Student Name:

MAGNUS
CHURCH OF ENGLAND
ACADEMY

Knowledge Organiser: November 2024

Year 11

"Wise men and women are always learning, always listening for fresh insights."
Proverbs 18:15 (The Message)

Determination – Integrity – Ambition – Humility – Compassion

Using Your Knowledge Organiser

Your teachers have worked hard to produce this document for you and have selected the most important knowledge that you will need to know to make good progress in their subjects. **You should aim to learn all the information in your knowledge organiser off by heart.**

Try out some of the strategies listed here to help you achieve this.

1. Read the knowledge organiser and ensure you understand it. Try and make links between the information on it and what you already know and do.

2. Look, Cover, Write, Check – the traditional way of learning spellings!

3. Create a Mnemonic – Using the first letters of keywords create a memorable sentence or phrase.

4. Create an acronym – using the first letters of keywords to create a word to prompt you to remember all of the information.

5. Write it out in full on a blank version of the same format.

6. Write it out in note form, reducing it to key ideas or words. Try the same format but a smaller piece of paper.

7. Recreate the knowledge organiser as a series of images and words

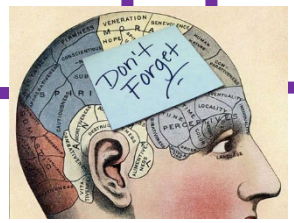
8. Write a set of test questions for yourself using the organiser.
    - Answer these without the organiser the next day.
    - Swap your questions with a friend to increase challenge.
    - Turn your questions in to a game by putting them on cards and playing with friends.

9. Chunk the knowledge into smaller bitesize sections of around 5 pieces of information. Concentrate on mastering a chunk before you start on the next.

10. Try to make connections between the information and people you know. E.g. Visualise yourself trying these strategies with a specific teaching group.

11. Talk about the information on the knowledge organiser with another person. Teaching someone else about it helps us learn it.

12. Say the information out loud – rehearse it like learning lines for a play, or sing it as if you are in a musical!



Year 11 Half term two key vocabulary

English Language	**English Literature**	**Maths (F)**	**Maths (H)**	**Science - Biology**	**Science-Chemistry**
Judgmental Self-righteous Disillusioned Exploits Attentive Parenthesis Character trait Rhetoric Recipient Comparative Conjunction	Capitalism Socialism Imperious Conceited Privileged Microcosm Marginalisation Construct Perspective Social Responsibility	Term Co-efficient Simplify Solve Substitute Form Expand Factorise Variable Simultaneous Equation	Indices Algebraic Fractions Re-arrange Equations Simultaneous Equations Elimination (simultaneous equations) Substitution (simultaneous equations) Variable Expand Factorise	Extinction Classification Binomial system Linnean system Domain Evolution Fossil Fossil Record	Formulations Mobile phase Stationary phase Repeatable Random error Systematic error Precise Accurate Finite resource Renewable resource Sustainable development Agricultural
Science – Physics	**History**	**Geography**	**French**	**GCSE RS**	**Sociology**
Solenoid Electromagnet Magnetic field Current Force Magnetic flux density Density	Negotiators Exterminators Emancipation Abolitionist Plantations Scalping Chiefs Manifest Destiny Fort Laramie Treaty Bozeman Trial	Abiotic Biome Producer Consumer Ecosystem Biodiversity Interdependence Deforestation Subsistence	Noun Adjective Verb Connective Opinion verb Infinitive Frequency expression Conjugate Adjectival agreement Wow phrase Exclamation	Buddha Jakata Ascetics Meditation Enlightenment Mara Dhamma The three marks of existence The four noble truths Arhat	Crime Deviance Socially defined behaviour Reported crime Recorded crime Validity Dark figure of crime British Crime Survey Social constructed Peer group pressure
Drama	**Child Development**	**Dance**	**Art**	**PE**	**Technology**
Dramatic tension Suspension of Disbelief Climax Anti-Climax Atmosphere Mood Target Audience Atmosphere Symbolic Intention	Delayed gross mental skills Delayed fine motor skills Poor concentration levels Down's syndrome Embryo Delayed literacy skills English as an additional language Positive role model Social norms and values Limited interaction	Command words Subject Specific Vocabulary Stimulus Motif Development Choreographic device Choreographic intent Action Space Dynamics	Response Develop Experiment Annotate Review Reflect Independent Composition Analyse Interpret	Components SMART Safe practice Adaptability Proactive Reactive Laissez-faire Progressive practice Organisation Control measures	Iterative design Anthropometrics Ergonomics Isometric projection Marketability Oblique Perspective drawing Collaborative designing User-centres design Systems approach
Construction	**iMedia**	**Hospitality and Catering**	**Music**	**Business**	**Core RS**
Structure Sustainability Harvesting Roofing Insulation Boarding Panels Party walls Interior Exterior	Visual Identity Visualisation Diagram Mind Map Moodboard Central Subject Node Topic Node Sub Node Connector/Branch/Line Conventions Concept sketches	RDI Free sugars Protein complementation BMR Osteoporosis Anaemia Pernicious anaemia PAL EAR	Falsetto Syllabic Melismatic Acapella Distortion Synthesised Amplified Phasing Panning Sample	Medium Promotional mix Push Strategies Budget Assets Capital Start-up costs Running Costs Cost of sales Retained profit Liquidity Trade Credit	Crime Punishment Evil Poverty Mental illness Addiction Greed Retribution Deterrence Reformation

Year 11 — English Literature *'Conflict Poetry'*

Key Vocabulary

Charge of the Light Brigade	**Brigade**—*military unit (or group of people)* **Dismayed**—*upset* **Blundered**—*made a mistake* **Sabres**—*swords* **Plunged**—*Steeply dropped* **Sundered**—*torn away*
The Man He Killed	**Ancient**—*very old* **Nipperkin**— *a half-pint* **Infantry**—*a branch of an army made up of soldiers* **Foe**—*enemy* **Quaint**—*attractively old-fashioned* **Half-a-crown**—*old british coin*
Poppies	**Armistice**—*peace agreement* **Graves**—*places where bodies are buried* **Crimped**—*folded/interfered with* **Spasms**—*extreme pains/muscle jerks* **Blockade**—*something that prevents access to and from a place* **Rounded up**—*collected/gathered together* **Impulse**—*sudden desire* **Blackthorns**—*bushes with fruits* **Intoxicated**—*drunk* **Skirting**—*avoiding/going around the edge* **Ornamental**—*pretty* **Reinforcements**—*additional things that strength or add support* **Inscriptions**—*written sayings*
The Prelude	**Unloosed**—*released/gave/given* **Glittering**—*shining and twinkling* **Idly**—*in a lazy way* **Craggy**—*rough and rocky* **Utmost**—*extreme* **Boundary**—*Edge/border* **Elfin**—*elf-like* **Lustily**– *energetically (with sex on the mind)* **Heaving**—*lifting up* **Instinct**—*gut feeling* **Stature**—*height* **Strode**—*walked* **Trembling**—*shaking* **Covert**—*secret* **Mooring**—*anchoring* **Solitude**—*quiet aloneness* **Spectacle**—*sight to see*
The Destruction of Sennacherib	**Cohorts**—*associates/groups of people* **Gleaming**—*shining* **Sheen**—*shine* **Withered** - *shrank and died* **On the morrow**—*on the next day* **Heaved**—*lifted up/threw* **Steed**—*horse* **Distorted**—*twisted/lied about* **Lances**—*knives* **Wail**—*loud cry* **Gentile**—*non-Jewish person*
A Poison Tree	**Wrath**—*anger* **Deceitful**—*dishonest* **Wiles**—*tricks* **Beheld**—*looked/saw*
Catrin	**Fierce**—*strong* **Confrontation**—*argument* **Environmental**—*relating to surrounding conditions* **Rosy**—*wonderful* **Defiant**—*angry and uncooperative* **Glare**— *angry*
Cousin Kate	**Cottage**—*house* **Maiden**—*young unmarried woman* **Contented**—*satisfied and happy* **Mindful**—*aware/careful* **Flaxen**—*pale yellow* **Lured**—*attracted* **Thereof**—*of that/of it* **Shameless**—*without shame* **Pure**—*total/totally/nothing else mixed in* **Outcast**—*person who is disliked* **Howl**—*yell* **Writ**—*official written order* **Fret**—*worry*

English Literature Paper 1

How long is it?	1 hour, 45 minutes.
How many questions are there?	You have to answer two questions on Macbeth (1 hour) and one question on An Inspector Calls (45 minutes).
How do I answer 1(a) Macbeth? *This is an extract question.*	Read the question carefully, find the key words. Highlight/underline at least three different quotations you can explore that help answer the question. Be clear in your answer that you know when the extract is from in the text. Write at least three analytical paragraphs, using quotations in each one. WHAT HOW WHY Ensure that you unpick the language of each quote to further your analysis.
How do I answer 1(b) Macbeth? *This is an essay question.*	Read the question carefully, find the key words. Make a quick bullet point plan of moments in the play you can write about linked with the question, for example a question about Guilt will reference the moment in Act 2 when Macbeth returns from killing Duncan. **Remember you cannot use the scene from the extract in this question.** Write at least three analytical paragraphs, (WHAT, HOW, WHY) referencing different moments in the play. **You don't need to use quotes here, you can just talk about the moment in the play.** In your analytical paragraphs, you **must** discuss how the play links with the context (great chain of being, supernatural, James I, patriarchal society etc.)
How do I answer 7 or 8 An Inspector Calls? *This is an essay question.*	Read the question carefully, find the key words. Make a quick bullet point plan of moments in the play you can write about linked with the question, Write your introduction, ensuring you write about the context of the play in detail before linking it to the question. Write at least five analytical paragraphs (WHAT, HOW, WHY), referencing different moments in the play. **You don't need to use quotes here, you can just talk about the moment in the play.** In your analytical paragraphs, you **must** discuss how the play links with the context in detail (socialism, capitalism, younger generation v older generation, patriarchal systems)

Year 11 — Component 1 English Language

Box 1 Vocabulary: Character Traits– Jonathan and Frances	
Term	**Definition**
Judgmental	Having or displaying an overly critical point of view.
Self-righteous	Having or characterized by a certainty, especially an unfounded one, that one is totally correct or morally superior.
Impatient	Having or showing a tendency to be quickly irritated or provoked; restlessly eager; intolerant.
Unsympathetic	Not feeling, showing, or expressing sympathy; uncaring; cold.
Demanding	Making others work hard or meet high standards; not easily satisfied; severe.
Sarcastic	Marked by or given to using irony in order to mock or convey contempt; derisive.
Vulnerable	Exposed to the possibility of being harmed (physically or emotionally).
Emotional	Having feelings that are easily excited and openly dis-played; sensitive.
Disillusioned	Disappointed in someone or something that one discovers to be not as good as one had believed.
Pride	A feeling of deep pleasure or satisfaction derived from one's own achievements, the achievements of those with whom one is closely associated, or from qualities or possessions that are widely admired.
Insensitive	Showing or feeling no concern for others' feelings; blasé.
Takes advantage of/ exploits	Uses for one's own benefit; uses.

Box 2 Vocabulary: Character Traits: Ruby Lennox	
Term	**Definition**
Attentive	Pays close attention to something; concentrating.
Loner	A person that prefers not to associate with others;
Detached	Separate or disconnected; isolated.
Considerate	Careful not to inconvenience or harm others; caring;
Sensitive	Having or displaying a quick and delicate apprecia-

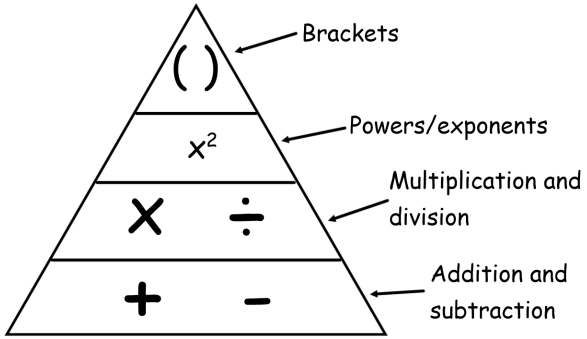
Box 3: Varying Sentence Starts:

Narrative/

Fiction Writing (C1):

- ❑ When it happened,
- ❑ Where it happened,
- ❑ Adverb start,
- ❑ Pair of pairs,
- ❑ With a +action,
- ❑ Verb start,
- ❑ Simile start,
- ❑ No….. No…. No…., only….
- ❑ It wasn't just…., it was…,
- ❑ Adjective start,
- ❑ So, so, so: ….
- ❑ Show three: tell one,
- ❑ Triple adjective: …

Order of Operations



Inverse Operations

+ ⟷ −

× ⟷ ÷

$\square^2$ ⟷ $\sqrt{\square}$

$\square^3$ ⟷ $\sqrt[3]{\square}$

Square Numbers

1×1 or $1^2 = 1$
2×2 or $2^2 = 4$
3×3 or $3^2 = 9$
4×4 or $4^2 = 16$
5×5 or $5^2 = 25$
6×6 or $6^2 = 36$
7×7 or $7^2 = 49$
8×8 or $8^2 = 64$
9×9 or $9^2 = 81$
10×10 or $10^2 = 100$
11×11 or $11^2 = 121$
12×12 or $12^2 = 144$

Cube Numbers

$1^3 = 1 \times 1 \times 1 = 1$
$2^3 = 2 \times 2 \times 2 = 8$
$3^3 = 3 \times 3 \times 3 = 27$
$4^3 = 4 \times 4 \times 4 = 64$
$5^3 = 5 \times 5 \times 5 = 125$

Written methods

Multiplication (Grid method)

26 x 5

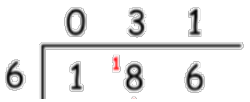
×	20	6
5	100	30

The 26 is broken into 20 and 6. These numbers are multiplied as shown.

The results are then added, 100 + 30 = 130.

Division (Bus stop)

186 ÷ 6



6 doesn't divide into 1, so the 1 carries.
6 divides into 18, 3 times.
6 divides into 6, once.

Multiplying Integers

If the signs are the same, the result is positive.

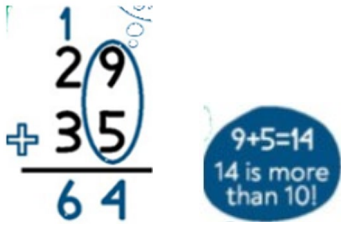
+ × + = + − × − = +

+ × − = − − × + = −

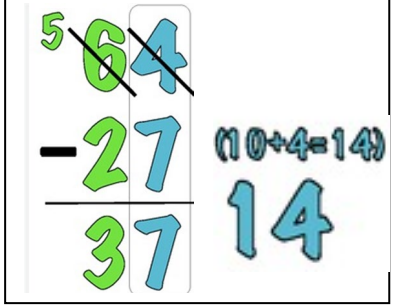
Adding Negative Numbers

+ add +	Add the numbers; end result is a positive E.g. 3 + 5 = 8
+ add −	Find the difference between the numbers; end result takes the sign of the number with largest magnitude. E.g. 3 + − 5 = -2
− add −	Add the integers; end result is a negative -3 + -5 = -8

Column Addition



Column Subtraction



Rounding (to different degrees of accuracy)

* 5 and above rounds up *

24.356 To the nearest integer (whole number)

24

24.356 To 3 significant figures (starting at first non-zero digit)

24.4

24.356 To 2 decimal places (digits after the decimal point)

24.36

Draw in your line then check the number to the right

Algebra can be seen in many forms. The ones you will see most often are in an equation, expression, inequality and identity

Expression: x + 3

An expression is made up of terms and never has an equals sign

Equation: x + 3 = 4

An equation always has an equals sign

Inequality: x + 3 < 4

An inequality has either a <, >, ≤ or ≥ sign

Identity: 2x ≡ x + x

The two sides are always equal n matter the value of x

Inverse Operations

A pair of inverse operations are when two operations performed on a number (or variable), results in the original number (or variable)

+	⟷	−
×	⟷	÷
a^2	⟷	$\sqrt{a}$
a^3	⟷	$\sqrt[3]{a}$

Subject Terminology

Term	A term is either a single number or variable, or numbers and variables multiplied together.
Co-efficient	A number used to multiply a variable.
Simplify	Collect like terms (with same variable) to make an expression or equation simpler
Solve	To find a value (or values) we can put in place of a variable that makes the equation true.
Substitute	To replace variables with given values
Form	To represent problems algebraically
Expand	Multiply each term inside brackets by terms on the outside of the brackets.
Factorise	Factorising is the inverse of expanding brackets by finding what to multiply to get an expression.

Expanding and Simplifying Double brackets

To expand two binomials, we multiply each term by both terms in the other bracket

Expand (a + b)(c + d)

ac + bc + ad + bd

Example: Expand (a + 2)(a − 3)

×	a	+2
a	a^2	2a
-3	-3a	-6

$a^2 - a - 6$

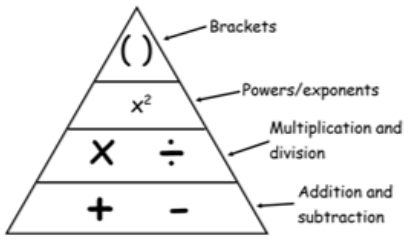
Expanding and Factorising

$3(x+2)$ ⇄ 3

×	x	$+2$
3	$3x$	$+6$

⇄ $3x+6$

Order of Operations



Solving equations

$4x + 7 = 31$

-7 -7

$4x = 24$

$\div 4$ $\div 4$

$x = 6$

Subject terminology	
Indices	Another name for powers, these can be positive, negative, integer or fractional.
Algebraic Fractions	Fractions which involve variables, either to solve or simplify
Re-arrange	Change the subject of an equation
Equations	A process which has an equal sign, used for solving
Simultaneous Equations	Two equations with two different variables, both of which can be solved
Elimination (simultaneous equations)	When there is a common term in both equations, these can be cancelled out
Substitution (simultaneous equations)	When there is a common variable in both equations, one can be substituted into the other
Variable	The letter which is used in algebra

General rule: $a^m \times a^n = a^{m+n}$

$2^5 \times 2^7 = 2^{5+7} = 2^{12}$ $\quad x^3 \times x^8 = x^{3+8} = x^{11}$

General rule: $a^m \div a^n = a^{m-n}$

$2^{14} \div 2^7 = 2^{14-7} = 2^7$ $\quad x^{10} \div x^8 = x^{10-8} = x^2$

General rule: $(a^m)^n = a^{m \times n}$

$(5^4)^2 = 5^{4 \times 2} = 5^8$ $\quad (4h^9)^3 = 4^3 \times h^{9 \times 3} = 64h^{27}$

Key Fact

Remember:

$p = p^1$

$p^0 = 1$

Negative indices: A negative power performs the reciprocal

General rule: $a^{-m} = \frac{1}{a^m}$

$3^{-1} = \frac{1}{3}$ $\quad \left(\frac{3}{4}\right)^{-1} = \frac{4}{3}$ $\quad 7^{-2} = \frac{1}{7^2} = \frac{1}{49}$ $\quad 2^{-3} = \frac{1}{2^3} = \frac{1}{8}$

Fractional indices: The denominator of a fractional power acts as a root. The numerator acts as a normal power.

General rule: $a^{\frac{m}{n}} = (\sqrt[n]{a})^m$

$27^{\frac{2}{3}} = (\sqrt[3]{27})^2 = 3^2 = 9$ $\quad \left(\frac{25}{16}\right)^{\frac{3}{2}} = \left(\frac{\sqrt{25}}{\sqrt{16}}\right)^3 = \left(\frac{5}{4}\right)^3 = \frac{125}{64}$

Simultaneous Equations

Solving through elimination

$3x + 8y = 23$

$x + 2y = 7$ (×3)

$3x + 6y = 21$ (×3) ☆

$2y = 2$

$y = 1$

☆ $3x + 6(1) = 21$

$3x + 6 = 21$

$3x = 15$

$x = 5$

Solving through substitution

① $3x + 2y = 21$

② $y = x + 3$

A) Substitute y and solve to find x.

① $3x + 2(x + 3) = 21$

$3x + (2x + 6) = 21$

$5x + 6 = 21$

$5x = 15$

$x = 3$

B) Input x to find y.

② $y = (3) + 3$

$y = 6$

Adding algebraic fractions

To add algebraic fractions

1) Find the common denominator of the fractions
2) Cross multiply and write as a single fraction
3) Expand and simplify any brackets

Example: $\frac{4}{x+3} + \frac{5}{x-2}$

$\frac{4}{x+3} + \frac{5}{x-2} = \frac{4(x-2) + 5(x+3)}{(x+3)(x-2)}$

Find a common denominator.

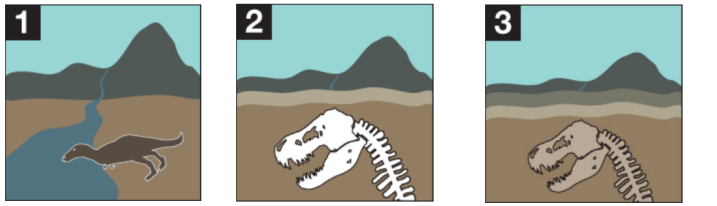
Write as a single fraction straight away.

$= \frac{4x - 8 + 5x + 15}{(x+3)(x-2)}$

$= \frac{9x + 7}{(x+3)(x-2)}$

Paper 2 Subject: Science - Biology Topic: B14 Genetics and Evolution

How Fossils Form

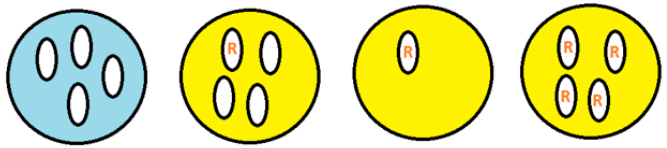


A plant or animal dies and is buried.

The soft parts decay. The skeleton is buried in sediment. Layers of sediment build up. The sediment compacts and turns to rock.

The bones are dissolved by water seeping through the rock. Minerals in the water replace the bone leaving a rock replica of the original been called a fossil.

How bacteria become antibiotic resistant



Bacteria growing on a petri dish

One bacteria mutates to become resistant to antibiotics. Antibiotics are added to the petri dish.

The resistant bacteria survives whilst all others die.

The resistant bacteria reproduces and passes on its genes to the next generation.

Simple rules for writing scientific names

- The first name is the name of the genus to which the organism belongs. It is written with a capital letter.
- The second name is the name of a species to which the organism belongs. It is written with a lower case letter.
- The two names are underlined when hand written or are in italics when printed.

E.g. *Panthera leo* is the scientific name for Lion

Kingdom: Animalia (animal kingdom)
Phylum: Chordata (Vertebrates)
Class: Mammalia (mammals)
Order: Carnivora (carnivores)
Family: Felidae (cats)
Genus: *Panthera*
Species: *leo*

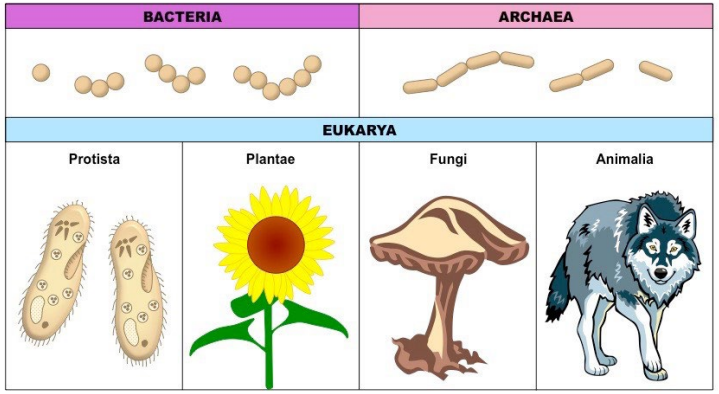
Reasons for Extinction

Taxonomic Ranks

Mnemonic to help you remember

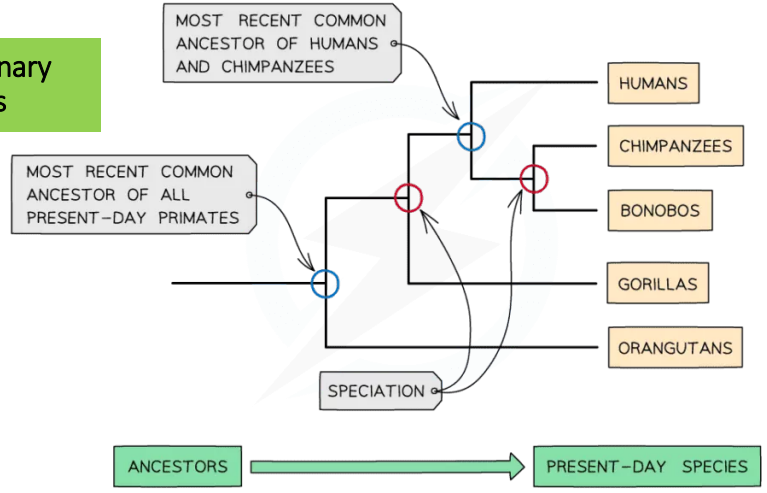
King	Kingdom	Kingdom is the highest level on the biological classification scale. All living creatures are classed as part of the Animalia Kingdom.
Prawn	Phylum	Phylum splits animals by major chracteristics. Vertebrates (fish, birds, mammals inc. humans) are in the Chordata Phylum.
Curry	Class	Class distinguishes further. Fish are divided into Chondrichthyes (cartilaginous fish) and Osteichthyes (bony fish).
Or	Order	Order further differentiates by physical characteristics.
Fat	Family	Family follows on from order by placing into groups by further physical characteristics. For example cod, coalfish, pollock and whiting are all members of the Gadidae family, and share features such as all having three dorsal fins.
Greasy	Genus	Genus is a further, final breakdown. For example cod are in the Gadus Genus to differentiate them from the other fish in the Gadidae family.
Sausages	Species	Species is the final step and pinpoints the exact creature. For example Atlantic cod's species name is *Gadus Morhua*.

Three Domains

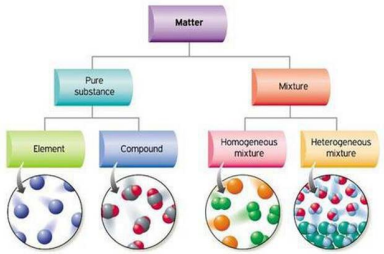


Subject Terminology	Definition
Extinction	No remaining individuals of a species alive.
Classification	The organization of living things into groups according to their similarities.
Binomial system	Each organism is named for its genus then its species.
Linnaean system	Classification of living organisms into groups based on their structure and characteristics.
Domain	The highest taxonomic rank, even higher than kingdom.
Evolution	The change of inherited characteristics within a population over time through natural selection.
Fossil	The preserved remains, impression or traces of animals, plants and other organisms that lived millions of years ago.
Fossil Record	The history of life on Earth as shown by fossils.

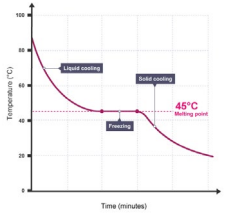
Evolutionary Trees



Pure substances and Mixtures

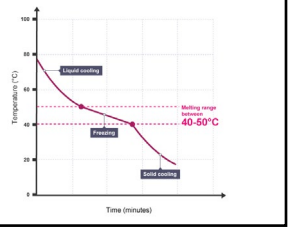


Pure substances have a sharp **melting point** but mixtures **melt** over a range of temperatures.



The horizontal part of the graph shows that the salol has a sharp melting point, so it is pure.

Impure salol (a mixture of salol and other substances) would produce a gradual fall in temperature as it freezes.

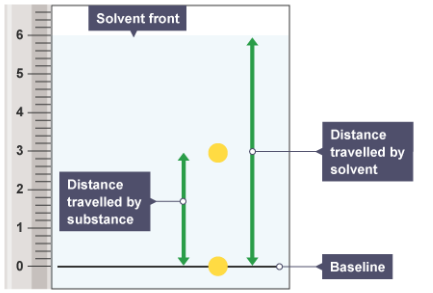


Chromatography

Paper **chromatography** is used to separate mixtures of **soluble** substances.

R_f values can be used to identify unknown chemicals if they can be compared to a range of reference substances. The R_f value is always the same for a particular substance.

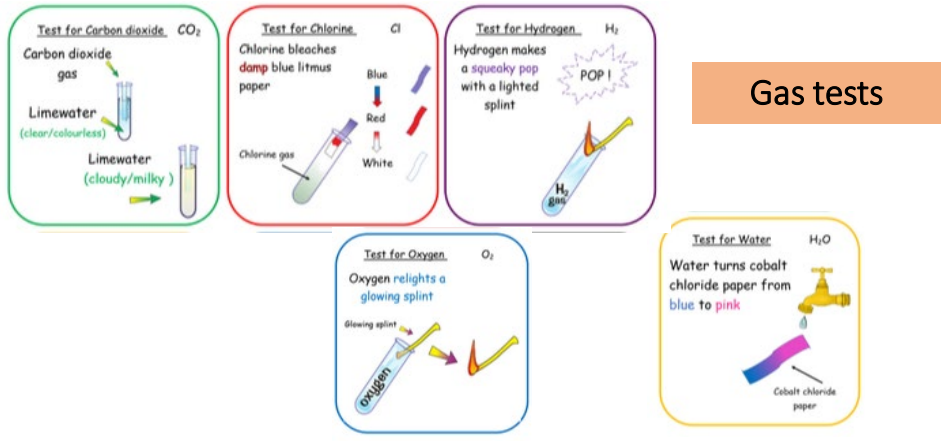
$$R_f = \frac{\textit{distance travelled by substance}}{\textit{distance travelled by solvent}}$$



Subject Terminology

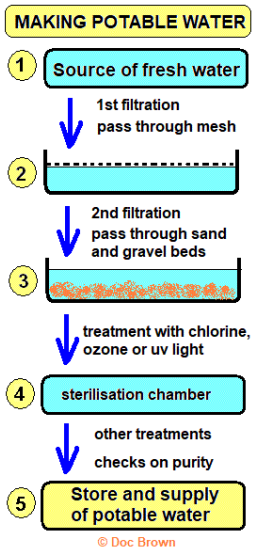
Key Word	Definition
Formulations	A mixture that has been designed as a useful product
Mobile phase	Phase in chromatography that moves, usually a solvent or mixture of solvents.
Stationary phase	Phase in chromatography that does not move, for instance, the paper in chromatography.
Repeatable	The same person doing the same investigation and getting similar or the same results.
Random error	An error that is unpredictable and caused by the person using equipment incorrectly, leading to anomalous results. This can be reduced (not prevented) by repeats and calculating a mean.
Systematic error	An error that is consistent and always out by the same proportion. Caused by the equipment and not the person. E.g. zero error.
Precise	How tightly clustered around the mean your result is, reflecting degree of random error
Accurate	How close your answer is to the true value

Gas tests



Paper 2 Subject: Science - Chemistry Topic: Chemistry unit 12 Earth's resources

Potable water

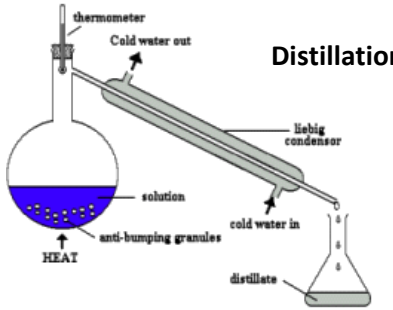


Water that is safe for humans to drink is called **potable water**.

Waste water from homes, industry and agriculture must be treated before being released into the environment.

Potable water can be made from sea water, through a process known as **desalination**.

Desalination can be done by **distillation** and by **reverse osmosis**

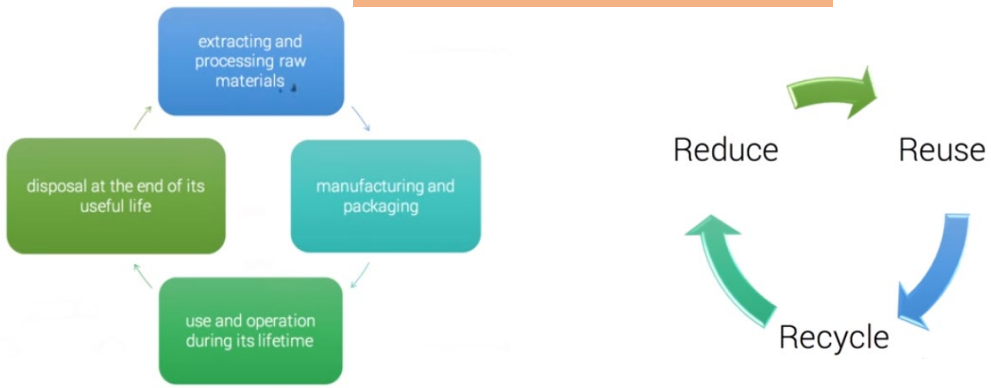


Distillation

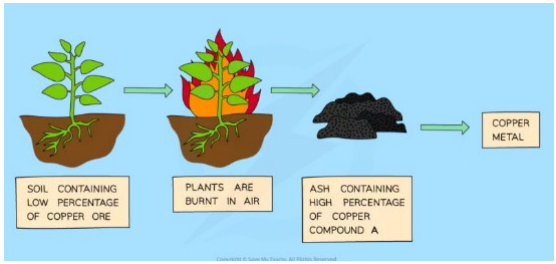
REVERSE OSMOSIS

Key Word	Definition
Finite resource	Resource that can only be used once and is in limited supply. For example, oil is a finite resource.
Renewable resource	Resources which will not run out in the foreseeable future. This could be because the reserves of the resources is huge, or because the current rate of extraction is low.
Sustainable development	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs
agricultural	Agriculture, or farming, is the cultivation of crops and animals to produce food and other products
synthetic	A material made by a chemical process, not naturally occurring
potable water	Water that is safe for humans to drink
filtration	used to separate an insoluble solid from a liquid.
desalination	the removal of salt from seawater
Fertiliser	A nutrient added to the soil to increase the soil fertility

Life Cycle Assessments

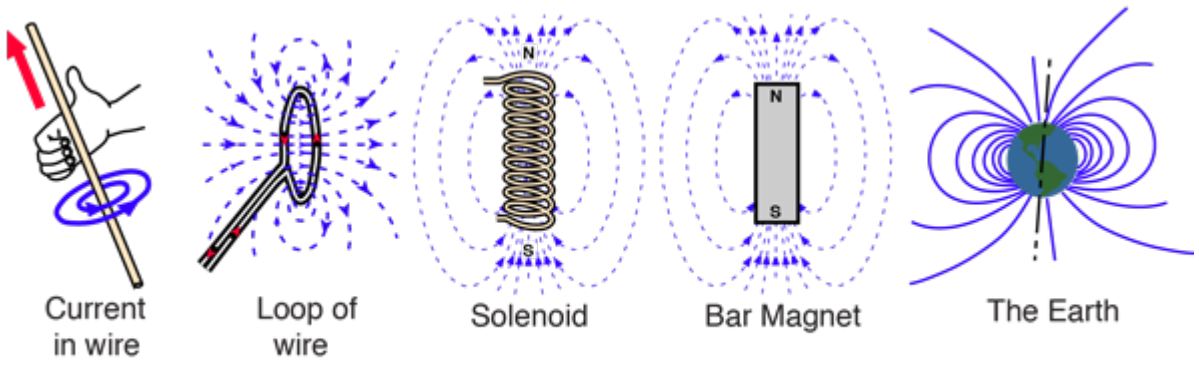


Alternative methods of extracting metals from Ores (higher only)



Phytomining: Using plants to absorb metal compounds from the ground through their roots. The plants are then burned to produce an ash containing a high concentration of the metal compounds.
Bioleaching: Using bacteria to extract metals from their ores.

Magnetic fields



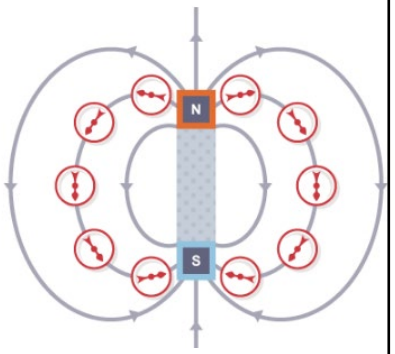
Magnetic Field Sources

Subject Terminology	Definition
Solenoid	a long piece of conducting (and insulated) wire is looped into a coiled cylinder. The magnetic field is uniform and strong.
Electromagnet	An electromagnet is a solenoid with an iron core
Magnetic field	The region around a magnet where a force acts on another magnet or on a magnetic material
Current	Rate of flow of electrical charge measured in amps
Force	A push or pull that acts upon an object as a result of that objects interactions with its surroundings
Magnetic flux density	magnetic field strength (force per unit length per unit current)
Density	A mass of a unit volume of a material substance Density = mass ÷ volume

Magnetic fields can be mapped out using a small plotting compass

1. place the plotting compass near the magnet on a piece of paper
2. mark the direction the compass needle points
3. move the plotting compass to many different positions in the magnetic field, marking the needle direction each time
4. join the points to show the field lines

The needle of a plotting compass points to the south pole of the magnet.



Ways in which you can make the magnetic field around a solenoid/electromagnet stronger:

1. Using a larger current.
2. Using an iron core.
3. Add more turns to the wire.
4. Place the turns of the wire more closely together.

Unit 1b

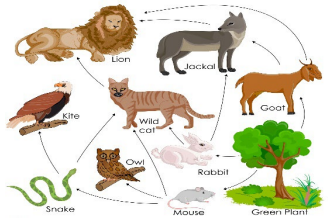
The Living World

What is an Ecosystem?

An ecosystem is a system in which organisms interact with each other and with their environment.

Ecosystem's Components

Abiotic	These are **non-living**, such as air, water, heat and rock.
Biotic	These are **living**, such as plants, insects, and animals.
Flora	**Plant life** occurring in a particular region or time.
Fauna	**Animal life** of any particular region or time.



Food Web and Chains

Simple **food chains** are useful in explaining the basic principles behind ecosystems. They show only one species at a particular trophic level. **Food webs** however consists of a network of many food chains interconnected together.

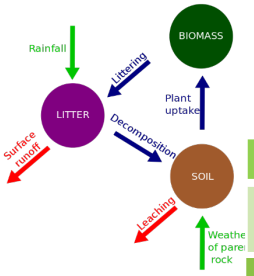
Biome's climate and plants

Biome	Location	Temperature	Rainfall	Flora	Fauna
Tropical rainforest	Centred along the Equator.	Hot all year (25-30°C)	Very high (over 200mm/year)	Tall trees forming a canopy; wide variety of species.	Greatest range of different animal species. Most live in canopy layer
Tropical grasslands	Between latitudes 5°- 30° north & south of Equator.	Warm all year (20-30°C)	Wet + dry season (500-1500mm/year)	Grasslands with widely spaced trees.	Large hoofed herbivores and carnivores dominate.
Hot desert	Found along the tropics of Cancer and Capricorn.	Hot by day (over 30°C) Cold by night	Very low (below 300mm/year)	Lack of plants and few species; adapted to drought.	Many animals are small and nocturnal: except for the camel.
Temperate forest	Between latitudes 40°- 60° north of Equator.	Warm summers + mild winters (5-20°C)	Variable rainfall (500-1500m /year)	Mainly deciduous trees; a variety of species.	Animals adapt to colder and warmer climates. Some migrate.
Tundra	Far Latitudes of 65° north and south of Equator	Cold winter + cool summers (below 10°C)	Low rainfall (below 500mm/ year)	Small plants grow close to the ground and only in summer.	Low number of species. Most animals found along coast.
Coral Reefs	Found within 30° north – south of Equator in tropical waters.	Warm water all year round with temperatures of 18°C	Wet + dry seasons. Rainfall varies greatly due to location.	Small range of plant life which includes algae and sea grasses that shelters reef animals.	Dominated by polyps and a diverse range of fish species.

Nutrient cycle

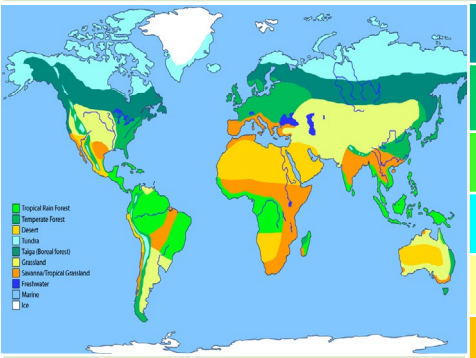
Plants take in **nutrients** to build into new organic matter. Nutrients are taken up when animals eat plants and then returned to the soil when animals die and the body is broken down by **decomposers**.

Litter	This is the **surface layer** of vegetation, which over time breaks down to become **humus**.
Biomass	The total **mass of living organisms** per unit area.



Biomes

A biome is a **large geographical area of distinctive plant and animal groups**, which are adapted to that particular environment. The climate and geography of a region determines what type of biome can exist in that region.



- Coniferous forest
- Deciduous forest
- Tropical rainforests
- Tundra
- Temperate grasslands
- Tropical grasslands
- Hot deserts.

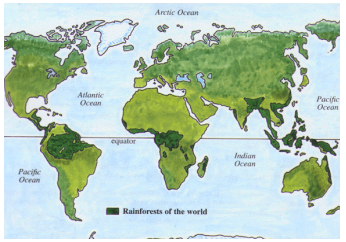
The **most productive biomes** – which have the greatest biomass- grow in climates that are **hot and wet**.

Tropical Rainforest Biome

Tropical rainforest cover about **2 per cent** of the Earth's surface yet they are home to **over half of the world's plant and animals**.

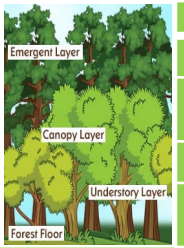
Interdependence in the rainforest

A rainforest works through **interdependence**. This is where the plants and animals **depend on each other** for survival. If one component changes, there can be **serious knock-up effects** for the entire ecosystem.



Distribution of Tropical Rainforests

Tropical rainforests are **centred along the Equator** between the Tropic of Cancer and Capricorn. Rainforests can be found in South America, central Africa and South-East Asia. **The Amazon** is the world's largest rainforest and takes up the majority of northern South America, encompassing countries such as Brazil and Peru.



Layers of the Rainforest

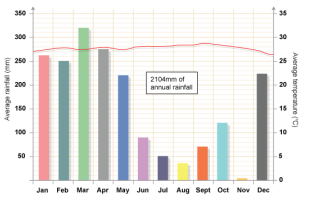
Emergent	Highest layer with trees reaching **50 metres.**
Canopy	80% of life is found here as It receives **most of the sunlight and rainfall.**
U-Canopy	Consists of trees that reach **20 metres high.**
Shrub Layer	Lowest layer with **small trees** that have adapted to living in the **shade.**

Rainforest nutrient cycle

The **hot, damp conditions** on the forest floor allow for the **rapid decomposition** of dead plant material. This provides plentiful nutrients that are easily absorbed by plant roots. However, as these nutrients are in high demand from the many fast-growing plants, they do not remain in the soil for long and stay close to the surface. If vegetation is removed, the soils quickly become **infertile**.

Climate of Tropical Rainforests

- Evening temperatures rarely fall below **22°C.**
- Due to the **presence of clouds**, temperatures rarely rise above **32°C**.
- Most afternoons have heavy showers.
- At night with no clouds insulating, temperature drops.



CASE STUDY: UK Ecosystem: Epping Forest, Essex

This is a typical English lowland deciduous woodland. **70% of the area** is designated as a **Site of Special Scientific Interest (SSI)** for its biological interest, with **66 %** designated as a **Special Area of Conservation (SAC).**

Components & Interrelationships		Management
Spring	**Flowering plants** (producers) such as bluebells store nutrients to be eaten by consumers later.	- Epping has been managed for centuries. - Currently now used for **recreation** and **conservation**. - Visitors **pick fruit** and berries, helping to **disperse seeds**. - Trees cut down to encourage **new growth for timber.**
Summer	Broad tree leaves grow quickly to **maximise photosynthesis**.	
Autumn	Trees shed leaves to **conserve energy** due to sunlight hours decreasing.	
Winter	Bacteria **decompose** the leaf litter, releasing the nutrients into the soil.	

Tropical Rainforests: Case Study Brazil

Brazil is a NEE country in South America.

Adaptations to the rainforest

Spider Monkey	Strong limbs to help it climb
Drip Tips	Allows heavy rain to **run off leaves easily**.
Lianas & Vines	**Climbs** trees to reach sunlight at canopy.

Rainforest inhabitants

Many tribes have developed sustainable ways of survival. The rainforest provides inhabitants with…

- **Food** through hunting and gathering.
- **Natural medicines** from forest plants.
- **Homes and boats** from forest wood.

Issues related to biodiversity

Why are there high rates of biodiversity?

- **Warm and wet climate** encourages a wide range of vegetation to grow.
- There is **rapid recycling of nutrients** to speed plant growth.
- Most of the rainforest is **untouched.**

Main issues with biodiversity decline

- **Keystone species** (a species that are important of other species) are extremely important in the rainforest ecosystem. Humans are threatening these vital components.
- **Decline in species** could cause tribes being unable to survive.
- **Plants** & **animals** may become **extinct.**
- Key medical **plants** may become **extinct.**

Impacts of deforestation

Economic development

+ Mining, farming and logging creates employment and tax income for government.
+ Products such as palm oil provide valuable income for countries.
- The loss of biodiversity will reduce tourism.

Soil erosion

- Once the land is **exposed by deforestation,** the soil is more **vulnerable to rain**.
- With **no roots to bind soil together**, soil can easily **wash away.**

Climate Change

-When rainforests are cut down, the climate becomes **drier.**
-Trees are **carbon 'sinks'**. With greater deforestation comes more greenhouse emissions in the atmosphere.
-When trees are burnt, they **release more carbon in the atmosphere**. This will enhance the **greenhouse effect.**

What are the causes of deforestation?

Logging

- Most widely reported cause of destructions to biodiversity.
- Timber is harvested to create **commercial items** such as furniture and paper.
- **Violent confrontation** between indigenous tribes and logging companies.

Agriculture

- Large scale **'slash and burn'** of land for ranches and palm oil.
- Increases **carbon emission**.
- **River saltation** and **soil erosion** increasing due to the large areas of **exposed land.**
- Increase in **palm oil** is making the **soil infertile**.

Mineral Extraction

- **Precious metals** are found in the rainforest.
- Areas **mined** can experience **soil and water contamination**.
- **Indigenous people** are becoming **displaced** from their land due to roads being built to transport products.

Tourism

- **Mass tourism** is resulting in the building of hotels in extremely **vulnerable areas**.
- Lead to **negative relationship** between the government and indigenous tribes
- Tourism has **exposed animals** to human **diseases.**

Energy Development

- The **high rainfall** creates ideal conditions for **hydro-electric power (HEP).**
- These have relatively short life spans and can cause river water to become acidic due to rotting of organic material

Road Building

- **Roads** are needed to bring supplies and **provide access** to new mining areas, settlements and energy projects.
- In Brazil, the Trans-Amazonian Highway has opened up large areas of the forest to development

Sustainability for the Rainforest

Uncontrolled and unchecked exploitation can cause irreversible damage such as loss of biodiversity, soil erosion and climate change.

Possible strategies include:

- **Agro-forestry** - Growing trees and crops at the same time. It prevents soil erosion and the crops benefit from the nutrients.
- **Selective logging** - Trees are only felled when they reach a particular height.
- **Education** - Ensuring those people understand the consequences of deforestation
- **Afforestation** - If trees are cut down, they are replaced.
- **Forest reserves** - Areas protected from exploitation.
- **Ecotourism** - tourism that promotes the environments & conservation

Cold Environment: Alaska, USA

Alaska is located to the north west of mainland USA next to Canada. It is mostly wilderness with most of the state above the Arctic circle leading to extremes in temperatures.

Opportunities and challenges in the Cold Environments

Opportunities

The fishing industry
There are two main sectors of the industry: Commercial fishing. Since the 1870s, the sector has grown to employ one in ten Alaskans. Some of the biggest salmon, crab, and whitefish fisheries in the world are in Alaska. They provide 78,500 jobs and add US$6 billion to the state economy annually.

Mineral extraction
In the late 1800s, Alaska was known as 'the gold rush state'. Today, one-fifth of the state's mining wealth still comes from gold (although silver, zinc and lead mining are also very important). Large gold mines must be managed carefully to minimise environmental impacts. Humans and ecosystems can be harmed by the toxic chemicals used to process gold ore (such as mercury, cyanide and nitric acid). Mining development has sometimes been halted due to environmental campaigns..

Tourism
Tourism attracts between one and two million summer visitors each year, making tourism one of Alaska's biggest employers, although some work is seasonal and poorly paid. Some tourists enjoy fishing, while others merely view the wildlife, with popular activities including whale watching and kayaking. Approximately 60 per cent of summer visitors are cruise ship passengers.

Energy
Energy production is another big employer, especially the oil industry (see pages 106–107). More than 50 hydroelectric power (HEP) plants supply Alaskan communities with one-fifth of their electricity. Previously glaciated U-shaped valleys in Alaska are a perfect site for HEP generation. Geothermal energy is also being harnessed in tectonically active parts of the state. Alaska's coastline is part of the Pacific 'Ring of Fire'. A tourist resort at Chena Hot Springs near Fairbanks is now powered entirely by geothermal power.

Challenges

The low population density of less than one person per square kilometre means that most of Alaska lacks surfaced roads. Hunters, miners and explorers must make their own way across the tundra.
Snow and ice make some roads and tracks unusable for months of the year.

A process called solifluction takes place in summer. On slopes, the soil's active layer starts to flow downhill. The thawed soil slides easily over the impermeable frozen layer below. Large amounts of soils and mud can collect at the base of slopes, covering highways that run along valley floors, cutting places off for months.

Permafrost underlies most of Alaska (Figure 8.14). The seasonal melting of the active layer means that offroad travel cannot take place during summer.

Over time, the seasonal melting and re-freezing of the active layer results in great expanses of uneven ground surface called thermokarst (Figure 8.15) making travel impossible in some places.
Frost heave – where pebbles and stones slowly rise upwards to the ground – can make tracks dangerous.

What can be done?

Indigenous people and newcomers alike use high-pitched steep roofs for their homes so snow can slide off. Triple glazed windows help to keep the cold at bay.
Today, new buildings are always raised on piles to prevent melting. These piles can lift a structure several metres above the surface and are sunk deep into the land, well below the lower limit of the active layer.
Roads are now built on gravel pads one to two metres deep that stop heat transfer from taking place.
Utilities such as water, sewerage and gas cannot be buried underground or they would freeze too.
Instead, they are carried by utility corridors or 'utilidors'.
Airport runways are painted white to reflect sunlight and stop them from warming up too much on sunny days.

Key Dates In the Expansion and Consolidation of America	
1854	**Kansas Nebraska Act** – created as a compromise. Kansas and Nebraska were given popular sovereignty to decide to become slave or free states.
1860	**Abraham Lincoln elected President of the United States** – He became the first Republican to win and only received 40% of the popular vote.
1861 – 1865	**American Civil War** – a civil war in the United States fought between the Union (north) and Confederacy (south).
1863	**President Lincoln signed the Emancipation Proclamation** – it declared "that all persons held as slaves … and henceforward shall be free"
1863 – 1868	**Indian Wars** – a series of battles waged by the US Government against Native Americans (Plain's Indians) over land and natural resources in the West.
1864	**Sand Creek Massacre**- Colorado soldiers attacked a peaceful Plain's Indian camp slaughtering and mutilating about 150 people, mainly women & children.
1865	**Thirteenth Amendment** – abolished slavery and involuntary enslavement, except as punishment for a crime.
1865 – 1868	**Sioux or Red Cloud's War** – began as US gov developed the Bozeman Trial. Plain's Indians attacked workers, settlers and soldiers to save their native land.
1866	**Fetterman Massacre** – The Sioux lured a US Army patrol at Fort Phil Kearny into a deadly trap where they killed 81 US soldiers.

TECHNICAL VOCABULARY	
Fort Laramie Treaty	Agreement between US Government and representatives of the Plains Indian Nations. Plains Indians promised not to attack settlers on the Oregon Trial and to allow building of some roads and Forts in their territory. In return they had an agreed hunting area and annual subsidy.
Bozeman Trial	Established to link the gold fields in Montana with the Oregon Trial – broke the terms of the Fort Laramie Treaty.
Negotiators	These people wanted a negotiated solution to the Indian problem. They believed that responsibility for Indian affairs should be kept within the Bureau of Indian Affairs.
Exterminators	This group believed that the Plains Indians were savages, and the Indian problem required a military solution. Their aim was to use the army to wipe out the Indians – a solution that today we would call Genocide.
Emancipation Proclamation	President Abraham Lincoln issued the Emancipation Proclamation on January 1, 1863. It declared "that all persons held as slaves" within the rebellious states "are, and henceforward shall be free."
Abolitionism	The formal organised opposition to slavery which began as early as 1817 in the USA.
Fugitive Slave Act	Required all Americans to return runaway slaves to their owner, even if the slaves reached free states. This made the institution of slavery very visible to Northerners and anti-slavery feeling grew.
Plantations	In the early 19th century, the South's economy was heavily based on cotton exports. Cotton was produced cheaply using slave labour on plantations – large slave run farms.

American Civil War

7 Southern States left the rest of the USA and set up what was known as the CONFEDERATES. The remaining states in the north were called the UNION. The Union north won and the southern states re-joined the rest of the USA.

What were the Consequences?

. At the end of the war in 1865, over 600,000 Americans had died. 400,000 were wounded.
. The southern states were devastated by the war.
. Government needed to re-build the south and also gave citizenship (freedom) to former African American slaves.

How did this Affect the West?

. Many southerners wanted a **new start** to their lives in the West.
. Many Black Americans decided to move away from the South to make a new life in the West.

Conflict with The Plains Indians	
Little Crow's War (1862)	Chief of Dakota Sioux in Minnesota, where white population increasing. Agreed to give up 24m acres of land and live on reservations for $1.4m. Gov delayed payment; reservation not big enough to hunt so Indians left. Sioux attacked settler towns, killed 600. Army arrived; some Indians put on trial; others forced onto poor reservation land where many died.
Sand Creek Massacre (1864)	When gold found in Montana, prospectors travelled across Cheyenne Indian land. Chiefs agreed to move to reservation, but young warriors refused. Cheyenne chief Black Kettle tried to reach agreement, but Colonel Chivington massacred 130 Indians, who were waving white surrender flags.
Red Cloud's War (1866-68)	Gold discovered in Montana 1862, prospectors travelled there on Bozeman Trial, across sacred Lakota Sioux land. This broke Fort Laramie Treaty. Red Cloud did not trust government, so fought rather than agreeing to allow forts along Bozeman Trail: 3,000 Indians fought 700 US soldiers. They won many battles.

Why was there TENSION between the White Settlers and the Plains Indians?

Fear of the Plains Indians	Racism	Threat to food	Shortage of grass	Government Pressure
White settlers were sometimes caught up in raids between tribes and took this the wrong way thinking they were being attacked. White settlers scared each other with stories. They were worried that they would be **scalped** or caputred as **slaves.**	The White Settlers had strong, racist views about the Plains Indians thinking they were **Superior.** This made them angry when Plains Indians stole horses from them.	With so much travel on the Oregon Trial, the Plains Indians had serious problems with the disruption of the **buffalo.** The White Settlers killed huge numbers for the **meat** on their jounry. The settlers caused massive buffalo stampedes because they did not know how to control them.	Thousands of oxen and horses travelling on the Oregan Trail resulted in a lack of grass. This meant there was tension and competion from both sides to feed their animals.	The White Settlers saw the Plains Indians keeping an eye on them, but even without being aggressive the settlers believed the Plains Indians were going to attack them. Some wanted the government to build **Forts** so the **Army** could **protect** them.

Half-Term 2 History Topic: Treatment and Prevention – Medicine through Time.

Medieval (1250 – 1500) Approaches to TREATMENT and PREVENTION	
Religious/supernatural:	Prayer; saying mass; fasting; going on pilgrimage – all advised as religious "treatments". Some believed disease was a punishment sent by God, therefore you should not try to treat.
Humoural Treatments:	Physician suggested a treatment for each symptom, including bleeding and purging; bathing (only available to rich); remedies (made from herbs and spices)
Prevention:	PRAY! Practice basic hygiene (as recommended in the Regimen Sanitatis); purifying bad air (e.g. carrying a sweet-smelling "posy"; some measures were taken to keep towns clean, like clearing animal corpses)
Who cared for the Sick?	The Physician was university educated; expensive so only available if you were rich. Diagnosed illness by: observing sample of urine/faeces/blood and consulting astrological charts. Apothecary mixed the herbal remedies. Surgeon performed basic operations and bleeding. Approx. 1,100 Hospitals by 1500, 30% run by Church. Provide clean place to rest and eat well. Many hospitals were places for travellers to stay. Emphasis on Care not cure. Most people cared for at home (kept clear, fed, herbal remedies). This was considered to be a woman's role.

Renaissance (1500 – 1700) Approaches to TREATMENT and PREVENTION	
Religious/supernatural:	Time of discovery, scientific progress and experiments. The church had less control over life so there was a chance for the spread of new ideas.
Treatment	Transference – disease could be transferred to an object by rubbing it. Lots more herbal remedies available from newly discovered lands of the New World. The new science of chemistry resulted in lots of chemical cures. Apothecaries and surgeons were better trained. Less hospitals available because many of these had been run by the monasteries, which were closed by Henry VIII.
Prevention:	Ideas about cause of disease had advanced, but treatments were still not effective. Therefore, prevention still very important. Cleanliness still important, though less use of public baths since arrival of syphilis. Moderation avoiding too much alcohol, cold, food etc. To reduce miasma homeowners in some towns had to pay a fine if they did not clean outside their homes.

C18th – C19th (1700 – 1900) Approaches to TREATMENT and PREVENTION	
Hospitals:	Florence Nightingale: Nurse in Crimean War 1854; hospitals appalling. Made changes to way wounded soldiers treated; Sanitation (clean hospital, bedding etc); Nurses to provide care & good meals provided. Mortality rate (% of wounded dying) fell from 40% to 2% Upon return to GB Nightingale set up nursing college, designed hospital wards & wrote "Notes on Nursing".
Treatment	Koch and Pasteur – Pasteur was the first to suggest that Germs cause disease. He published his idea in 1861 called the Germ Theory. He argued that microbes in the air caused decay not the other way round. – Koch used dye to identify microbes. He linked specific disease to the particular microbe that caused them. This technique was called 'Microbe hunting'. He identified several disease such as tuberculosis (1882) and Cholera (1883).
Prevention:	Edward Jenner developed vaccination to protect against smallpox. Previously people had been inoculated (given a small dose of disease to develop immunity). 1776 Jenner worked out you could make someone immune to smallpox by injecting a small amount of Cowpox. Lots of opposition from Church, inoculators and scientists.

TECHNICAL VOCABULARY

Inoculation	Protecting someone from a disease by giving them a weakened version.
Vaccination	A substance which gives someone a weakened form of a disease to protect them from it.
Symptom	A negative side effect of the disease, e.g. a runny nose is a symptom of a cold.
Diagnosing	The process of trying to work out what illness a patient has.
Purging	A natural treatment that tried to rebalance the humours by giving the patient something to make them vomit or a laxative to make them defecate.
Astrology	The study of the movement of planets and the stars.
Flagellation	Flogging, whipping or beating oneself to punish someone for their sins or show a dedication to God.
Urine Chart	A tool used by a physician to help them diagnose a patient's illness. They would look at a sample of the patients urine and compare it to a colour chart to determine why they were ill.
Infirmary	A hospital.
Apothecary	Mixed herbal remedies to try and create a cure for an illness.

Modern (1900 -) Approaches to TREATMENT and PREVENTION	
Technology/Chemical Cures:	• Magic bullet = attacks disease, not body • Salvason 606 = first developed to attack syphilis • Penicillin = 1928 Alexander Fleming noticed that in his lab, some mould was killing bacteria in a dirty petri dish (it had drifted in through the window). He didn't study further but published his findings. Florey and Chain were studying antibiotics. They read Fleming's work and tested it successfully in 1940 on mice. They couldn't however produce large quantities. When US joined WW2 in 1941, Florey and Chain got backing from big American Drug Companies to mass produce. • Technology has helped to identify and combat diseases
Prevention:	Government has assumed responsibility for Public Health. Compulsory vaccinations. Laws to provide health environment (e.g. Clean Air Act 1956) Communication about health risks of lifestyle choice (e.g. anti-smoking campaigns)

Theory of four humours	Theory that the body is made up of four humours. If one humour is out of balance then you will fall ill.
Theory of opposites	The idea to treat illness by re-balancing the humour.
Miasma	The theory that disease was caused by bad or dirty air and this led to illness and death.
Islamic beliefs	Doctors in hospitals 'For every disease Allah has given a cure'. Mental illness is treated with compassion. Avicenna's book the Cannon of Medicine documented 760 drugs.
Christian beliefs	Believed in 'Care not cure', illness and disease are a punishment from God for committing sins. Medical understanding based on Galen and Hippocrates' ideas. Human dissections are banned by the Church. 700 Hospitals in England – used for rest, rather than treatment.
Spontaneous Germination	An old belief that germs are the result of disease and decay, rather than the cause of them. This idea is now known to be false.

	PRESENT I do (add to stem)	**PRETERITE** I did (add to stem)	**IMPERFECT** I was doing (add to stem)	**CONDITIONAL** I would do (add to infin)	**FUTURE** I will do (add to infin)	**PERFECT** I have done	**PRESENT CONTINUOUS** I am doing
	AR ER IR	AR ER/IR	AR ER/IR	AR/ER/IR	AR/ER/IR	AR> ado ER/IR> ido	AR> ando ER/IR> iendo
I	o o o	é í	aba ía	ía	é	he ……ado	estoy ……ando
You	as es es	aste iste	abas ías	ías	ás	has……ado	estás ……ando
He	a e e	ó ió	aba ía	ía	á	ha……ado	está ……ando
We	amos emos imos	amos imos	ábamos íamos	íamos	emos	hemos……ado	estamos ……ando
You.pl	áis éis ís	asteis isteis	abais íais	íais	éis	habéis……ado	estáis ……ando
They	an en en	aron ieron	aban ían	ían	án	han……ado	están ……ando
Some common I R R E G U L A R S	ir> voy ser>soy dar>doy estar>estoy hacer>hago tener>tengo poner>pongo salir>salgo	ir>fui ser>fui dar>di estar>estuve hacer>hice tener>tuve poner>puse saber>supe	ser>era ir>iba hay>había	Same as future tener>tendría venir>vendría poner>pondría salir>saldría saber>sabría poder>podría haber>habría decir>diría querer>querría	Same as conditional tener>tendré venir>vendré poner>pondré salir>saldré saber>sabré poder>podré haber>habré decir>diré querer>querré	abrir>abierto escribir>escrito hacer>hecho poner>puesto romper>roto ver>visto volver>vuelto	dormir>durmiendo seguir>siguiendo sentir>sintiendo vestir>vistiendo

Half-Term 2 Y11 Subject Spanish School

¿Qué te gusta estudiar? ¿Cuál es tu asignatura preferida?

Week 1

OPINION	NOUN
Me encanta(n) = I love	el inglés = English
Me chifla(n) = I love	el dibujo = art
Me mola(n) = I love	el español = Spanish
Me gusta(n) mucho = I really like	el alemán = German
	el francés = French
	el comercio = business
Me gusta(n) = I like	el teatro = drama
Me interesa(n) = I'm interested in	la cocina = food technology
	la biología = biology
Me da(n) igual = I don't care about	la química = chemistry
No me importa(n) = I don't care about	la física = physics
	la religión = RE
No me gusta = I don't like	la informática = ICT
No me gusta(n) nada = I really don't like	la historia = history
	la música = music
Detesto = I hate	la geografía = geography
Odio = I hate	la educación física = PE
	la tecnología = technology
	las ciencias = science
	las matemáticas = maths
No aguanto = I can't stand	las asignaturas = subjects

Week 2

CONNECTIVE because	In my opinion	I think that it is	ADJECTIVE
porque	a mi modo de ver		aburrido/a/os/as = boring
		creo que es / son	bueno/a/os/as = good
dado que	en mi opinión		divertido/a/os/as = fun
		pienso que es / son	obligatorio/a/os/as = compulsory
puesto que	para mí		entretenido/a/os/as = entertaining
		considero que es / son	educativo/a/os/as = educational
ya que	desde mi punto de vista		estupendo/a/os/as = great
		me parece que es / son	interesante(s) = interesting
aunque = although	a mi juicio		emocionante(s) = exciting
			importante(s) = important
			fácil /faciles = easy
			útil /utiles = useful
			inútil / inutiles= useless
			difícil / dificiles = difficult
			fenomenal(es)= great
			genial(es) = great

CONNECTIVE	VERB	NOUN
Siempre = always	estudio = I study estudiamos = we study	en la biblioteca = in the library muchas asignaturas = lots of subjects
Casi siempre = almost always	escucho = I listen escuchamos = we listen	al profesor = to the teacher a la directora = to the head teacher música = music
Normalmente = normally	hablo = I speak hablamos = we speak	con mis amigos = with my friends con mis compañeros = with my friends
A menudo = often	veo = I watch vemos = we watch	un vídeo = a video
A veces = sometimes	leo = I read leemos = we read	un libro = a book en la biblioteca = in the library
De vez en cuando = sometimes	como = I eat comemos = we eat	en la cantina = in the canteen un bocadillo = a sandwich una pizza = a pizza chicle = chewing gum
Rara vez = rarely	bebo = I drink bebemos = we drink	en clase = in class en el laboratorio = in the laboratory agua mineral = water una limonada = a lemonade un zumo de naranja = an orange juice
Nunca = never	escribo = I write escribimos = we write	en mi cuaderno = in my exercise book en mi agenda = in my planner

Verb	Infinitive
Se debe = you must	usar el móvil en clase = use your phone in class
No se debe – you mustn't	llevar piercings en el insti = wear piercings in school
No se permite = You are not allowed	correr en los pasillos = run in the corridors
Está prohibido = It is forbidden	ser agresivo o grosero = be aggressive or rude
Se puede = you can	llevar uniforme = wear uniform
No se puede = you can't	ser puntual = be on time
Se debería = you should No se debería = you shouldn't	comer chicle = chew gum
Se podría = you could No se podría = you couldn't	salir del instituto durante el día escolar = leave school during the school day

el acoso escolar = bullying

las normas / las reglas = rules

la presión del grupo = peer pressure

sufrir el estrés de los exámenes = suffer exam stress

llevar el uniforme = to wear uniform

el próximo trimester = next term

el recreo = break

la hora de comer = lunch hour

los deberes = homework

suspender una prueba = to fail a test

aprobar mis exámenes = to pass exams

hacer novillos = to skip lessons

GCSE DANCE KNOWLEDGE ORGANISER

EXAM COMMAND WORDS

Analyse: Separate information into components and identify characteristics to be able to explain and interpret.

Comment: Present an informed option.

Compare: Identify similarities and/or differences.

Consider: Review and respond to information given.

Define: Specify meaning.

Describe: Set out characteristics.

Discuss: Present key points taking into account different ideas, characteristics and/or features.

Evaluate: Judge from available evidence and make an informed design on the effectiveness.

Explain: Set out purposes or reasons.

Give: Produce an answer from recall.

How: State in what ways.

Identify: Name or characterise.

Interpret: Translate information into recognisable form demonstrating an understanding of meaning.

Name: Identify correctly.

Outline: Set out main characteristics.

State: Express in clear terms.

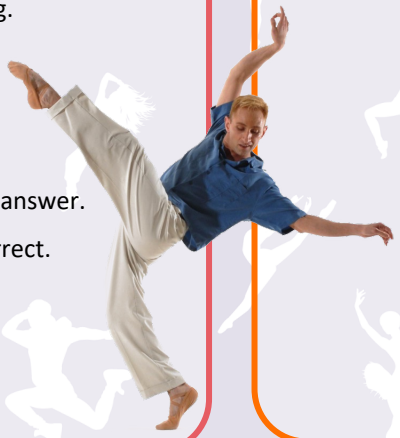
Suggest: Present a possible case or possible answer.

Tick: Put a mark to indicate something is correct.

What: Specify something.

Which: Specify from a range of possibilities.

Why: Give a reason or purpose.



KNOWLEDGE, UNDERTSANDING AND SKILLS FOR PERFORMANCE

Expressive skills

Projection
Focus
Spatial awareness
Facial expression
Phrasing
Musicality
Sensitivity to other dancers
Communication of choreographic intent

Physical skills

Posture
Alignment
Balance
Coordination
Control
Flexibility
Mobility
Strength
Stamina

Technical skills

Action
Space
Dynamics
Relationships
Timing
Rhythmic content
Moving in a stylistically accurate way

Mental Skills

Prep for performance:
Systematic repetition
Mental rehearsal
Rehearsal discipline
Planning of rehearsal
Response to feedback
Capacity to improve

During performance:
Movement memory
Commitment
Concentration
Confidence

Safe Practice

Prep for performance:
Warming up
Cooling down
Nutrition & Hydration

During performance:
Safe execution

Appropriate dance wear:
Footwear
Hairstyle
Clothing
Absence of jewellery

GCSE DANCE KNOWLEDGE ORGANISER

KNOWLEDGE, UNDERTSANDING AND SKILLS FOR CHOREOGRAPHY

Action
Travel
Turn
Elevation
Gesture
Stillness
Use of different body parts
Floor work
Transfer of weight

Dynamics
Fast/slow
Sudden/sustained
Acceleration/deceleration
Strong/light
Direct/indirect
Flowing/abrupt

Spatial Content
Pathways
Levels
Direction
Size of movement
Patterns
Spatial design

Relationship Content
Lead and follow
Mirroring
Action and reaction
Accumulation
Complement and contrast
Counterpoint
Contact
Formations

Choreographic Processes
Researching
Improvising
Generating
Selecting
Developing
Structuring
Refining and synthesising

Structuring devices and form
Binary
Ternary
Rondo
Narrative
Episodic
Beginning/middle/end
Unity
Logical sequence
Transitions

Choreographic devices
Motif and development
Repetition
Contrast
Highlights
Climax
Manipulation of number
Unison
Canon

KNOWLEDGE, UNDERTSANDING AND SKILLS FOR CRITICAL APPRECIATION

Features of Production

Staging/set: Eg. projection, furniture, structures, backdrop, screens
Features of these such as colour, texture, shape, decoration, materials.
Lighting: Eg- Colour, placement, direction, angles etc.
Properties: Eg- Size, shape, materials, how used etc.
Costume: Footwear, masks, make up, accessories
Features such as colour, texture, material, flow, shape, line, weight, decoration and how they define character or gender, identify characters, enhance or sculpt the body and enhance the action.
Dancers: Number and gender.
Aural setting: Eg: Song, instrumental, orchestral, spoken word, silence, natural sound, found sound, body percussion, style, structure and musical elements such as tone, pitch and rhythm.
Dance for camera: Eg- Placement, angle, proximity, special effects.

CHOREOGRAPHY KEY WORDS

Stimulus
The starting point for a dance piece.

Motif
A short phrase of movement that reflects a stimulus.

Choreographic Intention
What the choreographer would like the audience to learn about the dance.

Choreographic Approach
How the choreographer created movement material eg. improvisation, collaboration, choreographic tasks.

Communication of Choreographic Intent
Mood
Meaning
Idea
Theme Style/style fusion

Performance Environment
Proscenium arch
End stage
Site-sensitive
In-the-round

Year 11 Subject: Drama Topic: Production

Building Tension:

Tension, or **dramatic tension**, often lies with the development of **suspense** in a drama. As the **audience** anticipates certain outcomes in the plot, the **tension builds**. An example **of rising tension** occurs in a mystery play or whodunit. In these instances, the audience is left in a constant state of **suspense** trying to guess the real culprit.

The development of **tension** usually parallels the advancement of the plot, leading to a **crisis or climax. Tension** is closely linked with the **element of timing**.

The Audience:

Using the **imagination** of the **audience** and the **suspension of disbelief** is extremely important when developing **tension, suspense and atmosphere.**

Technical elements:

The use of **sound effects, music, lighting, costume and set** in a performance can be pivotal in creating **suspense and atmosphere**.

Symbol

A symbol is something which stands for, or **represents something else**. **Symbols** are often used in drama to deepen its meaning and remind the audience of the themes or issues it is discussing. A **prop** often has a particular significance that an **audience** will instantly recognise when used **symbolically** in the work.

Lighting

Altering the **level of light** and combining the light with various colours can help to significantly change the **mood** and **atmosphere** of a scene.

- A **low lighting level**, with dark blues, greens or reds, can make the stage very **eerie** and filled with **dramatic tension.**
- A **high lighting level** of warm, coloured light can produce a very **happy** and **energetic** feeling on **stage**.

Subject Terminology	
Suspense	A state or feeling of excited or anxious uncertainty about what may happen.
Mood	Created by the director, performers and performance elements all working together. Eg: mysterious, stressful
Atmosphere	**Atmosphere** is the overall feeling the audience experiences as a result of the mood created in the scene.
Climax/ Anti-climax	This is the building and release of tension in **drama**.
Play within a play	It means that your **characters** are performing a **play** on-stage for their own benefit, as a part of the **play**
Tension	Tension is **a growing sense of expectation within the drama**
Suspension of Disbelief	**The people in the audience know that what they are seeing on stage or screen is a pretend reality**, but they are pretending that they do not know that.

Music and Sound

Sound and music are extremely effective when conveying the **atmosphere** required for a specific **scene** or moment. **A sound designer**, working with the director, will:

- Identify moments where the **sound** can enhance the **action** on stage for an audience.
- Decide what sort of **sound** is required (**music, sound effect** or combination).

Music will often imply that the drama on stage is building to a **climax,** making the **audience** think that something is going to happen and putting them on edge.

Popular Music

Area of study 4 - Eduqas GCSE Music

Popular music includes:

- **POP**
- **ROCK**
- **RAP**
- **HIP HOP**
- **REGGAE**

Plus many other genres, e.g. soul, ska, heavy metal, R&B, country, rock'n'roll.

FUSION: when two different styles are mixed together. This can be two styles of popular music e.g. 'rap metal', or could combine a popular music genre with other styles, folk-rock, gospel, world music, classical to create a new and interesting sound. **Jazz fusion** (jazz and pop) is a popular genre.

Instruments

ELECTRIC GUITAR:

- Lead guitar: plays the melody/ solos/riffs
- Rhythm guitar: plays the chords/ accompaniment.

BASS GUITAR: plays the bass line.
DRUM KIT: provides the beat.
LEAD SINGER: the main vocalist.
BACKING VOCALS: singers who provide harmony.

Pop/rock groups may also include **acoustic** (not electric) instruments e.g. trumpet, trombone, saxophone and/or electronic keyboards/synthesizers.

Features and techniques found in popular music

Riff	A short, repeated pattern.
Hammer on	Finger brought sharply down onto the string.
Pitch bend	Altering (bending) the pitch slightly.
Power chords	A guitar chord using the root and 5th note (no 3rd).
Distortion	An effect which distorts the sound (creates a 'grungy' sound).
Slap bass	A percussive sound on the bass guitar made by bouncing the strings on the fret board.
Fill	A short, improvised drum solo.
Rim shot	Rim and head of drum hit at same time.
Belt	A bright, powerful vocal sound, high in the chest voice.
Falsetto	Male voice in a higher than usual range.
Syllabic	One note sung per syllable.
Melismatic	Each syllable sung to a number of different notes.
A cappella	Voices singing without instrumental accompaniment.

The structure of a pop/rock song may include:

INTRO: short opening section, usually instrumental.
VERSE: same music but different lyrics each time.
CHORUS: repeated with the same lyrics each time (refrain).
MIDDLE EIGHT: a link section, often eight bars, with different musical ideas.
BRIDGE: a link/transition between two sections.
OUTRO: an ending to finish the song (coda).
*You may also hear a pre-chorus, instrumental interlude or instrumental solo.

***Strophic songs, 32 bar songs (AABA) and 12 bar blues are also found in popular music.**

A typical rock ballad in verse-chorus form could follow the pattern:

- Intro
- Verse 1
- Chorus
- Verse 2
- Chorus
- MiddleEight
- Chorus
- Outro

Technology

Amplified	Made louder (with an **amplifier**).
Synthesized	Sounds created electronically.
Panning	Moving the sound between left and right speakers.
Phasing	A delay effect.
Sample	A short section of music that is reused (e.g. looped, layered).
Reverb	An electronic **echo** effect.

Toto: Africa

Soft rock

Form and structure:

The piece is in **strophic** or **verse-chorus** form.

Intro	Verse 1 / Verse 2	Chorus 1 / Chorus 2	Link 1 / Link 2	Instrumental	Chorus 3	Outro
1 – 4	5 – 39 / 14 – 39	40 – 57	58 – 65	66 – 82	40 – 92	93 – 96
4 bars	35 bars / 26 bars	18 bars	8 bars	17 bars	22 bars	4 bars

Metre and rhythm:

Simple duple time – 2/2 (split common time) – with two minim beats in every bar.

Uses distinctive **ostinato rhythms** for both riffs, consisting almost totally of **quavers**, with constant use of **syncopation**.

Vocal rhythm looks complex but follows the natural rhythm of the lyrics.

Background details:

Composed by band members **David Paich** and **Jeff Porcaro**.

Recorded by the American rock band Toto in **1981** for their fourth studio album entitled **Toto IV**.

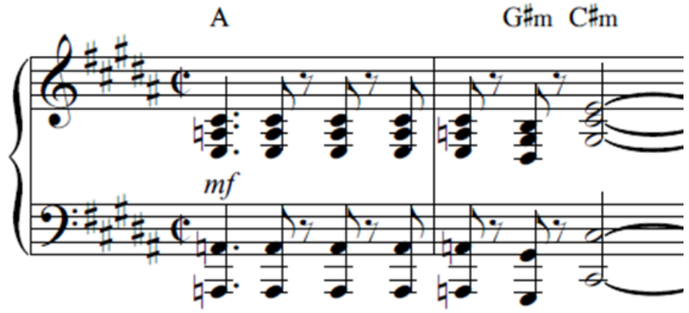
Released in **1982** and reached number one in America on 5 February **1983**.

Genre: **soft rock**.

Harmony:

Diatonic; mixture of root position and inverted chords.

Riff a can be heard during the intro, verses, link sections, instrumental and outro. This riff uses a three-chord pattern: **A** – **G♯m** – **C♯m**.



Choruses use a standard chord pattern: **vi** (F♯m) – **IV** (D) – **I** (A) – **V** (E).

The **harmonic rhythm** (the rate of chord change) is mostly once per bar.

Instrumentation:

Rock band: drum kit with additional percussion, lead and bass guitars, synthesisers, male lead vocals and male backing vocals.

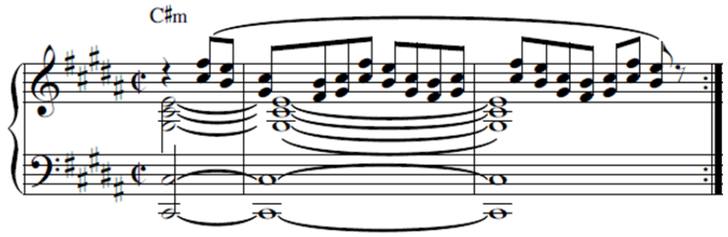
Dynamics:

Most of the song is ***mezzo-forte*** (moderately loud) whilst the choruses are ***forte***.

Melody:

Mostly **conjunct** (moving in step) with a **wide vocal range**.

Riff b uses the **pentatonic scale** (interpreted through E major):



Vocal improvisations occur towards the end of the song.

Texture:

Homophonic: melody and accompaniment.

Tonality:

The majority of the song is in **B major** whilst the choruses are all in **A major**.

Tempo:

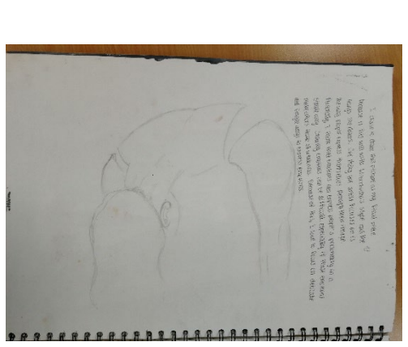
The tempo is **moderately fast**.

Half-Term: HT2 Subject: KS4 Art Threshold Concept Link(s): Develop ideas through a use of media

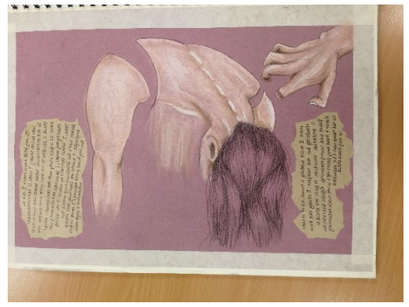
Assessment Taxonomy					
LIMITED	BASIC	EMERGING COMPETENT	COMPETENT & CONSISTENT	CONFIDENT & ASSURED	EXCEPTIONAL
Unstructured Clumsy Disjointed Minimal Elementary	Deliberate Methodical Superficial Unrefined Simplistic Tentative	Reflective Predictable Growing Control Broadening Endeavour Safe	Informed Purposeful Secure Engaged Skilful Thoughtful Cohesive	Advanced Convincing Comprehensive Focused Perceptive Refined Resolved Risk-taking	Accomplished Inspired Intuitive Insightful Powerful Extraordinary Unexpected Outstanding
1-12 marks	16-24 marks	28-36 marks	40-48 marks	52-60 marks	64-72 marks

TECHNICAL VOCABULARY	
Response	A reaction (to the work of an artist)
Develop	To evolve, grow and improve
Experiment	To test (with different art media)
Annotate	Explanatory notes
Review	Evaluate
Reflect	Reconsider and modify
Independent	On your own
Composition	How objects, shapes and patterns are arranged
Analyse	To examine in detail
Interpret	Explain/translate art work

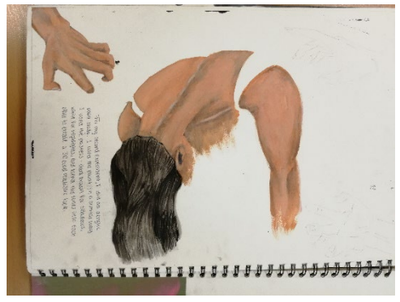
Developing ideas
1. Primary sources- take **lots** of your own photo responses and choose at least 4 compositions to draw out, on one or 2 sides.
2. Link your work to a chosen artist(s)/art style • What does the artist draw? • What media do they use? • What colour scheme do they use? • What is their work about; meaning, mood etc.?
3. Use a variety of media, experimenting with new and different techniques
4. Use a variety of colour schemes
5. Review and evaluate: • What media you liked and why? • What you like/dislike about your ideas and about the changes to the drawings? • How you used the media and what effects you achieved? • What problems you had or what happy accidents occurred? • Which material and process is most suitable for each idea and why? • What connections to artists have you made and how successful are they?
6. Choose the most successful idea, ensuring that you will be able to reproduce it



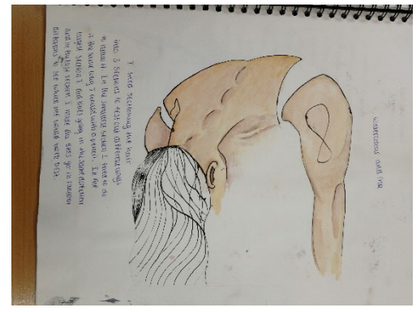
Draw out your favourite composition or compositions and photocopy



Experiment with different media



Experiment with different colour schemes



Knowledge Organisers – Core principles

Page 1

Term	Explanation	Term	Explanation
Iterative design	Small steps with constant changes as feedback is gained. Feedback is used to help the design refine further developments.	**Primary data sources of information**	**First hand information**
Secondary data sources	**Information obtained from others**	**Ergonomics**	Study of human interaction between the user and the product. Feel Comfort Sound Ease of use Smell
Anthropometrics	Measurements of the human body – Maximum and minimum. **Length Height Weight Angles**	**Design brief**	This is a written statement that says what you are going to design make and evaluate. It should include your target market and where it will be used.
Manufacturing specification	1. Details relating to the products function. 2. How its made 3. Time scale 4. Health and safety 5. Quality control 6. Quality assurance 7. CAD Drawings in 2D and 3D 8. Cutting list 9. Components used 10. Tolerances needed.	**Coco Channel 1883-1971**	French fashion designer for fragrances, accessories and clothing. Huge company today!
Alexander McQueen 1969-2010	**British fashion designer** who wowed people with his shocking and unconventional designs	**William Morris 1834-1896**	Main part of the arts and crafts movement in 1880's using nature as inspiration
Mary Quant 1934 – present.	Famous for the mini skirt and flower power inspiration	**Vivienne Westwood 1941 – present**	Establishing the punk image of the 70's. Her designs are still popular today.
Marcel Breur 1902-1981	Maker of Bauhaus. Most famous was the Wassily chair and first to be made from tube steel. He went on to become an architect.	**Norman Foster 1935-present**	Famous for the **Gherkin and Wembley stadium** including the great court.
Charles Rennie Mackintosh 1868-1928	Mackintosh was a Scottish designer using **ART NOUVEAU** as a design influence.	**Aldo Rossi 1931-1997**	**Italian architect** who became a product designer. Post modern influences to produce building like this.
Gerrit Rietveld 1888-1964	Dutch architect and furniture designer to produce the movement **De Stijl**. Famous for using primary colours and geometric lines.	**Ettore Sottsass 1917-2007**	Austrian born **Italian**. Famous for revamping officing style machines such as this **Valentine type writer.**
Raymond Templier 1891-1968	Belonged to the **art deco** movement and designed jewellery.	**Louis Comfort Tiffany 1848-1933**	American art designer and artist known for his glass designs. His famous was the **tiffany lamp.**
Sir Alec Issigonis 1906-1988	Famous for car design and joined Morris motors to produce the iconic **Morris Minor and mini**!	**Alessi**	**Founded by Giovanni Alessi in 1921** and produced metal wear for tables.

Knowledge Organisers – Core principles

Page 2

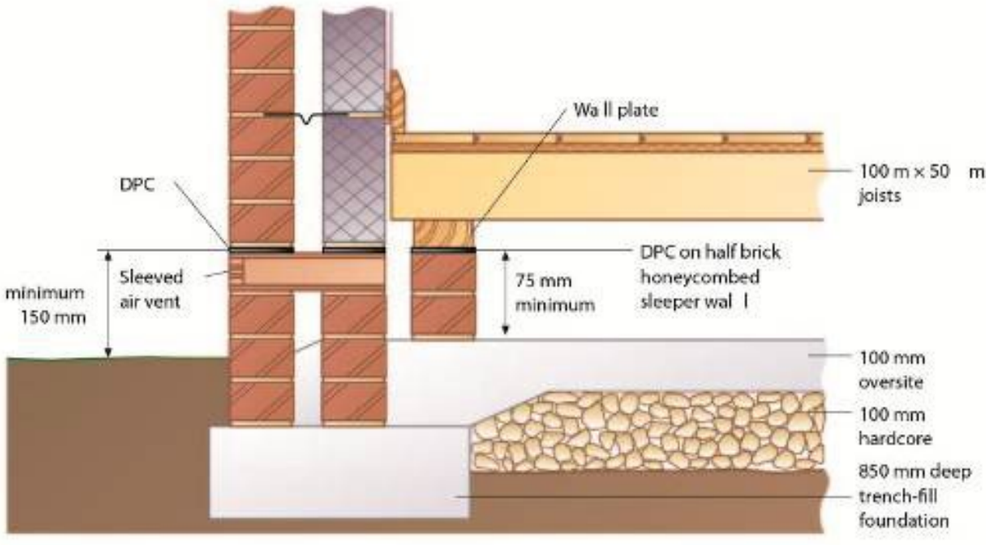
Term	Explanation	Term	Explanation
Braun	**German company** founded in the 1920's. Famous for shavers and audio equipment.	**Apple**	IN 1976, **Steve jobs** along with two other founded Apple. **Largest IT** company in the world. Famous for coming up with innovative designs that will be iconic for ever.
Dyson	Sir James Dyson started to make improvements to the traditional vacuum cleaner in 78 and produced the famous bagless vacuum cleaner. Also, no designing fans and lighting products.	**GAP**	American company selling clothing. Simply and clothing using clear, bold colours.
Primark	International clothing retailer with its main business in Ireland. Low cost 'fast fashion' trend. Cloths made in China, Bangladesh and India.	**ZARA**	Spanish clothing company known for selling products that react to client's trends – Just in time production approach. Began to work with GREENPEACE in 2011 to eliminate harmful toxins from cloths.
User-Centred design	Means to fulfil the wants, needs and limitations of the user	**Systems approach**	If you are designing a product with electronics or mechanisms use a sequence chart to show input/ process/ out put so they can see how it would work.
Sketching	Getting ideas down quickly is important. Do this on plain paper or scaffolded sheets to help you with scale and proportion.	**Modelling and its purpose**	2D models are quick to produce Quick to produce Using materials such as card is cheap and easy to form 3D ideas – they can be recycled after and doesn't cost anything Show size, scale and proportion. Show the development between each design. These can be photographed and recorded into your portfolio to show how they will work.
Testing	To show the intent of the design and how it will work. Destructive testing – used to determine how the product will respond under pressure. Make decisions on materials used. Market testing – inspection of parts/ functional testing and its looks.	**Oblique**	Quick to produce and simple technique. Draw the idea as a plan and then use a 45 degree angle to project the sides back.
Isometric projection	30 degree angle for height width and depth Dimensions can be done accurately. Good for geometric shapes Fairly realistic Use measurements on the drawing	**Perspective drawing**	Uses vanishing points Construction lines go back to the vanishing points Realistic drawing
Annotating drawings	Adding notes to a drawing to explain detail Explaining if parts of the design meet the needs of the specification Express subjective and objective views	**Collaborative designing**	Some designers may have more strengths in parts of the design process. Some people are good at risk taking? Innovation Identifying problems Some people may have contacts in areas to help with a problem. Speed up the process – in development people can work on different aspects of a solution.
Marketability	Look goof and fully functional Potential to be commercially viable Fill and meet a gap in the market Compete with other products Easily tested		

Half-Term 2 – Building Project

The diagram opposite shows a section through a timber floor and wall.

There are **three** different types of floor finish:

- Chipboard
- Moisture-resistant chipboard
- Tongue-and-grooved softwood floorboards



What is the purpose of skirting boards?

Functions of a floor

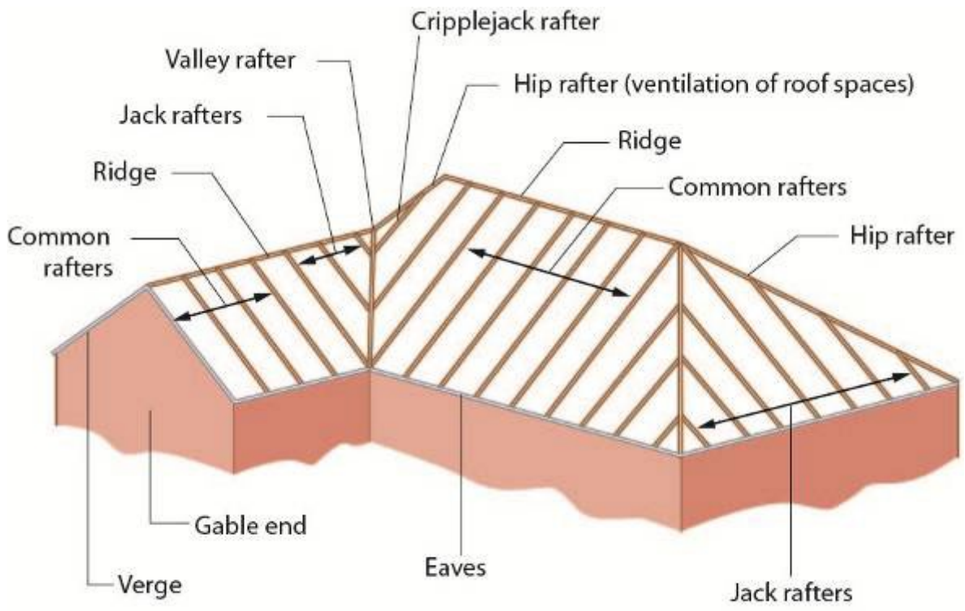
Floors support their own weight. They also resist loads, such as the dead loads of furniture and live loads such as the occupants of the building.

A floor has **four** functions. It:

1. Provides a level surface
2. Reduces sound transmission
3. Transfers loads to walls
4. Provides accommodation of services.

Subject - Construction

The components of a roof



Roofing terminology

List some suitable materials and products that could be used to finish the roof pictured below.

Functions of a roof

A roof supports its own weight and resists dynamic loads such as snow and wind.

A roof has **five** functions. It:

1. Discharges rainfall away from the building
2. Waterproofs a structure
3. Can create a recreational area if flat
4. Can improve a structure's aesthetic appearance
5. Can provide additional accommodation/space (e.g. in the loft or attic).

Year 11 HT2 Subject – Hospitality and Catering Threshold Concept Link(s) **Nutritional needs of specific groups of people**

Different Activity levels	
Energy required for; • Growth • Movement • Body warmth • Production of sound • Brain function • Energy comes from Carbohydrate first • Fat second source • Protein only when carbs and fat stores are depleted Food and drinks which contain carbohydrates, protein and fats.	• Increased activity requires increased energy intake preferably in the form of carbohydrates • Decreased activity levels due to age or health issues calorie intake should be reduced accordingly • People recovering from illness or an operation should get their calories from protein rich food to increase tissue repair and healing. • Calories from starchy carbohydrates are better as they burn slowly therefore releasing energy at an even rate throughout the day

TECHNICAL VOCABULARY	
RDI- **Recommended daily intake**	The amount of each nutrient recommended to meet the requirements of the majority population
Free sugars	Sugars, honey, fruit juices, sugar added to food
Protein complementation	Combining two incomplete proteins to get a complete one
BMR-	**Basal metabolic rate**- the speed of the metabolism in the resting state
Peak bone mass	The amount of bone present when the skeleton has stopped growing and are at a maximum density
Osteoporosis	The production of new bone cannot keep up with the removal of old bone
Anaemia	When you are unable to make enough red blood cells to carry oxygen around the body
Pernicious anaemia	Caused by low red blood cell production and the body is unable to absorb Vit B12
PAL	**Physical activity level**-The amount of extra activity you do per day such as sport.
EAR	**Estimated average requirement-** Calories required per day to maintain body weight

Unit 2

AC1.2 LO1

Different Life Stages	
Children 1-12 **NEEDS-**All nutrients are important especially proteins vitamins and minerals • A good variety of foods should be introduced early • Food needs to be made into fun shapes to encourage variety in the diet • Get kids involved in the cooking • Small portions, presented well • Limit the amount free sugars in foods and drinks • Children should be active, can become more sedentary playing computer games. This can lead to obesity **Adolescents (TEENAGERS)** **NEEDS-** All nutrients are important especially proteins vitamins and minerals • The body is growing from a child into an adult • Minerals are taken up into the bones to reach peek bone mass as adults • Girls start menstruating need plenty of iron to avoid anaemia	**Adults** **NEEDS-** All nutrients are important especially **proteins** vitamins and minerals • Keep body weight within a healthy range • Eat less calories as BMR decreases with age • Eat sufficient **calcium and vitamin D** to promote healthy bones • Eat plenty of fibre as the digestive system slows down with age • **Vitamin C** aids the uptake of **Iron** to avoid anaemia • Salt intake should be kept below >6g to avoid high blood pressure • Body reaches peak bone mass at 30yrs • Avoid high fat/ high sugar food **Older Adults** **NEEDS-**Vits A, C, E to prevent age related eye conditions. Vit B to help body's use of energy • Body systems such as digestion and circulation slow down. • Metabolic rate slows down, so reduction of carb intake • High • Less active as weight may be gained • Smaller appetite

Special diets			
Type of diet	**Reason**	**What can be eaten**	**Foods to avoid**
Vegan	Health, religion, ethical	All plant based foods	All animal foods and products
Lacto-ovo vegetarian (Normal veggie)	Health, religion, ethical	All plant based foods, Dairy and eggs	No food which involves killing an animal
Lacto vegetarian	Health, religion, ethical	All plant foods All dairy	No food which involves killing an animal and eggs
Gluten free	Coeliac disease	Rice, soya, maize, pulses, beans and nuts	Foods containing wheat. Biscuits, pasta, bread
Lactose free	Lactose intolerance	Lactose free products Alpro, soya milk, oat milk	Foods containing dairy
Low salt	Heart disease and high blood pressure	Fruit and veg, dairy and unprocessed meat	Yeast extract, processed foods, sauces
Low sugar	Diabetes, weight reduction	Fruit and veg, dairy and unsweetened products	Foods full of sugars and fizzy drinks

Year 11

Child Development: Supporting Children to Play, Learn and Develop.

Physical needs that may impact on play, learning and development.	
What is a sensory impairment?	A sensory impairment would include a difficulty in seeing (visual impairment) or hearing (hearing impairment).
What are some possible impacts of visual impairments?	Motor skills can be affected; may not move towards things as they can't see them; won't be able to fully explore so won't develop concepts easily; may struggle to talk as can't copy lip movements of others; not able to make eye contact causes difficulties in social situations; can't see facial expressions clearly; maybe less independent.
What are some possible impacts of hearing impairment?	Discharge from the ears; posture issues; difficulties with reading and maths concepts; difficulty in speech as they cannot hear the sounds required to speak; restricted language can affect social development; can have low self-esteem.

Cognitive and intellectual needs that may impact on play, learning and development.	
What are the possible impacts of poor concentration levels?	Can lead to disruptive behaviour; can talk a lot and interrupt others; can be restless or fidgety; won't persevere with learning skills; lose interest quickly; difficulties in paying attention, following instructions or completing activities.
Why do some children have difficulties remembering instructions?	Developmental disabilities (ADHD; autism; Down's syndrome); concussion or traumatic brain injury; medical conditions like epilepsy.
What are difficulties in problem-solving?	Some children find this difficult as they haven't reached their age milestones for cognitive development. Developmental conditions like Down's syndrome which can mean a lower cognitive ability. Other reasons could be trauma; birth injuries; mothers using drugs/alcohol during pregnancy.
What impact can delayed literacy skills have?	Children who are left-handed can struggle with writing- longer to form letters; learning difficulties; behavioural problems.

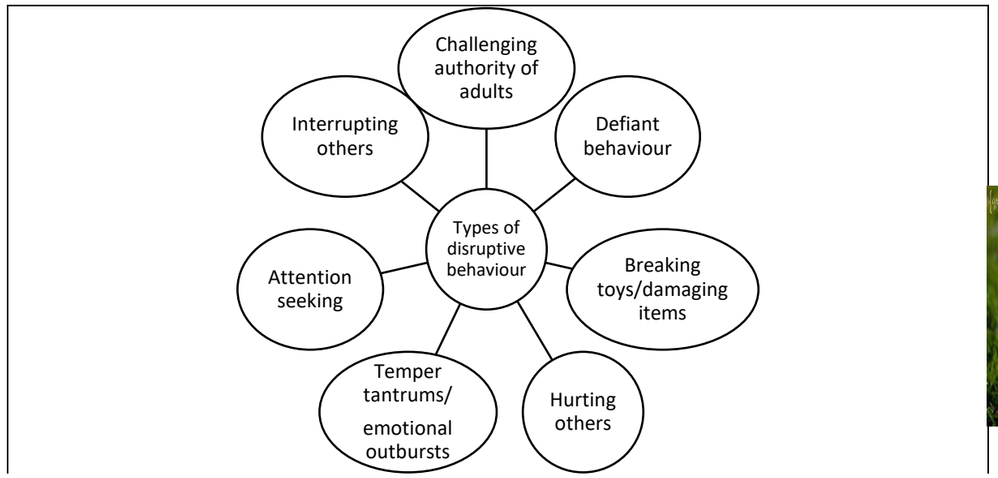
Communication and Language needs that may impact on play, learning and development	
What are the benefits of children learning English as an additional language?	Cognitive skills are developed if using more than 1 language; problem-solving and creativity skills; memory improves; can socilaise with different people; closer bonds if have a shared language; links between language and culture/religion = self-identity/self-esteem.
What can be the negative impacts of learning English as an additional language?	Children in a setting where they don't understand the language may be frightened, they may feel different to others = low self-esteem. May take longer to settle in as they need time to learn the language; may lose their 'home' language; may have gaps in language or develop a speech delay.
How do we recognise speech delay?	A child may have a speech delay if at 3 years old they are hard to understand; don't ask for things by name; learn words but don't remember them; know fewer words than you'd expect. Delayed language can also come from medical issues; lack of stimulation or no opportunities to interact and learn language.

TECHNICAL VOCABULARY	
Delayed gross motor skills	Large movements of the body are not progressing as quickly as other children of the same age.
Delayed fine motor skills	Small movements of a child's hands and fingers are not progressing as quickly as other children of the same age.
Poor concentration levels	Children find it difficult to focus on what they are doing and/or focus for a long time.
Down's syndrome	A biological disorder which occurs during embryo development when cells are dividing, and an error occurs causing development delays.
Embryo	Stage of pre-birth when the egg has been fertilised.
Delayed literacy skills	A child's reading and writing skills are not progressing to expected milestones of their age and stage of development.
English as an additional language	English is not a child's first language, the first language is the one a child is exposed to from birth.
Positive role model	Someone who sets a good example.
Social norms and values	Attitudes and behaviours that are considered 'normal' in society.
Limited interaction	When a child has limited communication and contact with adults.

Social and emotional needs that may impact on play, learning and development	
What impact can limited interaction with adults have?	Children may have a lack of interest in things; may not learn how to join in and play with others; behave unacceptably to gain attention and do not develop language skills.
What impact can having poor awareness of social norms and values have?	May display inappropriate and unwanted behviour in social situations and public places; difficulties concentrating or making friends; can be withdrawn and have low self-esteem.
Why do some children have difficulty forming bonds with adults?	Premature birth; Postnatal depression; a child's health or a parent/parents health and abuse. If a child has difficulty forming bonds with adults this impacts on play, learning and development.
What are the impacts on a child if they don't play?	Child will not know what they like or are interested in; find it hard to control emotions; unable to make friends or cooperate; won't learn how to use resources and equipment; won't progress in development; won't be able to adapt; can lead to anxiety and depression.
Why do some children have difficulties forming friendships?	May not have the skills – can't share or take turns; may not have formed bonds with adults making it difficult to trust and understand the needs of others; delayed language skills; English as an additional language; not tolerant of others; domineering; argumentative.

Year 11

Child Development: Supporting Children to Play, Learn and Develop.



TECHNICAL VOCABULARY	
Friendships	Relationships between friends.
Disruptive behaviour	Unwanted behaviour that disturbs and interrupts activities.
Transitions	Changes in children's lives.
Care or education providers	Settings that provide formal care/education for children – school for example.
Sibling	Brother or sister.
Significant family member	A close family member – parent, sibling or grandparent.
Family structure	The way in which a family is organised.
Expected milestones	Development that is expected at a particular age.
Initiate play	To start play.
Sustain involvement	Being involved for an extended period without interruption.
Perceived	Interpreting something in a particular way.
Isolate	Cause a person to be alone/apart from others.
Emotional resilience	A person's ability to adapt to stressful situations.

Social and Emotional needs that may impact on play, learning and development: transitions	
What can transitions bring to a child?	A new environment or a new relationship which can have different effects on different children.
How will children feel during transitions?	A range of feelings from excitement to stressed, anxious and nervous.
Why do children prefer things to stay the same?	Things being consistent helps children feel safe and secure- changes are unsettling.
How do children cope starting nursery/school?	Depending on age children may be nervous or excited; could suffer from separation anxiety; may cry; be clingy; ask lots of questions.
How do children cope with a new sibling?	This is a huge adjustment – many children are jealous or start to behave like a baby to gain attention (regression) may be aggressive and may try to hurt the baby or take their things.
How do family structures change?	Births; divorce; separation; death. Children may also move house or spend time at two different houses' Some children go into care and many children find adjusting to changes difficult.

Possible impact of not meeting expected milestones: -

- Unable to develop own ideas and make connections.
- May not develop language and social skills.
- Unable to understand concepts such as shape and colour.
- May not learn to control movements.
- Will not develop imagination and creativity.
- Poor concentration, perseverance and memory skills.

Possible impact of individual needs on physical learning and development: -

- Unable to access learning activities at varying levels.
- May not develop stamina.
- May not develop friendships.
- Unable to grasp small objects or manipulate materials.
- May tire easily and not be able to sustain involvement in activities.
- May be unable to navigate play areas and activities.

Possible impact of individual needs on cognitive development: -

- May not understand rules.
- Poor awareness of social norms.
- May not be able to sustain attention.
- May have difficulties taking turns; listening to others; sharing or being respectful.

Possible impact of individual needs on communication and language development: -

- Difficulties with speaking and listening.
- May not be able to make sense of information.
- Play with others may be limited.
- May lack confidence.
- May not be able to build friendships.

Possible impact of individual needs on social and emotional development: -

- May find cooperative play difficult.
- May have poor emotional resilience.
- May isolate themselves or be isolated by others.
- May refuse or find it difficult to join in team or group activities.
- May have limited expression of thoughts and feelings.
- May find building positive relationships difficult.
- May find it difficult to cope with change.
- May have low self-esteem.

HT2 Y11 Subject **RS core** Theme E **Crime and Punishment** Christianity

Religion, crime and punishment and reasons for crime	
In the UK who do the police arrest?	Police arrest people who are suspected of having broken the law by committing crimes.
If the police question someone and believe they committed a crime what happens?	If the police are confident that they have the right person, then the person will be charged with that offence.
What happens to a person charged with a serious crime in the UK?	Suspected offenders face a hearing in front of a local magistrate before going to Crown Court before a judge and a jury of 12 people.
What do most serious offences carry?	A life sentence in prison although this doesn't mean people stay in prison until they die. A life sentence is usually 25 years.
Can a UK court impose a sentence of physical harm or death?	No UK court can impose physical harm or death in some countries the death penalty is allowed.
What is Civil Law?	Civil law concerns disputes between individuals or groups – landlords/tenants etc…
What do the teachings in the Bible warn against?	They warn against having any evil or wrong thoughts or intentions.
In a religious sense who can evil be linked to?	Evil can be linked to the devil (Satan) who is the source of all that is considered evil.
Do Christians believe that people are evil?	Many would say there is no such thing as an evil person. Human beings are imperfect and suffer from an original sin.
What are some reasons for committing crime?	Poverty; opposition to unjust laws; hate; greed; addiction; mental illness and upbringing.

Christian attitudes	
What are the general Christian attitudes to lawbreakers?	Christians are against people breaking the laws of their country as laws are there to protect the rights and security of all citizens.
What do Christians believe about lawbreakers?	Some believe that a punishment should be as severe as the crime committed; others believe that the lawbreaker should be helped so that they do not re-offend. They hate the crime but not the person.
What are Christian attitudes to how lawbreakers should be treated?	Lawbreakers have rights and these should be protected, even whilst they are being punished. Christians believe that inhumane treatment of offenders is wrong. Jesus said prisoners should be treated well.
What are Christian attitudes to different types of crime?	Christians condemn hate crimes and murder as all people are created with equal value and none should get inferior treatment.
What are Christian attitudes to suffering?	Christians should try and help those who are suffering; they should follow the example of Jesus who helped people in need.
Can we blame God for suffering?	Christians believe that God gave humanity the free will to behave as they choose. Teachings of Jesus give guidance to help.
If they cause suffering what should Christians do?	Christians should be honest to themselves; to other people and to God and work hard at repairing any damage they have caused so that relationships can be restored.
When should prison be used?	Most Christians agree that prison should be used as a punishment for serious crimes.
Would a Christian agree with corporal punishment?	Christians do not agree with this, they focus on positive sanctions that help rehabilitate offenders, they believe in following Jesus' example of treating all people with respect.

TECHNICAL VOCABULARY	
Crime	An offence which is punishable by law – stealing; murder etc.
Punishment	Something legally done to somebody as a result of being found guilty of breaking the law.
Evil	The opposite of good; a force or the personification of a negative power that is seen as destructive and against God.
Poverty	Being without money, food or other basic needs of life (being poor)
Mental illness	A medical condition that affects a person's feelings, emotions or mood and perhaps their ability to relate to others.
Addiction	Physical or mental dependency on a substance or activity which is very difficult to overcome.
Greed	Wanting to possess wealth, goods or items of value which are not needed.
Retribution	An aim of punishment -to get your own back 'an eye for an eye.'
Deterrence	An aim of punishment- to put people off committing crime.
Reformation	An aim of punishment to change someone's behaviour.
Free will	The ability of people to make decisions for themselves.
Corporal punishment	Punishment of an offender by causing them physical pain – illegal in the UK.
Forgiveness	Showing mercy and pardoning someone for what they have done wrong.

Aims of punishment and the Death Penalty	
What is retribution?	This means to get your own back; in the Old Testament this is called lex talionis and means criminals should receive the same injuries and damage they caused their victim.
What is deterrence?	If offenders are seen to be punished for their actions it is hoped that the threat of this will put others off committing crimes.
In the past what punishments were used as deterrents?	Being punished in public – public floggings and executions.
What is reformation?	This is the punishment that most Christians prefer as it seeks to help offenders by working with them to help them understand why their behaviour is harmful.
Should Christians seek revenge?	No Christians should seek and show compassion.
Is there a limit to forgiveness?	No there is no maximum amount of times a person should be forgiven. God's love is infinite so there can be no limit to forgiveness.
What do Christians think about the death penalty?	Some agree with it and use teachings from the Old Testament to support their views: 'Whoever sheds human blood, by humans shall their blood be shed.' Genesis 9:6 and 'Life for life; eye for eye; tooth for tooth.' Exodus 21:23-24.
Why do some Christians oppose the death penalty?	They do not believe that taking another life is right – only God has the right to take life.

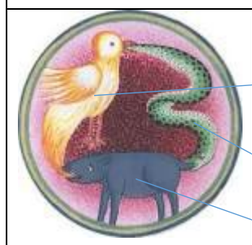
Subject **RS** Buddhism: beliefs and teachings.

Before enlightenment	
How long ago was Buddhism founded?	Buddhism was founded around 2500 years ago.
Who is the founder of Buddhism?	The founder of Buddhism was Siddhartha Gautama, he was born around 500BCE.
Who were Siddhartha's parents and what did this mean for his lifestyle?	Siddhartha's parents were King Suddhodana and Queen Maya and he had a life of 'material' luxury.
Queen Maya had a dream before Siddhartha was born what was it? What did it mean?	Queen Maya dreamt about a little white elephant who told her that her child would be holy.
After his mother died the King tried to protect his son from all hardships – what were the four sights that changed Siddhartha's life?	The four sights were old age; illness; death and a holy man. 
When he was an ascetic how was Siddhartha trying to understand the problem of suffering?	Siddhartha practiced living in extreme temperatures and places of danger; he slept on thorns and survived on very small amounts of food.
How did the demon Mara try to distract Siddhartha from gaining enlightenment?	Mara tried to distract Siddhartha by sending his daughters; his armies; offering control of his kingdom and questioning Siddhartha.
How long did Siddhartha's enlightenment take?	Siddhartha's enlightenment took place during 3 parts (watches) of the night.

TECHNICAL VOCABULARY	
Buddha	This is a title meaning 'awakened one' or 'enlightened one.'
Jakata	Popular stories about the life of Buddha.
Ascetics	People who live a simple and strict lifestyle with few pleasures or possessions. They are searching for spiritual wisdom.
Meditation	The practice of calming and focussing the mind.
Enlightenment	Spiritual wisdom that comes from understanding the true reality of nature.
Mara	A demon that represents spiritual obstacles and temptation.
Dhamma	The truth Buddha realised when he became enlightened.
The three marks of existence	Dukkha (suffering); Anicca (impermanence) and Anatta (nothing is permananet).
The four noble truths	These are dukkha (suffering); samudaya (cause of suffering); nirodha (suffering can end) and magga (there is a means to end suffering).
Arhat	A perfected person

After Enlightenment: Teachings	
What is the Dhamma?	Dhamma refers to the Buddha's teachings but is also about truth; training and universal 'law'.
What are the three refuges (or jewels) in Buddhism?	The three refuges (jewels) in Buddhism are the Buddha; the Dhamma and the Sangha (the Buddhist community).
What is the idea of dependent arising?	Dependent arising is the idea that everything arises in dependence upon conditions. It is shown as the Wheel of Life.
What does the Tibetan Wheel of Life show?	The Wheel of Life shows dependent arising as applied to birth, death and rebirth (samsara).
What are the three marks of existence?	The three marks of existence are suffering (Dukkha); impermanence (anicca) and having no permanent, fixed self or soul (anatta).
What are the 3 recognised types of suffering?	The three types of suffering are ordinary suffering (dukkha-dukkhata); suffering because of change (viparinama-dukkha) and suffering because of attachment (samkhara-dukkha).
How does anicca (impermanence) affect the	Anicca affects the world in the three following groups – living things; non-living things and people's minds.
What does the story of Nagasena and the chariot	The story of Nagasena and the chariot illustrates that there is no fixed part to a person.
What are the Four Noble Truths?	The Four Noble Truths are- 1/ dukkha (suffering); 2/ samudaya (causes of suffering); 3/ nirodha (suffering can end) and 4/ magga (there is a way to end suffering).
What are the 5 aggregates/skandhas?	The 5 aggregates/skandhas are Form: Sensation; Perception; Mental Formations and Consciousness.

Suffering, causes and routes to happiness



The 3 poisons

Greed/desire shown by a cockerel.

Hatred/anger shown by a snake.

Ignorance shown by a pig.

The **threefold way** makes up the sections of the eightfold path. They are ethics; meditation and wisdom.

The Eightfold Path has 8 aspects that Buddhists practice and live by in order to achieve enlightenment. It is split into the threefold way and can be understood as a range of practices that should all be developed. They are: -

Ethics – right speech; right action; right livelihood.

Meditation – right effort; right mindfulness; right concentration.

Wisdom – right understanding; right intention.

How does a person become an **Arhat**?
An arhat has overcome the main sources of suffering and has become enlightened so the cycle of rebirth ends and reach nibbana, this means that have followed and fulfilled the Eightfold Path.

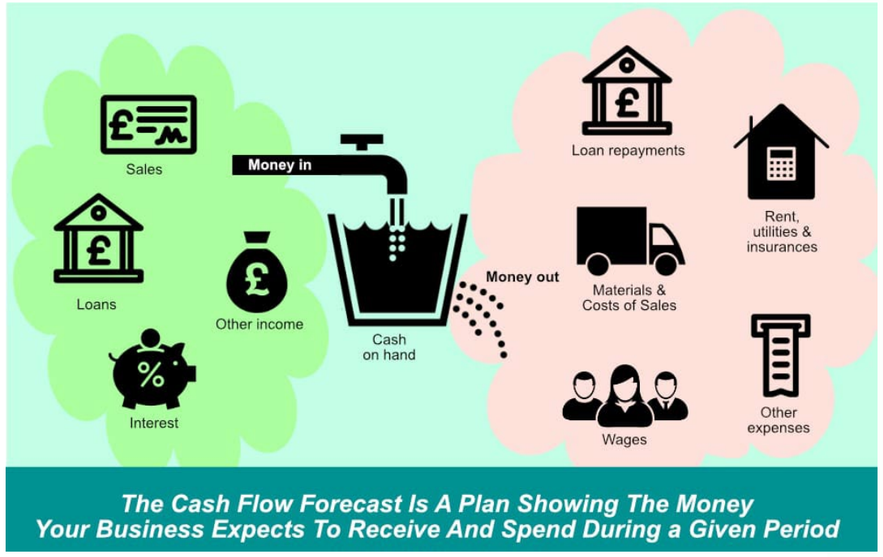
Half Term 2 Subject **Enterprise** Threshold Concept Link(s) **Business Marketing and Enterprise**

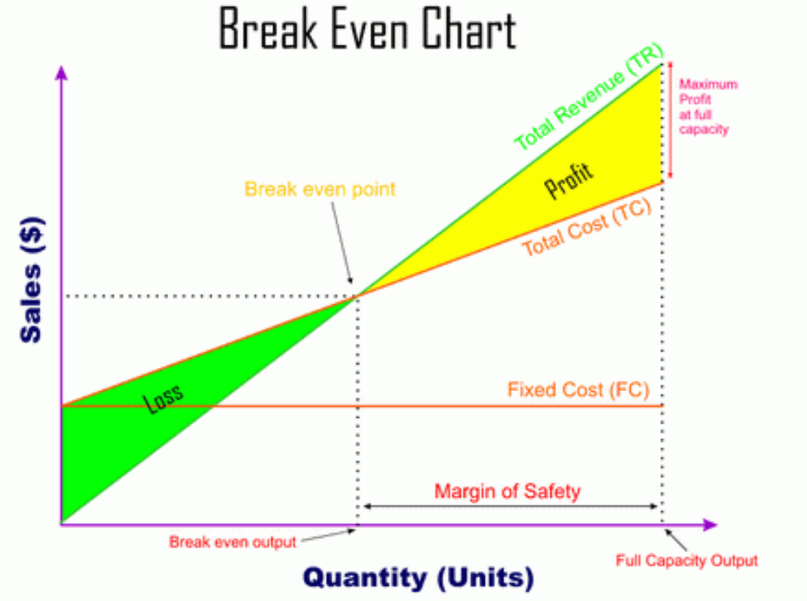
Topic Formula	
Revenue	Number of Sales x Price
Total costs	Total Fixed Costs + Total Variable Costs
Gross Profit	Sales revenue – Cost of sales
Net profit	Gross profit – Other expenses
Interest	$\frac{\text{Total repayment – borrowed amount}}{\text{Borrowed amount}}$ x100
Break-even Point in units	$\frac{\text{Fixed Costs}}{\text{(Sales price – variable cost)}}$

TECHNICAL VOCABULARY	
Medium	How an enterprise chooses to communicate with and advertise to its market
Promotional mix	The range of techniques used to communicate with current and potential customers. Advertising, public relations, direct marketing, personal selling and sales promotions.
Push Strategies	Push goods and services directly to the customer at the point of purchase. Making them aware of the brand.
Budget	Is the amount of money designated for a specific activity or period of time.
Assets	Items an enterprise owns. Includes property, machinery and cash.
Capital	Is the money, buildings and equipment that an enterprise uses in order to trade.
Start-up costs	The amount of money spent setting up a business before it starts trading.
Running costs	Are the fixed and variable costs that have to be paid to keep the business trading.
Cost of sales	Is the cost of producing the product.
Retained profit	Is profit earned and accumulated from previous trading reinvested back into the enterprise.
Net current assets	Are the difference between current assets and current liabilities. They show the value of the enterprise.
Liquidity	The ability of an enterprise to pay its debts
Trade Credit	Allows a customer to 'buy' things from a business without paying for them at the time. The money is paid back later in instalments.

Profit and loss Account
Sales revenue minus
Cost of Sales (raw materials, packaging, direct wages) Equals
Gross Profit minus
Operating Costs (salaries, rent, insurance, advertising) Equals
Net profit

Cash flow forecast





HT2 Subject **Sociology** Threshold Concept Link(s) **Crime and Deviance**

Who commits crime? Why do differences occur?

Gender	Ethnicity	Class	Age
Women committing less crime. • Gender socialisation • Fewer opportunities • More domestic responsibilities • May be treated differently in the criminal justice system e.g. sad, rather than bad, given a lenient sentence. Chivalry thesis • Others argue they are treated more harshly- double deviancy. Therefore do not commit crime. **Women's involvement in crime is increasing:** • Lost a lot of their controls and restraints • Women are not experiencing equality in the work place-gender pay gap.	• Inaccurate statistics Labelling- racism and stereotyping within the police practice. More ethnic groups are stopped and searched. • Institutional racism within the police- most police officers are white and may label particular groups (Stephen Lawrence murder) • Linked to their social class, higher levels of crime in the ethnic minority groups could link to the fact they are also possibly experiencing poverty and this leads to crime. • Media reinforcing views- reporting in the media on particular groups can generate mistrust and hostility.	• Inaccurate statistics- lower-class criminals may commit crimes that are more identifiable and more likely to be targeted by the police. • Socialisation • Material deprivation- may commit crime to obtain the things others have • Education- W/C more likely to be in the bottom sets/streams so may look for other routes to get what they need e.g. crime. • Anomie- mismatch between goals and the means to achieve the goals. • Labelling. • White collar crime is not as easily identifiable as crimes committed at lower levels.	• Status frustration- lack of independence and caught in transition. Lack of responsibilities can lead them to drift into deviant and criminal behaviour. • Peer Pressure • Edgework- thrill seeking and risk-taking. Getting a "buzz" from committing a crime or displaying deviant behaviour. • Socialisation- Some young people are inadequately socialised and have learned criminal behaviour as a norm or value. • Police stereotyping • Media moral panic/folk devil. • Subcultural theory

TECHNICAL VOCABULARY	
Crime	Behaviour that breaks the law.
Deviance	Behaviour that does not conform to the dominant norms of a specific society
Socially defined behaviour	Thought of as natural but is actually the product of cultural expectations.
Official Crime statistics	The way crime is officially measured, based on statistics collected by the Home office.
Victim surveys	Surveys of the public which ask them to report any crimes they have experienced, whether or not they have reported them.
Self –report surveys	Surveys of the population which ask them to confess to crime they have committed. But for which they have not been caught.
Reported crime	Crime is reported to the police. Not all crime is reported
Recorded crime	Crime that is recorded by the police. Not all reported crime is recorded.
Validity	Data is valid if it gives a true picture of what is being studied.
Dark figure of crime	A large amount of criminal activity never appears in the crime statistics.
British Crime Survey	BCS: A victim survey conducted annually by a team of researchers at the home office. The BCS measures the amount of crime in England and Wales by asking people about crimes
Social constructed	Views of what is criminal or deviant behaviour are influenced by the values and norms of the society we live in.
Peer group pressure	A group of a person's won age who are important to them and often influence them to behave in a particular way.

Social Control: Much of our behaviour is socially controlled.

Formal Social Control: Based on written rules and laws.

Agencies of formal social control:
- Houses of Parliament
- The police force
- Judiciary
- The prison service.

Informal Social Control: Based on unwritten rules and processes such as approval & disapproval

Agencies of informal social control:
- Family members
- Peers
- Teachers
- Work colleagues

The class deal & the gender deal.
- Most people conform to the rules because of the 'deals' that offer them rewards.
- **Class Deal:** Material rewards if you work for your wage
- **Gender deal:** Material & emotional rewards if you live with a male breadwinner within the family.

Refusing the class deal: Not found legitimate ways of earning a decent living. More to gain than to lose by offending.

Refusing the gender deal: Supposed to be rewarded with happiness & fulfilment from family life. Many women may be abused, no bonds with family & friends. Nothing to lose and everything to gain.

Those at high risk from crime:
Class: The poor, living in private rented housing
Gender: Males
Age: The Young
Ethnicity: Minority ethnic groups.

Debate: The media:

1. **Are the media biased in their presentation of crime?**
2. **Does the media create crime in society?**

1. Are the media biased in their presentation of crime?

- When individuals do not have direct knowledge or experience of what is happening, they rely on the media to inform them.
- The media set the agenda in terms of what is considered to be important.
- The editors filter what they see as newsworthy (news value) they tend to include and emphasis elements of a story for their audience. Stories they are more likely to report (news value) are stories involving children, violence, celebrities, if the event has occurred locally, easy to understand and if graphic images are involved.
- 46% of media reports are about violence or sexual crimes, yet these only make up for 3% of crime recorded by the police (Ditton & Delphy 1983)
- Deviancy amplification is usually used to describe the impact of the media on the public perception of crime.

2. Does the media create crime?

- Media content can have a negative impact on the behaviour of young people, particularly children.
- It is suggested that some people may imitate violence and immoral or antisocial behaviour seen in media. The media are regarded as a powerful secondary agent of socialisation.
- Video games are often blamed as a link between increased aggressive behaviour and crime.

Crime Key Studies	
Study	Findings
Merton's (1938) strain theory Functionalist	• People's aspirations and goals are shaped by their culture eg American Dream = economic success • Some people experience a strain between the goals of society and the means of achieving them. This may lead to anomie (normlessness) • They may seek out an illegitimate route to economic success eg crime
Becker's (1963) interactionist perspective interactionist	• Argues deviance is created by society • Powerful social groups create deviance by making the rules and applying these to others • People can develop deviant careers if labelled as deviant • The deviant label can become a master status (main identity) • Labelling can lead to the self-fulfilling prophecy
Heidensohn's (1985) control theory Feminist	• Women commit less crime because they are more closely controlled in society • In a patriarchal society, women have stronger social control placed on them which can reduce opportunities for crime • At home, women are controlled by domestic responsibilities, at work by fear of damaging reputation and in public by fear of male violence
Carlen's (1988) class and gender deal Feminist	• Carlen explains why working-class women commit crime • She argues they are promised two rewards for conforming- 'class deal' (money and material items from working hard) and 'gender deal' (happy domestic life with husband and children) • She found WC women committed crime when these rewards were blocked due to: poverty, living in care, drug addiction. • They had nothing to lose and everything to gain
Cohen's (1955) subcultural theory Functionalist	• Argues delinquency is carried out by groups not individuals, and that groups often commit non-utilitarian (not motivated by money) crimes • Working class boys experience status frustration at not succeeding in middle class school • They join/ form a delinquent subculture with an alternative status hierarchy where they will gain status for deviance

Key term	Definition
Crime	Any form of behaviour that breaks the law
Custodial sentences	Punishment where offenders will sentenced to go to prison or Young offenders institute
Crime rate	A measure of the level of criminal activity in a society based on crimes recorded by the police
Dark figure of crime	The unknown amount of criminal activity that is not reported or recorded to the police
Deviance	Any form of behaviour that does not conform to the norms of a society – this can be influenced by time, place, social situation and culture
Formal agencies of social control	Formal rules and social controls that tell everyone within society what is and is not acceptable e.g. the police, the courts, the government
Informal agencies of social control	The approval or disapproval of people around us that can influence and control our behaviour e.g. family , friends, peer group, schools, work, religion
Official crime statistics	Government statistics on crime based on official sources e.g. police records
Self-report study	A survey that asks respondents to identify crimes they have committed, but for which they have not been caught
Social construction of crime	What is considered criminal and deviant changes over time or when it takes place, therefore is socially constructed. No act is in itself criminal or deviant- it largely depends on how other member of society see it e.g. homosexuality
Victim survey	A survey that asks respondents about their experience of crime, regardless of whether or not those crimes have reported
Collective conscience	The shared beliefs that bind communities together and regulate individual behaviour
Deviant career	Deviant behaviour that develops over time due to labels. e.g. labelled a troublemaker at school and then goes onto commit crime later in life
Deviancy amplification	The exaggeration of a particular social issue as a consequence of media coverage, e.g. anti-social behaviour by groups of young people

Delivering a Sports Activity Session	
SMART	Specific, Measurable, Achievable, Realistic, Time-bound.
Components of a session	Introduction – **warm up** (pulse raiser, dynamic stretches, skills practice), **main session** (skill in isolation, progression, conditioned/competitive situation), **cool down** (transition to resting, static stretches), **conclusion** (summary and feedback)
Safe practice	• The amount of players. • The type of sport.
Timing	• Punctual and prepared. • Structure of session.
Adaptability	• Different ability levels of participants.

Delivery styles	
Proactive	**Reactive**
• Pre-planned. • Consider situation and group before deciding content and delivery. • Has a prepared session plan.	• Leader adapts the session, based on the situation. • E.g. the leader may break down the task into more simple steps, if the learners are struggling.

Leadership Styles	
Democratic	• Shared decision-making. • Person-orientated. • Good relationships with members of the group.
Autocratic	• Leader makes decisions. • Command style. • Task-orientated. • Focus on good results.
Laissez-faire	• The leader does little. • The group lead the task with little input.

Exam - Topic Area 5 – The Use of Technology in Sport	
To enhance performance	Equipment, clothing, analysis, recovery & rehabilitation, accessibility.
To increase safety of participants	Helmets, gloevs, protective padding and guards, mouth guards, Formula 1 cars.
To increase fair play and accuracy of officiating	VAR, TV match official. Hawkeye, Hotspot, times/distances and at the line, post-event disciplinary action.
To enhance spectatorship	Video replays, decision-making, scores and information