosexuality?	That being a homosexual is not sinful, but you should remain chaste.
11	What is adultery?	Voluntary sex between a married person and a person who is not their spouse.
12	What did Jesus teach about lust and adultery?	Jesus taught that lust is wrong as it can lead to adultery.
13	Define contraception.	Methods used to prevent pregnancy.
14	Define family planning.	Controlling how many children couples have and when they have them.
15	The pill, the diaphragm, condoms, spermicidal creams, the coil and sterilisation are all types of what?	Contraception
16	What is considered as God's greatest gift to a married couple?	A child
17	Give a Christian attitude about children born outside of marriage.	Christians accept that children may be born out of wedlock.
18	What do the Catholic Church teach about artificial contraception?	It goes against natural law and human nature.
19	What did the Church of England approve in 1930?	It approved the use of artificial contraception.
20	Define marriage.	The legal union of two people as partners in a personal relationship.
21	Define marriage in Christianity.	The lifelong union of a man and woman with the intent to have children.
22	Define cohabitation.	People living together in one place.
23	Define civil partnership.	The legal joining of two people, a similar contract to marriage, created originally for same sex couples who could not legally get married.

SCIENCE - BIOLOGY 1

1	What is a genome?	The total DNA in an organism.
2	What are genes?	Sections of DNA found on chromosomes that code for a specific protein.
3	What is DNA made from?	Nucleotides

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4	What are the 3 parts of a DNA nucleotide?	A phosphate group, a sugar group and one of four nitrogen bases.
5	What are the 4 letters used to represent the nitrogen bases in DNA?	ATCG
6	What is sexual reproduction?	Genes from 2 organisms (a father and a mother) are mixed.
7	What are the male and female gametes in animals?	Sperm and egg cells
8	Compared to a normal cell, how many chromosomes are in a gamete?	Half
9	What type of cell division produces gametes?	Meiosis
10	What cell division process happens in asexual reproduction?	Mitosis. One parent cell divides in two to make a new cell.
11	How many pairs of chromosomes are there in every human body cell?	23
12	What are the two types of sex chromosome?	X and Y
13	True or False: all females have two X chromosomes.	True. The XX combination allows female characteristics to develop.
14	What is a Punnett square?	A genetic diagram used to find the probability of inheriting a gene or characteristic.
15	What are alleles?	Different versions of the same gene.
16	What are the two possible types of alleles?	Dominant or Recessive
17	What is the mix of your alleles called?	Your genotype.
18	What is an example of an inherited disorder caused by a recessive allele?	Cystic fibrosis,
19	What is an example of an inherited disorder caused by a dominant allele?	Polydactyly. Babies are born with extra fingers or toes.
20	What are 3 arguments for embryo screening?	It will help stop suffering. Treating disorders costs a lot of money. Laws are in place to stop parents selecting features of their baby.
21	What are 3 arguments against embryo screening?	Suggest that people with genetic disorders are unwanted. People might try to create 'designer' babies. Screening is expensive.
22	What is variation?	Differences between individuals of the same species.
23	What are the two causes of variation?	The environment (environmental variation) or differences in genes (inherited variation)
24	What does mutation mean?	A random change in a gene that produced a genetic variant.
25	What is the theory of evolution?	All of today's species have evolved from simple life forms that first started to develop over three billion years ago.

26	What is the name of the theory that Charles Darwin proposed to explain evolution?	Evolution by natural selection. Only organisms that are the best fit for their environment survive and reproduce.
27	What are 5 causes of extinction?	Environmental change. New predator. New disease. Too much competition for food. Catastrophic event (e.g. volcanic eruption)
28	How do bacteria become resistant to antibiotics?	By the process of natural selection.
29	Why can bacteria evolve so quickly?	They reproduce rapidly to increase the population size of the antibiotic-resistant strain quickly.
30	What is selective breeding?	Humans choose which plants or animals are going to breed to produce offspring with useful or attractive features.
31	What is inbreeding?	Animals or plants that are the best are always used for breeding and they are all closely related.
32	What is a disadvantage of selective breeding?	The number of different alleles in a population are reduced. This can lead to health problems and make populations vulnerable to disease.
33	What is genetic engineering?	An organisms DNA is changed by cutting a gene out of one organism and putting it into another organisms cells.
34	Why might we produce GM crops?	To encourage resistance to herbicides, insects or disease to increase crop yields.
35	What is a fossil?	The remains of organisms from many thousands of years ago.
36	What are the 3 ways that fossils can form?	From gradual mineral replacement, from casts and impressions, from preservation in places where no decay happens.
37	How do fossils provide evidence of the origin of life?	Fossils show how much or little organisms have changed (evolved) as life has developed on Earth over millions of years.
38	What are the 5 kingdoms in the 5-kingdom classification system?	Animals, plants, fungi, prokaryotes, protists.
39	Who made up the 5-kingdom classification system?	Carl Linneaus
40	What are the smaller groups that the kingdoms are split into?	Phylum, Class, Order, Family, Genus, Species
41	What model of classification did Carl Woese propose after the development of microscopes?	The 3-domain system. All organisms fit into the 3 domains eukaryota, archaea or bacteria
42	What do evolutionary trees show?	Common ancestors

SCIENCE – BIOLOGY 2

1	What is a community?	The populations of different species living in a habitat.
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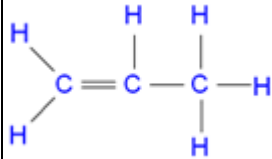
2	What is an ecosystem?	The interaction of a community of living organisms with the abiotic parts of their environment.
3	Give four resources that animals compete for?	Space, food, water and mates.
4	Give 3 examples of abiotic factors.	Moisture level, light intensity, temperature, carbon dioxide level, wind intensity, wind direction, oxygen level, soil Ph, soil mineral content.
5	Give 3 examples of biotic factors.	New predators arriving, competition from other species, new pathogens, availability of food.
6	What are functional adaptations?	Things that go on inside an organism's body that can be related to processes like reproduction and metabolism that allow it to live in conditions of its environment.
7	What are structural adaptations?	Features of an organism's body structure that allow it to live in the conditions of its environment.
8	Give two examples of the type of condition in which you might find an extremophile.	Very hot or high-pressure conditions.
9	What type of organism is always found at the start of a food chain?	A producer
10	Name the group of organisms that eat the secondary consumers	Tertiary consumers.
11	What are predators?	Consumers that hunt and kill other animals.
12	Describe what a quadrat and transect are.	A quadrat is a square frame enclosing a known area A transect is a line distributed across an area.
13	Describe one way in which a transect can be used to measure the distribution of organisms across an area.	A line can be marked out across the area you want to study and all of the organisms that touch the line can be counted. / A line can be marked out across the area you want to study and data can be collected using quadrats placed along the line.
14	How does carbon dioxide from the atmosphere first enter the food chain?	Carbon dioxide is removed from the atmosphere by green plants and algae during photosynthesis, and the carbon is used to make glucose. The glucose can be turned into carbohydrates, fats and protein that make up the bodies of the plants and algae.
15	How is carbon returned to the atmosphere from dead leaves?	Dead leaves are fed on by detritus feeders and microorganisms. These release carbon dioxide when they respire.
16	Define biodiversity.	The variety of different species of organisms on earth, or within an ecosystem.
17	Explain why is it's important to have high biodiversity.	It makes sure that ecosystems are stable.
18	How can chemicals used to grow crops cause water pollution?	It can be washed from the land into water.
19	How do humans cause land pollution?	By using toxic chemicals, by burying nuclear waste and by creating landfill sites for other waste.

20	Name the two main greenhouse gases we are worried about.	Carbon dioxide and methane.
21	Describe global warming	Gases in the atmosphere act as an insulating layer and absorb most of the energy that would normally be radiated out into space and reradiate it in all directions including back towards the earth. Increasing the temperature of the planet.
22	Give a consequence of global warming.	Rising sea levels which cause habitat loss.
23	Give three things humans use land for that reduces the amount of land available to other animals and plants.	Building, quarrying, farming.
24	What is deforestation?	Cutting down of forests.
25	What are peat bogs and why are they important?	Bogs are areas of land that are acidic and waterlogged. The peat is formed when the plants that live here don't fully decay when they die and build up. They are important because they are a carbon store.
26	What is the purpose of a breeding programme?	They help protect biodiversity by preventing endangered species from becoming extinct.
27	Outline and explain what a farmer who only grows one crop might do to protect biodiversity.	They may reintroduce hedgerows and field margins providing habitats.
28	Give one reason why people are encouraged to recycle as much waste as possible.	To reduce waste on landfill sites leaving ecosystems in place.

SCIENCE – CHEMISTRY 1

1	What are hydrocarbons?	Compounds formed from carbon and hydrogen ONLY.
2	When does complete combustion occur?	When there is a plentiful supply of oxygen. Carbon dioxide and water are produced.
3	What may be produced in incomplete combustion?	Carbon monoxide, particulates
4	What is crude oil?	A fossil fuel found in rocks that contains a mixture of different length hydrocarbons.
5	What physical property of the hydrocarbons in crude oil can be used to separate them?	Boiling point
6	What are the key stages of fractional distillation?	Heating, evaporation, rising up the fractionating column, cooling, condensing, collecting
7	Where do the longest chain hydrocarbons condense in the fractionating column?	Near the bottom where it is hottest as they have the highest boiling points.
8	What are the main uses of crude oil?	Fuel, petrochemicals, lubricants, detergents, solvents, polymers.
9	Crude oil can undergo fractional distillation to produce a variety of useful fuels.	A) Diesel oil, petrol, kerosene, heavy fuel oil and LPG B) Polymers, solvents, lubricants and detergents

[Type here]

	A) Give the name of a fuel obtained from crude oil. B) Give the name of one other product which can be derived from crude oil.	
10	Why is cracking important?	Crude oil fractions from fractional distillation can be split up into smaller molecules. If this didn't happen we may not have enough fuel for cars, planes and other transport to meet the demand.
11	What are the two types of cracking?	Steam cracking: larger fractions are heated to a vapour and mixed with steam to a very high temperature. Catalytic: larger fractions are heated to a vapour and passed over a catalyst.
12	What is the general formula for an alkene?	C_2H_4 . Alkenes have a C=C double bond which is very reactive and they are used for making other chemicals, particularly polymers.
13	Explain why alkenes are described as unsaturated.	Alkenes are unsaturated because they have two fewer hydrogen atoms than the alkane with the same number of carbon atoms
14	Draw the chemical structure of propene.	
15	What happens to bromine water in the presence of an alkene?	It turns from orange to colourless
16	What would you expect to see when an alkene burns in air?	A smoky yellow flame
17	All Alkenes have what sort of bond?	All alkenes have a C=C bond
18	What is an addition reaction?	The carbon-carbon double bond will open up to leave a carbon-carbon single bond and a new atom is added to each carbon.
19	Propanol can be formed from propene. State what conditions and reactants are necessary to form propanol from propene?	Propene needs to be heated with steam in the presence of a catalyst.
20	Why does the repeating unit of a polymer have the same atoms as the monomer?	Because the polymer is the only molecule made in the reaction.
21	The name of the polymer comes from the type of?	Monomer it's made from (just stick the word "poly" in front of it.

22	A carboxylic acid contains five carbon atoms. Draw the displayed formula of this carboxylic acid.	<p style="text-align: center;">pentanoic acid</p>
23	State what you would react with a carboxylic acid to make an ester and what would be the catalyst for this reaction.	An alcohol and the catalyst would be strong acid, e.g sulfuric acid.
24	(H) What is the minimum number of functional groups a molecule must have in order to be able to form part of a condensation polymer chain?	Two
25	(H) What small molecule is released when a condensation polymer forms from a dicarboxylic acid and a diol?	Water
26	(H) What two functional groups must an amino acid have?	A carboxyl group and an amino acid group.
27	(H) Name the type of reaction that converts amino acids into polypeptides.	Condensation polymerisation
28	Name a polymer made from sugars.	Starch/cellulose

SCIENCE – CHEMISTRY 2

1	What is the definition of a pure substance?	A Substance that only contains one compound or element.
2	What effect will impurities have on melting or boiling point of a sample?	It will lower them.
3	What is a formulation?	A useful mixture with a precise purpose made following a formula.
4	What is Chromatography?	An analytical method to separate the substances in a mixture.
5	In Chromatography, what is the name of the phase which can't move?	Stationary phase.
6	What Conditions affect how long molecules are in the mobile phase?	How soluble they are in the solvent and how attracted they are to the paper.
7	Why is the base line drawn in pencil?	Pencil is insoluble in water and won't travel up the paper.

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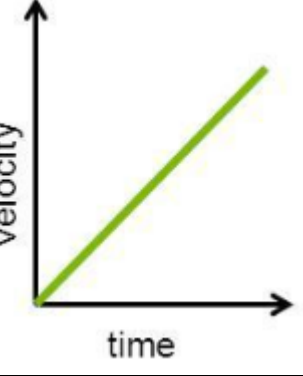

8	What is the test for Chlorine?	Chlorine bleaches damp litmus paper, turning it white.
9	What is the test for Oxygen?	A glowing splint will relight when Oxygen is present in the test tube.
10	What gas do we test for with the squeaky pop test?	Hydrogen Gas
11	What happens to limewater when a gas is bubbled through? What is the name of the gas?	Limewater will turn cloudy due to the formation of calcium carbonate. The gas bubbled through is Carbon dioxide gas.
12 Triple	What colour flames are produced when compounds containing the metal ions below are held in a Bunsen burner flame? a. Copper b. Potassium c. Sodium	a. Green b. Lilac c. Yellow
13 Triple	What gas is produced when a carbonate reacts with dilute acid?	Carbon dioxide
14 Triple	Describe how to test a solution to see if it contains bromide ions.	Add dilute nitric and then silver nitrate solution – if a cream precipitate forms the solution must contain bromide ions.
15 Triple	Flame emission spectroscopy is an instrumental technique used to identify metal ions in a solution. a. What other information can flame emission spectroscopy provide? b. Give an advantage of flame emission spectroscopy over conducting a flame test.	a. The concentration of the metal ions in the solution b. More than one ion can be identified in the solution, it is more accurate and it is faster and more sensitive.

SCIENCE – PYHSICS 1

1	What is a scalar quantity?	A quantity that has only a magnitude (size)
2	What is a vector quantity?	A quantity that has both magnitude (size) and direction.
3	List 3 examples of scalars and 3 examples of vectors.	Scalars – time, distance, mass Vectors – acceleration, displacement, forces
4	State the units used to measure weight and mass.	Weight = Newtons (N) Mass = Kilograms (Kg)
5	How does the gravitational field strength affect the mass and weight of an object?	It has no effect on mass, as mass is the amount of matter within an object. An increase in GFS causes an increase in weight.
6	Give the equation that links weight, mass and gravitational field strength.	Weight = Mass x Gravitational Field Strength

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7	State what is meant by the centre of mass of an object.	The point at which the weight force seems to act from an object.
8	Give two examples of contact forces.	Friction, Air resistance, reaction force, tension
9	Give two examples of non-contact forces.	Gravitational Force, Magnetic Force, Electrostatic Force
10	State Newton's 3 rd Law of motion.	When two objects interact, they exert equal and opposite forces on each other.
11	Describe the forces in action between a moving car tyre and the road.	Weight, friction, reaction force
12	State Newton's 1 st Law of motion.	An object will remain in the same state of motion unless a resultant force acts on it.
13	What is meant by the term resultant force?	A resultant force is the sum of multiple forces acting on an object.
14	What is a free-body diagram?	A scale diagram that shows all forces acting on an object.
15	What will happen to an object if the forces acting on it are balanced?	It's motion will remain the same.
16	What will happen to an object if the forces acting on it are unbalanced?	There will be a resultant force, so the motion of the object will change.
17	What is a moment in Physics?	A turning force about a pivot.
18	Name two factors that can affect the size of a turning force?	Size of the force applied. Perpendicular distance from the pivot.
19	Give one example of a simple machine.	Levers – e.g. crowbars, taps, handles, door hinges.
20	Why do we use gears?	To change the size of a turning force.
21	What do we mean by the centre of mass of an object?	The place on an object where the weight force acts upon.
22	State what will happen when two moments are in equilibrium.	When two moments are in equilibrium there will be no change in the position of either lever about the pivot.
23	State the formula to calculate the speed of an object	Speed = Distance / time
24	On a distance time graph what does a flat line mean?	The object is stationary.
25	On a distance time graph what does an inclined line mean?	The object is moving at a constant speed.
26	How can you calculate the speed on a distance time graph?	Calculate the gradient (change in distance / change in time)
27	Describe the difference between speed and velocity.	Speed is a scalar quantity, whereas velocity is a vector quantity.
28	How many seconds are there in 10.5 minutes?	$10.5 \times 60 = 630$ seconds
29	How can you calculate the acceleration of an object?	Acceleration = $\frac{\text{Change in velocity}}{\text{time}}$ Acceleration = $\frac{\text{Change in velocity}}{\text{time}}$
30	What does the line on this velocity time graph show?	The object is moving at a constant velocity.

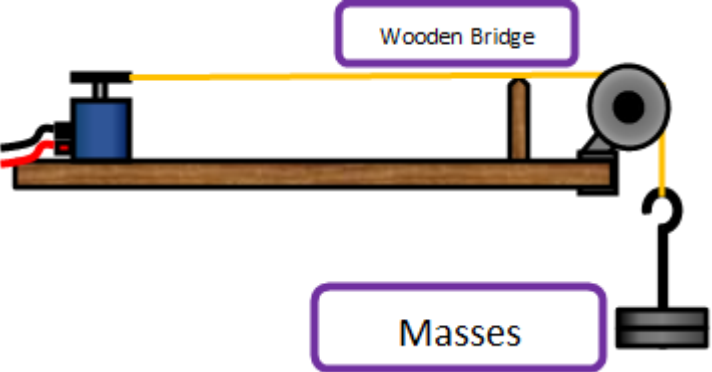
	 <p>A velocity-time graph with 'velocity' on the vertical axis and 'time' on the horizontal axis. A horizontal blue line is drawn at a constant positive velocity value.</p>	
31	<p>What does the line on this velocity time graph show?</p>  <p>A velocity-time graph with 'velocity' on the vertical axis and 'time' on the horizontal axis. A straight blue line starts at the origin (0,0) and increases linearly with a constant positive gradient.</p>	The object is moving with a constant acceleration.
32	<p>What does the line on this velocity time graph show?</p>  <p>A velocity-time graph with 'velocity' on the vertical axis and 'time' on the horizontal axis. A blue curve starts at the origin (0,0) and curves upwards, with its gradient increasing as time increases.</p>	The object is moving at a changing acceleration. As the gradient increases, the rate of acceleration increases.
33	<p>State the formula that links Force, Mass and Acceleration.</p>	$\text{Force} = \text{Mass} \times \text{Acceleration}$
34	<p>State Newton's 2nd Law.</p>	<p>Force is directly proportional to acceleration (when mass remains constant) and mass is inversely proportional to acceleration (when force remains constant).</p>
35	<p>What is meant by Inertia?</p>	<p>The tendency of an object to continue in its current state (at rest or in uniform velocity)</p>
36	<p>Name a force which opposes the driving force of a car?</p>	<p>Friction</p>
37	<p>Define Stopping distance.</p>	<p>Stopping distance = Thinking distance + Braking distance</p>

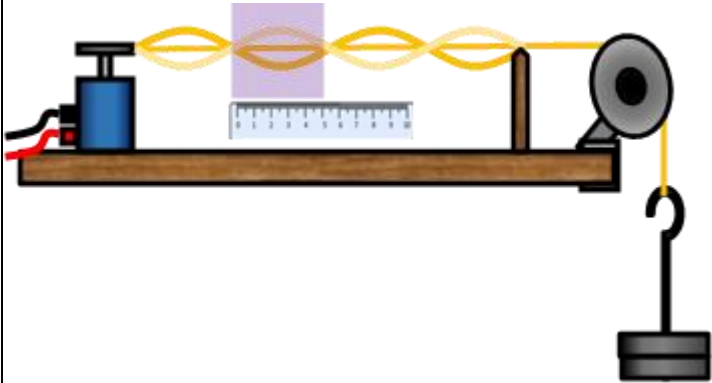
38	State 2 factors that can affect your braking distance.	Road conditions, Tyre conditions, Mass of the vehicle, velocity of the vehicle.
39	State 2 factors that can affect your thinking distance.	Levels of tiredness, drug use, car's velocity, distractions, alcohol consumption.
40	State the equation to calculate the momentum of an object.	Momentum=Mass ×Velocity Momentum =Mass ×Velocity
41	State the units of momentum.	Kg m/s (Kilogram metres per second)
42	Describe what happens to momentum in a closed system before and after a collision.	Momentum is conserved.
43	Name the zone at the front of the car that is designed to lessen the force of impact?	Crumple Zone
44	What needs to happen to the impact time to lessen the force of impact?	The impact time needs to be increased to lower the force of impact.
45	Describe the factors for a car that can affect the impact force.	Mass of the car, Velocity of the car, impact time.
46	Name the safety devices fitted in cars to increase the impact time?	Seatbelts and Airbags
47	Describe how the length of the impact time can affect a person's momentum?	The greater the impact time, the lower the momentum.
48	Describe the jobs of side bars and crumple zones in a crash?	They absorb the force of impact over a longer period of time, thus reducing the impact force.
49	State what is meant by elastic deformation?	A material that will return to its original shape when the forces deforming it have been removed.
50	Describe how to measure the extension of a spring?	Measure the original length of the spring, attach the load to the spring, then measure the new length. Calculate the difference between the original and new length of the spring.
51	According to Hooke's law, what is the relationship between extension and force applied up until the limit of proportionality?	The extension of a spring is directly proportional to the force applied.
52	Explain what is meant by the limit of proportionality?	This is the point at which an elastic object will no longer return to its original shape when a load is applied to the material. The material has now been inelastically deformed.

SCIENCE – PHYSICS 2

1	What do all waves transfer?	Energy
2	State the definition of a transverse wave.	A wave where the oscillations/vibrations causing the wave are perpendicular (at 90°) to the direction that the wave transfers energy

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3	State the definition of a longitudinal wave.	A wave where the oscillations/vibrations causing the wave are parallel to the direction that the wave transfers energy
4	Describe what an area of compression and rarefaction are on a longitudinal wave.	<p>Compression – A region of high pressure on a wave where particles are close together.</p> <p>Rarefaction – A region of low pressure on a wave where particles are spread further apart.</p>
5	State two examples of longitudinal and transverse waves.	<p>Transverse – water waves, light waves, EM waves</p> <p>Longitudinal – Sound waves, Earthquakes (p waves)</p>
6	<p>Describe what is meant by the following:</p> <ol style="list-style-type: none"> Amplitude Wavelength Frequency Wave Period 	<ol style="list-style-type: none"> Amplitude – The height of the wave measured from the middle (resting position). Wavelength – The distance from a point on one wave to the identical point on the next wave. (e.g. from peak to peak) Frequency – The number of waves passing a specific point in one second. Wave Period – The time taken to produce one wave.
7	State the equation and units used to calculate wave speed.	Wave speed (m/s) = Frequency (Hz) x Wavelength (m)
8	<p>Describe how to measure the following in a wave tank:</p> <ol style="list-style-type: none"> Wavelength Frequency 	<ol style="list-style-type: none"> Use a meter ruler to measure the length of 10 wave fronts under a strobe light. Take the total distance in meters and divide by 10 to give the wavelength. Measure the number of waves that pass a specific point in 10 seconds. Take the number of waves and divide by 10 to calculate the frequency.
9	Describe how to change the wavelength of the wave on the string.	<p>Add more tension to the string or move the position of the triangular block that supports the string.</p> 

11	Describe how to measure the wavelength of the wave on the string.	Use a meter ruler to measure the length of one half of a wave, then double it. 
12	Describe what happens to the speed of a water wave when it enters more shallow water.	The speed of the wave will decrease.
13	State what happens to a water wave when it is reflected of a surface.	The wave will reflect back at the same angle that it hit the surface.
14	State what happens to a water wave when it crosses from deep water to shallow water at a non-zero angle.	The wave will refract when entering more shallow water at a non-zero angle.
15*	State the feature of a wave that links to the loudness of a musical note.	The amplitude of the wave.
16*	State the frequency of sounds waves the human hearing can perceive.	20Hz – 20,000Hz
17*	Name the first part of the ear that vibrates when struck by a sound wave.	Eardrum
18*	The transfer of sound waves to solids causes atoms to do what?	Vibrate
19*	State the frequency of ultrasound.	>20,000Hz
20*	State two uses of ultrasound waves.	Medicine – pregnancy scans, ultrasound treatment of kidney stones. Industry – Detecting cracks in materials Exploration – mapping of the oceans floor (SONAR)
21*	Which property of ultrasound waves makes them safer to use than X-rays?	Non-Ionising
22*	How are all seismic waves produced?	They are produced by Earthquakes.
23*	What is a P wave?	A longitudinal mechanical wave. They are faster than S-waves.
24*	What is a S wave?	A transverse mechanical wave. They are slower than P-waves.

[Type here]

25*	Which type of wave can pass through the liquid outer core of the Earth?	Only P-Waves. Only P-waves can travel through liquids.
26*	Which type of seismic wave can pass through the mantle?	Both P and S-waves. They can both travel through solids.
27	State the order of the Electromagnetic waves from largest wavelength to smallest.	Radio, Microwave, Infrared, Visible Light, Ultraviolet, X-ray, Gamma
28	As the wavelength of an EM wave increases, describe what will happen to the frequency.	The frequency will decrease.
29	State which type of EM wave carries the most and which carries the least energy.	Most energy – Gamma Least energy -Radio
30	What happens to an electromagnetic wave when it refracts?	It changes direction.
31	When drawing a ray diagram where would you draw the normal line?	The normal line is drawn perpendicular to the surface of the medium.
32*	State the law of reflection.	Angle of Incidence = Angle of Reflection
33*	Refraction occurs when visible light enters a material that has a different _____	Density
34*	How do we measure the angle of refraction?	Measure the size of the angle between the refracted ray and the normal line.
35	State the surface that is the best emitter and absorber of Infrared radiation.	Matt Black
36	State the surface that is the worst emitter and absorber of Infrared radiation.	Shiny Reflective (silver)
37*	What is emitted by all bodies (objects), no matter the temperature?	Infrared Radiation
38*	Describe the levels of emission and absorption of Infrared Radiation for a body at a constant temperature.	The rate of infrared radiation being absorbed and emitted is the same.
39*	What is a perfect black body?	A theoretical object that is able to absorb all infrared radiation that hits it.

[Type here]

40*	Why does the Earth get hotter during the day time?	More infrared radiation is being absorbed by the Earth than is being emitted.
41	State the three Electromagnetic waves used in communication.	Radio, Microwave & Visible light
42	State two electromagnetic waves used in cooking.	Infrared & Microwave
43	Describe a use of Gamma waves	Sterilising medical equipment (Irradiation), medical tracers
44	State the three types of radiation that are highly ionising.	Ultraviolet, X-Rays and Gamma
45	Describe the impact of ionising radiation on the cells and tissues in the body.	Damages cells and tissues
46	Give the units that measure radiation dosage.	Sieverts (Sv), common dosages are measured in milli Sieverts (mSv)
47	Which sub-atomic particle is responsible for the production of radio waves when it oscillates?	Electron
48*	What happens to the thickness of a convex lens at the centre.	Thickness of the lens increases
49*	Give the name of the point where all rays of light converge.	Principal Focus
50*	What is the focal length?	The distance between the Principal Focus
51*	What type of image has rays of light that never truly meet?	Virtual Images
52*	What type of image can be projected onto a screen?	Real Image
53*	How is the image formed by a concave lens different to a convex lens?	Concave lenses always form virtual images. Whereas convex lenses form both virtual and real images.
54*	What do concave lenses do to parallel rays of light that go through them?	They cause parallel rays of light to diverge.
55*	How close does a convex lens need to be to form an upright, magnified and virtual image of an object?	Within one focal length.

56*	State the equation that links magnification, image height and object height.	Magnification = $\frac{\text{Image height}}{\text{Object height}}$
57*	What is white light made up from?	All colours of light.
58*	Which type of material will allow all light to transmit through it?	Transparent materials
59*	Which type of material will absorb or reflect light at its surface?	Opaque materials
60*	Which type of material will transmit light but it gets refracted due to lots of internal boundaries?	Translucent materials
61*	What would a red colour filter do to green light?	All green light would be absorbed by the red filter.

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

1	What does the Present tense mean?	Things that are happening now
2	What are the 3 types of verb in Spanish?	ER, IR, AR
3	What does the verb 'jugar' mean	To play
4	What does the verb 'hacer' mean	To do/to make
5	What does the verb 'ir' mean	To go
6	How do you say 'I play' in Spanish	Juego
7	How do you say 'I do' in Spanish	Hago
8	How do you say 'I go' in Spanish	Voy
9	How can you express your opinions in Spanish?	Me gusta (I like), me encanta (I love), prefiero (I prefer), odio (I hate)
10	How do you say because in Spanish?	porque

[Type here]

11	Where do we put the negative in French?	Before the verb No tengo
12	What does the Preterite/Past tense mean?	Things that have happened
13	What changes at the end of the verb to indicate the past tense?	Take off the last 2 letters and add ... Comí Hablé viví
14	How do we make past participles in Spanish?	ER verbs: remove the ER and add ido IR verbs: remove the IR and add ido AR verbs: remove the AR and add ado
15	What does the Future tense mean in Spanish?	Things that are going to happen/will happen in the future
16	How do you make the Near Future tense (going to) in Spanish	Use the part of ALLER (to go) for the person you are talking about e.g. voy Add 'a' Add an infinitive verb 'jugar' e.g. voy a jugar = I am going to play