



YEAR 11 MASTERY SHEETS

#TheLongdendaleLegacy



Longdendale
HIGH SCHOOL

| English |

Week 1

Question	Answer
For <u>Literature Paper 1</u> , what do you do for Shakespeare's Macbeth Qa (20 marks)?	Analysis: Range of paragraphs: point, range of evidence, name and identify language, structure and form techniques, explain and analyse the effect, Shakespeare's intent on the audience.
For <u>Literature Paper 1</u> , what do you do for Shakespeare's Macbeth Qb (20 marks)?	Explore a theme elsewhere: range of paragraphs: point, event detail, explain, importance, context, audience, Shakespeare's intent.
For <u>Literature Paper 1</u> , what do you do for Post-1914 - Animal Farm (40 marks)?	Choose one question: Explore a theme / character / group / concept across the novella. Range of paragraphs: point, event detail, explain, importance, context, reader, Orwell's intent.
For <u>Literature Paper 2</u> , what do you do for Novel – A Christmas Carol Qa (20 marks)?	Analysis: Range of paragraphs: point, range of evidence, name and identify language, structure and form techniques, explain and analyse the effect, Dickens' intent on the reader.
For <u>Literature Paper 2</u> , what do you do for Novel – A Christmas Carol Qb (20 marks)?	Explore a theme / character elsewhere: range of paragraphs: point, event detail, explain, importance, context, reader, Dickens' intent
For <u>Literature Paper 2</u> , what do you do for Anthology Conflict Poetry (20 marks)?	Compare and analyse: Range of paragraphs: similar/different point, range of evidence, name and identify language, structure and form techniques, explain and analyse the effect, poets' intent / message / context on the reader.
For <u>Literature Paper 2</u> , what do you do for Unseen Poetry (20 marks)?	Compare and analyse: Range of paragraphs: similar/different point, range of evidence, name and identify language, structure and form techniques, explain and analyse the effect / ;poet's message on the reader

Week 2

Question	Answer
For Language Paper 1, what do you do for Q1/2 (1 / 2 marks)?	Identify a word, phrase, quote or quotes depending on the amount required by the question.
For Language Paper 1, what do you do for Q3 (6 marks)?	Analysis of language and structure: One extended paragraph answering the question: point, range of evidence, name and identify language AND structure techniques, explain and analyse the effect.
For Language Paper 1, what do you do for Q4 (15 marks)?	Evaluate the success: Range of paragraphs: point, range of evidence, explain, evaluative adverbs, evaluate the writer's choices and how they have been successful.
For Language Paper 1, what do you do for Q5 or Q6 (40 marks)?	Choose one task and write a detailed descriptive / narrative story. Range of paragraphs, a clear plot, character(s), use of language devices, accurate and effective paragraphs, sentences, punctuation, spelling and vocabulary.

Week 3

Question	Answer
For Language Paper 2, what do you do for Q1/Q2 (1 / 2 marks)	Identify a word, phrase, quote or quotes depending on the amount required by the question.
For Language Paper 2, what do you do for Q3 (15 marks)?	Analyse how the writer interests and engages readers in a range of paragraphs: point, range of evidence, name and identify language AND structure techniques, explain and analyse the effect.
For Language Paper 2, what do you do for Q4/Q5 (1 / 2 marks)	Identify a word, phrase, quote or quotes depending on the amount required by the question.
For Language Paper 2, what do you do for Q6 (15 marks)?	Evaluate the success: Range of paragraphs: point, range of evidence, explain, evaluative adverbs, evaluate the writer's choices and how they have been successful.
For Language Paper 2, what do you do for Q7a (6 marks)?	Compare Text 1 and Text 2 for similarities: 3 similarities and prove with evidence from each (you do not need to explain)
For Language Paper 2, what do you do for Q7b (14 marks)?	Compare and contrast Text 1 and Text 2 – the views and perspectives of the writers. Range of paragraphs: similar/different points, range of evidence from each text, explain the views and perspectives – mentioning language, structure, purpose, audience, format, tone.
For Language Paper 2, what do you do for Q8 or Q9 (40 marks)?	Choose one task and write according to the purpose, audience, format and tone required. Range of paragraphs, ideas developed, use of language devices, accurate and effective paragraphs, sentences, punctuation and vocabulary.

| Maths |

Week 1

Question	Answer
Define Solve	Arrive at a numerical answer.
Define Simplify	Collect like terms.
Define Expand	Multiply out the brackets.
Define Factorise	Find the Highest common factor and put the brackets in.
What is a question asking you to do if it asks you to Calculate/Work out?	Arrive at an exact answer.

Week 2

Question	Answer
Define Estimate?	Approximate Value.
What do you HAVE to do to the values in an estimate question?	Round all numbers to 1 significant figure.
What do you do if a questions asks you to 'Show' something?	Provide structured evidence to reach a conclusion. Do not start with the answer you must read the question and work out how they have arrived at the given solution.
What does it mean to plot a graph?	Draw points accurately on the graph.
What does it mean to Sketch a graph?	Draw a diagram not necessarily to scale.

Week 3

Question	Answer
1) What does it mean to prove something?	Provide a formal mathematical argument.
2) What is a counter example?	An example to disprove a statement.
3) What must you do if you are using a calculator to assist with your working out?	Write down everything that goes into the calculator onto your exam paper.
4) In a non-calculator paper what must you do with all calculations?	Repeat calculations to ensure you have arrived at an accurate answer.
5) What must you do on a worded question?	<p>READ – read the question through completely once.</p> <p>READ AGAIN – read the question again this time re writing important information.</p> <p>WHAT IS THE QUESTION ASKING ME – figure out what the question is actually asking you to work out, which pieces of your information are relevant.</p> <p>WHAT MATHEMATICAL SKILLS AM I USING – What skills are you using here – percentages? Area? Volume? Make sure you are on the right topics and then you can commence the question!</p>

| Biology |

Week 1

Question	Answer
What is an independent variable?	The independent variable is the variable that is changed in an experiment.
What is a dependent variable?	The dependent variable is the variable that is measured in an experiment.
What is a control variable?	The control variable refers to any variables that need to stay the same in an experiment.
Which organelle in a cell controls the activity of the cell?	The nucleus
.Which organelle controls the entry and exit of substances?	The cell membrane
Which organelle converts energy by respiration?	The mitochondria
Name the 3 organelles present in a plant cells that are absent from an animal cell	Cell wall, chloroplast & vacuole
What are stem cells?	Undifferentiated cells
What is the name of the process where cells produce an identical copy of themselves?	Mitosis
What are the 3 stages in the cell cycle?	Stage 1: replication of cell contents Stage 2: separating chromosomes & nuclear division Stage 3: cell division

Week 2

Question	Answer
Define diffusion	The movement of gases or dissolved substances from a high to a low concentration
Define osmosis	The movement of water from a high to a low concentration through a partially permeable membrane
Define active transport	The movement of substances from a low to a high concentration (against a gradient), using energy from respiration
Orde the following from smallest to largest: Organ, cell, organism, tissue, organ system	Cell, tissue, organ, organ system, organism
What occurs in the small intestine?	Digestion continues and nutrients are absorbed into the blood
What substance is responsible for digestion?	Enzymes
What enzymes digest carbohydrates, and where are the produced?	Carbohydrases (particularly amylase) Made in the mouth pancreas and small intestine
What enzymes digest proteins, and where are the produced?	Proteases Made in the stomach, pancreas and small intestine
What enzymes digest lipids, and where are the produced?	Lipases Made in the pancreas and small intestine
What role does bile play in digestion?	It neutralises stomach acid and emulsifies fats
What is the food test to identify starch, and what does a positive result look like?	Use iodine solution Turns from brown to black
What is the food test to identify reducing sugars, and what does a positive result look like?	Use benedict's solution Turns from blue to cloudy yellow/orange/green/red

Week 3

Question	Answer
Name the 4 chambers of the human heart	Right and left atria, right and left ventricle
Where is the pacemaker situated?	The right atrium
Describe the structure of arteries	The have thick muscular walls with a lot of elastic tissue
What is the role of capillaries?	To allow oxygen and nutrients to pass from our blood into tissues, and for waste to pass back out
What is the role of lymphocytes in the immune response?	The produce antibodies, that stick to pathogens
What is the role of phagocytes in the immune response?	The engulf and digest pathogens
What is contained in a vaccine?	A dead or inactive form of a pathogen
What type of pathogen can be destroyed by antibiotics?	Bacteria ONLY
What is the word equation for photosynthesis?	Carbon dioxide + water -> glucose + water
What is a limiting factor?	A factors that is used up in a reaction, so limits the rate of the reaction
What is the word equation for aerobic respiration?	Glucose + oxygen -> carbon dioxide + water
What are the products of anaerobic respiration in animals, and in yeast?	In animal the product is lactic acid In yeast the products are alcohol and carbon dioxide

| Chemistry |

Week 1

Question	Answer
What does the term 'apparatus' mean?	Apparatus is the term of equipment which the exam board use.
What is an independent variable?	The independent variable is the variable that is changed in an experiment.
What is a dependent variable?	The dependent variable is the variable that is measured in an experiment.
What is a control variable?	The control variable refers to any variables that need to stay the same in an experiment.
When describing variables, what terms should be used in place of the term amount?	The term amount should not be used, instead we can use the terms volume or concentration.
Give a piece of apparatus that measures volume more accurately than a measuring cylinder.	A pipette or burette is a more accurate way to measure a volume of a liquid.
Give 2 ways we can ensure accurate data is collected?	To collect accurate data, we should repeat at last 3 times and then calculate a mean value.
What is an anomalous result?	An anomalous result is a result that does not
How is a mean value calculated?	To calculate a mean, you add together the results (do not include anomalous results) and then divide by the number of results you used.
What shape should your line of best fit be on a chemistry graph?	A line of best fit should be a straight line or smooth curve (not hairy or wobbly) in chemistry.

Week 2

Question	Answer
What is a proton?	A proton is a subatomic particle with a positive charge, found in the nucleus of an atom.
What is an electron?	An electron is a subatomic particle with a negative charge, found on the energy shells of an atom.
What is a neutron?	A neutron is a subatomic particle with no charge, found in the nucleus of an atom?
What is an ion?	An ion is an atom with a charge because it has gained or lost electrons.
What are isotopes?	Isotopes are atoms of the same element, but that have different mass numbers due to different numbers of neutrons.
What was the plum pudding model of the atom?	The plum pudding model of an atom has a cloud of positive charge with negative electrons spread throughout.
What was Rutherford's experiment and what did it prove?	Rutherford fired alpha radiation at gold foil and proved that atoms have a nucleus because of the directions the radiation reflected in.
What happens in an ionic bond?	In an ionic bond a metal loses electrons and becomes a positive ion, a non-metal gains electrons and becomes a negative ion, and then the oppositely charged ions are attracted by electrostatic forces.
What happens in a covalent bond?	In a covalent bond non-metal atoms share electrons.
Why can metals conduct heat and electricity?	Metals have a sea of delocalised electrons which can move between the ions to transfer thermal energy or create electrical current.

Week 3

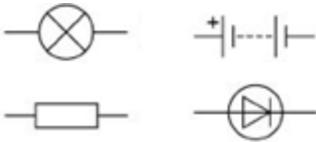
Question	Answer
What do the 4 state symbols s, l, g and aq stand for?	s = solid, l = liquid, g = gas, aq = aqueous
How can an insoluble or unreacted solid be separated from a liquid?	Filtration separates an insoluble solid from a liquid?
How can a soluble solid be separated from a liquid?	Evaporation or crystallisation separates a soluble solid from a liquid.
Give 2 ways mixtures of liquids can be separated?	Mixtures of liquids can be separated through distillation or chromatography.
How can boiling point be used to tell you if something is a mixture or pure?	A pure substances boils at only one temperature; a mixture will boil over a range of temperatures.
Which forces are broken when something changes state?	Intermolecular forces are broken when something changes state.
What can we say about the strength of intermolecular forces if something has a high boiling point?	A high boiling point links to strong intermolecular forces.
What pH values and colours link to acids?	Acids are pH 0-6, colours red, orange and yellow.
What pH values and colours link to alkalis?	Alkalis are pH 8-14, colours blue and purple
What pH values and colours link to neutral?	Neutral is pH 7, colour green.
What is a more accurate way to measure pH, in place of indicator paper or universal indicator solution?	A pH probe measures pH more accurately than paper or solution.
What do the terms exothermic and endothermic mean?	Exothermic reactions release energy and the temperature increases, endothermic reactions absorb energy and the temperature decreases.

| Physics |

Week 1

Question	Answer
What are the SI units for energy?	Joules (J)
What are the SI units for power?	Watts (W)
What are the SI units for current?	Amps (A)
What are the SI units for potential difference?	Volts (V)
How do you convert millimetres into metres?	Divide by 1000
How do you convert kilometres into metres?	Multiply by 1000
What energy transfer occurs when a car drives	Chemical energy in the petrol is converted to kinetic energy in the wheels
Why is no machine 100% efficient?	Wasted energy is dissipated to the surroundings, usually as heat or sound
Define power	The energy that is converted per unit time
Define specific heat capacity	The energy needed to increase 1kg by 1°C
Name the 2 fossil fuels	Coal, oil & gas
What are alternative fuels good for the environment?	Little/no carbon emissions, renewable

Week 2

Question	Answer
What are the circuit symbols for: Bulb, battery, resistor & diode?	
Should you place an ammeter in series or parallel?	series
Should you place a voltmeter in series or parallel?	parallel
How do you find the total resistance in series?	Add the values of each resistor
How do you find the total resistance in parallel?	It is less than the smallest individual value
What does the National Grid consist of?	A series of transformers and power lines
What potential difference and frequency do we use in the UK?	Alternating current (AC) at 230V and 50Hz
Describe the forces between solid particles	Strong due to the closeness and pattern of the particles
Describe the arrangement of liquid particles	Most are touching with only small spaces between them, with no pattern
Describe the motion of gas particles	Random speeds in random directions
How do you find the volume of a regular shape?	Length x width x height
How do you find the density of an irregular shape?	Place it into a displacement can, collect the water that comes out of the spout

Week 3

Question	Answer
Define specific latent heat	The energy needed to change the state of 1kg of a substance
How can you identify a state change on a heating or cooling graph?	A horizontal line
Why does the pressure increase when the temperature increases?	Hotter particles move faster, collide more with each other and the walls of the container
Describe alpha radiation	Same as a helium nucleus, large mass (4), large charge (+), low penetrating, high ionising power
Describe beta radiation	Same as an electron, small mass (0.0005), small charge (-), medium penetrating, medium ionising power
Describe gamma radiation	An electromagnetic wave, no mass or charge, highly penetrating, doesn't ionise
What happens when a particle emits alpha radiation?	The mass number decreases by 4 and the atomic number decreases by 2
What happens when a particle emits beta radiation?	The mass number stays the same, but the atomic number increases by 1
What happens when a particle emits gamma radiation?	The atom remains unchanged, but is in a lower energy state
What is the definition of half-life?	The time it takes for the initial radioactivity to reduce to half its original value
What does contamination mean?	Unwanted presence of radioactive material
What does irradiation mean?	Purposeful presence of radioactive material

Exam Technique | Business Studies |

Week 1

Question	Answer
What is the minimum amount of connectives of a 3 mark answer?	3
What is the minimum amount of connectives of a 6mark answer?	6 connectives over 2 paragraphs
What is the structure of a 9mrk answer	<ul style="list-style-type: none"> • Pick an option • Advantage of that option • Disadvantage of that option • I think they should pick option...because and give the disadvantage of the option you are not picking • The success of this option depends on ..

Week 2

Question	Answer
How many pieces of context are needed in a 1, 2 or 3 mark question in section B and C	1
How many pieces of context are needed in a 6 mark question in section B and C	4
How many pieces of context are needed in a 9 and 12 mark question in section B and C	6
What should the first line of each 9 and 12 marker have	A quote from the case study

Week 3

Question	Answer
If you are writing something is expensive or cheap, what must you do?	Explain WHY
If you are writing something motivates workers, what must you do?	Explain WHY
f you are writing something gives the business a good reputation what must you do?	Explain WHY
If something is expensive what is the impact	Costs are higher – profit lower – the business has less money to spend making the business better
If something is cheap what is the impact	Costs are lower – profit higher– the business has more money to spend making the business better

| Drama |

Week 1

Question	Answer
What are the 4 main themes?	Racism Violent protest Love and Friendship Identity
Who is Kelani Adams	Solicitor to support Ryan McGregor
What must you consider in costume question?	Colour, fabric, style, accessories, hair, make-up and social class.
What must you consider in set design question?	Original staging, where audience sit, furniture, floor, ceiling.

Week 2

Question	Answer
What are 2 rehearsal techniques?	Role on wall Hot-seating
What is an execution?	Where someone is killed by hanging
What sound would you choose for hanging scene? Why?	Suspenseful music, eerie silence, ticking sound.
What lighting would you choose for hanging scene?	Spot-light, red wash, strobe, darkness.

Week 3

Question	Answer
Who designed original set design?	Simon Kenny
How long do you spend on 15 mark question?	20 mins
How long to do spend on section B	30 mins
What should you do after you have answered a key question?	Cross it out.

Support for Enterprise | Enterprise |

Week 1

Question	Answer
What is the formula for Total Costs ?	Fixed Costs + Total Variable Costs
What is the formula for Total Variable Costs?	Variable Cost per item x quantity sold
What is the formula for Revenue?	Selling Price of the item x Quantity Sold
What is the formula for Profit per unit?	Selling Price per item – total cost per item
What is the formula for Profit	Total Revenue – Total Cost

Week 2

Question	Answer
How can a business sell their goods	Physical: shops, face to face Digital: e-commerce, websites, social media marketplace sites, online auction sites, download
What is the impact of having a physical shop	Can offer really high levels of customer service an can create a USP Expensive as need to pay rent
What is the benefit of selling digitally (online)	Can sell world wide- more potential customers Cheaper no rent to pay on a shop
What are the stages of the product lifecycle?	Development , introduction, Growth, Maturity, Decline
What is an extension strategy?	A strategy designed to increase the sales of a product

Week 3

Question	Answer
What are the types of the Enterprise	Sole Trader, Partnership, Private Limited Company, Franchise
What are the sources of capital?	Own savings, Friends and family, Loans, Crowdfunding, Grants, Business angels
What are the sources of support for Enterprise	Finance providers, e.g. bank, business angel, Local council enterprise department , Accountants , Solicitors, Friends/family, Chamber of Commerce, Government , Charities
If something is expensive what is the impact	Costs are higher – profit lower – the business has less money to spend making the business better
If something is cheap what is the impact	Costs are lower – profit higher – the business has more money to spend making the business better

| History |

Week 1

Question	Answer

Week 2

Question	Answer

Week 3

Question	Answer

Topic 4 Resource Management | Geography |

Week 1

Question	Answer
What is famine?	A widespread, serious, shortage of food. In extreme cases it can lead to starvation and deaths.
What is food security?	When people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life.
What is food insecurity ?	Being without reliable access to a sufficient quantity of affordable, nutritious food.
What is undernutrition?	This occurs when people cannot access enough nutrients to cover their needs for energy and growth, or to maintain a healthy immune system.
What is irrigation?	Applying water to land in order to supply crops and other plants with necessary water

Week 2

Question	Answer
What is permaculture?	A system of agricultural and social design principles based upon or directly using patterns and features observed in natural ecosystems
What is sustainable food supply?	Food that is produced in ways that avoid damaging natural resources.
What is the the new green revolution?	A combination of modern technology, traditional knowledge and an emphasis on farming, social and agroecological systems as well as yields, especially in poorer countries. At the same time, it emphasises alternative approaches and improved farm management and information systems in order to minimise environmental damage from external inputs and benefit poor farmers and marginal areas bypassed by the original green revolution.

Week 3

Question	Answer
What is urban farming?	The growing of fruits, herbs, and vegetables and raising animals in towns and cities, a process that is accompanied by many other activities such as processing and distributing food, collecting and reusing food waste.
What is Aeroponics?	Growing plants in an air or mist environment without the use of soil.
What is Biotechnology?	The manipulation (through genetic engineering) of living organisms to produce useful commercial products (such as pest resistant crops and new bacterial strains).
What is hydroponics?	A method of growing plants using mineral nutrient solutions, in water, without soil
What is sustainable development ?	Development that meets the needs of the present without limiting the ability of future generations to meet their own needs.

Week 4

Question	Answer
What is 'Grey' water?	Wastewater from people's homes that can be recycled and put to good use.
What is groundwater management?	Regulation and control of water levels, pollution, ownership and use of groundwater
What is over-abstraction?	When water is being used more quickly than it is being replaced
What is sustainable water supply ?	Meeting the present-day need for safe, reliable, and affordable water, which minimises adverse effects on the environment
What is water conservation?	The preservation, control and development of water resources, both surface and groundwater, and prevention of pollution

Week 5

Question	Answer
What is hydro(electric) power?	Electricity generated by turbines that are driven by moving water.
What is geothermal energy?	Energy generated by heat stored deep in the Earth
What is biomass?	Renewable organic materials, such as wood, agricultural crops or wastes, especially when used as a source of fuel or energy. Biomass can be burned directly or processed into biofuels such as ethanol and methane
What is a sustainable energy supply?	Energy that can potentially be used well into the future without harming future generations. Sustainable energy is the combination of energy savings, energy efficiency measures and technologies, as well as the use of renewable energy sources.

Week 6

Masters of recall quiz



Topic 5 Paper 3 Issue Evaluation | Geography |

Week 1

Question	Answer
Energy	A property harnessed from different sources needed in our every day lives. Energy for homes, transport, run communication systems, grow food and access water etc.
Consumption	The use of energy in our every day lives – directly or indirectly
Energy Mix	The different types of energy that countries use in order to provide energy to meet the needs of the population – usually made up of renewable and non-renewable sources.
Energy Security	Is having an uninterrupted and affordable supply of energy which is able to sustain peoples lives and daily activities
Physical Environment	The natural geological and physical conditions of an area e.g. topography of the land, rivers, coasts, mountains, landscape and biomes, weather/climate, natural hazards

Week 2

Question	Answer
Renewable	Energy that comes from sources that will not run out e.g. wind, sun, waves etc
Biomass	Plant and animal matter (e.g. wood/straw, sewage and waste food) burnt for heat and energy
Geothermal	Harness heat from deep underground to generate electricity
Hydro-electric	Harness energy from the movement of water – such as dams

Week 3

Question	Answer
NTPG	Northern Tidal Power Gateways
Estuary	The tidal mouth of a river – where it meets the sea.
Tidal Barrage	Tidal barrage is a dam-like structure used to capture the energy from masses of water moving in and out of a bay or river due to tidal forces.
RSPB	Royal Society of the Protection of Birds
Energy Trilemma	Term used to describe the need of a form energy that is affordable, sustainable and in great supply.

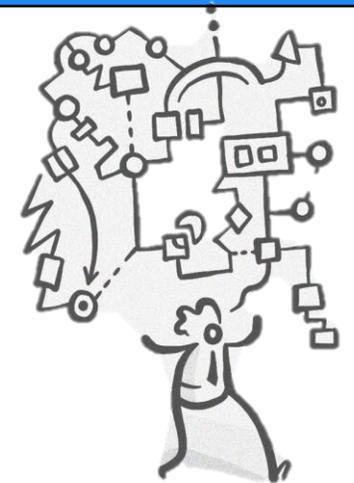
Week 4

Question	Answer
Sustainable	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs
Conservation	The careful maintenance and upkeep of a natural resource to prevent it from disappearing
SSSI	Sites of Special Scientific Interest
AONB	Areas of outstanding natural beauty

Week 5

Masters of recall
quiz

EXAMS



Topic 6 Fieldwork | Geography |

Week 1		Week 2		Week 3	
Question	Answer	Question	Answer	Question	Answer
What is an introduction?	to the fieldwork and study site. Should include location maps at different scales, and the enquiry question, written out clearly.	What is an enquiry?	An enquiry is a question that you set out to prove or disprove	What is random sampling?	selecting a person to interview or site to measure, at random. Random sampling is unbiased as particular people or places are not specifically selected
What is methodology?	When you describe and justify the way that the data was collected.	What is a hypothesis?	proposed explanation made based on limited evidence as a starting point for further investigation	What is systematic sampling?	collecting data in an ordered or regular way, e.g. every 5 metres or every fifth person
What is a data presentation?	Data that is presented in different ways. E.g. pie charts, histograms, radial graphs	What is an investigation?	A thorough attempt to learn the facts about something	What is stratified sampling?	dividing sampling into groups, e.g. three sites from each section of coastline, or five people from each age range. It is possible to combine stratified sampling with random and systematic sampling
What is an analysis?	Where we look at the results in detail and discuss patterns.	What is primary data?	information that is collected first-hand, e.g. tallies, measurements and photographs		-Stratified random sampling - random samples are taken from within certain categories
What is a conclusion?	A short section to draw together the results and answer the enquiry question	What is secondary data?	information that someone else has previously collected and made available, e.g. on the internet		-Stratified systematic sampling - regular samples are taken from within certain categories
What is an evaluation?	this considers the strengths and weaknesses of the data collection, along with possible improvements or extensions. It is acceptable to talk about weaknesses, as long as improvements can be suggested.	What is human data?	information about people, e.g. cities and tourism		
		What is physical data?	information about natural landscapes, e.g. rivers and coasts		

Week 4		Week 5		Week 6	
Question	Answer	How to draw a field sketch		Masters of recall quiz	
What is ratio?	To show the relationships between two sets of data	<p>Field sketches can be drawn by anyone - fantastic artistic skills are not required. Drawing a field sketch is a straightforward process:</p> <ol style="list-style-type: none"> 1. Identify the landscape that needs to be sketched. 2. Write a title that will help to locate the sketch, e.g. 'Site One'. 3. Draw an outline of the main features of the landscape with a pencil, e.g. hills and valleys or buildings and roads. 4. Add detail to the sketch to record more information, e.g. river features, such as Meanders, river cliffs and rapids 5. Only draw people if they are important to the enquiry question. 6. Annotate or label the field sketch to give more information about the landscape and conditions, e.g. what was the weather like? 7. Consider taking a photograph to support the field sketch 8. 			
What are proportions?	To show how many given items are in an area				
What is a meander?	A bend in the flow of a river				
What are central tendencies?	(averages) Mean, mode, median				
What are percentages?	To show proportions or change over time				
What are: Mean Mode Median	Mean - add the total of all values that have been collected and then divide by the number of values. Median - write out all of the numbers that have been collected in numerical order and find the middle number. Mode - the most commonly appearing value within the data				

Topic security | Information Technology |

Week 1

What are the emerging threats against computers and networks?	Quantum computing, Cyber physical attacks and deep fake technology.
What are the impacts of an attack?	Data loss, data theft and data manipulation
Data protection methods are?	Logical protection and physical protections
What are the logical methods of protection?	<ul style="list-style-type: none"> •Access levels – Determine level of permissions each user has. •Authentication – Methods used to prove the identity of a user. Strong passwords
What are the physical methods of protection?	<ul style="list-style-type: none"> •Locks – Locks on doors so they cannot be opened unless you have a key. •CCTV – Monitor the premises 24/7 without any supervising on site. •Security guards – Employing security staff to protect sensitive data stored in buildings.

Week 2

What is confidential computing?	Confidential computing is an emerging technology used for storing data more securely. It's a cloud computing technology that isolates sensitive data in a protected hardware-based environment such as the devices we use.
What is the difference between ethical and moral?	Moral is what is considered as right or wrong whereas Ethical is what is considered right by a group of people.
Legislation is used to protect data usage what are some of these?	Copyright, Designs and Patents Act Computer Misuse Act Data Protection Act (GDPR)
What is meant by environmental issues?	It's the way we measure the impact technology is having on the environment.
What is meant by culture?	Culture refers to the ideas, customs, and social behaviour

Week 3

Question	Answer
What is fake news?	The spread of misinformation using online communications.
What is cyber bullying?	Sending unkind messages to other people using digital communications
What is the digital divide?	Digital divide refers to the gap between people who has access technology to those that don't. Factors such as affordability, location and cultural factors can cause a divide.
What is hotdesking?	Hot-desking is when an employee doesn't have a regular space to work
In what ways can technology help reduce our impacts on the environmental?	The following methods can be used Homeworking and teleworking

Week 4

Question	Answer
What is media?	<ul style="list-style-type: none"> •Media is the format used to communicate information to others. There are two media industries: traditional media and new media.
Give some examples of newmedia	Social media and media on demand

Week 5

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Week 6

Masters of recall quiz



| Music |

Week 1

Question	Answer
Name THREE possible answers for a question about TEXTURE.	Monophonic. Polyphonic. Homophonic. Melody & accompaniment (there are others).
Name THREE possible answers for a question about DYNAMICS.	Piano, mezzo piano, mezzo forte, forte, crescendo, diminuendo (there are others).
Name THREE types of accidental.	Flat, sharp, natural.
Name TWO possible answers for a question about TONALITY.	Major, minor.
Name THREE types of curved lines you might see on a music score.	Tie, slur, phrase mark.

Week 2

Question	Answer
Name the decades for Rock and Roll.	1950s and 1960s
Name the decades for Pop Ballads.	1970s, 1980s, 1990s.
How should you use the planning page for Q3 – the long answer?	Write MAD TSHIRT. Put in a chronological timeline or table.
Name THREE types of curved lines you might see on a music score.	Tie, slur, phrase mark.



Week 3

Question	Answer
What word describes music with clashing notes?	Dissonant
What styles of music are covered by the Central and South America topic?	Calypso and samba.
Name a Film composer and a game music composer.	John Williams – film. Koji Kondo – games.
What word describes a rhythm that is off the beat?	Syncopation.
What is the rhythm used in bhangra music?	Chaal rhythm.

| RE |

Week 1

Question	Answer
Define the term 'Parable'.	A story with meaning behind it to teach a moral lesson.
Describe the significance of the Parable of the Good Samaritan.	It teaches Jesus' Golden rules: To love God and to love thy neighbour. (Treat others how you want to be treated).
Describe the significance of the Parable of the Lost Son.	It teaches that God/ our parents loves us unconditionally (agape). To always forgive.
Describe the significance of the Parable of the Sheep and the Goats.	It showed Christian how to get into Heaven, because ' <i>whatever you do to others, you do to me</i> ' (Jesus)'.
Describe the significance of the story of Job.	It explains that God has a plan for everyone throughout their suffering, that we cannot understand his reasons as we are only humans. But to always keep faith.

Week 2

Question	Answer
Describe the significance of the Night of Power.	The night Muhammad became a prophet (Sunni). <i>He received the words of the Qur'an from angel Jibril.</i>
Describe the significance of the Night Journey.	Muhammad was taken on a Pegasus to Jerusalem to speak with every prophet. Then taken to Paradise to speak with Allah. <i>Told to pray 5 times per day.</i>
Describe the events of the Hijrah.	Great migration of Muslims for safety. Muhammad and Abu Bakr saved by spider web and birds next (<i>evidence of Allah's omnipotence</i>).
What three important battles led to the victory of Muhammad?	The battle of Badr, Uhud and the Trench.

Week 3

Question	Answer
Define the term 'Source of authority'.	A guide human beings use to know the right way to live.
Which of the following is NOT a source of authority. The Law, a Pope, the Hadith, your conscience or an opinion.	An opinion . A conscience is a source of authority for a Humanist.
Which questions on an EDUQAS exam paper requires a source of authority?	A 5-, 8- and 15-mark question.
What is a strength of the Qur'an as a source of authority.	It is the direct word of Allah, so Muslims know exactly what is expected of them.
What is a limitation of the Bible as a source of authority?	There are so many interpretations as it is only inspired by God not the direct word.
Define the term Impact.	What affect something has on individuals, groups or society.

Topic: El medio ambiente | Spanish |

Week 1

Question	Answer
Translate: Un barrio de la ciudad	A neighbourhood in the city
Translate: Una casa individual	A detached house
Translate: Una casa adosada	A semi-detached house
Translate: Una finca/granja	A farm house
Translate: Las afueras	The outskirts

Week 2

Question	Answer
Translate: Se debería apagar la luz	You should turn off the lights
Translate: Se debería ducharse en vez de bañarse	You should shower instead of having a bath
Translate: Se debería reciclar el plástico y el vidrio	You should recycle plastic and glass
Translate: Se debería desenchufar los aparatos eléctricos	You should unplug electric appliances
Translate: No se debería malgastar el agua	You should not waste water

Week 3

Question	Answer
Translate: El paro/el desempleo	Unemployment
Translate: Los problemas del medio ambiente	Environmental problems
Translate: Los sin hogar/ Los sin techo	The homeless
Translate: Es necesario cuidemos la planeta	It's necessary that we look after the planet
Translate: Es necesario apoyemos proyectos de ayuda	It is necessary we support aid projects

Week 4

Question	Answer
Translate: Hay demasiada basura en las calles	There is too much rubbish in the streets
Translate: El aire está contaminado	The air is polluted
Translate: Plante más bosques y selvas	Plant more woods and forests
Translate: Reduzca las emisiones del vehiculos	Reduce vehicle emissions
Translate: Use energías renovables	Use renewable energy

Week 5

Question	Answer
Translate: Fumar cigarillos es peligroso y un malgasto de dinero	Smoking cigarettes is dangerous and a waste of money
Translate: Daña los pulmones	Damages the lungs
Translate: Mancha los dientes de amarillo	Stains your teeth
Translate: Causa el fracaso escolar	Causes failure at school
Translate: Una organización de servicio voluntario	An organisation for voluntary service

Week 6

Masters of recall
quiz



Component 3 BTEC | Sport |

Week 1

Question	Answer
What does the "S" in SMARTER stand for, and why is it important	The "S" stands for Specific. Goals should be clear and specific, which helps to focus efforts and clearly define what is to be achieved. A specific goal answers questions like who is involved, what do I want to achieve, where is it to be done, and why is it important?
How can you make a goal measurable?	To make a goal measurable, you should include criteria that allow for tracking progress and determining when the goal has been met. For example, instead of saying "I want to improve my fitness," a measurable goal would be "I want to run 5K in under 30 minutes."
What is meant by "achievable" in the SMARTER framework	"Achievable" refers to setting realistic goals that can be attained given current resources, capabilities, and constraints. It means that while a goal should challenge you, it should also be possible to achieve with effort.
Provide an example of a SMARTER goal related to improving sports performance	"I will improve my football skills by practicing dribbling for 30 minutes, three times a week, for the next month, and I will evaluate my progress by tracking my performance in practice drills with my coach."
What strategies can help in setting achievable goals?	Strategies include conducting a self-assessment to understand strengths and weaknesses, breaking larger goals into smaller, manageable tasks, and seeking feedback from coaches or peers

Week 2

Question	Answer
What are the five key principles of training?	<ol style="list-style-type: none"> 1. Specificity: Training should be specific to the sport or activity to improve performance. 2. Progression: The intensity and volume of training should gradually increase to allow for improvements in performance. 3. Overload: To improve fitness, the training workload must exceed what the body is used to. 4. Reversibility: If training stops, the fitness level will decrease, known as detraining. 5. Tedium: Training programs should be varied to prevent boredom and maintain motivation.
What does "specificity" mean in the context of training?	Specificity refers to the principle that training should be tailored to the specific demands of the sport or activity being performed. For example, a distance runner will focus on endurance training, while a sprinter will prioritise speed and power.
Explain the principle of progression and why it is important.	Progression involves gradually increasing the intensity, duration, or frequency of training over time to continue improving performance. It is important because it allows the body to adapt to new challenges without risking injury or plateaus in performance
Describe what "reversibility" means and give an example.	Reversibility is the principle that states that fitness gains can be lost if training ceases or decreases significantly. For example, if an athlete stops training for a few weeks, they may experience a decline in their cardiovascular fitness, strength, or flexibility.

Question

Week 3

Answer

Give an example of a training program that incorporates the principle of specificity	A training program for a soccer player would include specific drills such as dribbling, passing, shooting, and tactical exercises, rather than general fitness exercises like long-distance running, which may not specifically improve football skills.
In what ways can an athlete ensure their training program is both effective and engaging?	An athlete can ensure their training program is effective and engaging by: <ul style="list-style-type: none"> - Setting specific and measurable goals. - Incorporating a variety of training methods (e.g., circuits, interval training, different sports). - Regularly reviewing and updating their training plan. - Including social elements, such as training with a team or a partner. - Listening to their body and adjusting intensity based on how they feel.
How does long-term exercise affect muscular strength and endurance?	Increased muscle hypertrophy (growth of muscle fibers), resulting in greater muscular strength. <ul style="list-style-type: none"> - Improved neuromuscular coordination, allowing muscles to work more effectively together. - Increased muscular endurance due to enhanced oxidative capacity of muscle fibers. - Greater efficiency in energy use during prolonged activities.
What are the psychological benefits associated with long-term exercise?	Reduced symptoms of anxiety and depression due to the release of endorphins ("feel-good" hormones). <ul style="list-style-type: none"> - Improved self-esteem and body image as individuals achieve fitness goals and increase physical capabilities. - Enhanced mood and overall mental well-being, contributing to better coping mechanisms for stress. - Improved cognitive function and memory.