Sheffield Park Academy
The best in everyone™
Part of United Learning

Knowledge Organiser

Term 2

Name: .....

Tutor Group: .....

Tutor & Room: .....

AMBITION • KNOWLEDGE • DETERMINATION

Stick your Timetable here

CONTENTS

How do I complete Knowledge Organiser homeworks?

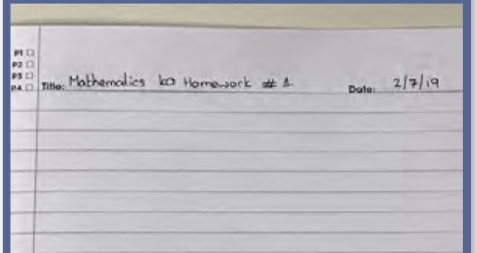
You will be set a MINIMUM of 2 Knowledge Organiser homeworks in every subject each half term

STEP 1

Identify what words/ definitions/facts you have been asked to learn.

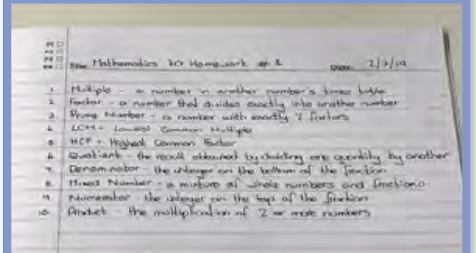
STEP 2

Write today's date and the title from your Knowledge Organiser.



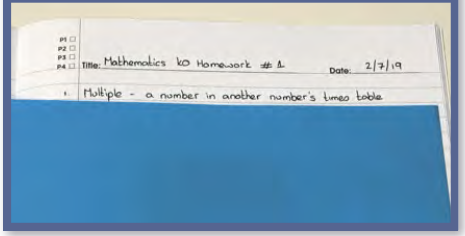
STEP 3

Write out the keywords/definitions/facts you have been set in FULL.



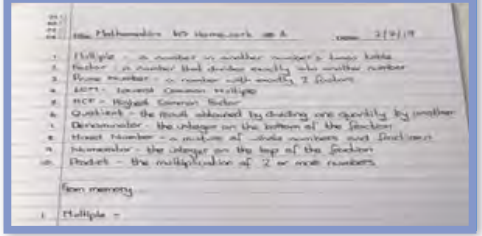
STEP 4

Cover the definitions in your SELF-QUIZZING BOOK, apart from the first. **Read it, Cover it, Say it** in your head, check it… REPEAT until confident.



STEP 5

Cover up ALL the definitions/facts and write them out from memory in your SELF-QUIZZING BOOK.



STEP 6

Check your answers and correct where required. Repeat Steps 4 to 6 until you are confident.

You will be **tested** on the words/definitions/ facts as a starter activity in your lesson on the day that the homework is due.

This will be completed in your normal exercise book and you will mark it in class.

Your Knowledge Organiser and Self-Quizzing Book

Knowledge Organisers

Knowledge Organisers contain critical, fundamental knowledge that you MUST know in order to be successful in Year 10 and subsequent years.

They will help you recap, revisit and revise what you have learnt in lessons in order to move the knowledge within from your shor-term memory to long-term memory.

Self-Quizzing Book

This is the book that all Knowledge Organiser homework is to be completed in.

You must follow the simple rules as to how they are to be used.

You **must** bring your Knowledge Organiser and Self-Quizzing Book to **every** lesson and place it on your desk at the beginning of each lesson.

You **must** keep all of your Knowledge Organisers and Self Quizzing Books because the fundamental knowledge required in Year 10 will also be required in Year 11.

Knowledge Organisers are **NOT** a replacement for revision guides but they include the fundamental knowledge that ALL students in Year 10 require.

YEAR 10 ART KNOWLEDGE ORGANISER – UNIT 2 EXAM

Keywords.

1. Formal Elements: Line, Tone, Colour, Pattern, Shape, Texture and Form

2.Line: Line is the path left by a moving point.

3.Shape: Shape is an area enclosed by a line.

4.Tone: This refers to the lightness or darkness of something.

5.Pattern : A design that is created by repeating lines, shapes, tones or colours.

6. Observational Drawing: When you observe something and respond to it with a visual representation.

7.Collage: A piece of art that is created by sticking various different materials such as paper or fabric on to a backing.

8.Typography: Arranging letters or text in a way that makes them visually appealing to the reader.

9.Two Dimensional: elements organised in terms of a flat surface.

10.Three Dimensional: Produced by carving or shaping stone, wood, clay, or other materials.

11.Media: The material used to create artwork.

12. Technique: The way tools and media are used to create artwork.

13. Composition: This is the way an object is placed or positioned on a page.

14. Lino Printing: Block printing that involves carving a pattern or design into a vinyl surface.

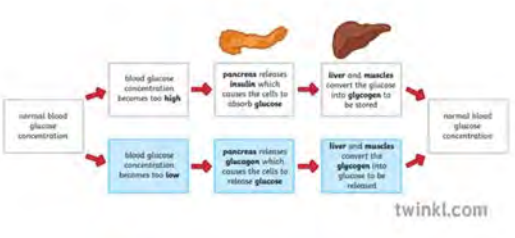
Sketchbook

- Artist research
- Experiment with a range of materials.
- Experiment with colour, line, shape, space.
- Annotations to show reflections on their work and that of others.

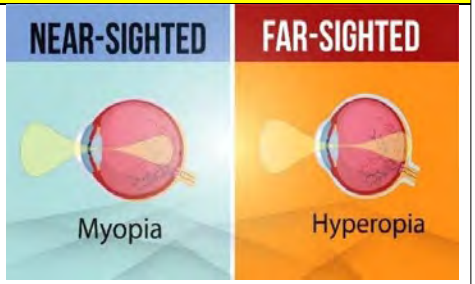
Command Words.

1. **Research**: The process of solving problems and finding facts in an organised way.
2. **Analyse:** Identify several relevant factors, show how they are linked, and explain the importance
3. **Method :** A procedure, technique, or way of doing something
4. **Evaluation:** Bring together all of your information and make a judgement on the Importance or success of something.
5. **Generate Ideas:** The process of creating, developing and communicating abstract, concrete or visual ideas.
6. **Develop:** To grow or change into a more advanced or stronger form or idea.
7. **Refine:** To make improvements to the idea.

	B4	Bioenergetics	
	Key word	**Definition**	
1	Photosynthesis	The process by which plants make glucose using carbon dioxide, water and sunlight.	
2	Respiration	The process by which **energy** is **released.**	
3	Metabolism	All the chemical reactions in a cell or the body.	
4	Aerobic respiration	Respiration where oxygen is used to release lots of energy.	
5	Anaerobic respiration	Respiration where oxygen is **not** used and releases only small amount of energy.	

B5		Homeostasis	
Key word		**Definition**	
1	Homeostasis	The regulation of internal conditions to maintain optimum conditions in response to changes.	
2	Stimulus	A change in the environment.	
3	Insulin	Released from the pancreas in response to high blood glucose levels. It causes glucose to be converted into glycogen for storage in the liver.	
4	Glucagon	Released from the pancreas in response to low blood glucose levels and causes glycogen to be broken down into glucose and released back into the blood.	
5	Type 1 diabetes	When the pancreas does not produce enough insulin.	
6	Type 2 diabetes	When the body cells no longer respond to insulin.	

B5		Homeostasis (Triple T)	
Key word		**Definition**	
1	Myopia	Short-sightedness.	
2	Hyperopia	Long-sightedness.	
3	Cerebral cortex	The outer part of the brain responsible for intelligence, language, memory and consciousness.	
4	Medulla	Controls unconscious activities such as heart rate and breathing rate.	
5	Cerebellum	Controls balance, co-ordination of movement and muscular activity.	



GCSE Business Studies **Y10 January - March Page 1 of 2**

1.4 Making a business effective.

Stakeholder	Any one, or group of people, that have an interest in the business operations.			
Share	The percentage of a business owned by a person			
Shareholder	A person who owns a share in a business			
Limited liability	Restricts the losses suffered by owners to the sum of money they have invested into the business			
Unlimited liability	The business owner and business are one entity therefore the owner is responsible for all of the business debts. The entrepreneur may lose their personal assets to clear the debt.			
Bankrupt	When a business (or person) is unable to pay all their debts, even after personal assets have been sold for cash			
Sole trader	A business owned run by 1 person. Has unlimited liability			
Partnership	A business owned and run usually by between 2 and 20 people. Has unlimited liability			
Private Limited company	A small business. Shares of the business can be sold to family and friends. They have limited liability.			
Franchise	Paying a business owner (the franchisor) for the right to use an established business name, branding and business methods			
Franchisee	There person who opens a business as a franchise			
Royalties	Monies paid by the franchisee to the franchisor. Usually as a percentage of the profits.			
Marketing Mix	Product – the product or service you are selling	Price – how much you charge for your product or service	Place – where you sell your product or service	Promotion – how you make customers aware of your product / service / business
e-commerce	Where businesses sell online rather than from a physical store.			
Business plan	A document setting out a new company's plans, aims, and cash flow			

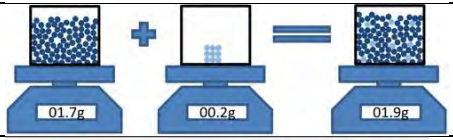
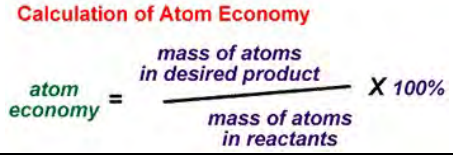
GCSE Business Studies **Y10 January – March Page 2 of 2**

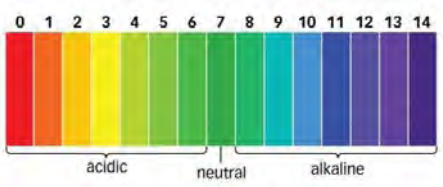
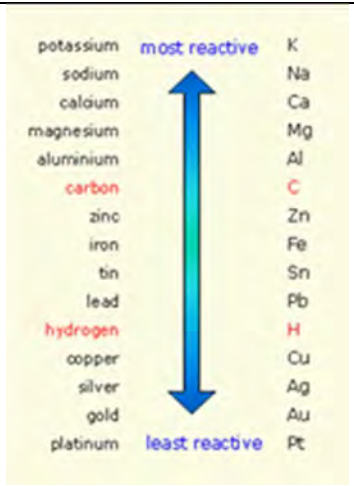
1.5 Understanding external influences on a business cont……	
Business plan	A document setting out a new company's plans, aims, and cash flow
Payments systems	Ways of paying online such as paypal
Consumer rights	Laws that empower the consumer. Allows them to demand certain standards from suppliers.
Consumer law	Acts of Parliament (laws) that are set to protect customers from misleading or dangerous practices by businesses
Legislation	Laws passed by acts of Parliament that everyone needs to follow. Breaking these laws may result in a fine or even prison sentence
Economy	Refers to the production of, and consumption of, goods and services in the economy. This then links into the supply of money.
Economic Climate	A measurement of the current economic outlook.
Disposable income	The amount of money people have left from their wages once all necessities / bills have been paid.
Unemployment	The number of people available for work who do not have paid employment
Taxation	A levy placed by the Government on certain things in the economy such as imports, incomes of individuals and companies.
VAT	Value added tax. A tax added onto the sale of certain goods in the economy. Currently 20%
Income tax	A tax placed on the income of individuals.
Inflation	A sustained increase in prices in the economy over a specific time period.
Exchange rate	The value of a currency based on how much of a different currency it can purchase.
Pressure Group	Organisations formed to put forwards a particular point of view or cause.
Recession	A period of 2 quarters (2 x 3 months) where the economy as a whole has shrunk
Boom	A period of sustained high growth within the economy

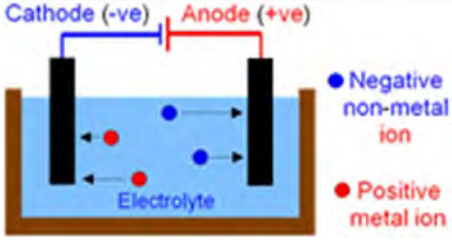
Y10 Food and Nutrition

Key word	Definition
1. GM crops	Genetically modified crops are plants used in agriculture, the DNA of which has been modified using genetic engineering methods.
2. Yeast	A microscopic organism used in bread making. Yeast needs food, warmth, moisture and time to develop carbon dioxide, this gas helps the dough to rise.
3. Gluten formation	Wheat and other related grains (including barley, and rye) contain a mixture of two proteins glutenin and gliadin. When flour made from grinding these grains is mixed with water the two proteins combine and form gluten. Without water, gluten is not formed. The more the dough is mixed, the more gluten is developed.
4. Gelatinisation	The change that starches undergo during cooking.
5. Coagulation	During cooking, proteins denature and coagulate.
6. Dextrinisation	The browning of starch with heat.
7. Aeration	The process of allowing air to be combined into ingredients to make them lighter and/or create more volume.
8. Food intolerance	A food intolerance is when a person has an unpleasant reaction to a food or an ingredient.
9. Food allergy	A food allergy, involves the person's immune system. Some people are either born with or develop an allergy and will have to avoid eating certain foods e.g. nuts or eggs. Symptoms of allergies include severe skin rashes, eczema, diarrhoea and even anaphylactic shock.
10. Religious beliefs	Many religions have dietary rules that can affect their choice of food. They may have to choose or avoid foods depending on their religious beliefs and principles.

Key word	Definition
11. Commodity	Basic foods which are produced in plentiful supply and sold for consumption.
12. Provenance	The place of oorigin of a food, essentially where the food comes from, or where the original commodity came from before processing.
13. Classification	Deciding which category something belongs in. Commodities such as fruits and vegetables may be classified.
14. Food spoilage	Food spoilage is a natural process caused by bacteria, mould, fungi and yeasts. Once a food is picked, slaughtered, cooked or stored, microorganisms will start to cause decay and eventually make food unsafe to eat.
15. Cross contamination	Cross-contamination occurs when juices from raw meats or bacteria from unclean equipment touch cooked or ready-to-eat foods.
16. Primary Processing	When raw food is changed or converted into foods that can be eaten immediately or into ingredients that can be used to make other food products. Examples include washing vegetables, squeezing fruit to make fruit juice, heat treatments for pasteurisation so that milk is pasteurised, and wheat milled into flour.
17. Secondary Processing	This is converting primary processed foods into other food products e.g., flour into biscuits/pastry/cakes or milk made into cheese/cream.

	C3	Quantitative Chemistry	
	Key word	**Definition**	
1	Mole	Chemical amounts are measured in moles. The mole is the unit for amount of substance.	
2	Conservation of mass	The law of conservation of mass states that no atoms are lost or made during a chemical reaction, so the mass of the products equals the mass of the reactants.	
3	Concentration	The amount of substance (e.g., the mass) in a certain volume of a solution.	$\text{concentration in } g/dm^3 = \frac{\text{mass of solute in } g}{\text{volume in } dm^3}$
4	Actual yield (T)	The amount of product actually produced by a reaction.	
5	Atom economy (T)	The measure of the amount of starting materials that end up as useful products.	

	C4	Chemical Reactions	
	Key word	**Definition**	
1	Acid	Acids produce hydrogen ions (H^+) in aqueous solutions. They have a pH range of 0-6.	
2	Alkali	Alkalis produce hydroxide ions (OH^-) in solutions. The have a pH range of 8-14.	
3	Displacement	A chemical reaction in which a more reactive element displaces a less reactive element from its compound.	

4	Oxidation	A reaction involving the gain of oxygen. Oxidation is the loss of electrons.	HT: OILRIG e.g. $2HCl + Mg \rightarrow MgCl_2 + H_2$ Magnesium is oxidised $Mg \rightarrow Mg^{2+} + 2e^-$
5	Reduction	A reaction involving the loss of oxygen. Reduction is the gain of electrons. Reduction with carbon: Metals less reactive than carbon can be extracted from their oxides by reduction with carbon.	
6	Electrolysis	The splitting up of an ionic compound using electricity. The electric current is passed through a substance causing chemical reactions at the electrodes and the decomposition of the materials.	

Algorithms		
1	**Pseudo Code**	Textual based algorithm
2	**Flow Chart**	Graphical based algorithm using symbols
3	**Start/ Stop Symbol**	
4	**Decision Symbol**	
5	**Input/Output Symbol**	
6	**Process Symbol**	

Algorithms – Searches		
1	**Binary Search**	A search algorithm that finds the position of a target value within a sorted array. Binary search compares the target value to the middle element of the array
2	**Linear Search**	A algorithm for finding a target value within a list. It sequentially checks each element of the list for the target value until a match is found or until all the elements have been searched
3	**Bubble sort**	A sorting algorithm that repeatedly steps through the list, compares adjacent elements and swaps them if they are in the wrong order. The pass through the list is repeated until the list is sorted.

Networks		
1	**LAN**	Local area network is a computer network that interconnects computers within a limited area such as a residence, school, laboratory, university campus or office building.
2	**WAN**	A wide area network is a telecommunications network that extends over a large geographic area for the primary purpose of computer networking.
3	**PAN**	A personal area network is a computer network for interconnecting electronic devices within an individual person's workspace.
4	**WLAN**	Wireless LAN is a wireless computer network that links two or more devices using wireless communication to form a local area network within a limited area such as a home, school, computer laboratory, campus, or office building
5	**NIC**	The network interface card (NIC) or network card is the hardware device most essential to establishing communication between computers
6	**Network Topology**	Network topology is the arrangement of the elements of a communication network.

Project planning		
1	**Task list**	A prioritized set of activities you (or your team) need to do to complete a project
2	**Mind map**	A mind map is a diagram used to visually organize information.
3	**Mood board**	An arrangement of images, materials, pieces of text, etc. intended to evoke or project a particular style or concept.
4	**Contingency plan**	A contingency plan is a plan devised for an outcome other than in the usual plan
5	**Gantt chart**	a type of bar chart that illustrates a project schedule and how long each task in the project should take

Project Evaluation		
1	**Feedback**	Information about reactions to a product or a person's performance of a task
2	**Stakeholder**	A stakeholder is a party that has an interest in a company and can either affect or be affected by the business.
3	**Client**	a person or organization using the services of professional person or company.
4	**Improvements**	Suggestions on how some thing could be made better
5	**Evaluation**	The making of a judgement about the amount, number, or value of something; assessment.

GCSE ENGLISH LANGUAGE — PAPER 1—EXPLORATIONS IN CREATIVE WRITING—SECTION A

Reading	Q1: Comprehension	Q2: Language Analysis	Q3: Structural Analysis	Q4: Comparing Writer's Perspective
What is the text about? Who are the main characters? Where is it set? What kind of atmospheres are created? How?	Read the section of the extract carefully	Consider the question before looking for evidence. 2+ ideas about the extract = opening statement.	What is the 'journey' of the text? Identify shifts in focus.	Identify the 2 parts of the statement. Write down why you agree with each focus. Is there a reason to disagree? Don't force it!
Annotate the focus of each paragraph: action, dialogue, description, characters.	Underline/circle/ highlight information relating to the focus.	Opening statement to inform evidence choice. Remember that evidence support your ideas.	Where do we begin? What is established at the start? Where do we end? What/ who has changed? Turning point/catalyst?	Select and annotate 2-3 moments – focus + connotations. (3 Step Approach) Refer to introduction. Before using evidence, explain why this moment supports your point. Include evidence last.
Do not answer any questions until you have read the whole text.	Use the information you have identified to complete the sentences.	Use the '3 step approach' to support analysis. Use the following questions: 1)What does the language mean? 2)What do we associate with it? 3) What does it suggest in this context?	Each paragraph should include: What does the writer choose to focus on? Why? Why now? How does it relate to/differ from the previous focus? Try to refer to another section of the text. Show you are aware of how the whole text links together.	Sentence stems: *The writer first establishes…when they choose to focus on…* *It is clear that…* *This is established through the writer's use of…* *The writer further develops this idea…when they choose to focus on…* *It is clear that…* *This is established through the writer's use of…* - Repeat the process for second focus

Critical Verbs

Suggests
Conveys
Symbolises
Highlights
Conveys
Portrays
Presents
Emphasises
Represents
Demonstrates
Perpetuated
Evokes
Denotes
Illustrates
Develops
Infers
Implies
Connotes
References
Perpetuates
Alludes to

GCSE ENGLISH LANGUAGE — PAPER 2—WRITER'S VIEWPOINTS AND PERSPECTIVES—SECTION A

Reading	Q1: Comprehension	Q2: Summary of Differences & Similarities	Q3: Language Analysis	Q4: Comparing Writer's Perspective
You will have to read 2 sources, one of which will be a 19th century text	Read the section of the extract carefully	This question tests your ability to infer implicit ideas from the evidence you find.	Consider the question before looking for evidence, 3 ideas about the extract > opening statement.	Identify the focus of the question Find 3 pieces of evidence in each source and note the writers' perspectives and any important words/language techniques
Look at the source information to determine the form and purpose of each text	Track the source – the statements occur in order within the text	Read the focus carefully Find 2-3 pieces of evidence from each source which link to the focus	Opening statement to inform evidence choice. Remember that evidence supports your ideas.	Using the 3 perspectives from each source write your introduction. Write up 3 comparative paragraphs using the following structure:
Do not answer any questions until you have read the whole text.	Read the questions carefully, some of them will catch you out otherwise	Write 2-3 paragraphs using the following sentence starters: - In source A the writer states… - From this I can infer… from this I can also infer… - However/On the other hand/like wise in source B the writer states…	Use the '3 Step Approach' to support analysis. Use the following questions: 1)What does the language mean? 2)What do we associate with it? 3)What does it suggest in this context	1. Make a point about the writer's perspective for source A; 2. Name the writer's method and include your evidence; 3. Analyse how your evidence shows the writer's perspective; 4. Write a comparative point about the writer's perspective for source B; 5. Name the writer's method and include your evidence; 6. Analyse how your evidence shows the writer's perspective

Critical Verbs
Conveys
Connotes
Develops
Denotes
Demonstrates
Establishes
Explores
Evokes
Highlights
Infers
Portrays
Presents
Represents
Perspective

KS4 MACBETH TOPIC SHEET

1. Context

Playwright: Shakespeare (April 23rd 1564-April 23rd1616) **Dates:** written around 1606 **Published:** in 'the First Folio, 1623 **Era**: Jacobean **Genre:** Tragedy = *A play ending with the suffering and death of the main character.* **Set:** Scotland, **Structure:** Five Act Play	**Macbeth.** The plot is partly based on fact. Macbeth was a real 11th Century king who reigned Scotland from 1040-1057. Shakespeare's version of the story originates from the Chronicles of Holinshed (a well known historian). The play was most likely written in 1606 – the year after the Gunpowder Plot of 1605 – and reflects the insecurities of Jacobean politics.
The Divine Right of Kings says that a monarch is not subject to earthly authority and that they have the right to rule directly from the will of God. It implies that only God can judge an unjust king and that any attempt to depose, dethrone or restrict his powers runs contrary to the will of God and may constitute a sacrilegious act. The action of killing a king is called regicide and is considered a terrible crime.	**King James I of England (and VI of Scotland)** came to the throne in 1603 following the death of Queen Elizabeth I. The play pays homage to the king's Scottish lineage. The witches' prophecy that Banquo will found a line of kings is a clear nod to James' family's claim to have descended from the historical Banquo. James was convinced about the reality of witchcraft and its great danger to him leading to witch trials. The play is probably not written simply to please James, but certainly looks at relevant ideas.
Shakespearean Tragedy. Macbeth is one of Shakespeare's tragedies and follows specific conventions. The climax must end in a tremendous catastrophe involving the death of the main character; the character's death is caused by their own flaw(s) (hamartia) yet the character has something the audience can identify with.	**The Great Chain of Being** was a belief in a strict religious hierarchy (see key vocabulary) of all things which was believed to have been decreed by God. This idea was important in Elizabethan and Jacobean beliefs. The chain starts from God and progresses downward to angels, demons (fallen/renegade angels), stars, moon, kings, princes, nobles, commoners, wild animals, domesticated animals, trees, other plants, precious stones, precious metals, and other minerals.

Conventions of a Shakespearean Tragedy

A **tragic hero** who falls from greatness through a flaw of their own character.	**Hamartia** – the flaw in the tragic hero that destroys them.	A **hero of status** – the central characters are people of importance, with power and status to lose.
External conflict – his tragedies feature conflict between characters, and always lead to death.	**Internal conflict** – there are frequent moments of self-doubt or internal torment.	**Supernatural elements –** Many of Shakespeare's tragedies feature supernatural influences.

2. Key Characters

Macbeth: The eponymous protagonist is the tragic hero of this play. He is both ambitious and ruthless. He falls from loyal and respected warrior to a paranoid, tyrannical king, before dying in battle in Act V.

Lady Macbeth: A strong, ambitious and manipulative woman who exerts pressure on Macbeth to pursue him ambition of becoming king by murdering Duncan. Unable to deal with the guilt of these actions and is driven to madness and suicide.

The Witches / Weird Sisters: Supernatural and manipulative beings who seem to be able to predict the future. They are unearthly and omniscient.

Banquo: Macbeth's close friend and ally is astute and loyal. Macbeth sees him as a threat. He is virtuous, admired by audiences, and mistrustful of the supernatural witches.

Duncan: King of Scotland at the beginning of the play. He is a virtuous, strong and respected leader, held up as the model of good kingship by others in the play. He is murdered by Macbeth in Act 2.

Macduff: A soldier who is loyal to Duncan and is suspicious of Macbeth. His family is murdered by Macbeth's soldiers and he eventually exacts revenge by killing Macbeth. He was born by caesarian section and therefore was "not of woman born".

Malcolm: Duncan's son and next in line to the throne. He is described as a good man in the play.

3. Central Themes

Ambition	The play is about the corrupting power of ambition. Both Lady Macbeth and Macbeth are urged to action by the prophecies of the witches, but they still commit their crimes themselves because they want greater power. Their ambition leads them to violence and death.
Kingship and Tyranny	The play contrasts the kind and wise rule of Duncan, who is described as a virtuous (good) king, with the brutal rule of Macbeth, who quickly becomes called a tyrant. The play shows how Macbeth has no divine right to rule and upsets the natural order by killing Duncan.
Order and Disorder	The play subverts the natural order of the world. Macbeth's actions are based on a supernatural belief in a prophecy. It depicts an anarchic world: Macbeth inverts the order of royal succession; his wife inverts the patriarchal hierarchy; the unnatural world disrupts the natural. The disruption underpins the conflict that is not only external and violent but internal as Macbeth and his wife come to terms with what they've done.
Appearance and Reality	Characters in the play are often not what they seem. Lady Macbeth and Macbeth are duplicitous towards Duncan, the witches equivocate (not say what they really mean) and cannot be trusted, Lady Macbeth seeks to manipulate Macbeth.

4. Key Vocabulary

Ambition	A desire to achieve something e.g. Macbeth and kingship
Hubris	Having excessive pride or self-confidence
Tyrant	A ruler who rules through fear and violence
Corrupt	Acting dishonestly *OR* being in a state of decay
Patriarchal	A society where power is in the hands of men
Duplicitous	Lying and being false. Two-faced. Deceitful
Façade	A false front, mask or illusion. Hiding one's true feelings
Prescient	Having knowledge of things before they happen – the witches
Nihilistic	The belief that everything is meaningless
Courageous	Being very brave
Supernatural	Things that are not a part of the natural world
Fate	Events being already decided and out of a person's control
Treachery	Betraying someone's trust
Regicide	The killing of a king

5. Key Terminology, Symbols and Devices

Motif	A recurring image or idea that has symbolic importance. The best example in Macbeth would be blood.
Soliloquy	When a character is alone on stage and speaks their thoughts aloud to themselves.
Iambic Pentameter	A line of a play or poem that has ten syllables organised into five pairs of syllables, where the second in each pair is emphasised. e.g. "When *you* durst *do* it *then* you *were* a *man*"
Foreshadowing	When a hint or warning is given about a later event.
Dramatic Irony	When a character is unaware of something that the audience is aware of, so they don't know the full significance of their words.
Symbolism	When something symbolises a set of ideas e.g. "The raven himself is hoarse" – raven symbolic of death, supernatural.
Aside	When a character pauses in a conversation to speak only to the audience or another character, unheard by the rest.

The Big Ideas	Notes	The Methods	Notes
1. Shakespeare uses the play to demonstrate the terrible consequences of disrupting the **natural order**. His rule is unnatural and brings only disorder and sickness. His death restores balance.		1. Shakespeare **uses blood as a metaphor for guilt** through the play. As the guilt increases, the volume of blood increases.	
2. Shakespeare uses the play to demonstrate the consequences of engaging with **the supernatural.**		2. Shakespeare uses **apparitions** to present the consequences of ungodly behaviour and is ambiguous about whether they are real or imagined.	
3. Shakespeare uses Macbeth's role as a tragic hero to highlight how vulnerable people are to the destructive **temptation of power.**		3. Shakespeare's **characterisation of Macbeth and Lady Macbeth** establishes the idea that ungodly deeds do not go unpunished.	

GCSE ENGLISH LITERATURE — AQA POETRY ANTHOLOGY: POWER AND CONFLICT

TERMINOLOGY

line	a line of verse; the basic unit of structure
stanza	a grouping of **lines** of verse
juxtaposition	implies comparison or contrast. Created by placing two entities side by side to create dramatic or ironic
free verse	a poem with no fixed **form** or **rhyme scheme**
blank verse	unrhymed **lines** of, usually, **iambic pentameter**
sonnet	a fourteen-**line** poem with a particular **metre** and **rhyme scheme**, traditionally about love
dramatic monologue	a poem in which the imagined **speaker** addresses a silent listener
rhyme	when words or the ends of words sound alike
symbolism	use of symbols to represent ideas in literature.
assonance	repetition of **vowel** sounds in **non-rhyming** words
alliteration	repetition of **consonant** sounds in proximity
sibilance	**alliteration** of fricative "s", "z", "sh", "f" sounds
onomatopoeia	when the sound of words match their meaning(s)
personification	inanimate objects are given human qualities
caesura	a pause mid-**line** due to **terminal punctuation**
enjambment	when the sentence or clause continues over a **line** or **stanza** break
refrain	a **line** repeated at the end of a **stanza**

The Big Ideas

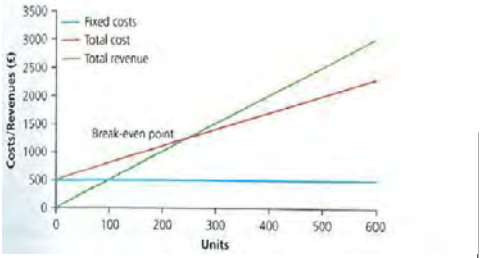
The poets explore the idea that the effects of conflict can be emotional as well as physical.

The poets explore the idea that power is fragile.

The poets explore the idea that power can be corruptive.

POET	TITLE	SUMMARY	THEMES AND IDEAS										
			Effects of Conflict	Power of Nature	Power of Humans	Memory	Identity	Individual Experience	Pride	Guilt	Anger	Fear	Loss and Grief
Percy Bysshe **Shelley**	Ozymandias	A ruined statue of Rameses shows how **nature** inevitably defeats **pride**		X	X				X				
William **Blake**	London	A speaker sees how **power restricts** and **confines** people in London			X			X			X		X
William **Wordsworth**	The Prelude: Boat Stealing	A boy steals a boat and is changed by an encounter with **nature**		X		X		X	X			X	
Robert **Browning**	My Last Duchess	A **proud** Duke discusses the infidelities of his previous wife with a suitor			X	X	X		X				
Alfred, Lord **Tennyson**	The Charge of the Light Brigade	A **patriotic** account of the doomed charge of 600 light cavalry in Crimea	X				X		X				
Wilfred **Owen**	Exposure	A **soldier's experience** standing sentry in the winter of World War One	X	X									X
Seamus **Heaney**	Storm on the Island	A **political allegory** of "the Troubles" as islanders preparing for a storm.		X	X							X	
Ted **Hughes**	Bayonet Charge	An imagined exploration of a soldier's participation in a bayonet charge	X					X				X	
Simon **Armitage**	Remains	A soldier reflects on and justifies his killing of a looter; PTSD	X			X		X		X			
Jane **Weir**	Poppies	A mother reflects and mourns the loss (ambiguous) of her son	X			X	X	X				X	X
Carol Ann **Duffy**	War Photographer	A photo-journalist tries to reconcile conflict with society's apathy	X			X		X		X	X		
Imtiaz **Dharker**	Tissue	An exploration of **identity** construction with history, **culture** and society		X	X		X						
Carol **Rumens**	The Emigrée	A refugee reflects on their isolation and sense of **identity** as an outsider				X	X	X					X
John **Agard**	Checking Out Me History	A reflection on **culture** and **identity** through omitted historical figures			X	X	X				X		
Beatrice **Garland**	Kamikaze	A reflection on the impact of **conflict** and shame/honour within family		X	X	X	X	X					X

R064. Learning Outcome 2. Understand what makes a product financially viable	
Fixed Costs (FC)	Costs that do not change with output. For example rent, loan repayments, insurance, salaries.
Variable Cost (VC)	Costs that vary directly with the level of output. For example raw materials, packaging.
Total Variable Cost (TVC)	The variable cost per unit multiplied by the quantity produced. **TVC = VC x QTY**
Total Cost (TC)	Addition of all business's costs for a specific level of output. **TC = TVC + FC**
Revenue (R)	The money a business earns from selling goods or providing a service
Selling price (SP)	The amount you sell each item of your good or service for. NEVER refer to this as cost.
Total Revenue (TR)	The total amount of money earned at a specific level of sales. **TR = SP x number of sales**
Profit (P)	The difference between your revenue and costs. If the difference is positive you have made a profit.
Loss (L)	The difference between your revenue and costs. If the difference is negative you have made a loss.
Profit calculation	**Profit = TR - TC**
Break even (BE)	The point at which a business makes neither a profit nor a loss. TR and TC are equal. It can be shown on a break even graph or calculated using a formula. Break even is **ALWAYS** a quantity and **NEVER** a **£.** You will *lose 1 mark* if you put a £ in the front of your answer
Break even calculation	You will be given this formula in the exam but you must know how to apply it. **BE = FC / (SP- VC)**
Contribution	The amount left over after Variable costs have been subtracted from sales revenue. **SP-VC**
Margin of safety (MOS)	The difference between forecasted sales and the breakeven point (where forecasted sales are greater than BE point)



R064. Learning Outcome 5. Understand factors for consideration when starting a business	
Sole Trader	A business owned and controlled by 1 person
Partnership	A business with 2 or more owners. A partnership agreement should be drawn up
Franchise	The owner grants a licence to another businessperson to trade using their brand or idea
Franchisor	The owner of the original business who grants franchise licences
Franchisee	The owner of a business who uses a licence to operate their business under an existing brand name
Private Limited company	A business owned by shareholders. Shares can only be sold to family and friends
Public limited company	A business owned by shareholders. Shares are sold on the stock exchange to the anyone who wants to purchase them.
Shareholder	Someone who purchases a share of ownership in a business and has part ownership to the value of the share they have
Unlimited Liability	The business owner is liable for ALL of the debts of the business. This may mean they have to use personal assets to pay business debts.
Limited Liability	The business owners (shareholders) are liable for the debts of the business up to the value of their investment.
HMRC	Her Majesty's Revenue and Customs. The department which collects tax on behalf of the Government
Personal savings	Your own personal money that you use to invest in a business
Loan	When you borrow money from a financial institution. You pay interest back on the loan.
Crowdfunding	A group of investors are asked to put money into a venture. If the whole amount is not raised all monies are returned.
Grant	Money is given to a business to start up. Does not have to be repaid
Business angel	A wealthy entrepreneur who provides a business with a sum of money in return for a proportion of the business

R064. Learning Outcome 6. Understand different functional activities				
Human Resources	Looks after people including their wellbeing, training needs. Hires new workers.			
Operations	Looks after the production process and day to day running of the business			
Finance	Controls the money. Prepares all financial documents			
Marketing	Promotes or advertises the business. Carries out market research			
4Ps	Product – what you sell	Price – how much you sell it for	Place – where you sell it	Promotion – how you make customers aware of your business

Year 10 French Knowledge Organiser

Holidays & Jobs

A	General Opinions	
1	Je dirais que	I would say that
2	Autant que je sache	As far as I know
3	Je crois que	I believe that
4	Selon ___	According to ___
5	J'ai horreur de/d'___	I hate ___
6	Je ne supporte pas	I can't stand
7	___ m'intéresse	___ interests me
8	___ m'ennuie	___ bores me
9	___ m'embête	___ annoys me
10	___ n'est pas mon truc	___ isn't my thing

B	Negatives	
1	ne ___ pas	Don't
2	ne ___ jamais	Never
3	ne ___ personne	Nobody
4	ne ___ rien	Nothing
5	ne ___ que	Only
6	ne ___ plus	No longer

C	Adverbs	
1	Normalement	normally
2	Généralement	Generally
3	D'habitude	Usually
4	Totalement	Totally
5	Finalement	Finally
6	Fréquemment	Frequently
7	Évidemment	Obviously
8	Regulièrement	Regularly
9	Seulement	Only
10	Facilement	Easily
11	Absolument	Absolutely

D	Connectives	
1	Par contre	However
2	C'est à dire	That is to say
3	Donc	So/thus/therefore
4	Ainsi que	As well as
5	(Mal)heureusement	(Un)fortunately
6	Néanmoins	Nevertheless
7	À l'autre côté	On the other hand
8	En revanche	However
9	Même si	Even if
10	Sinon	If not
11	Car/Parce que/Puisque	Because
12	Également	Equally
13	Malgré	Despite
14	Malgré cela	Despite that
15	Sans doute	Without a doubt
16	Peut-être	Perhaps

E	High level structures	
1	Pour que je puisse	So that I can
2	Bien que je sois	Although I am
3	Bien que ce soit	Although it is
4	Il faut que je fasse	I have to do
5	Il faut que je sache	It's necessary that I know
6	Bien que j'eusse eu l'intention de +infinitive	Although I had had the intention of …
7	Je ne pense pas que ce soit	I don't think that it is
8	Pour que nous puissions	So that we can

F	Si clauses	
1	Si j'étais riche	If I was I rich
2	Si j'avais le pouvoir	If I had the power
3	Si j'avais le choix	If I had the choice
4	Si j'avais plus d'argent	If I had more money
5	Si c'était possible	If It was possible
6	J'aimerais	I would like
7	Je changerais	I would change
8	Je voudrais	I would like
9	Il y aurait	There would be

G	Opinions In Different Tense	
1	C'est	It is
2	C'était	It was
3	Ce sera	It will be
4	Ce serait	It would be
5	Ça va être	It is going to be
6	Ce n'est pas	It isn't
7	Ce ne sera jamais	It will never be

H	Describing A Photo	
1	Dans la photo	In the photo
2	Il y a	There is/There are
3	Je peux voir	I can see
4	Un homme	A man
5	Une femme	A woman
6	Des enfants	Some kids
7	Qui sont en train de +inf	Who are +infinitive verb
8	Il me semble que	It seems to me that
9	La personne semble	The person seems

Build knowledge and confidence to be a determined and competent linguist via an ambitious curriculum that builds on and develops prior knowledge

Year 10 French Knowledge Organiser

Holidays

I	Talking About Holidays	
1	Je vais ...	I go
2	Je suis allé(e) ...	I went
3	Je voudrais aller ...	I would like to go
4	J'irai	I will go
5	En France	To France
6	En Espagne	To Spain
7	En Allemagne	To Germany
8	Au Portugal	To Portugal
9	Au Pakistan	To Pakistan
10	Aux États-Unis	To the US
11	Aux Pays-Bas	To the Netherlands
12	Je vais rester	I am going to stay
13	Ma famille est restée	My family stayed
14	Nous restons	We stay
15	À la campagne	In the countryside
16	À la montagne	In the mountains
17	Au bord de la mer	By the sea

J	Holiday Activities & Tenses	
1	Normalement	Normally
2	Je visite	I visit
3	Nous visitons	We visit
4	Je fais	I do
5	Nous faisons	We do
	Je mange	I eat
6	Nous mangeons	We eat
7	Je me bronze	I tan
8	Nous nous bronzons	We tan
9	L'année dernière	Last year
10	J'ai visité	I visited
11	J'ai fait	I did
12	Je me suis réposé(e)	I relaxed
13	L'année prochaine	Next year
14	Je visiterai	I will visit
15	J'irai	I will go
16	Je ferai	I will do

Jobs

K	Introducing Future Plans	
1	Dans le futur	In the future
2	Lorsque je serai diplômé(e)	When I have a degree
3	Quand je serai adulte	When I am an adult
4	Après avoir quitté le collège	After having left school
5	Je voudrais être	I would like to be
6	Je veux être	I want to be
7	J'aimerais être	I would like to be
8	J'ai envie de/d'	I want to
9	J'ai l'intention de/d'	I intend to
10	Je n'ai aucune intention de	I have no intention od
11	J'espère devenir	I hope to become
12	Je rêve de/d'	I dream of
13	Aller à l'université/à la fac	To go to university
14	Faire un apprentissage	To do an apprenticeship
14	Faire du bénévolat	To do voluntary work
15	Prendre une année sabbatique	Take a gap year
16	Travailler cmme	To work as

The conditional tense

You use the conditional tense to say "would"
eg je regarderais = I would watch
Take the future stem and add the imperfect tense endings

je regarderais	nous regarderions
tu regarderais	vous regarderiez
il/elle/on regarderait	ils/elles regarderaient

Some verbs have irregular stems:

vouloir = je voudrais	être = je serait
aller = j'irais	avoir = il y aurait
faire = je ferais	

Saying 'in' or 'to' with countries

J'habite = I live
Je vais en vacances = I go on holiday

en + feminine country
en Angleterre/France/Belgique

au + masculine country
au pays de Galles / Royaume-Uni

aux + plural country
aux États-Unis/Pays-Bas

L	Useful Structures	
1	Il y a	There is
2	Il y aura	There will be
3	Il y avait	There was
4	On peut + infinitive	You can ____

M	Useful Adjectives to Talk About Jobs	
1	Divertissant	Entertaining
2	Gratifiant	Rewarding
3	Enrichissant	Enriching

N	Jobs	
1	Avocat(e)	Lawyer
2	Comptable	Accountant
3	Professeur	Teacher
4	Acteur/Actrice	Actor/Actress
5	Infermier/Infermière	Nurse
6	Médecin	Doctor
7	Ingénieur/ingénieure	Engineer

Build knowledge and confidence to be a determined and competent linguist via an ambitious curriculum that builds on and develops prior knowledge

Y10 Climate Change

1.	*Global atmospheric circulation (GAC)*
High Pressure	Air sinking towards the earth's surface making conditions drier.
Low pressure	Air rising from the earth's surface making conditions wetter.
Global atmospheric circulation	The movement of air in the atmosphere.

2.	*Evidence of climate change*
Climate	The weather conditions prevailing in an area in general or over a long period.
Quaternary period	A period of geological time from about 2.6 million years ago to present (characterised by the appearance and development of humans).
Inter-glacial	A warmer period of time with less ice, lasting approximately 10,000 years between two glacial periods.
Ice cores	These are made up of layers of ice, one layer is formed each year. By analysing the data trapped in the layers, scientists can tell what the temperature was each year.
Tree rings	As the tree grows a new ring is formed each year. These are thicker in warmer, wet conditions. They can go back 10,000 years.

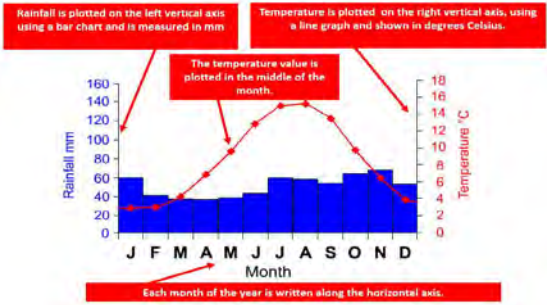
3.	*Natural causes of climate change*
Milankovitch	A scientist who came up with the orbital change theory.
Atmosphere	Is a mixture of nitrogen (78%), oxygen (21%), carbon dioxide (0.04%), methane and other gasses (1%) that surrounds Earth. High above the planet, the atmosphere becomes thinner until it gradually reaches space.
Sunspots	Cooler areas of the sun's surface.

4.	*Human causes of climate change*
Fossil fuels	A natural fuel such as coal or gas, formed in the geological past from the remains of living organisms.
Carbon emissions	The release of carbon into the atmosphere (a main contributor to climate change).
The greenhouse effect	The trapping of the sun's heat in the atmosphere.
Deforestation	Cutting down large areas of trees.

5.	*Effects*
Per capita CO2 emissions	How much CO2 is released in the atmosphere per year.
Coral reef	A natural habitat for many animals and plants in shallower waters near to coastlines.

6.	*Climate graphs*
Biome	A large-scale ecosystem defined by abiotic factors e.g., climate, soils, vegetation.
Climate graph	A combined bar and line graph that displays temperature and precipitation data.

7.	*Future projections for climate change*
Population growth	Increase in the amount of people on the planet.
Future projection	A prediction of what will happen in the future.
Thermal expansion	The increase in the volume of water as the temperature increases.



Y10 Tropical cyclones

1.	*Distribution of tropical cyclones*
Hurricanes	Form over the Atlantic from June to November.
Cyclones	Form over the Indian Ocean from November to April.
Typhoons	Form over the Pacific ocean from May to October.

2.	*Hazards*
Intense rainfall	Thick, dense clouds cause prolonged and intense rainfall, contributing to river flooding.
Landslides	soil becomes saturated in areas with steep relief, making the ground heavier and causing it to slump suddenly.
Primary effect	Direct impacts of an event e.g. people killed, injured, or buildings collapse.
Secondary effect	The indirect impacts of an event, usually occurring in the weeks, hours, months after the event e.g. the outbreak of disease from contaminated water.
GIS	Geographical Information system.

3.	*Responses*
Immediate response	Any form of immediate action taken to save lives, prevent human suffering.
Long term response	those that go on for months and years after a disaster. It involves constructing destroyed houses, schools, hospitals, etc.

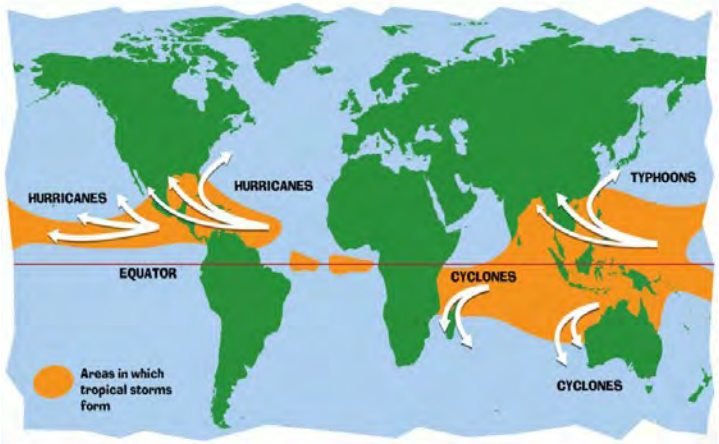


Figure 2: Source and Distribution of Tropical Cyclones

Y10 Development dynamics

1.	Country classification
Developed country	Normally has lots of money, many services and a high standard of living.
Developing country	Often quite poor compared to others, fewer services and a lower standard of living.
The Brandt line	An imaginary line dividing the world into developed and developing countries.

2.	Measuring development
Gross Domestic Product per capita (GDP per capita)	The total number of goods and services sold by a country, divided by its population.
Infant mortality	The number of babies that die per 1000 before their first birthday.
Life expectancy	The average age you are expected to live to in a country.
Literacy rate	The % of people that can read and write.
People per doctor	The number of people to one doctor.
Human Development Index	Combines GDP per capita, life expectancy and education.

3.	*The Demographic Transition model*
Infant mortality	The number of babies that die per 1000 before their first birthday.
Birth rate	The number of births per 1000.
Death rate	The number of deaths per 1000.
Natural increase	The difference between birth and death rates.

5.	*Global inequalities*
Inequality	Something that is unequal.
TNC (transnational corporation)	A company that operates all over the globe e.g. Shell Gas company
Consumption	The usage of something e.g. Energy cons umption.
Cash Crops/Primary products:	Raw materials- usually from farming or mining.
Infrastructure	The basic physical and organizational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society or enterprise.

4.	*Population Pyramids*
Dependent population	Those who rely on the economically active for support e.g. the young and elderly.
Economically Active	Those people who work, receive a wage and pay tax.
Population structure	The number/ proportion of people in each age range, for each gender.

6.	Factors influencing development
Development	How rich or poor a country is compared with other areas.

Factors which encourage development:	Factors which hinder development:
1. A strong and stable government. 2. A large coastline for trade. 3. Availability of natural resources e.g. oil, coal, fertile soil etc. 4. A pleasant climate, ideal for growing crops.	1. Colonialism may have led to resources being exploited from the country. 2. The country is landlocked, making trade difficult. 3. Few natural resources to power industry. 4. A harsh climate, so cannot grow crops reliably.

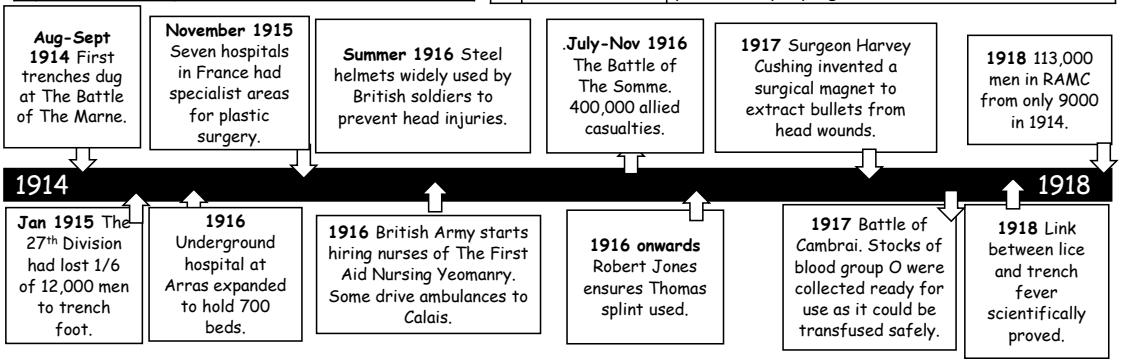
7.	What is aid?
Donor	A country that gives aid to another country.
Recipient	A country which receives aid.
Bilateral	International aid given by one country to another.
Multi-lateral	Aid given by NGOs (Non-Government Organisations) like the Red Cross or Oxfam.
Short term aid	Aid given to support a country following a crisis e.g. after an earthquake.
Long term aid	Aid given over a prolonged period of time to support a country's development e.g. teaching farmers different farming techniques.

5.	Aid - advantages/ disadvantages
Advantages	1. People learn new skills e.g. improved farming techniques; so become independent 2. Can save lives after a natural disaster e.g. supplying clean water, food and medicines. 3. Simple technology e.g. water pumps, are easy for the locals to maintain.
Disadvantages	1. Countries can become dependent upon aid, causing problems if it is removed. 2. Corrupt governments can sell the aid on, so it does not reach those in need. 3. The recipient can end up in debt if loans or deals are made.

History – Knowledge Organiser
Y10 – Historic Environment – The British Sector of The Western Front 1914-1918

	Key Individuals	
1	Alexis Carrel and Henry Dakin	Invented the Carrel-Dakin method to use a suysttubes to keep chemicals flowing through wounds to fight infection.
2	Hugh Owen Thomas	Invented The Thomas Splint which reduced the death rate for soldiers with a broken femur (thigh bone) from 80%-20%.
3	William Rontgen	Discovered X-Rays in 1895 which could find bullets and shrapnel in soldiers. By 1916 most Casualty Clearing stations had X-Rays
4	Richard Lewisohn	Discovered that sodium citrate could be added to blood to prevent it from clotting so more blood transfusions could be carried out.

	Key terms	Definition
1	Vaccination	Using a dead, inactive or milder disease to improve people's immunity to more serious diseases
2	Germs	Louis Pasteur used microscopes to prove they made milk sour. Koch proved they caused disease.
3	Antiseptic	Using chemicals to fight infection and stop germs (especially bacteria) getting into the body.
4	Anaesthetic	Chemicals to put people to sleep or make them feel less pain during surgery eg Chloroform.
5	DNA	Your genes which make you like you are eg there is a gene for eye colour and hair colour etc
6	Antibiotics	Flemings discovery that mould produces chemicals which kill bacteria and fight infection.
7	Cancer	Where your cells multiply too quickly without doing their job. Can be caused by smoking, drinking etc
8	Diagnosis	Finding out what is wrong with someone or the reason why they are feeling sick or ill.
9	Industrial Era	Historical time period stretching from c1700-c1900 when people moved more into cities.
10	Modern Era	Historical time period stretching from c1900-present. Rapid progress in treatment etc.



History – Knowledge Organiser
Y10 – Anglo-Saxon and Norman England c1065-1066

	Key Individuals	
1	Earl Godwin	Harold Godwinson's Dad who was technically richer than Edward the Confessory. Forced into exile and then returned
2	Tostig Godwinson	Harold Godwinson's younger brother. Joined Hardraada after he lost Northumbria. Killed at The Battle of Stamford Bridge.
3	Edwin and Morcar	Edwin was Earl of Mercia and Morcar was named Earl of Northumbria after the rising against Tostig Godwinson.
4	Stigand	Archbishop of Canterbury and head of The Church in England. He crowned Harold Godwinson and later William the Conqueror

	Key terms	Definition
1	Earldoms	The different areas the kingdom of England was divided up into eg Northumbria, Wessex etc
2	House	An old word for family eg 'House Godwin' means the Godwin family.
3	Housecarls	Full-time professional soldiers who normally fought with double-edged swords as they were expensive.
4	Fyrd	Part-time peasant soldiers who normally fought with their spears as they required less metal.
5	Embassy	An official visit on behalf of a leader eg Harold Godwinson went on an embassy to Normandy.
6	Archbishop of Canterbury	Head of The Church in England. This was Stigand who crowned both Harold and William in 1066.
7	Weregild	Literally 'man gold'. Compensation paid if you killed someone to stop a family blood feud.
8	Cavalry	Horse soldiers. William had approximately 2000 of these at The Battle of Hastings.
9	The Witan	Group of the most powerful Anglo-Saxon earls and thegns whose decided who should be king.
10	Succession	Inheriting a title from someone who held it before them eg Harold becoming king after Edward.

1043 Edward the Confessor becomes king as Aethelred's only surviving son.

1053 Earl Godwin returns with an army and is restored to his lands and titles.

1055 Earl Godwin dies and his Earldom is inherited by Harold Godwinson

1062 Harold Godwinson defeats Gruffyd ap Llywelyn, the Welsh king and presents Edward the Confessor with his head.

Jan 1066 Edward the Confessor dies and Harold Godwinson is crowned king. Edward allegedly promised Harold the throne.

14/10/1066 William Duke of Normandy defeats Harold Godwinson.

c1043 — c1066

1051 Edward promises William he can be the next king of England.

1052 House Godwin exiled by Edward. The nobles prevent s civil war.

1055 Tostig Godwinson becomes Earl of Northumbria after the death of Earl Siward.

1065 Rising against Tostig in Northumbria. Tostig exiled

20/9/1066 Battle of Gate Fulford. Viking Hardraada and Tostig defeat Saxon Earls Edwin and Morcar.

25/9/1066 The Battle of Stamford Bridge. Harold Godwinson defeats Hardraada.

Values of care
(Early years & education settings)

1. ensuring **Confidentiality**
2. encouraging children's **L**earning & development
3. practising **A**nti-discrimination
4. working with **P**arents/guardians & families
5. working with other **P**rofessionals
6. ensuring **E**quality of opportunity
7. valuing **D**iversity
8. keeping children **S**afe, maintaining a healthy & **S**afe environment
9. ensuring the **W**elfare of the child is paramount

Values of care
(health & social care settings)

10. Promoting equality & diversity
11. Maintaining confidentiality
12. Promoting right & beliefs

Applying the values of care …

13. Ensures standardisation of care
14. Improves the quality of care
15. Provides clear guidelines (re inform & improve practice)
16. Maintains or improves quality of life

Effects on individuals if not applied(effects can be interrelated too)
PIES

PHYSICAL – such as effects on body if not receiving appropriate care (e.g. coeliac not being provided with gluten-free food = digestive health will deteriorate).

I**NTELLECTUAL** – though processes such as thinking skills understanding, learning, reasoning, comprehension & knowledge (e.g. child with learning difficulties isn't given support & learning activities matched to their special needs, their learning won't progress).

EMOTIONAL – relating to an individual's feelings (e.g. expectant mum would be upset, angry & frustrated if told she couldn't have a home birth without any reasons or the chance to ask questions).

SOCIAL – an individuals' relationship with others (e.g. staff at primary school do nothing about children laughing at child who has birthmark on face & that child may lack friends because they become isolated, withdrawn & perhaps refuse to attend.

EXCEPTIONS to CONFIDENTIALITY

17. Intends harm to themselves - e.g. suicide; mental health problems (possibly schizophrenia) & threaten to, or are, harming themselves.
18. Intends harm to others - e.g. threatens to seriously injure someone (e.g. domestic violence; child sex abuse); has mental health problems (e.g. schizophrenia) & where their behaviour puts others at risk of harm.
19. Is at risk of harm from others - e.g. suspected child sex abuse; a case of domestic violence.
20. Is at risk of carrying out a serious offence - e.g. terrorism; drug dealing, violent assault.

PHYSICAL EFFECTS	INTELLECTUAL EFFECTS	EMOTIONAL EFFECTS	SOCIAL EFFECTS
Pain	Lack of skills development	Low self-esteem and/or depressed	Withdrawn
Existing illness gets worse	Lack of knowledge	Low self-confidence	Isolated
Bruising	Lack of progress	Disempowered	Excluded
Cuts & grazes	Loss of concentration	Upset and/or angry	Become antisocial, uncooperative
Broken bones and/or injury	Losing interest	Loss of trust, feeling unsafe	Refusal to use the service
Dehydration	Lack of stimulation	Frustrated, humiliated	Lack of friends
Malnutrition	Will not achieve potential	Frightened	Develop behaviour problems

Can I write in paragraphs?

The **TIPTOP** rule

You move onto a new paragraph when you change **t**ime, **p**lace, **t**opic or **p**erson.

1. I always start an essay with an introduction which addresses the question.
2. I finish an essay with a conclusion to summarise the main points of my argument and to address the question again.
3. I use connectives in each paragraph to link my ideas and to put them in a logical order.

Furthermore	But	Meanwhile
Whereas	Since	Nonetheless
Nevertheless	Yet	However
Alternatively	Therefore	Although
Consequently	Besides	Moreover

Have I used the correct grammar?

I am aware that I must use language that is appropriate to my reader.

◆ **No slang** that lesson was ~~bangin'~~
◆ **No informal language** I'm ~~gonna~~ do my homework now

◆**Other things to consider:**

✓ **I am clear about the purpose of this piece of writing**
✓ **I know who my audience is**
✓ **I will use a suitable layout and text type**

I am proud of my work because...

- I have written clearly so that my reader can understand my writing easily.
- I have checked my **spelling** and corrected any errors.
- I have used full sentences with a subject and a verb.
- I have used correct **punctuation** and **grammar.**
- I have paragraphed my work using **TIPTOP.**
- My writing is suitable for the person I am writing for

Can I spell familiar words accurately?

Common contractions

We must use an apostrophe to replace any letter(s) we have left out.

11 o'clock	I'd	We'd
Aren't	I'll	We'll
Can't	I'm	We're
Couldn't	Isn't	Weren't
Didn't	It'd	What's
Doesn't	It'll	When's
Don't	It's	Where'd
Hadn't	Mightn't	Where's
Hasn't	Mustn't	Who'd
Haven't	She'd	Who'll
He'd	She'll	Who's
He'll	She's	Why'd
He's	Shouldn't	Why'll
How'd	They'd	Why's
How's	They'll	

Can I use different sentence types?

Simple sentences: contains a subject and a verb and can contain an object
- Sarah likes to read in the library.
- Tom enjoys reading at home.

Compound sentences: joins two simple sentences using the connectives: for, and, nor, but, or, yet, so.
- Sarah likes to read in the library but Tom prefers to read at home.

Complex sentences: A complex sentence contains a conjunction such as because, since, after, although, or when .
- Because Robert felt tired, he only studied for an hour.
- Although the rain had stopped, the pitch was still water-logged.
- Paul enjoys Music, however, he is more proficient in Art.

Homophones

I have checked that I have not mixed up my homophones.

affect/effect	one/won
bare/bear	passed/past
brake/break	peace/piece
buy/by	practice (n)/practise (v)
grate/great	read/red
hair/hare	sea/see
hole/whole	sight/site
hour/our	to/too/two
knight/night	wait/weight
know/no	weak/week
meat/meet	wear/where
	witch/which

Basics:

❑ Every sentence must start with a capital letter.
❑ Every sentence must finish with some form of punctuation: .?!
❑ Proper nouns need capital letters. These are **unique** people, places or things e.g. there are many cities so 'city' doesn't take a capital letter. However there is only one London, therefore it takes a capital letter.
❑ When writing titles of works such as books, films or plays:
▪ Capitalise the first word
▪ Capitalise any main/important words
▪ Don't capitalise minor words such as 'and', 'of' or 'the' e.g. The Sound of Music, The Wizard of Oz, Harry Potter and the Goblet of Fire
❑ When writing speech:
✓Go to a new line when a different person speaks e.g. "Good morning" said the Headteacher. "It's the afternoon!" replied the student.
✓Each person's speech is marked with speech marks e.g. "Walk on the left" said Mr Mathews.

Can I spell accurately?

1. Sound out the word
2. Think about how it looks
3. Think about a similar word
4. Is there a memory sentence for this word? (e.g. big elephants cannot always use small exits)
5. Find the word in a list –
   - Key words list
   - Frequently used words list
   - Your own word bank
7. Ask a friend or teacher
8. To learn it: look, cover, write , check
9. Once you've solved it, add the correct spelling to your own word bank.

Can I use punctuation?

The Apostrophe
I always aim to use apostrophes correctly.

There are two main reasons why we use apostrophes: for possession and to replace a letter or letters

Note: Apostrophes are NEVER used to denote plurals

Full stop	.	indicates that a sentence has finished
Comma	,	indicates a slight pause in a sentence, separates clauses in a complex sentence and items in a list
Question mark	?	goes at the end of a question
Exclamation mark	!	goes at the end of a dramatic sentence to show surprise or shock
Apostrophe	'	shows that letter(s) have been left out or indicates possession
Speech marks	""	indicate direct speech, the exact words spoken or being quoted
Colon	:	introduces a list, a statement or a quote in a sentence
Semicolon	;	separates two sentences that are related and of equal importance
Dash / hyphen	-	separates extra information from the main clause by holding words apart
Brackets	()	can be used like dashes, they separate off extra information from the main clause
Ellipsis	...	to show a passage of time, to hook the reader in and create suspense

Apostrophe for Possession
(To show that something belongs to another)

If a single thing/person owns anything, add an apostrophe + 's'.
•The dog's bone
•The boy's homework
•Jones's bakery
•Yesterday's lesson
However, if it is plural (more than one), an apostrophe comes after the 's'.
•The dogs' bones
•The boys' homework
•Joneses' bakeries (lots of Jones families)
•Many websites' content is educational

There/ their/ they're

Note: special care must be taken over the use of **there**, **their** and **they're** as they sound the same but are used quite differently:
❖**There** shows position *Your seat is over there*
❖**Their shows that 'they' own something** Their blazers are navy blue
❖**They're** is short for **they are** as in *They're revising every day*

Its

Note: its, which shows that something owns something (like our, his etc), does not take an apostrophe: *the dog ate its bone and we ate our dinner*

Your/ you're

Note: special care must be taken over the use of **your** and **you're** as they sound the same but are used quite differently:
❖**Your** is possessive as in *this is your pen*
❖**You're** is short for you are as in *you're coming over to my house*

Y10 Mathematics – An ambitious curriculum, rich in skills and knowledge, which prepares you to be future leaders through your learning of problem-solving.

Probability (F/H)		
1.	**Probability**	How likely something is to happen. Always given as a fraction, decimal or percentage
2.	**Probability Scale numbers**	Impossible = 0, Even chance = 0.5 or ½ or 50%, Certain = 1 or 100%
3.	**Sample Space**	Listing all of the possible outcomes from two events, for example flipping a coin and rolling a dice
4.	**Mutually Exclusive Events**	Mutually exclusive events cannot happen at the same time. Events sum to 1.
5.	**Venn Diagrams**	Comparing 2 or more sets of data that share some things in common
6.	**Set notation**	A – all elements in A A' – all elements not in A B – all elements in B B' – all elements not in B
7.	**Intersection**	A ∩ B – all the elements in both A and B
8.	**Union**	A U B – all the elements in A or B or both
9.	**Tree Diagrams**	Used when there are two or more events. Each pair of branches add to 1 (mutually exclusive) To find the probabilities we multiply along the branches

Standard Form (F/H)		
1.	Write number in standard form	A way of writing large or small numbers $a \times 10^b$ $1 \leq a < 10$

Simple Interest (F/H)		
1.	Percentage	Means out of 100
2.	Percentage of an Amount (Non-Calculator)	% = ÷ 100 10% = ÷ 10 5% = halve 10% 50% = ÷ 2 25% = halve 50%
3.	Convert percentage to decimal	Decimal = percentage ÷ 100
4.	VAT	Value Added Tax A tax that is added to goods that you buy
5.	Income Tax	Tax that you pay from your wages
6.	Simple Interest	Calculate the percentage amount and multiply it by the number of periods that the money will be invested for.

Growth and Decay (F/H)		
1.	Growth	Getting bigger
2.	Decay	Getting smaller
3.	Appreciation	The value of something increasing
4.	Depreciation	The value of something decreasing
5.	Interest Rate	Money that is paid regularly as a percentage, this is usually by a bank when money is saved or borrowed.
6.	Compound Interest	Interest that gets added regularly (eg. monthly, annually), changes the value of money each time so a new calculation must be completed.
7.	Annually/per annum	Each year

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Ratio (Further) (F/H)		
1.	Ratio	How much of one thing there is compared to another, usually written as 3 : 4
2.	Parts	The numbers in the ratio, 3 parts : 4 parts
3.	Simplify	Make the numbers smaller, divide by the Highest Common Factor
4.	Writing a Ratio as a Fraction	Each part of the ratio is the numerator, add the parts to make denominator. Example 3 : 4 written as a fraction The parts are 3 and 4 so these are the numerators 3 + 4 = 7 so the denominator is 7 3/7 and 4/7
5.	Scale	The ratio between the distance on a diagram and that in real life

Further Proportion (Higher only)		
1.	Direct Proportion	As one amount increases, so does another at the same rate, e.g., the number of hours worked and your pay
2.	Direct Proportion Formula	$y = kx$, $y = kx^2, y = kx^3, y = k\sqrt{x}$ etc
3.	Inverse Proportion	As one amount increases, another decreases, e.g., the more decorators you have will reduce the time it will take to paint a wall
4.	Inverse Proportion Formula	$y = \frac{k}{x}, y = \frac{k}{x^2}, y = \frac{k}{\sqrt{x}}, etc$

Capture/Recapture (Higher only)		
1.	Population	The whole group that you are looking at, eg. all the students in school
2.	Sampling	A smaller group that is taken from the population
3.	Random Sampling	Every member of the population is equally likely to be chosen

Recurring Decimals (Higher only)		
1.	Recurring decimal	When a decimal number repeats forever e.g., 0.3333333333333333…
2.	Terminating decimal	A decimal that ends, it has a finite number of digits, e.g., 0.25
3.	Dot notation	Two dots show the beginning and end of a recurring group of numbers e.g., $0.\dot{3}46\dot{5} = 0.34653465346534653465\ldots$
4.	Recurring Decimals you need to know	$\frac{1}{9} = 0.11111111\ldots = 0.\dot{1}$ $\frac{1}{3} = 0.333333333\ldots = 0.\dot{3}$ $\frac{2}{3} = 0.666666666\ldots = 0.\dot{6}$ $0.999999999\ldots = 0.\dot{9} = 1$

Unit 1 The Music Industry

25% External Unit (1 hour examination)

Job Roles
Musician
Composer
Songwriter
Record producer
Conductor
Live Sound Technician
Roadie
Instrument Technician
Artistic Manager
Venue Manager
Studio Manager
Promoter
Marketer
A&R
Sound Engineer
Session Musician
Mastering Engineer
Manufacturer
Music Journalist
Blogger
Broadcaster
Software Programmer
DJ
Retailer
Distributer

Employment Types
Full Time
Part Time
Freelance
Self-Employed
Permanent
Casual

Venues
Large Venues
Medium Venues
Small Venues

Health and Safety

Security

Organisations
Recording Companies
Record Labels…

- **Major Labels**

- **Sub Labels**

ISLAND

- **Independent Labels**

SUB POP
XL RECORDINGS
ROUGH TRADE

Music Publishing
Self Publishing
Promotion Companies
PR and Marketing
Hire and Transport

Agencies

mcps PRS FOR MUSIC PPL

Unions

bectu equity MU

Trade Bodies

MPG MUSIC PRODUCERS GUILD
APRS the professional recording association
plasa

Identify what the acronyms stand for? What do they do? Who would need to use them?

The examination paper lasts for 1 hour and consists of three sections A, B and C.

Section A tests your knowledge through a series of multiple choice questions and shorter answer questions.
This is a great opportunity to score high by demonstrating that you have revised and understood all of the terminology used in this unit!

Section B and C will present you with a scenario. You will need to write a longer answer.
During your music lessons you will be given many opportunities to work with and understand the words below

Advantages / Disadvantages | **Opportunities / Challenges** | **Identify** | **Explain**

Priorities | **Reasons** | **Evaluate**

Know the definitions of each job role in the music industry and be prepared to **link** one job role to another one.

BTEC MUSIC Knowledge Organiser – Music Industry

1

venue	a place where a live music event can take place
small venue	pub, club, small theatre/hall
large venue	arena
multi-use venue	sports stadium
festival	outside gig, usually more than one stage
sound quality	how good the music sound due to the equipment
intimate atmosphere	performers are close to the audience
touring event	plays at different venues around the country
publicity	letting people know about the event
Risk Assessment	measuring risk and taking steps to minimise them
hazard	something which could cause injury or death
Operational Procedures	systems put in place to ensure people are safe

2

Record Label	co-ordinates the production, manufacture, distribution and marketing of a song
Major Record Label	large label which has most departments in house
Indie Record Label	smaller label, usually focused on a particular style of music
music publishing	makes sure songwriters and composers get paid
promoter	finds venues, prices the event, publicising it to make it a success
broadcasting	distributing songs to a dispersed audience
marketing	responsible for identifying opportunities for the song to be heard
publicise	make the song and artist well known
online marketing	publicising an artist through websites
high street stores	selling CD's through shops i.e. HMV
digital download	selling songs through online stores i.e. iTunes

3

PRS	collects money for music used in live performances
MCPS	licenses the composer's copyright for CD's and digital downloads
PPL	licenses the right to play sound recordings – eg in pubs, shops
A&R	looks after the best interest of the artist
Artist Manager	guides the career of an artist
PR	generates publicity, promotes the artist
Booking Agent	contacts promoters and venues to get gigs
Tour Manager	looks after financial and logistical aspects of a tour
Transport Hire Company	provides vehicles to carry equipment and people
Sound & Lighting Hire	provides good quality sound and lighting for gigs and tours
Sound & Lighting Engineer	can be hired to look after the sound and light at a gig

Generic	I think …..... In my opinion …..... I agree/disagree with …. because …..... The answer is …..... because …..... Another way of looking at this is …....
History	This links to my next point because... The source is a... The source was made in…
Geography	An example of this is... This means that... One positive/negative reason is... Overall, I believe that... The evidence in the figure/source is
English	The writer first establishes the idea that… when he/she chooses to focus on… It is clear that… This is established/reinforced/developed through the writer's use of…

Science	I can conclude from the data that… (we then often follow the format) as _____ increases/decreases, _____ increases/decreases The pattern the data shows is… One key fact from the topic was…
ART	To further develop my idea, I could..... In my opinion..... I have taken inspiration from.....
HSC	This is a strength because..... This is a weakness because ..... I conclude ....
Maths	..... is incorrect because..... Another way to work this out is..... The mistake is that.....
EAL	I like... because I don't like..... because I think …....

PE	This is a strength because..... This is a weakness because ..... I conclude ....
IT	I agree/disagree with ….because ……. The answer is ……. because ……. I could have improved my work by …….
Performing Arts	Within my performance I ... I would suggest they... to improve their performance, They use these techniques in their work to show…
Music	As I listened to the music I felt… This sounds like… I would suggest they... to improve their performance …….
Technology	The design could do with… Aspects I found difficult were… If I was to do this again I would…

BTEC Tech Award Dance /Component 3

Structure of the Exam
- Activity 1: an ideas log (up to 800 words).
- Activity 2: a skills log (up to 800 words).
- Activity 3: a digital recording of a workshop performance to an audience of between 7 to 15 minutes per group performance of between 5 to 10 minutes.
- Activity 4: an evaluation report (up to 800 words).

Common Misconceptions:
- Describing the narrative of the piece instead of explaining how you have interpreted the brief.
- Not linking your ideas for the piece to the brief.
- Not be specific about how the ideas in your piece meet the requirements of the brief.
- Not linking your ideas to the work of professional practitioners you have studied.
- Not identifying your **individual contribution** to the interpretation of the brief, exploration and development of ideas and planning.

	Key Term	Explanation
1	**Concept of Performance**	What is the piece about and how is this going to be portrayed to the target audience
2	**Style of Performance**	What form does the piece take (dance / drama / musical theatre)
3	**Purpose of the performance**	Why the piece is being created? (to educate, to inform, to entertain, to celebrate, to challenge viewpoints, to provoke, to raise awareness)
4	**Target Audience**	The people you are creating your performance piece for (age range, interest, group)
5	**Planning and Managing resources**	The things you need to create and perform your piece (music, projections, props, rehearsal space, costume, rehearsal schedule)
6	**Exploration of ideas**	The different way you have experimented with ideas for your piece (mind mapping, researching, structured improvisation story boarding, character exploration)

	Performance types / practitioner style	Definition	Stylistic Features
7	Naturalism (Stanislavski)	A form of theatre that attempts to create a perfect illusion of reality through a range of dramatic and theatrical strategies	• The fourth wall. • Everyday conversations and style of speaking. • Ordinary people. • representation of real life that is still theatrically effective.
8	Epic Theatre (Brecht)	A form of theatre that reminded the audience that they were watching theatre; a presentation of life, **not** real life itself.	• Breaks the fourth wall. • Direct address • Using placards / technology • Use of songs or music
9	Verbatim	A form of documentary theatre, it allows theatre makers to explore events and themes through the words of people at the heart of them	• created from the transcription of interviews. • based on research. • characters often represent a specific, real person.
10	Physical theatre	A form of theatre that puts emphasis on movement rather than dialogue.	• Gesture • Proximity • Movement / no movement • Mask work • Dance work
11	Theatre in education	Theatre in education is used to encourage effective learning in schools.	• designed to stimulate reaction and participation from its small audience, • targeting an area for a particular year group in a school's PSHE curriculum. • designed for a young audience.
12	Contemporary dance	Contemporary dance is a style of expressive dance that combines elements of several dance genres including modern, jazz, lyrical and classical ballet.	• communicates a story through movement. • Physical skills • Expressive skills • Technical skills

	Physical Skills ***Aspects enabling effective performance***	
13	**Accuracy**	How well the actions are replicated
14	**Alignment**	Correct placement of body parts in relation to each other.
15	**Balance**	A steady or held position achieved by an even distribution of weight.
16	**Coordination**	The efficient combination of body parts.
17	**Control**	The ability to start and stop movement, change direction and hold a shape efficiently
18	**Dynamic Range**	How the dancer moves (fast, slow, aggressive, elegant)
19	**Extension**	Lengthening one or more muscles or limbs.
20	**Flexibility**	The range of movement in the joints
21	**Focus**	A central point or focus of attention in the movement space
22	**Isolation**	An independent movement of part of the body.
23	**Movement memory**	Remembering the order of the movements
24	**Posture**	The way the body is held.
25	**Strength**	Muscular Power
26	**Stamina**	Ability to maintain physical and mental energy over periods of time.

	Expressive Skills ***Aspects that contribute to performance artistry and that engage the audience***	
27	**Projection**	The energy the dancer uses to connect with and draw in the audience.
28	**Focus**	Use of the eyes to enhance performance or interpretative qualities.
29	**Spatial Awareness**	Consciousness of the surrounding space and its effective use.
30	**Facial Expressions**	Use of the face to show mood, feeling or character.
31	**Musicality**	The ability to make the unique qualities of the accompaniment evident in performance.

	P2 Electricity key words	
1	Electric component	A working part of a circuit e.g., a light
2	Potential difference	Energy transferred per unit of charge, the driving force of a circuit
3	Electric charge	The charges within a circuit that can move and transfer energy
4	Electric current	The rate of flow of charge in a closed circuit
5	Resistance	The slowing down of electric current by a component in a circuit
6	Series circuit	A circuit with only one pathway/loop
7	Parallel circuit	A circuit with two or more pathways/loops
8	Direct current	Current that flows in only 1 direction due a fixed potential difference
9	Alternating current	Current that is constantly changing direction due to a constantly changing potential difference
10	National grid	The system of wires and transformers that links power stations to consumers
11	Live wire	The **brown** wire connected to the national grid in domestic appliances
12	Neutral wire	The **blue** wire that completes a circuit within an appliance
13	Earth wire	The **striped** wire that connects to the earth as a safety precaution in metal domestic appliances
14	Transformer (T)	A device to increase or decrease the potential difference in the national grid.
15	Static charge (T)	The build up of electrons on an insulator caused by friction between insulators. Creates an electric field around the charged object
16	Electric field (T)	The area around a charged object in which a force would be exerted by another charged object.

	P4 atomic structure and radiation key words	
1	Proton	Sub-atomic particle found in the nucleus of the atom. Relative mass of 1 and charge of +1
2	Neutron	Sub-atomic particle found in the nucleus of the atom. Relative mass of 1 and charge of 0
3	Electron	Sub-atomic particle found orbiting the nucleus of the atom. Relative mass of 0 and charge of -1
4	Atomic number	The number of protons in an atom. This is the smaller of the two numbers for each element in the periodic table
5	Mass number	The number of protons and neutrons in an atom. The larger of the two numbers for an element in the periodic table
6	Isotope	Atoms of an element with the same number of protons but different numbers of neutrons
7	Radiation	The emission of electromagnetic waves or sub-atomic particles from an object
8	Radioactive source	A source which emits ionizing radiation in the form of alpha, beta of gamma
9	Activity	The rate at which a radioactive source decays
10	Count rate	The number of radioactive decays per second measured by a detector
11	Alpha particle α	Two protons and two neutrons – the same as a helium nucleus
12	Beta particle β	A high energy electron emitted from the nucleus when a neutron turns into a proton
13	Gamma ray ϒ	A high energy electromagnetic wave emitted from the nucleus
14	Half life	The time taken for half of the atoms in a radioactive source to decay **or** the time taken for the count rate from a radioactive source to reduce by half
15	Irradiation	The process of exposing an object to radiation. This does not make the irradiated object radioactive
16	Contamination	When radioactive atoms become present in a material where they should not be.

17	Background radiation (T)	Natural sources of radiation that is around us all the time
18	Nuclear fission (T)	The splitting of a large unstable nucleus to release energy
19	Nuclear fusion (T)	The joining of two lighter nuclei to make a larger nucleus.

P5 – Forces and motion		**Taught in Y10**
1	Scalar	A measurement that has both only magnitude e.g. distance, speed, time, temperature.
2	Vector	A measurement that has both magnitude and direction e.g. displacement, velocity, acceleration.
3	Force (F)	A push or pull on an object due to the interaction with another object, measured in Newtons (N).
4	Contact force	A force that can only act when objects are touching.
5	Non-contact force	A force that can act when objects are not touching.
6	Resultant force	The force left over when all forces have been resolved.
7	Gravity (g)	A force between all objects of mass. A very weak force, we only notice it with very large objects e.g. a planet.
8	Mass (m)	The amount of matter in a substance, measured in kg.
9	Weight (W)	The force acting on an object due to gravity.
10	Work Done (W)	The energy transferred by a force moving an object in the direction of the force.
11	Spring constant	The force required to stretch a spring 1m. Different for all springs.
12	Moment of a force (M) ^	The turning effect of a force.
13	Fluid (liquid or gas)	The force on the walls of a container from the fluid particles colliding. This force is at right angles to the walls of the container.
14	Atmospheric pressure (T)	The pressure on a body from the particles of air colliding with it.
15	Distance	The total distance travelled by an object. Distance is a scalar quantity.
16	Displacement	The distance in a straight line from start point and end point. Displacement is a vector quantity.
17	Speed	How fast an object is moving. Speed is a scalar quantity.
18	Velocity	Speed in a given direction. Velocity is a vector quantity.
19	Acceleration	The change in velocity of an object in a given time. Acceleration is a vector quantity.
20	**Newton's First Law**	**An object at rest remains at rest and an object in motion remains in motion with the same speed and same direction unless acted upon by an external force.**
21	**Newton's Second Law**	**The acceleration of an object is proportional to the force on the object and inversely proportional to the mass of the object**. The bigger the force the bigger the acceleration, the bigger the mass the smaller the acceleration.
22	**Newton's Third Law**	**Every action has an equal and opposite reaction.** When two objects interact the exert an equal and opposite force on one another.
23	Stopping distance	The sum of the thinking and braking distances of a vehicle.
24	Thinking distance	The distance travelled between the driver seeing an obstacle and applying the brakes.
25	Braking distance	The distance travelled by a vehicle after the driver has applied the brakes.
26	Momentum	A property of moving objects linked to the mass and velocity of the object.
27	Conservation of momentum	In a closed system the momentum before an event is equal to the momentum after the event.
28	Closed system	This is where the objects in focus can be considered closed off from the rest of the world.

Physics units

	Unit	Symbol	Measured in
1	Mass	m	Kilograms (kg)
2	Volume	V	Meters cubed (m^3)
3	Density	ρ	Kilograms per meter cubed (kg/m^3)
4	Distance	s	Meters (m)
5	Time	t	Seconds (s)
6	Temperature	T	Degrees Celsius (°C)
7	Frequency	f	Hertz (Hz)
8	Electric charge	Q	Coulombs (C)
9	Electric current	I	Amperes (A)
10	Potential difference	V	Volts (V)
11	Resistance	R	Ohms (Ω)
12	Speed	v	Meters per second (m/s)
13	Acceleration	a	Meters per second squared (m/s^2)
14	Momentum	p	Kilogram meters per second (kgm/s)
15	Force	F	Newtons (N)
16	Pressure	P	Pascals (Pa)
17	Energy	E	Joules (J)
18	Power	P	Watts (W)

PHYSICS KNOWLEDGE ORGANISER

AQA GCSE Physics – Equations & Formulae (specification 8463 & 8464)

Unit 1: Energy

Equations to Learn	
kinetic energy = $\frac{1}{2}$ × mass × speed^2	$E_K = \frac{1}{2}mv^2$
GPE = mass × gravitational field strength × height	$E_p = mgh$
power = $\frac{\text{work done}}{\text{time taken}} = \frac{\text{energy transferred}}{\text{time taken}}$	$P = \frac{W}{t} = \frac{E}{t}$
efficiency = $\frac{\text{useful energy output}}{\text{total energy input}}$ efficiency = $\frac{\text{useful power output}}{\text{total power input}}$	
Equations given in the exam	
elastic potential energy = 0.5 × spring constant × (extension)^2	$E_e = \frac{1}{2}ke^2$
change in thermal energy = mass × specific heat capacity × temperature change	$\Delta E = mc\Delta\theta$

Unit 2: Electricity

Equations to Learn	
charge flow = current × time	$Q = I\,t$
potential difference = current × resistance	$V = I\,R$
total resistance = resistance of component 1 + resistance of component 2	$R_T = R_1 + R_2$
power = current × potential difference	$P = I\,V$
power = (current)^2 × resistance	$P = I^2R$
energy transferred = power × time	$E = Pt$
energy transferred = charge flow × potential difference	$E = QV$

* Higher tier only

^ Separate Physics only

Unit 3: Particle Model of Matter

Equations to Learn	
density = $\frac{\text{mass}}{\text{volume}}$	$\rho = \frac{m}{V}$
Equations given in the exam	
change in thermal energy = mass × specific heat capacity × temperature change	$\Delta E = mc\Delta\theta$
thermal energy for a change in state = mass × specific latent heat	$E = mL$
^ for a gas: pressure × volume = constant	$pV = constant$

Unit 6: Waves

Equations to Learn	
wave speed = frequency × wavelength	$v = f\,\lambda$
Equations given in the exam	
time period = $\frac{1}{\text{frequency}}$	$T = \frac{1}{f}$
^ magnification = $\frac{\text{image height}}{\text{object height}}$	$M = \frac{h_{image}}{h_{object}}$

Unit 7: Magnetism and Electromagnetism

Equations given in the exam	
* Force = magnetic flux density × current × length of conductor in magnetic field	$F = BIl$
* $\frac{\text{potential difference across primary coil}}{\text{potential difference across secondary coil}} = \frac{\text{number of turns in primary coil}}{\text{number of turns in secondary coil}}$	$\frac{V_p}{V_S} = \frac{N_p}{N_s}$
* ^ p.d across primary × current in primary = p.d. across secondary x current in secondary	$V_pI_p = V_SI_S$

Unit 5: Forces

Equations to Learn	
weight = mass × gravitational field strength	$W = m\,g$
work done = force × distance (moved along the line of action of the force)	$W = Fs$
force = spring constant × extension	$F = ke$
moment of a force = force × distance (perpendicular to the direction of the force)	$M = Fd$
pressure = $\frac{\text{force normal to a surface}}{\text{area of that surface}}$	$p = \frac{F}{A}$
distance travelled = speed × time	$s = vt$
acceleration = $\frac{\text{change in velocity}}{\text{time taken}}$ $= \frac{\text{final velocity-initial velocity}}{\text{time taken}}$	$a = \frac{\Delta v}{t}$ $= \frac{v-u}{t}$
resultant force = mass × acceleration	$F = ma$
* momentum = mass × velocity	$p = mv$
Equations given in the exam	
* ^ Pressure = height of column × density of liquid × gravitational field strength	$p = h\,\rho\,g$
^ (final velocity)^2 – (initial velocity)^2 = 2 × acceleration × distance	$v^2 - u^2 = 2as$
* ^ Force = $\frac{\text{change in momentum}}{\text{time taken}}$	$F = \frac{m\,\Delta v}{t}$

Unit 4: Atomic Structure & Unit 8: Space

There are no equations in these sections of the course

Key Concepts		
1	Positivism	Positivism is based on the idea that the only way to obtain knowledge about the world is through scientific methods.
2	Criticisms	Critics of positivism argue that the methods of natural science cannot be applied to the study of the social world.
3	Interpretivists	Interpretivist sociologists argue that the subject matter of sociology is completely different from that of natural sciences. People do not behave like animals or objects. As a result, interpretivists do not believe that sociologists can use scientific research methods to study social life.
4	Sampling Strategies	Before carrying out surveys or interviews, the researcher must identify the population or group they want to study.
5	Probability Sampling	Random sampling: each member of the population has an equal chance of being included in the sample. Researches use computers to generate simple random samples.
6	Stratified Random Sampling	May be used if, for example, a sociologist wants the sample to reflect the age and gender characteristics of the population. Stratified random sampling would involve dividing the population into strata (subgroups)- for example, males ages 30 and under, females aged 30 and under, males aged 31 and over.
7	Non-probability Sampling	A sociologist may be interested in studying a population for which there is no sampling frame, for example British Muslim converts or homeless people. In this case, snowball sampling may be the only option. Using this technique, the researcher would contact one member of the population, gradually gaining their confidence until they are willing to identify others in the same population who might co operate in this way, the researcher can obtain a sample, although it is unlikely to be representative.

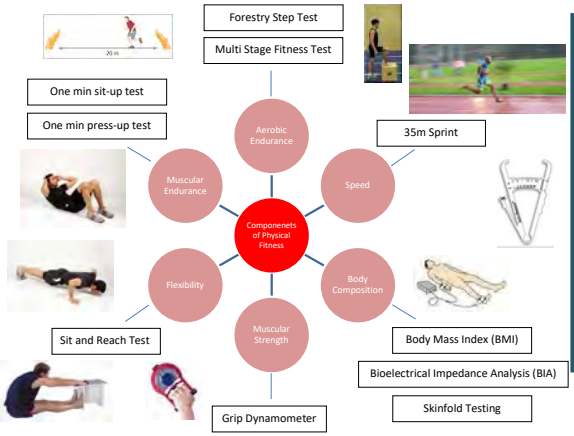
Key Words & Terminology		
1	Hypothesis	A supposition, hunch or informed guess. It is usually written as a statement that can be tested and then either supported by the evidence or refuted.
2	Pilot Study	A pilot study is a small scale trail run carried out before the main research.
3	Literature Review	When planning to research a particular topic, a sociologist will read up on the available literature, for example, any studies published in books or journals relevant to that area. This is known as literature review and it is a key part of the research process.
4	Research Process	The research process in sociology involves several steps or stages.
5	Research Aims	Set out what the researcher Is planning to investigate and so provide the study with a clear focus.
6	Quantitative Data	Is presented in numerical forms; For example 48% of respondents visit the local library at least once in the last month. the results are usually displayed in graphs, pie charts, or tables of statistics that count or measure something.
7	Qualitative Data	Is presented in visual or verbal form, for example as words or quotations, rather than numbers.

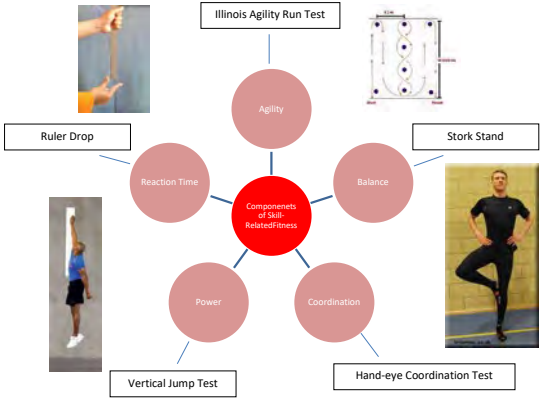
Knowledge organiser- Unit 1

Exercise Intensity and how it can be determined:

1. Intensity – Be able to measure heart rate (HR) and apply HR intensity to fitness training methods
2. Know about target zones and training thresholds; be able to calculate training zones and apply HR max to training: HR max = 220 – age (years)
3. Be able to calculate 60-85% HR max and know that this is the recommended training zone for cardiovascular health and fitness
4. Know that the borg (1970) (6-20) Rating of Perceived Exertion (RPE) Scale can be used as a measure of exercise intensity
5. Know about the relationship between RPE and heart rate where: RPE x 10 = HR (bpm)

Components of Fitness & Tests





Importance of Fitness Components for successful sports participation:

6. Being able to successfully meet the physical demands of the sport in order to reach optimal performance
7. Being able to successfully meet the skill-related demands of the sport in order to reach optimal performance
8. Being able to perform efficiently
9. Giving due consideration to the type of event/position played

Importance of Fitness Testing to sports performers and coaches:

10. Gives baseline data for monitoring/improving performance
11. Can design training programmes based on test results and determine if training programmes are working
12. Results can give a performer something to aim for/goal setting

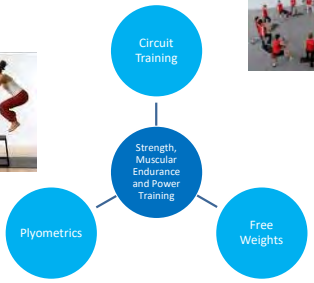
Principles of Training

The additional principles of training:

13. Progressive overload
14. Specificity
15. Individual differences/needs
16. Adaptation
17. Reversibility
18. Variation

The basic principles of training (FITT):

19. Frequency
20. Intensity
21. Time
22. Type



Methods of Training

YEAR 10 TEXTILES KNOWLEDGE ORGANISER – UNIT 2 EXAM.

Keywords.

1.Formal Elements: Line, Tone, Colour, Pattern, Shape, Texture and Form

2.Line: Line is the path left by a moving point.

3.Shape: Shape is an area enclosed by a line.

4.Tone: This refers to the lightness or darkness of something.

5.Pattern: A design that is created by repeating lines, shapes, tones, or colours.

6.Media: The material used to create artwork.

7.Technique: The way tools and media are used to create artwork.

8.Composition: This is the way an object is placed or positioned on a page.

9.Stitch: One complete movement of a threaded needle through fabric.

10.Lino Printing: A form of block printing that involves carving a pattern **or** design into a vinyl surface.

11.Applique: This technique is accomplished by either hand stitching or machine. Pieces of fabric are sewn onto a larger piece of fabric to form a picture.

12.Mola: This is reverse applique.

13.Fabric Paint: A combination of dye and a binding agent that makes it cling it is applied to.

Command Words.

1. **Research**: The process of solving problems and finding facts in an organised way.
2. **Analyse:** Identify several relevant factors, show how they are linked, and explain the importance
3. **Method:** A procedure, technique, or way of doing something
4. **Evaluation:** Bring together all your information and make a judgement on the Importance or success of something.
5. **Generate Ideas:** The process of creating, developing, and communicating abstract, concrete, or visual ideas.
6. **Develop:** To grow or change into a more advanced or stronger form or idea.
7. **Refine:** To make improvements to the idea.

Sketchbook

- Artist research
- Experiment with a range of materials.
- Experiment with colour, line, shape, space.
- Annotations to show reflections on their work and that of others.

Home Learning Priorities

Planner

Monday 3rd	
Tuesday 4th	
Wednesday 5th	
Thursday 6th	
Friday 7th	

Monday 10th	
Tuesday 11th	
Wednesday 12th	
Thursday 13th	
Friday 14th	

Monday 17th	
Tuesday 18th	
Wednesday 19th	
Thursday 20th	
Friday 21st	

Monday 24th	
Tuesday 25th	
Wednesday 26th	
Thursday 27th	
Friday 28th	

Monday 31st	
Tuesday 1st	
Wednesday 2nd	
Thursday 3rd	
Friday 4th	

Monday 7th	
Tuesday 8th	
Wednesday 9th	
Thursday 10th	
Friday 11th	

Monday 21st	
Tuesday 22nd	
Wednesday 23rd	
Thursday 24th	
Friday 25th	

Monday 28th	
Tuesday 1st	
Wednesday 2nd	
Thursday 3rd	
Friday 4th	

Monday 7th	
Tuesday 8th	
Wednesday 9th	
Thursday 10th	
Friday 11th	

Monday 14th	
Tuesday 15th	
Wednesday 16th	
Thursday 17th	
Friday 18th	

Monday 21st	
Tuesday 22nd	
Wednesday 23rd	
Thursday 24th	
Friday 25th	

Monday 28th	
Tuesday 29th	
Wednesday 30th	
Thursday 31st	
Friday 1st	

Ambition . Knowledge . Determination . Leadership

Ambition

My short, mid term and long term ambitions are:

Knowledge

The subjects I need to work hardest in this term are:

	Target grade
English	
Maths	
Science	

Ambition . Knowledge . Determination . Leadership

Determination

One area I need to improve in is:

Leadership

One way in which I will help others to show leadership is:

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Beaumont Road North
Sheffield S2 1SN

Tel: 0114 239 2661
Email: info@sheffieldparkacademy.org
www.sheffieldpark-academy.org