Sheffield Park Academy
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Knowledge Organiser

Term 1

Name: .....

Tutor Group: .....

Tutor & Room: .....

AMBITION • KNOWLEDGE • DETERMINATION

CONTENTS

How do I complete Knowledge Organiser homeworks?

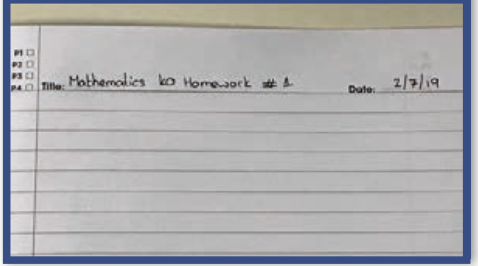
You will be set a MINIMUM of 2 Knowledge Organiser homeworks in every subject each half term

STEP 1

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

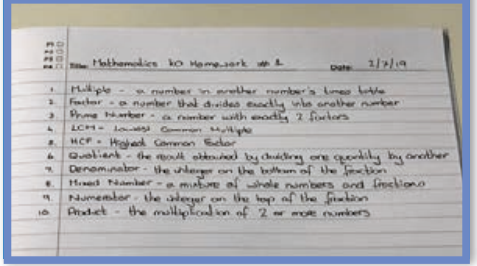
STEP 2

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



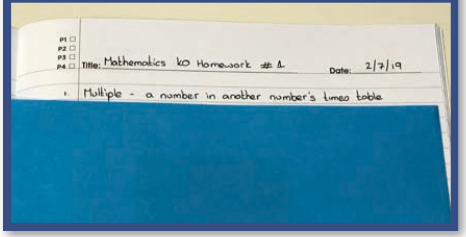
STEP 3

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



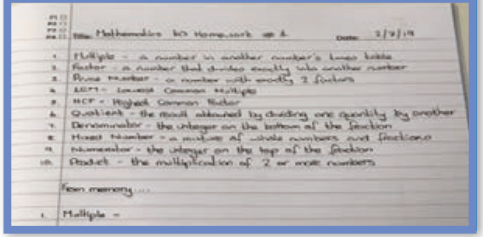
STEP 4

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

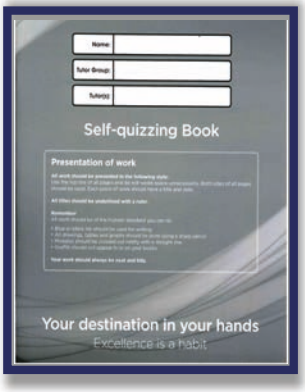
Knowledge Organisers contain critical, fundamental knowledge that you MUST know in order to be successful in Year 11 and subsequent years.

They will help you recap, revisit and revise what you have learnt in lessons in order to move the knowledge within from your short-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 11 will also be required in years to come.

Knowledge Organisers are **NOT** a replacement for revision guides but they include the fundamental knowledge that ALL students in Year 8 require.

YEAR 11 ART KNOWLEDGE ORGANISER – UNIT 3 STREET FESTIVAL.

Keywords.

Formal Elements	Line, Tone, Colour, Pattern, Shape, Texture and Form
Line	Line is the path left by a moving point.
Shape	Shape is an area enclosed by a line.
Tone	This refers to the lightness or darkness of something.
Pattern	A design that is created by repeating lines, shapes, tones or colours.
Surface texture	Refers to the surface quality in a work of art.
Two Dimensional	Having its elements organised in terms of a flat surface.
Sgraffito	A technique used in painting which consists of putting down a preliminary surface, covering it with another, and then scratching the superficial layer so that the pattern or shape below appears.
Media	The material used to create artwork.
Technique	The way tools and media are used to create artwork.
Composition	This is the way an object is placed or positioned on a page.
Lino Printing	Is a form of block printing that involves carving a pattern or design into a vinyl surface.

Sketchbook

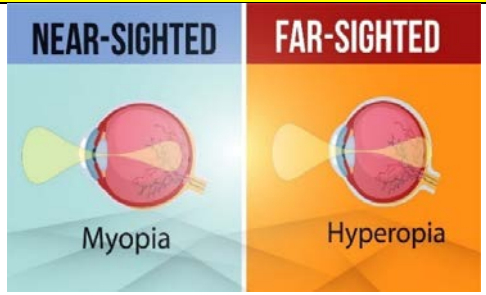
- Artist research
- Experiment with a range of materials.
- Experiment with colour, line, shape, space.
- Annotations to show reflections on their work and that of others.

Command Words.

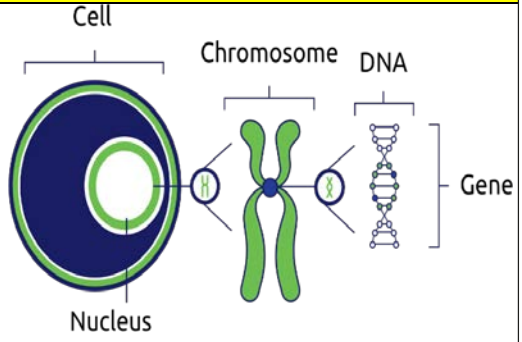
Research	Is the process of solving problems and finding facts in an organised way. Research is done by what is known and building on it.
Analyse	Identify several relevant factors, show how they are linked, and explain The importance of each.
Method	A procedure, technique, or way of doing something.
Evaluation	Bring together all of your information and make a judgement on the Importance or success of something.
Generate Ideas	The process of creating, developing and communicating abstract, concrete or visual ideas.
Develop	To grow or change into a more advanced or stronger form or idea.
Refine	To make improvements to the idea.

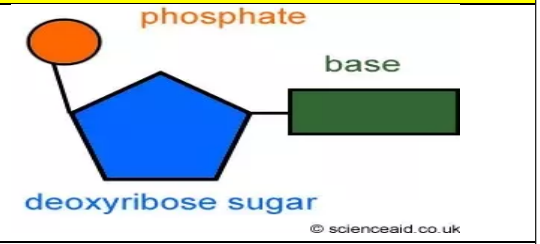
B5		Homeostasis	
Key word		**Definition**	
1	Homeostasis	The regulation of internal conditions to maintain optimum conditions in response to changes.	
2	Stimulus	A change in the environment.	
3	Insulin	Released from the pancreas in response to high blood glucose levels. It causes glucose to be converted 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^)
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.

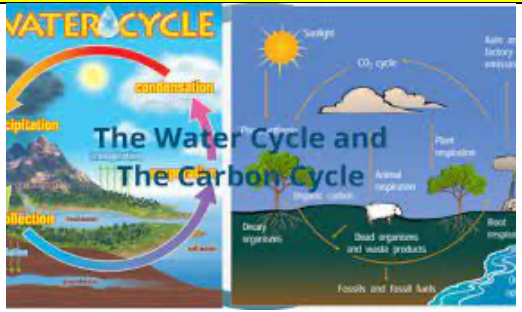


B6		Reproduction and Variation
Key word		**Definition**
1	Sexual reproduction	Reproduction involving two parents (one male and one female) where gametes fuse together.
2	Asexual reproduction	Involves only one parent with no fusion of gametes.
3	Gene	A small section of DNA on a chromosome which codes for a protein.
4	Mutation	A change in the DNA.
5	Genome	The entire set of genetic material of an organism.
6	Natural selection	A process which gives rise to phenotypes best suited to their environment.
7	Extinction	There are no remaining individuals of a species still alive.



B6		Reproduction and Variation (Triple^)	
Key word		**Definition**	
1	Speciation	Formation of a new species through natural selection from an isolated population.	
2	Nucleotide	Sugar + phosphate + base.	
3	Cuttings	A simple method used by gardeners to produce many genetically identical new plants from a parent plant.	

B7		Ecosystems and Relationships	
Key word		**Definition**	
1	Ecosystem	Interaction of a community of living (biotic) and non-living (abiotic) parts of their environment.	
2	Producer	Starts off a food chain. Usually, green plants or algae that photosynthesise. Eaten by primary consumers.	
3	Predator	Consumer that kills and eats other animals.	

	B7	Cycles and Impact	
1	Pollution	Can occur on land, in water, in the air. Pollution kills plants and animals which reduces biodiversity.	
2	Carbon cycle	Returns carbon from organisms to the atmosphere as carbon dioxide to be used by plants in photosynthesis.	
3	Water cycle	Provides fresh water for plants and animals on land before draining into seas. Water is continuously evaporated and precipitated.	
4	Food security (T^)	Having enough food to feed a population.	

	R065. Learning Outcome 1. Identify the customer profile for a business challenge					
1	***Market***	A place where buyers and sellers come together to trade goods and services.				
2	***Target market***	A group of customers whom you are aiming your product or service at.				
3	***Market Segmentation***	The process of dividing the market into different groups of customers based on different characteristics				
4	***Benefits of Segmentation include:***	Ensuring customer needs are matched and met	Increase in market share	Customer retention	Targeted marketing	
5	***Why does a business segment the market?***	Benefits required	Quality of goods required	Amount of money available of customers	Quantity of goods required	Time and location for purchasing goods
6	***Ways to segment markets***	Age	Gender	Income	Occupation	Lifestyle
7	***Customer Profile***	The characteristics of a business's perfect customer. Includes their likes and dislikes. Used to help segment the market.				

R065.Learning Outcome 2. Complete market research to aid decision making						
8	***Market Research***	Finding out your customers' needs / wants / views – aids decision making. Finding out if there is a demand for your product – allows you to understand the market and reduce risk.				
9	***Customer Retention***	The ability of a business to keep its customers so they return time after time to purchase their good or service.				
10	***Market Share***	The section of a market controlled by a particular business – how much they sell compared to others.				
11	***Primary Research*** *(Field research)*	Gathering information and data that hasn't been collected before. Information is specific to your business and your competitors do not have access to it. But it is expensive and time consuming to complete				
12	*Types of research include:*	Interviews	Observation	Questionnaires / surveys	Focus groups	Consumer trials
13	***Secondary Research*** *(desk research)*	Research where the data already exists. Information is freely available and easy to find. But it is available to all and isn't specific to your business.				
14	*Types of research include:*	Competitor research	Books / newspapers / magazines	Internal data	Government statistics	Purchased reports (e.g., MINTEL)
15	***Qualitative data***	Data or information based on the opinions of those that are being asked				
16	***Quantitative data***	Data collected that is based on facts or numbers; usually easier to analyse that qualitative data as it is based around statistics.				

1. What are Nutrients - Nutrients are the building blocks that make up food and have **specific and important roles to play in the body.**

2. Macronutrients are needed by the body in large amounts.
3. Micronutrients are needed by the body in small amounts.

		Nutrient	Definition/Function
MACRONUTRIENTS	4.	Carbohydrates	Two types: 1. Starchy (complex) provide energy when broken down – slow-release energy to the body (wholegrain provide slower release carbohydrates) 2. Sugary (simple) provide quick release energy to the body's' cells.
	5.	Proteins	Protein is needed for growth and repair of body cells. Source of energy. Protein is digested by the body into its component parts – called amino acids.
	6.	Fats	Fat is a term used to describe lipids – this can refer to solid fats and oils. Fat is broken down by the body and used for energy as a concentrated source. Also used to provide warmth when stored under the skin.

Vitamins - Vitamins are substances that our bodies need to develop and function normally. They include vitamins A, C, D, E, and K, choline, and the B vitamins (thiamin, riboflavin, niacin, pantothenic acid, biotin, vitamin B6, vitamin B12, and folate/folic acid).

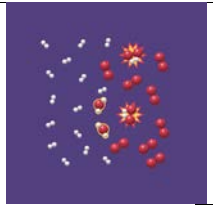
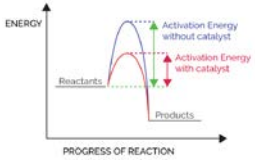
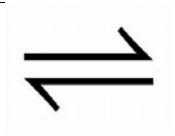
		Water Soluble	Definition/Function
MICRONUTRIENTS	7.	C Antioxidant	Normal structure and function of connective tissue e.g. collagen. Helps healing process. Antioxidant (protects from free radicals). Helps absorb iron in the body. Improves immune system.
	8.	B1 Thiamin	Normal function of the nervous system and heart. Releases energy from carbohydrates.
	9.	B2 Riboflavin	Release of energy from carbohydrates, fats and proteins. Maintains healthy skin, eyes, nervous system and mucous membranes.
	10.	B3 Niacin	Energy release carbohydrates, fats and proteins. Maintains healthy skin, digestive system and nervous system.
	11.	B9 Folate	Works with B12 to make red blood cells and nervous system. Reduces risk of nervous defects in unborn babies.
	12.	B12 Colbalbumin	Releases energy from food. Maintains normal structure of nerves. Processes folic acid (which helps make healthy red blood cells).

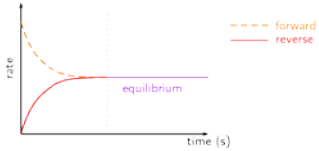
13. Vitamins - Vitamins are substances that our bodies need to develop and function normally. They include vitamins A, C, D, E, and K, choline, and the B vitamins (thiamin, riboflavin, niacin, pantothenic acid, biotin, vitamin B6, vitamin B12, and folate/folic acid).

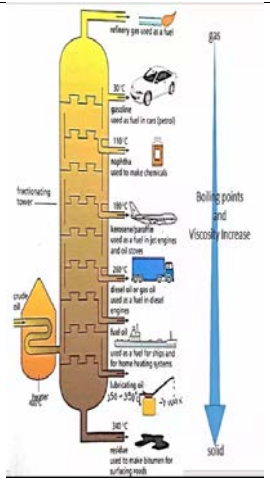
		Fat Soluble	Definition/Function
MICRONUTRIENTS	14.	**A** **Antioxidant**	• Needed for structure and functioning of the skin and mucous membranes. • Cell differentiation (growth and development of the body). • Helps with vision in dim light and colour vision • Keeping the immune system healthy.
	15.	**D**	• Needed for the absorption of calcium and phosphorus from foods. • Healing broken bones. • Developing and maintaining healthy bones and teeth. • Preventing bone diseases such as rickets and osteoporosis.
	16.	**E** **Antioxidant**	• Helps maintain healthy skin and eyes and strengthen the body's natural defence against illness and infection. • Forming red blood cells.
	17.	**K**	• Needed for clotting of blood and is also required maintaining healthy bones. • Infants are given vitamin K at birth.

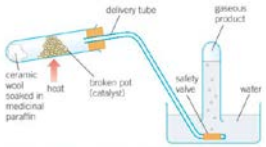
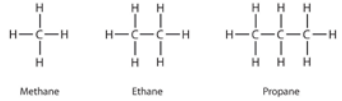
Mineral - A mineral is a naturally occurring inorganic solid, with a definite chemical composition, and an ordered atomic arrangement. This may seem a bit of a mouthful, but if you break it down it becomes simpler. Minerals are naturally occurring. They are not made by humans. Minerals are inorganic.

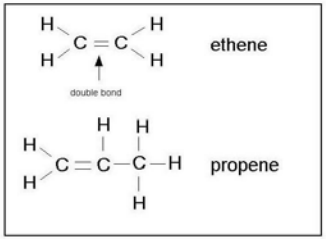
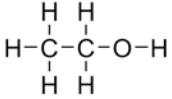
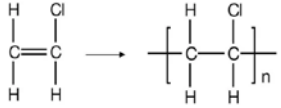
		Nutrient	Definition/Function
MICRONUTRIENTS	18.	**Iron**	Needed to make haemoglobin in red blood cells which transports oxygen around the body. Also removing waste substances from the body. Iron is only absorbed in the presence of vitamin C.
	19.	**Calcium**	Needed by the body to build strong bones and teeth. Essential for blood clotting process and blood pressure. Essential for nerve signal transmission and muscle contraction. The skeleton contains about 99% of the body's calcium.
	20.	**Sodium**	Controls the amount of water in the body Makes nerves and muscles work properly.

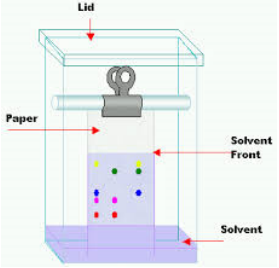
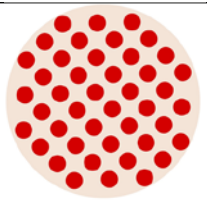
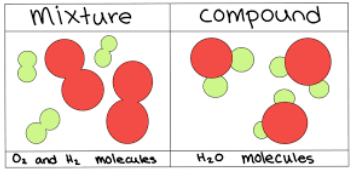
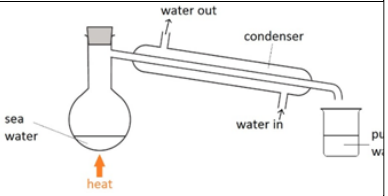
C6		Rate and Extent of Chemical Change	
	Key word	**Definition**	
1	Collision theory	According to this theory, chemical reactions can occur only when reacting particles collide with each other and with sufficient energy.	
2	Catalyst	A substance which speeds up a chemical reaction without being used up itself. It works by lowering the activation energy.	
3	Equilibrium	When a reversible reaction occurs in a closed system, equilibrium is reached when the forward and reverse reactions occur at exactly the same rate.	

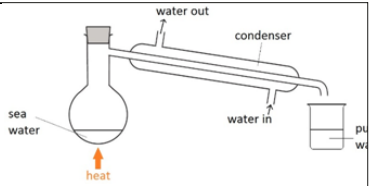
4	Le Chatelier's Principle (^ Triple only)	If a reaction at equilibrium is subjected to a change in concentration, temperature or pressure, the position of equilibrium will move to counteract the change.	

C7		Organic Chemistry	
	Key word	**Definition**	
1	Crude Oil	Is made from the remains of living sea creatures decayed in mud millions of years ago.	
2	Hydrocarbons	Hydrocarbons are made of hydrogen and carbon **only.**	
3	Fractional distillation	A method of separating a mixture of substances according to their different boiling points. Commonly used to separate crude oil into different fractions.	

4	Cracking	The larger molecules from fractional distillation are less useful. We can break them down into smaller, more useful molecules. Cracking produces a mixture of alkanes and alkenes.	
5	Alkanes	Alkanes are the most common hydrocarbon found in crude oil. Alkanes have the general formula CnH2n+2.	

6	Alkenes	Alkenes are hydrocarbons with a double bond between two of the carbon atoms in their chain, causing them to be unsaturated. They have the general formula CnH_2n.	
7	Alcohols (^)	Alcohols contain the functional group –OH. The first four members of a homologous series of alcohols are methanol, ethanol, propanol and butanol.	
8	Polymers	Large long-chain molecules made up of lots of small monomers joined together by covalent bonds.	

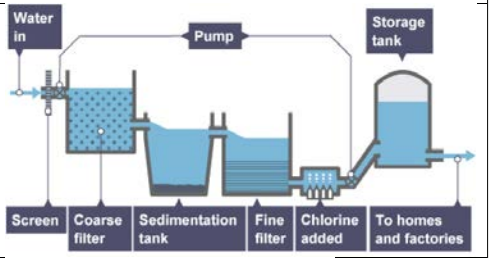
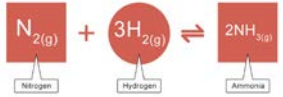
C8		Chemical Analysis	
	Key word	**Definition**	
1	Chromatography	A technique for the separation of a mixture of liquids.	
2	Separation	The various constituents of the mixture travel at different speeds, causing them to separate.	
3	Pure substance	It consists of only one substance.	
4	Mixture	It consists of a minimum of two substances not chemically joined together.	
5	Compound	It consists of minimum of two elements chemically joined together.	
6	Distillation	A technique for the separation of compounds from a liquid mixture using boiling points and condensation.	

6	Distillation	A technique for the separation of compounds from a liquid mixture using boiling points and condensation.	

C9		Chemistry of The Atmosphere	
	Key word	**Definition**	
1	Carbon foot print	'Total amount of CO_2 and other greenhouse gases emitted over the full life cycle of a product, service or event'.	
2	Greenhouse effect	The increase in the temperature of the Earth's atmosphere due to the greenhouse gases in the atmosphere trapping infra-red radiation from the surface.	
3	Global climate change	A long-term shift in global climate patterns.	

4	Global dimming	A gradual reduction in the amount of light reaching the Earth's surface. This can be caused by carbon particulates.	
5	Greenhouse gases	Greenhouse gases include water vapour, carbon dioxide and methane.	
6	Acid rain	Sulphur dioxide can be released when burning fossil fuels. This then dissolves in atmospheric water.	

C10		Using resources	
	Key word	**Definition**	
1	Finite	Resource that will run out e.g. fossil fuels.	
2	Renewable	Resource that can be replenished e.g. solar power, tidal power.	

3	Sustainable	Meets the needs of the current generation without compromising the ability of future generations to meet their needs.	
4	Life cycle assessment	LCA's are carried out in order to find the impact of a product on the environment.	
5	Potable water	Water that is safe to drink.	
6	Haber process (^)	Chemical reaction used to produce ammonia.	

Year 11
BTEC Digital IT Knowledge Organiser
Term 1 – Security Policies

Planning for disaster recovery	
Range of disasters which could happen	
1	Theft of data (having systems hacked or laptops/devices stolen)
2	Virus or other malware infection
3	Data loss (accidental deletion or intentional sabotage)
4	Fire or flood
5	Mechanical failure of equipment

Key Question

Why is it important to have a disaster recovery policy?

Answer

A disaster recovery policy is created to ensure the organisation can become operational again as quickly as possible after an unforeseen circumstance. A detailed plan is created covering all eventualities which could cause an organisation to stop trading.

Security Policies	
To make sure that all employees in all locations follow the same code of conduct organisations create policies that set out the responsibilities of staff. These policies detail how staff are expected to behave and what procedures they should follow in the event of a disaster. Most security policies are implemented by IT and technical staff. Below are examples of some common security policies	
1	System security
2	Data security
3	Compliance (with regulations and legislation)
4	Ensure users can complete the task in an efficient way
5	Environmental (including disposal of old equipment and waste products)
6	Disaster recovery
7	Data recovery
8	Infrastructure (updating and replacing hardware and software)
9	Responsible use policies (including email and internet use policies)

Disaster Recovery Plan			
	Consideration		**Description**
1	Identifying potential risks	1	Identify potential risks to the system and how each risk will affect the computer system and data
2	Who is responsible for which actions in the event of a disaster	2	Staff are given specific recovery tasks to avoid anything being duplicated or forgotten.
3	What staff should and should not do	3	Ensure that all staff know the procedures even if they do not have any direct tasks
4	How the systems will be backed up (including what will be backed up, how often and which media will be used)	4	Ensure that regular backups are taken. Decide where the backups will be stored and which media will be used to store the data e.g. cloud, magnetic tapes.
5	A timeline to establish how quickly the systems will need to be backup and running	5	After a disaster not all operations will be needed immediately. A plan should be made to define how long the organisation can be without each system. Critical systems must be identified and will need to be recovered first.
6	An alternative location for operation (hardware, software and personnel).	6	After disaster the organisation may need to move quickly to another location. Hardware, software and personnel should also be available (along with the backups) so that the organisation can function again quickly.

KS4 AN INSPECTOR CALLS KNOWLEDGE ORGANISER

1. Context

Playwright: John Boynton Priestley (1894-1984)
Dates: Written in 1945
First performed: In Moscow, Russia, in 1945
Era: Edwardian
Genre: Drama
Set: Fictional town Brumley 'an industrial city in the north Midlands' in 1912
Structure: Three Act Play

Biography of Priestley
- Born in Yorkshire in 1894.
- Fought in the first world war and became politicised by the suffering of it
- Became concerned with the effects of social inequality in Britain in 1930s
- Set up a new political party in 1942, The Commonwealth Party. It merged with the labour Party and was integral in developing the welfare state

Pre and Post War – Before the first world war there was deemed to be a general air of complacency regarding the prospect of any war taking pace. There were strong distinctions between upper and lower classes, society was deeply patriarchal. After the second word war ended in 1945, class distinctions had been greatly reduced by the two wars and women had earned a more valued place in society After 1945 there was a desire for more sweeping social change.

Socialism – Socialism is an approach to economic and social systems that is characterised by social ownership, democratic control and high levels of equality. Socialism is generally concerned with ensuring that disparities between wealth and social status are erased from society. After the two World Wars British society was far more open to socialist ideas. In *An Inspector Calls*, the Inspector harbors socialist attitudes.

Social and Moral Responsibility – Attitudes towards social and moral responsibility changed rapidly in the tine between when the play was set (1912) and the time the play was written (1945). In 1912 the general attitude of those with social status and wealth was towards looking after one's own. By the mid-1940s however, the Labour party under Attlee won a landslide election reflecting a wave of enthusiasm towards communal responsibility for everyone in society.

The Titanic – RMS Titanic was a British passenger liner that sank in the North Atlantic ocean in the morning hours of 15th April 1912, killing around 1500. The Titanic was designed to be the pinnacle of both safety and comfort, and due to its enormous size and quality was frequently labeled 'unsinkable'. In *An Inspector Calls* Birling claims this, thus immediately losing the respect of the audience. It can serve as a symbol of the hubris and arrogance of man.

FORM – The play fits into three possible forms:

Well-Made Play
- A popular type of drama from the 19th century
- The events build to a climax
- Primarily concerned with events that happened before the play
- Plot is intricate and complex

Morality Play
- Most popular during 15th and 16th centuries
- They taught the audience lessons that focused on the seven deadly sins
- Characters who committed those sins were punished

Crime Thriller
- Involves a gripping tale based around a crime
- The audience receives clues and must guess what has happened before the end
- All is revealed by the climax

2. Key Characters

Inspector Goole: An enigmatic (mysterious) figure who serves as Priestley's mouthpiece and advocates social justice. He serves as the Birling's conscience and exposes their sins.

Mr Arthur Birling: A capitalist and business owner who opposes social change and greater equality. He is a self-made man and lacks the refined manners of the upper classes. Made a fool by Priestley to highlight the arrogance and absurdity of his views.

Mrs Sybil Birling: Her husband's social superior, Mrs Birling is involved in charity work but contradictorily believes in personal responsibility and looking after one's-self. Fails to understand her own children.

Shelia Birling: Young and initially enthusiastic, Sheila grows and changes throughout the play, embracing the views of the Inspector and challenging the social indifference of her parents. She becomes wiser and more cautious in her relationship with Gerald.

Eric Birling: In his early twenties, he drinks too much and forces himself upon Eva Smith. Whilst she is pregnant with his child, he steals from his father to attempt to support her. Grows and changes, realises his own wrongs along with everyone else's. Critical of parents.

Gerald Croft: A businessman engaged to Sheila, Gerald a relationship with Daisy Renton (Eva Smith). Even though he sits between he two generations he is politically closest to Birling and fails to embrace the Inspector's message, instead seeking to prove he wasn't real.

Eva Smith: Doesn't appear in the play, but her suffering and abuse represents that of all the working classes. She also calls herself both Daisy Renton and Mrs Birling. The older characters begin to question whether she really is one person.

3. Central Themes

Social Responsibility	Priestley advocates a socialist message of collective responsibility for one another. The Inspector serves as his voice in conveying this ideology, but the younger generation also come to embrace it. The suffering of Eva Smith highlights the powerlessness of the working classes and the need for a society that protects is most vulnerable.
Age and the Generational Divide	Priestley presents a view that there is hope for change and that it lies with the younger generation. Both Sheila and Eric change for the better, maturing and becoming more empathetic as they come to embrace the Inspector's message. They also become vocal critics of their parents' indifference to Eva's suffering.
Class and Power	Priestley highlights the immense power that business owners wielded over their workers and presents them as arrogant and lacking in empathy. He demonstrates Edwardian society's preoccupation with wealth and status at the cost of the individual as a way of promoting change in post-WW2 Britain.
Gender	At the time the play was first performed, women had just played a pivotal role in World War 2 and were empowered by the freedom work provided them. In the 1912 setting, we see Sheila's growing independence vs her mother. However, the play still highlights the awful vulnerability of women and the outdated stereotyping of them.

4. Key Vocabulary

Capitalist	Believing in private wealth and business aimed at making profit for business owners. Independent and self-reliant.
Socialist	Believing in shared ownership, collective responsibility for one another and social equality for all.
Ideology	A political viewpoint or set of beliefs, for example socialism.
Responsibility	Being accountable or to blame for something, or having a duty to deal with something.
Hierarchy	A ranking of status or power e.g. the strict class hierarchy of Edwardian England.
Patriarchy	A society in which power lies with men.
Prejudice	An opposition to or opinion about something/someone based upon what they are e.g. working class, female etc.
Morality	The belief that some behaviour is right and some is wrong.
Proletariat	The working class.
Bourgeoisie	The capitalist class in possession of the means of acquiring wealth.
Aristocracy	The highest class in society and often holding titles passed from father to son, for example Lord and Lady Croft.
Façade	A false front or surface-level illusion, for example the façade of family happiness in the opening scene of the play.
Catalyst	Someone or something that speeds up or triggers an event.
Antithesis	When something is the opposite of something else.

5. Key Terminology, Symbols and Devices

Dramatic Irony	When the audience is aware of something that a character is not aware of, for example Birling believing war won't happen.
Plot Twist	When a story suddenly departs from its expected path and something very unexpected happens. The final phone call.
Cliffhanger	Each act ends on a particularly dramatic, revealing moment that creates a sense of tension and anticipation.
Stage Directions	When the playwright instructs actors/director to perform in a particular way. Priestley's are unusually detailed.
Entrances/Exits	Characters frequently leave or enter the stage at dramatic moments. Some characters miss important events.
Lighting	Priestley uses stage directions to indicate how the stage should be lit. Changes to 'brighter and harder' for Inspector.
Props	Physical objects used in the play. The photograph plays a key role in identifying Eva. The doorbell interrupts Birling.
Contrast and Juxtaposition	Deliberately placing two very different things along side one another to draw comparisons e.g. Birling and the Inspector.

The Big Ideas	Notes	The Methods	Notes
Priestley promotes a socialist ideology in which he **argues for collective social responsibility.**		1. Priestley uses **contrasts** in character, setting and language to emphasise the different conflicts at work in society.	
Priestley suggests that change is possible, and that **hope lies with the younger generation.**		2. Priestley uses the **characterisation** of the Inspector and the family as a means of highlighting his view of different groups in society.	
Priestley **challenges existing social hierarchies** of class and gender.		3. Priestley uses **entrances, exits, beginnings and endings** as a means of building and maintaining dramatic tension.	

KS4 KNOWLEDGE ORGANISER: *MACBETH*

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.

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. While King of Scotland, James VI became utterly convinced about the reality of witchcraft and its great danger to him leading to trials that begin in 1591.

Only a century before *Macbeth* was written, England had suffered under the massive disorder of the **Wars of the Roses**. Civil disorder was now seen as the ultimate disaster and also an ungodly state.

The Great Chain of Being was a strict religious hierarchical structure of all matter and life which was believed to have been decreed by God. This idea dominated Elizabethan 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.

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.

Conventions of a TRAGEDY

1. **Tragic Hero**
2. **A struggle between Good and Evil**
3. **Hamartia**
4. **Tragic Waste**
5. **External Conflict**
6. **Internal Conflict**
7. **Catharsis**
8. **Supernatural Elements**
9. **Lack of Poetic Justice**
10. **Comic Relief**

Biography of Shakespeare

- Born in Stratford-Upon-Avon
- Married Anne Hathaway in 1582.
- Left his family behind around 1590 to move to London to become an actor and playwright.
- Highly successful, he established himself as the most popular playwright of his day.
- Part-owner of The Globe Theatre in London.
- His first theatre group was called Lord Chamberlain's Men, later changed to the King's Men (1603) under the patronage of King James I.
- Died on his birthday in Stratford-upon-Avon in 1616.

2. Key Characters

Macbeth: *The eponymous protagonist is both ambitious and ruthless. He transforms from loyal warrior to paranoid, tyrannical king.*

Lady Macbeth: *A strong, ambitious and manipulative woman who defies expectations. Persuasive and ruthless.*

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

Banquo: *Macbeth's close friend and ally is astute and loyal. Macbeth sees him as a threat. Virtuous and insightful.*

Duncan: *King of Scotland; a strong and respected leader. Murdered in Act 2.*

Macduff: *A noble soldier who is loyal to Duncan and is suspicious of Macbeth.*

Malcolm: *Duncan's son and next in line to the throne. Dignified and clever.*

3. Key Terminology

soliloquy	A speech or passage in a drama when a character on stage speaks to himself or herself, expressing their inner thoughts and feelings.
hamartia	The fatal flaw of a tragic hero.
Tragic hero	A heroic character that makes a judgment error that inevitably leads to his/her destruction.
aside	A remark or passage in a play that is intended to be heard by the audience but is supposed to be unheard by the other characters on the stage.
prose	Ordinary writing not organised with rhymes or fixed line lengths (opposite to verse). It is the language that people speak in.
Dramatic Irony	A character speaks in ignorance of a situation or event known to the audience or other characters

4. Key Vocabulary

	Definition
eponymous	Being the person after whom a literary work e.g. novel, play. film is named.
treacherous	Guilty of, or involving betrayal or deception.
tyrant	A cruel and oppressive ruler.
corrupt	Having or showing a willingness to act dishonestly in return for money or personal gain.
Machiavellian	Cunning, scheming, and unscrupulous, especially in politics.
fate	The development of events outside a person's control, regarded as predetermined by a supernatural power.
downfall	A loss of power, prosperity or status.
arrogance	Unpleasantly proud and behaving as if you are more important than, or know more than, other people.
hubris	Excessive pride or self confidence.
manipulate	To control something or someone to your advantage, often unfairly or dishonestly.

5. Themes

Ambition	'Macbeth' is a play about ambition run amok. The witches' prophecies spur both Macbeth and Lady Macbeth to action but the witches never make Macbeth or his wife do anything; they act on their own to fulfil their deepest desires and ambitions. Both Macbeth and Lady Macbeth want to be great and powerful, and sacrifice their morals to achieve that goal.
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.
Kingship and tyranny	In the play, Duncan is always referred to as a 'king' while Macbeth soon becomes known as the 'tyrant'. In Act 4, scene 3 Malcolm pretends that he would make an even worse king than Macbeth. The model king, then, offers the kingdom an embodiment of order and justice, but also comfort and affection. Under him, subjects are rewarded according to their merits, as when Duncan makes Macbeth Thane of Cawdor after Macbeth's victory over the invaders. Most importantly, the king must be loyal to Scotland above his own interests. Macbeth, by contrast, brings only chaos to Scotland—symbolized in the bad weather and bizarre supernatural events—and offers no real justice, only a habit of capriciously murdering those he sees as a threat. As the embodiment of tyranny, he must be overcome by Malcolm so that Scotland can have a true king once more.
Appearance and reality	Appearances are deceptive in the play and some characters trust appearances too much. Duncan trusts the wrong men with disastrous consequences, Macbeth trusts the witches and Lady Macbeth manipulates her husband's trust. This fine line between appearance and reality represents the line between good and evil.

The Big Ideas	Notes	The Methods	Notes
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Priestley suggests that change is possible, and that **hope lies with the younger generation.**		2. Priestley uses the **characterisation** of the Inspector and the family as a means of highlighting his view of different groups in society.	
Priestley **challenges existing social hierarchies** of class and gender.		3. Priestley uses **entrances, exits, beginnings and endings** as a means of building and maintaining dramatic tension.	

Language Paper 1: Explorations in Creative Writing Section A: 4 Questions

Reading

- What is the text about? Who are the main characters? Where is it set? What kind of atmospheres are created? How?
- Annotate the focus of each paragraph: action, dialogue, description, characters.
- Do not answer any questions until you have read the whole text.

Q1 Tests your *understanding* of the unseen text.

- Identify the focus of the question and write it at the start of each line.
- Underline/circle/highlight information relating to the focus.
- Use the information you have identified to complete the sentences.

Q2 – 8 marks
Language analysis

Consider the question before looking for evidence, Two ideas about the extract > opening statement.

- Opening statement to inform evidence choice.
- Remember that evidence supports your **ideas**.
- 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?**

Avoid 'feature spotting'. The most effective evidence is the evidence which supports your ideas, not the evidence you can 'label'.

Q3 – 8 marks
Structure analysis

What is the 'journey' of the text?

- Where do we begin? What is established at the start?
- Where do we end? What/who has changed?
- How did we get there? Where did the writer signal this change? **(Turning point/catalyst)**

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**.

Q4 – 20 marks
Evaluation

- 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!
- 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.

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…

Critical Verbs

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

Language Paper 2: Writers' viewpoints and perspectives

Section A: 4 Questions

Reading

You will have to read 2 sources, one of which will be a 19th century text

Look at the source information to determine the form and purpose of each text

Do not answer any questions until you have read the whole text.

Q1 Tests your *understanding* of the unseen text (True/False)

- Read the section of the extract carefully
- Track the source – the statements occur in order within the text
- Read the questions carefully, some of them will catch you out otherwise

Q2 – 8 marks
Summary of similarities/differences

This question tests your ability to infer implicit ideas from the evidence you find.

- Read the focus carefully
- Find 2-3 pieces of evidence from each source which link to the focus
- 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…**

Q3 – 12 marks
Language analysis

Consider the question before looking for evidence, 3 ideas about the extract > opening statement.

- Opening statement to inform evidence choice.
- Remember that evidence supports your **ideas**.
- 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**

Avoid 'feature spotting'. The most effective evidence is the evidence which supports your ideas, not the evidence you can 'label'.

Q4 – 16 marks
Comparison of ideas/perspectives

- 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
- Using the 3 perspectives from each source write your introduction.
- Write up 3 comparative paragraphs using the following structure:

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
Feeling
Perspective

Y11 French – GCSE Theme: The environment

A.	Introducing the topic	
1	Il existe	There exists
2	Il y a beaucoup de	There are a lot of
3	Malheureusement	unfortunately
4	comme	As/ such as
5	Ce qu'on peut dire..	What one can say is ..
6	Je crois que	I believe that
B.	Key verbs	
1	aider	To help
2	arrêter	To stop
3	manifester	To protest
4	protéger	To protect
5	sauver	To save

C.	Opinions for the future	
1	Je veux aider	I want to help
2	J'espère sauver	I hope to save
3	Je voudrais manifester	I would like to protest
4	J'aimerais arrêter	I would like to stop
5	Je veux utiliser	I want to use
D.	Connectives	
1	Pro et contre	For and against
2	Mais/ou	But/or
3	Puis	then
4	Cependant/pourtant	However

E.	solutions	
1	Il faut/ on doit	One must
2	On peut	One can
3	recycler	recycle
4	trier les déchets	Separate rubbish
5	consommer moins d'énergie	Use less energy
6	utiliser le papier reclyclé	Use reclcled paper
7	utiliser les transports en commun	Use public transport
8	aller au collège en vélo	To go to school by bike
9	aller au collège à pied	To go to school on foot
10	réutiliser les sacs en plastique	Reuse plastic bags
11	économiser de l'eau	Save water
12	protèger l'environnement	Protect the environment
13	sauver la planète	Save the planet
14	aider les animaux	Help animals
15	éteindre les appareils électroniques	Switch off electrical devices
16	Donner de l'aide	Give aid
17	Prendre la résponsibilité	Take responsibility
18	Mèner une vie saine	Lead a healtyh life
F.	Local and global places	
1	À l'étranger	abroad
2	En ville	In town
3	En banlieue	On the outskirts
4	Au bord de la mer	By the seaside

G.	Positive adjectives	
1	génial	great
2	formidable	wonderful
3	incroyable	unbelievable
4	chouette	great
5	merveilleux	marvellous
6	unique	unique
7	extraordinaire	extraordinary
8	fascinant(e)	fascinating
9	Le meilleur	Le best
10	fabuleux (euse)	fabulous
11	bien organisé	well-organised
12	utile	useful
13	responsable	responsible
14	Plus utile	More useful
H.	Environmental problems	
1	Le changement climatique	Climate change
2	Les indonations	floods
3	Du bénévolat	Charity work
4	La terre	The earth
5	Les incendies	fires
6	La sécheresse	drought
7	La marée noire	Oil slicks
8	La surpopulation	overpopulation

I.	Negative adjectives	
1	catastrophe	tiring
2	sérieux	boring
3	désagréable	unpleasant
4	dangereux	demanding
5	agaçant	stressful
6	chocant	ridiculous
7	évitable	dangerous
8	déprimant	depressing
9	impossible	impossible
10	dommage	badly paid
11	inquiétant	worrying
12	nul	rubbish
13	inutile	useless
14	casse-pieds	a pain
J.	Environmental problems continued	
1	La circulation	traffic
2	La pollution de l'air	Air pollution
3	La destruction des fôret tropicales	Destruction of rain forests
4	La disparation des escpèces	Loss of animal species
5	C'est notre résponsibilité	Its our responsibility
6	C'est notre planète	Its our planet
7	Pour les générations futures	For future generations
8	C'est une question de temps	It's a question of time

Y11 – French Knowledge Organiser

A.	General opinions	
1	Je crois que	I believe that
2	Je vois que	I see that
3	Je dirais que	I would say that
4	Je pense que	I think that
5	Selon moi	From my point of view
6	Quant à moi	In my opinion
B.	Expressing feelings	
1	Ça m'inquiète	It worries me
2	J'ai besoin de	I need
3	Ça m'énerve	It gets on my nerves
4	J'en ai marre de	I'm fed up of
5	Je suis d'accord	I agree
C.	Opinions for the future	
1	Je veux	I want
2	J'espère	I hope
3	J'ai envie de	I feel like
4	J'aimerais	I would like
5	Ça me dit de	I fancy
D.	Basic opinions	
1	Je suis pour	I am for
2	Je suis contre	I am against
3	Il vaudrait mieux	It would be better
4	Je n'aime pas de tout	I really don't like

E.	Connectives	
1	aussi / en plus	also
2	pourtant	however
3	toutefois	however
4	malgré	despite
5	de l'autre coté	on the other hand
6	par la suite	therefore
7	donc	so
8	à cause de	due to
9	cependant	however
10	malheureusement	unfortunately
11	heureusement	fortunately
12	également	equally
13	par example	for example
14	en fait	in fact
15	même	even
16	car	because
17	parce que	because
18	puisque	because
F.	Opinions using comparisons	
1	Ce que j'aime le plus	What I like most
2	Ce qui est bien / mauvais	The good / bad thing is that
3	Le meilleur / Le pire est que	The best / worst thing is that
4	La chose la plus importante	The most important thing

G.	Positive adjectives	
1	merveilleux (euse)	marvellous
2	formidable	wonderful
3	incroyable	unbelievable
4	chouette	great
5	divertissant(e)	entertaining
6	unique	unique
7	extraordinaire	extraordinary
8	fascinant(e)	fascinating
9	passionnant(e)	exciting
10	fabuleux (euse)	fabulous
11	agréable	pleasant
12	utile	useful
13	sympa	nice
14	gentil(le)	kind
H.	Positive reasons	
1	Ça me fait rire	It makes me laugh
2	Ça me détend	It relaxes me
3	Ça me plait	It pleases me
4	Ça m'a plu	It's my passion
5	Je me suis éclaté	I have a wicked time
6	Je me sens bien	I feel good

I.	Negative adjectives	
1	pénible	annoying
2	barbant	boring
3	désagréable	unpleasant
4	énervant	annoying
5	agaçant	stressful
6	ridicule	ridiculous
7	dangereux	dangerous
8	déprimant	depressing
9	impossible	impossible
10	bête	silly
11	inquiétant	worrying
12	nul	rubbish
13	inutile	useless
14	casse-pieds	a pain
J.	Negative reasons	
1	Ça me fait pleurer	It makes me cry
2	Ça ne vaut pas la peine	It's not worth it
3	Ça m'inquiéte	It worries me
4	Je m'ennuie	I get bored
5	Ça me fatigue	It tires me out
6	Ça m'embête	It irritates me

1.	Wave features
Swash	Movement of a wave up the beach. The direction is dependent upon the wind direction.
Backwash	Movement of a wave back down the beach, this happens at 90^0.
Constructive wave	Have a strong swash and weak backwash; they cause deposition.
Destructive wave	Have a weak swash and strong back wash; they cause erosion.
Fetch	The distance a wave has travelled.

2.	Headlands and bays
Geology	Different rock types e.g. resistant rock such as granite, and less resistant rock such as clay.
Headland	Resistant rock which is not easily eroded so sticks out to sea.
Bay	Soft rock which is easily eroded so retreats to form a bay.

3.	Types of erosion
Hydraulic action	Waves compress pockets of air in cracks in a cliff, causing the crack to widen, breaking off rock.
Abrasion	Eroded material is hurled or scrapes against the cliff, breaking off rock.
Attrition	Eroded material in the sea, hit into each other breaking down into smaller pieces.
Solution	Cliffs e.g. chalk dissolve in seawater.

4.	Other coastal processes
Transportation	The movement of sediment.
Deposition	When waves drop the sediment they are transporting, either due to a loss of energy or change in direction of coastline.
Longshore drift	The movement of sediment along the coastline in a zig-zag motion, due to the wind & swash occurring at an angle to the beach.
Weathering	Breaking down of rocks by physical and chemical processes.
Salt weathering	The repeated formation of salt crystals in cracks in the rock, due to the evaporation of seawater.
Chemical weathering	Breakdown of rock by changing its chemical composition.
Biological weathering	Breakdown of rock by living things.
Mass Movement	Shifting of rocks and loose material down a slope or cliff due to gravity.

5.	Wave cut platforms
Wave cut notch	These form at the foot of a cliff due to erosion. This undercuts the cliff above leaving it unsupported.
Wave cut platform	When the unsupported cliff collapses, the process repeats and the cliff retreats leaving a sloping wave cut platform.

6.	*Geology and climate*
Concordant coastline	Made up of alternating bands of hard and soft rock that are parallel to the coast, eroded at the same rate.
Discordant coastline	Erosional landforms are more common, because of bands of alternating bands of rock are eroded at different rates.

7.	Caves stacks and arches
Crack	A weakness in the headland is eroded by hydraulic pressure, forming a cave.
Cave	This is eroded further, until the cave erodes all the way through the headland forming an arch.
Arch	The roof of the arch has no support, so collapses to form a stack.

8.	Spits
Change in coastline	Leads to material transported by longshore drift being deposited into the sea, forming a spit.
Hooked ends	Form on a spit due to a change in the direction of the prevailing wind.
Salt marsh	An area of salty marshland found behind a spit, which has dried out as the sea can no longer reach this area.

9.	Coastal management
Hard engineering	Human-made structures that help to deal with coastal erosion, such as: 1. **Sea walls,** which reflect the waves energy back out to sea 2. **Groynes,** which trap longshore drift.
Soft engineering	Adaptations to work with nature, such as: **Managed retreat**, allowing the coast to erode and moving people away.

10.	Case study example: Holderness coast, Mappleton
Where?	The fastest eroding coastline in Europe, in east Yorkshire.

Reasons to protect	Management strategies	Success
1. Rocks are made of soft rock (till), eroding at 2m per year. 2. The B1242 runs through Mappleton and would be expensive to re-route.	1. Rock groyne put in place to trap sediment being transported by longshore drift, creating a wider beach to absorb the power of the waves. 2. Rip-rap has been placed in front of the cliffs to absorb the wave energy.	1. Good – erosion in front of Mappleton has reduced, so the road has been saved. 2. Bad - beaches further south have been starved of sediment so erosion has increased e.g. at Great Cowden.

Year 11: Coastal change and conflict

1.	*River landscapes*
Rivers course	The path that a river takes as it flows downhill.
Long-Profile	Shows how the gradient changes as it flows downstream.
Cross- Profile	What a cross section of a river looks like.
Sediment load	Size and shape of rocks, eg big, jagged rocks in the Upper Course. As the river enters the middle and lower courses, the rocks become smaller and more rounded, until they are tiny particles at the river's mouth.

2.	Drainage basin features
Drainage basin	An area of land drained by a river and its tributaries.
Source	The start of a river.
Mouth	Where the river enters the sea or lake.
Tributary	A small river than joins a larger river.
Confluence	The point at which two or more rivers meet.
Watershed	The dividing line between two drainage basins.

3.	River profile
Upper course	The narrow, steep, upper part of a river, contains waterfalls.
Middle course	The wider, deeper channel, contains meanders and ox-bow lakes.
Lower course	The widest, flattest part of the river, near the mouth, contains the floodplain.

Year 11: River processes and pressures

4.	Types of erosion
Hydraulic action	The sheer force of the river causing the bed and banks to erode.
Abrasion	Material carried by the river erodes by scraping along the bed and banks.
Attrition	Eroded material carried by the river, hits into each other breaking down into smaller pieces.
Solution	The acids in the water causing erosion.

6.	Waterfall – upper course
Plunge pool	A pool which forms at the bottom of a waterfall, undercutting the hard rock above.
Gorge	A steep sided valley left behind when a waterfall retreats up stream.
Interlocking Spurs	They form when a river isn't powerful enough to erode laterally (across) into the hillsides that stick into its path. Instead, it has to wind around them.

7.	Meander – middle course
Slip off slope	The sloping bed of a meander, from the inside (shallow) to the outside (deep).
River cliff	The undercut bank on the outside bend of a meander.
Ox-bow lake	Erosion causes the outside of bends of a meander to get closer together, leaving a small bit of land left (the neck).

8.	Floodplain – lower course
Silt	The fertile, eroded material transported by a river.
Levees	Banks found at the side of a river in the lower course.

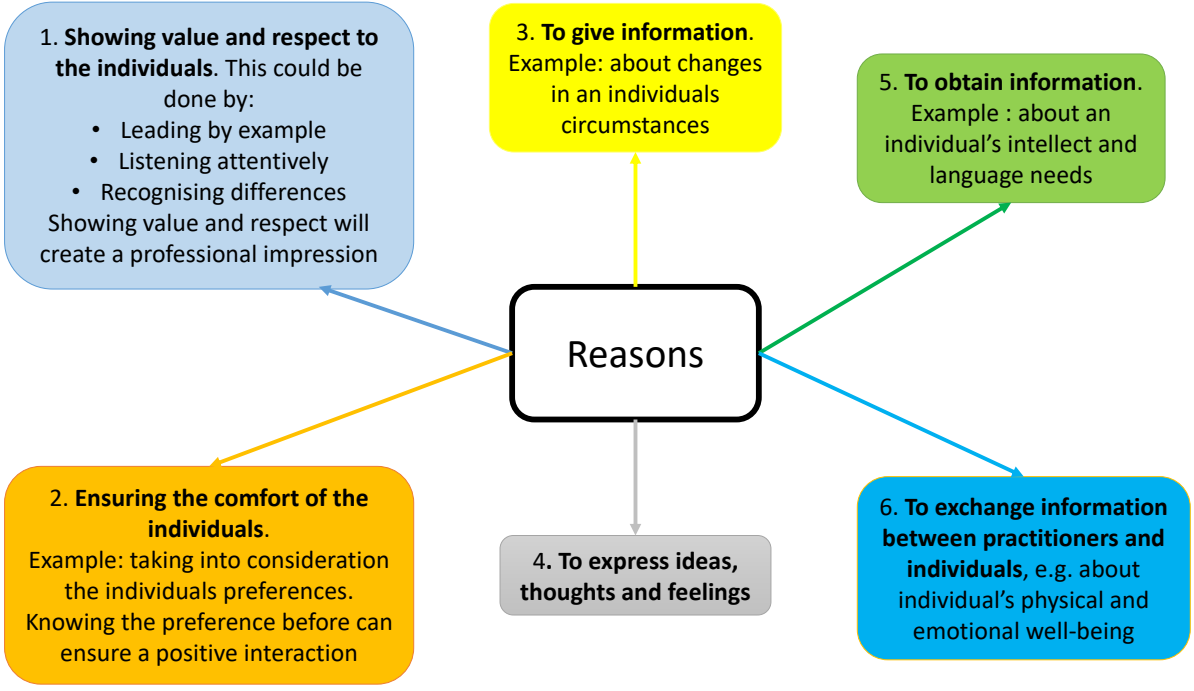
5.	Other river processes
River load	The material which the river is transporting.
Transportation	The movement of material by the river.
Deposition	When a river loses energy so drops it's load.
Lateral erosion	When erosion moves across the land, causing the bends of meanders to widen.
Vertical erosion	Erosion which takes place downwards into the land.

9.	Drainage basin processes
Precipitation	Liquid that falls from the sky e.g. rain, snow, hail.
Interception	When the leaves of trees stop precipitation reaching the ground.
Surface run-off	The movement of water overland back into a river.
Surface storage	Water stored on the surface in lakes or puddles.
Infiltration	The movement of water from the surface into the soil.
Through flow	The movement of water through the soil back into the river.

10	River application		
	River discharge	***River flood risk***	**River management**
	Antecedent conditions – Previous conditions, eg previous wet weather. **Lag time** – The time between peak (highest) rainfall and peak (highest) discharge. **Land-use change** – humans changing the land, eg via urbanisation or deforestation.	**Saturated ground** – Full of water and cannot absorb any more. **Urbanisation** – The process by which urban areas grow. **Permeable rock** – Water can pass through **Impermeable rock** – Water cannot pass through	**Hard engineering** – Building man-made structures to control the flow of rovers and reduce flooding. **Soft engineering** – Using knowledge of a river and its processes to set up schemes to reduce the effects of flooding. **Embankments** – High banks near rivers that stop it flooding.

RO22 - Communicating and working with individuals in health, social care and early years settings
LO3: Be able to communicate effectively within a health, social care ad early years setting

Why practitioners in the health, social care and early years settings need to communicate clearly

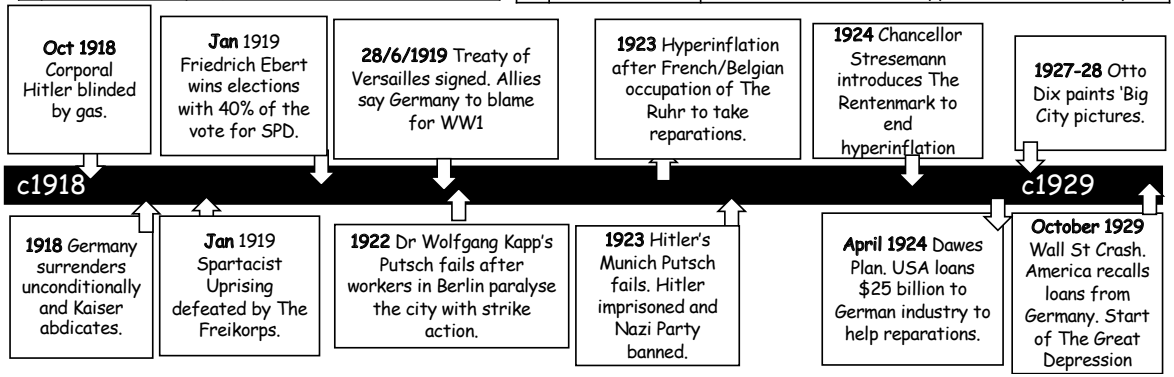


History – Knowledge Organiser

Y11 – Weimar and Nazi Germany c1918-29

	Key Individuals	
1	Friedrich Ebert	The first chancellor of Germany elected Jan 1919. He was (unfairly) associated with The Treaty of Versailles.
2	Rosa Luxemberg and Karl Liebknecht	Leaders of The Spartacist uprising in 1919. They wanted Soviet-style workers' councils like they had in Russia
3	Ernst Rohm	A member of The Freikorps who later became leader of The SA, Hitler's private army who protected him.
4	Gustav von Kahr	Right wing leader of Bavaria with Lossow who told the police about Hitler's Munich Putsch plans and helped it fail.

	Key terms	Definition
1	Constitution	An agreed set of rules for running a country. In Germany this was called The Weimar Constitution.
2	The Weimar Republic	Another name for Germany from 1919-1939. Named after the town of Weimar.
3	Kaiser	German word for 'emperor' or 'king'. Comes from the old Latin word for Caesar.
4	The Ruhr	An area of Germany which had a lot of factories in and so produced a lot of goods and money.
5	The Rhineland	An area in Western Germany around The River Rhine. It was demilitarised to protect France.
6	Right wing	Political position of people who think taxes should be low but there is more inequality.
7	Left wing	Political position of people who think taxes should be high so there is more money to help people.
8	Reparations	Money to repair damage. Germany was forced to agree £6.6 billion to repair WW1 damage.
9	Reichstag	German version of The House of Commons where the government votes and decides laws.
10	Democracy	A form of government where people in the country vote for their leaders. Opposite of dictatorship.



History – Knowledge Organiser

Y11 – Weimar and Nazi Germany c1929-39

Key Individuals		
1	President Hindenburg	The President of Germany technically had more power than the chancellor. President Hindenburg was elected in 1927 but died in 1934.
2	Heinrich Himmler	Hitler's head of The SS. By 1936 The SS controlled the German Police State: police and security forces, SD and Gestapo.
3	Herman Goering	Hitler placed Goering in charge of the 1936 Four Year Plan to improve the economy and prepare for war. This created jobs.
4	Reich Bishop Ludwig Muller	The leader of combined Protestant churches in Germany: The Reich Church.

	Key terms	Definition
1	Chancellor	German version of Prime Minister. Could only pass laws if The Reichstag voted for them.
2	KPD	*Kommunistische Partei Deutschlands.* The German Communist Party which Hitler banned in 1933.
3	Police State	The name given to countries where dictators keep control using police and spies.
4	Concordat	Agreement signed between Hitler and The Catholic Church. Catholics agreed to stay out of politics.
5	Propaganda	One-sided information designed to try and persuade people eg using newspapers and radios.
6	Censorship	Banning information or ideas. Controls attitudes by forbidding certain information or opinions.
7	Trade Unions	Workers who join together to campaign for better pay and conditions. Can resort to strike action.
8	Kinder, Kuche, Kirche	German words for Church, Children and Kitchen. Nazis said women should focus on these things.
9	Conscription	Forcing people to join the army. This was reintroduced by Hitler and reduced unemployment.
10	Pogrom	An attack on a group of people where the government supports or does not help victims.

March 1930 Chancellor Bruning's Coalition falls apart over taxes.

Jan 1919 Friedrich Ebert wins elections with 40% of the vote for SPD.

March 1933 Hitler passes The Enabling Act which allowed him to pass laws without people voting in The Reichstag.

1933 All judges and magistrates made to swear an oath of loyalty to Hitler and The Nazi Party. Top police jobs given to Nazis.

1935 1600 newspapers are closed down as Hitler seeks to censor any negative news about him.

1936 Membership of Hitler Youth made compulsory.

c1929 → c1939

Jan 1933 Hindenburg appoints Hitler Chancellor of Germany.

Feb 1933 Reichstag Fire. Hitler blames Communists. 100 Communists out of Reichstag.

April 1933 Hitler sets up The Gestapo under Reinhard Heydrich. His secret police in charge of arresting opponents.

Nov 1933 Nazis force all workers to join The DAF (German Labour Front) under Robert Ley which controlled workers.

1936 All Protestant Churches in Germany combine to form The Reich Church led by Reich Bishop Ludwig Muller

Nov 1938 Nazis launch a pogrom against Jews which they call 'Kristallnacht'.

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

Pythagoras' Theorem

$$a^2 + b^2 = c^2$$

Only applies to right angled triangles.

Can be used to find the height of an isosceles triangle

Can be used to find the length distance between two coordinates

Trigonometry

$$S\frac{O}{H}C\frac{A}{H}T\frac{O}{A}$$

Example – finding a side:

$\sin 37 = \frac{x}{5}$

x = 5 x sin 37^0

Example – finding a side:

$\tan y = \frac{3.2}{7.1}$

$y = tan^{-1}\left(\frac{3.2}{7.1}\right)$.

Bearings

Measure from the North

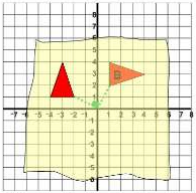
Measured in a clockwise direction

Written using 3 digits

Bearing of B **from A** (start at A)

Bearing of A **from B** (start at B)

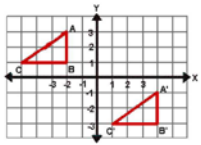
Transformations – rotation

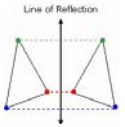


Always use tracing paper.
Describe:

1. It's a rotation
2. Size of rotation in degrees
3. Orientations: clockwise or anticlockwise
4. Centre of rotation

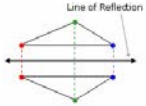
Transformations – translations and reflections





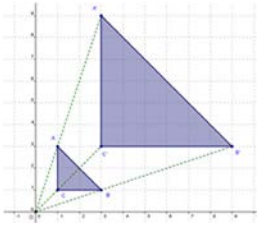
Reflection in the line x=a

Translate triangle ABC to A'B'C' with the vector $\begin{pmatrix} 6 \\ -4 \end{pmatrix}$



Reflection in the line y=a

Transformations – enlargement

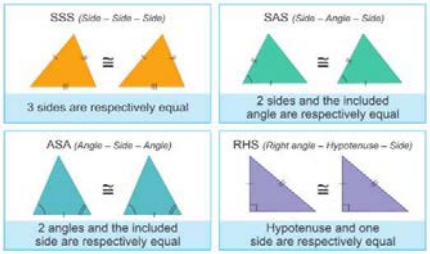


Describe:

1. It's an enlargement
2. The scale factor (if the image is smaller than the object the scale factor is fractional e.g. ½)

The centre of enlargement given as a coordinate

Congruent triangles



Simple vector notation

$$\begin{pmatrix} a \\ b \end{pmatrix}$$

a: movement along the x-axis (left or right)

b: movement along the y-axis (up or down)

$-a$: movement left $-b$: movement down

Operations with vectors

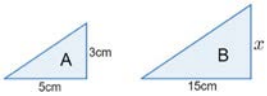
$\begin{pmatrix} 2 \\ 6 \end{pmatrix} + \begin{pmatrix} 7 \\ -3 \end{pmatrix} = \begin{pmatrix} 9 \\ 3 \end{pmatrix}$

If $b = \begin{pmatrix} 4 \\ -2 \end{pmatrix}$, then $3b = \begin{pmatrix} 12 \\ -6 \end{pmatrix}$

Similar shapes

Same shape, different sides

The ratio of the lengths of corresponding sides are equal



Length scale factor = 15 ÷ 5 = 3

x = 3cm x 3 = 9cm

Percentages

Finding percentages of an amount

1%	÷100
5%	÷20
20%	÷5
25%	÷4
50%	÷2

Multipliers:

To find the multiplier for a percentage, divide by 100

Use multipliers on a calculator paper

e.g. 35% of 370 = 0.35 x 370

Increasing and decreasing a given amount

Calculator:

$$Orginal\ Amount\ x\ mutiplier = new\ amount$$

Non-calculator: find the increase or decrease and add to the original amount

Finding percentage increase or decrease (profit/loss)

$$\frac{value\ of\ increase/decrease}{Original} \times 100$$

Writing an amount as a percentage of the original

$$\frac{Amount}{Original} \times 100$$

Reverse Percentage – finding the original amount

$$Orginal\ Amount = \frac{New\ Amount}{multiplier}$$

Algebriac proof – toolkit

Even numbers: 2n, 2n+2, 2n+4,…
Odd numbers: 2n+1, 2n+3, 2n+5,…
Sum: add
Product: multiply
Difference: subtract
Show it's a multiple: factorise
Show it's even: show it's a multiple of 2
Show it's odd: show it's a multiple of 2, plus 1

Functions

$f(4)$: *Substitute 4 into the function*

$f(g(x))$: *Substitute* $g(x)$ *into* $f(x)$ i.e. replace all values of x in $f(x)$ with the entire function $g(x)$

e.g. $f(x) = 2x + 3$, $g(x) = x - 3$, $fg(x) = 2(x\text{-}3) + 3$

Iteration – showing a root lies between 2 points:

If there is **a change in sign** for *y* for two particular values of *x* then we can say there is **a root** between these values of *x* and we can say that the equation f(*x*) = 0 will have a solution between these two values of *x*.

Solve quadratic inequalities

e.g. solve $x^2 + 5x - 24 \geq 0$

1. Factorise: $(x + 8)(x - 3) \geq 0$
2. Solve: x = -8, x = 3
3. Sketch the graph 

4. Values that satisfy the inequality $x \leq -8, x \geq 3$

Bearings

Measure from the North

Measured in a clockwise direction

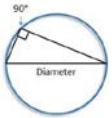
Written using 3 digits

Bearing of B **from A** (start at A) 

Bearing of A **from B** (start at B) 

Circle Theorems

Angle at the centre is twice the angle at the circumference



Angles in a semicircle are 90°.

Angles in the same segment are equal.

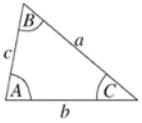
Opposite angles of a cyclic quadrilateral add up to 180).

Alternate segment theorem.

Tangents from an external point are equal in length.

The tangent to a circle is perpendicular (90°) to the radius

Sine rule



angles: $\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$

sides: $\frac{a}{\sin} = \frac{b}{\sin B} = \frac{c}{\sin C}$

Cosine rule

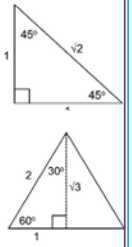
$$a^2 = b^2 + c^2 - 2bc\cos A$$

Area of a triangle

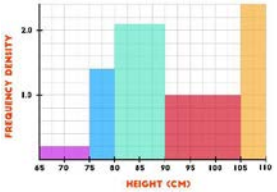
$$\frac{1}{2}ab\sin C$$

Exact Trig values

Angle (θ)	sin(θ)	cos(θ)	tan(θ)
0°	0	1	0
30°	$\frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{3}}$
45°	$\frac{1}{\sqrt{2}}$	$\frac{1}{\sqrt{2}}$	1
60°	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$\sqrt{3}$
90°	1	0	undefined



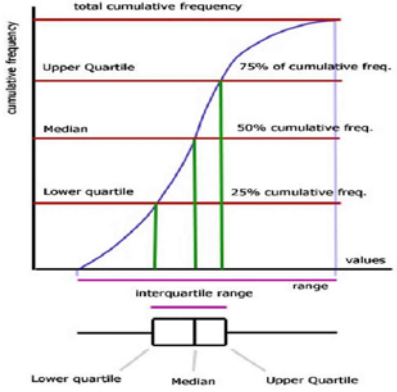
Histograms



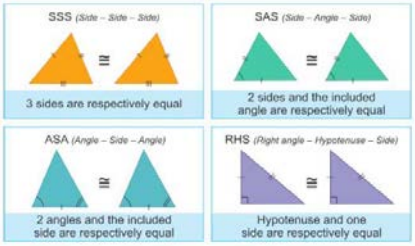
FD = Frequency density

$$FD = \frac{Frequency}{Class\ Width}$$

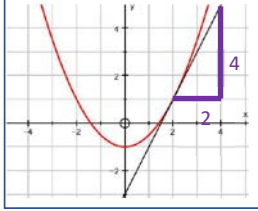
Cumulative Frequency Diagrams and Box Plots



Congruent triangles

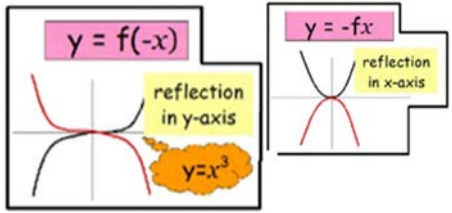


Gradients of curves



Gradient of a curve at a point = gradient of the tangent at the point

Transformation of a graph



Generic:

- ❑ I think…
- ❑ In my opinion…
- ❑ I agree/disagree with … because…
- ❑ The answer is … because…
- ❑ Another way of looking at this is…

Art:

- ❑ To further develop my idea, I could…
- ❑ In my opinion…
- ❑ I have taken inspiration from…

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…

Health & Social Care:

- ❑ This is a strength because…
- ❑ This is a weakness because…
- ❑ I conclude…

Performing Arts:

- ❑ Within my performance I…
- ❑ I would suggest they… to improve their performance
- ❑ They use these techniques in their work to show…

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…

History:

- ❑ This links to my next point because…
- ❑ The source is a…
- ❑ The source was made in…

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 … as … increases/decreases, … increases/decreases.
- ❑ The pattern the data shows is…
- ❑ One key fact from the topic was…

Technology:

- ❑ The design could do with…
- ❑ Aspects I found difficult were…
- ❑ If I were to do this again I would…

Music:

- ❑ As I listened to the music, I felt…
- ❑ This sounds like…
- ❑ I would suggest they… to improve their performance

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…

BTEC Tech Award Performing Arts /Component 2

Structure of the Component
You will develop your knowledge and understanding of a performance style by participating in workshops and rehearsals. You will replicate a professional performance repertoire and perform it to audience.

What I will need to do

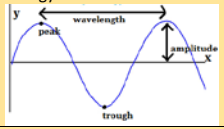
- Attend and participate in a series of workshops.
- Watch and analyse a piece of professional performance repertoire.
- **Learn and rehearse** a piece of professional performance repertoire.
- **Record your progress in a log book**

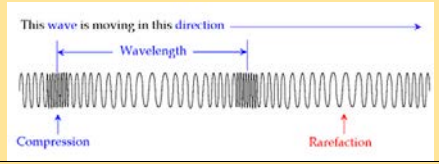
	Key Term	Explanation
1	**What is a professional performance repertoire?**	**A professional performance repertoire is a performance created by and performed by professionals**

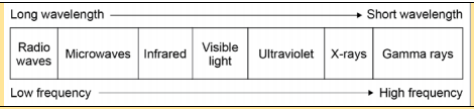
	Key Term	Explanation
2	**Skills audit**	A skills audit demonstrates what skills you are good at and what you need to improve on
3	**Long term targets**	Identifying areas to develop and review throughout the rehearsal and performance process
4	**Strengths**	What were you good at? Why were you good at it? What evidence do you have to demonstrate this?
5	**Areas to develop**	What did you find difficult? Why did you find it difficult? What evidence do you have to demonstrate this?
6	**Target setting**	How will you improve your areas to develop? What activity will you do to improve? What impact will this have? SMART (specific, measurable, attainable, realistic, time)
7	**Responding to feedback**	What did your teacher or peers tell you that you were good at / needed to improve on? What did you do about it?

	Command word	Definition
9	**Demonstrate (pass)**	Show that you can do a particular activity or skill
10	**Describe (pass)**	Give a clear, straightforward description which includes all of the main points.
11	**Explain (merit)**	Give logical reasons to support your view.
12	**Analyse (distinction)**	Identify several relevant factors, show how they are linked, and explain the importance of each.

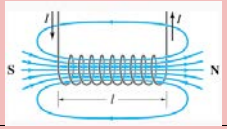
	P5 – Forces and motion	Taught in Y10
1	Scalar	A measurement that has both only magnitude e.g. distance, speed, time, temperature.
2	Vector	A measurement that has both magnitude and direction e.g. displacement, velocity, acceleration.
3	Force (F)	A push or pull on an object due to the interaction with 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 ^	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.

	P6 Waves key words	
1	Wave	A transfer of energy from one place to another. No matter is transferred by a wave.
2	Transverse wave	A wave in which the vibration is perpendicular to the direction of energy transfer. 
3	Peak	The top of the wave.
4	Trough	The bottom of the wave.
5	Amplitude	The displacement of the wave from the mid-point. The distance from the mid-point of the wave to the peak or trough .

6	Longitudinal wave	A wave in which the vibration is parallel to the direction of energy transfer. 
7	Compression	An area of increased pressure in a longitudinal wave. Where particles are closer together.
8	Rarefaction	An area of decreased pressure in a longitudinal wave. Where particles are further apart.
9	Wavelength	The distance from a point on one wave to the identical point on an adjacent wave. e.g. peak to peak or trough to trough on a transverse wave. Compression to compression on a longitudinal wave.
10	Period	The time taken for one complete wave to pass a point. Measured in seconds.
11	Frequency	The number of waves that pass a point in a second. Measured in Hertz (Hz).
12	Wave speed	The speed at which a wave travels. Measured in meters per second (m/s).
13	Reflection ^	The bouncing of a wave off an object e.g. a mirror for light.
14	Transmission ^	The passing of a wave through a medium (object or substance).
15	Refraction ^	The change in direction of a wave, due to the change in speed of a wave, when it enters a new medium (substance or object). This is a form of transmission.
16	Absorption ^	An object absorbing the energy in a wave. The wave ceases to exist if it is absorbed. Absorption causes an increase in temperature.
17	Electromagnetic wave	A wave from the electromagnetic spectrum.
18	Electromagnetic spectrum	The differing waves of the electromagnetic spectrum and their decreasing wavelength, increasing frequency.

		
19	Lens ^	An object that refracts light to form an image. E.g. glasses, magnifying glass, microscope.
20	Concave lens ^	A lens that is wider at the top and bottom than the middle. 
21	Convex lens ^	A lens that is wider an the middle than the top and bottom. 
22	Magnification ^	The increase or decrease in size of an image compared to the object.
23	Black body ^	An object that does not emit its own light. All bodies (objects) absorb and emit infrared radiation. The warmer the body (object) the more radiation it emits.
24	Perfect black body ^	A body (object) that absorbs all of the radiation incident upon it. A good absorber will also be a good emitter of radiation, so a perfect black body will also be a perfect emitter of radiation.

	P7 Magnetism and electromagnetism	
1	Permanent magnet	An object that produces its own magnetic field. This will have a north pole and a south pole. Magnetic metals are iron, nickel and cobalt.
2	Induced magnet	A material that becomes a magnet when placed in a magnetic field.
3	Magnetic field	The area around a magnet where a force acts on another magnet or magnetic material (iron, nickel, cobalt). The force between a magnet and magnetic material is always attraction. The force

		between two magnets can be attraction or repulsion.
4	Electromagnet	When a current passes through a wire a magnetic field is induced around the wire.
5	Solenoid	Several loops of wire. Wire is looped to increase the strength of the magnetic field around the wire, and create a magnetic field similar to that of a bar magnet. 
6	Motor effect	When a current carrying a wire is placed inside a magnetic field the two magnetic fields interact causing a force on the wire.
7	Fleming's left hand rule	A rule used to find the direction of force due to the motor effect. Thumb shows direction of force, first finger the direction of magnetic field lines, second finger the direction of current. 
8	Induced potential ^	When a wire is moved within a magnetic field a potential difference is produced in the wire. If the wire is part of a complete circuit a current will flow.
9	Generator effect ^	Moving a coil of wire within a magnetic field creates a potential difference in the wire. This is used to generate electricity in power stations.
10	Alternator ^	A generator used to produce an alternating current.
11	Dynamo ^	A generator used to produce a direct current.
12	Transformer ^	A device used to increase or decrease the size of potential difference and current within a wire.

	P8 Space physics – physics only ^	
1	Solar system	Our solar system consists of sun, 8 planets and dwarf planets orbiting the sun.
2	Milky Way galaxy	The galaxy that our sun and solar system is part of.
3	Nebula	Cloud of dust and gas that will form a star.
4	Star life cycle	The cycle that all stars go through from formation to death.
5	Orbit	The circular motion of an object around another, held a certain distance from the object by gravity.
6	Doppler effect	The effect of increasing the wavelength from an object as it travels away from a point.
7	Red-Shift	Stars moving away from us have wavelengths towards the red end of the spectrum due to the Doppler effect.

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)

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 x (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	$V_P I_P = V_S I_S$

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

LAB- Term 1

Planning a session

Name of session:

Date and Time:	Team/Group:	Equipment Needed:
Location:	Duration:	Health & Safety:

Aim of Session:

Context and previous content:

Warm Up Activities:	Main Activity:	Cool-Down
Coaching Points/Questions:		Additional Notes:

1.Who is it you are coaching males, females. Children?

2.Where will the session take place. Astro, field, swimming pool and sports hall.

3.How long the session will last.

4.What equipment will you be using.

5.Risk Assessment and checking equipment or playing surface.

6.What will you be working on this session. Plus aims of the session. What specific skill are you working on.

7.Warming up. This involves bringing the heart rate up . Dynamic and static stretching can be used to mobilise joints.

10.Cool down. This involves bringing the heart rate down and static stretching to help with flexibility.

Session Plan

9.Main skills and drills section. This should be the main content of the session.

8.Specific skills/drills/techniques.

11.The coach might make notes in this section.

Targets for development

1. SMARTER targets (specific, measurable, achievable, realistic, time-related, exciting, recorded).

Development plans should include:-

2. Aims and objectives
3. Goals
4. SMARTER targets (specific, measurable, achievable, realistic, time-related, exciting, recorded).
5. Activities and opportunities, e.g. training, courses, qualifications
6. Possible barriers. (Finance, transport, equipment and injury)

Sheffield Park Academy

Planning definitions

1.Participants:- Age, ability, gender, numbers, medical and specific needs.
2.Aims and objectives:- Target setting, expected outcomes.
3.Resources :- Equipment, time and environment.
4.Warm-up: This should get the brain and the body both physically and mentally prepared for exercise.
5.Pulse raiser: activities that can be used to gradually increase the pulse rate.
6.Mobilise: Activities to mobilise the main joints of the body such as knees and hips,
shoulders, ankles and wrists.
7.Stretching (different types of stretches for the main muscles used in sports activity sessions – deltoids, triceps, erector spinae, obliques, quadriceps, hamstrings, gastrocnemius).
8.Main component/components of activity, e.g. skill introduction, development, conditioned game, final activity.
9.Incorporate safe activities to minimise injury.
10.Cool down.
11.Pulse lowering: activities that gradually decrease in intensity.
12. Stretch: carry out maintenance and developmental stretches with the main muscles that were used in the activity session, including deltoids, biceps, triceps, erector spinae, abdominals, obliques, hip flexors, gluteus maximus, quadriceps, hamstrings, gastrocnemius.
13. Health and safety considerations: adhere to health and safety guidelines, and consider appropriate risk management strategies.
14. Risk assessment: environmental and injury **prevention.**

LAC- Term 1

Review

1. Feedback for review, e.g. from participants, supervisor, observers, self-analysis.
2. Methods, e.g. questionnaires, comment cards, observation records, direct verbal feedback.
3. Strengths and areas for improvement (demonstration of attributes, completion of responsibilities, e.g. planning, content, organisation, health and safety and achievements).

YEAR 11 TEXTILES KNOWLEDGE ORGANISER – UNIT 3 STREET FESTIVAL.

Keywords.

Formal Elements	Line, Tone, Colour, Pattern, Shape, Texture and Form
Line	Line is the path left by a moving point.
Shape	Shape is an area enclosed by a line.
Tone	This refers to the lightness or darkness of something.
Pattern	A design that is created by repeating lines, shapes, tones or colours.
Surface texture	Refers to the surface quality in a work of art.
Media	The material used to create artwork.
Technique	The way tools and media are used to create artwork.
Stitch and Slash	It involves **stitching** together two or more layers of fabric one on top of the other in parallel diagonal lines (bias) and cutting through the top layers leaving the base layer intact.
Mola	Is a fabric manipulation method where designs are cut out of the top layer of fabric and then layers are added underneath.
Silk Painting	Designs are outlined with gutta or water-based resists.
Couching	In embroidery, couching is a techniques in which yarn or other materials are laid across the surface of the fabric and fastened in place with small stitches of the same or a different yarn.
Embroidery	Using a needle to apply thread or yarn.
Angelina Fibres	Are glittery strands that can be incorporated into your wet felting, needle felting or spinning.

Command Words.

Research	Is the process of solving problems and finding facts in an organised way. Research is done by what is known and building on it.
Analyse	Identify several relevant factors, show how they are linked, and explain The importance of each.
Method	A procedure, technique, or way of doing something.
Evaluation	Bring together all of your information and make a judgement on the Importance or success of something.
Generate Ideas	The process of creating, developing and communicating abstract, concrete or visual ideas.
Develop	To grow or change into a more advanced or stronger form or 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.

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