Contents

Da Vinci Academy
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English: Poetry

Remains by Simon Armitage

Themes: Conflict, Suffering, Reality of War | **Tones:** Tragic, Haunting, Anecdotal

Content, Meaning and Purpose
-Written to coincide with a TV documentary about those returning from war with PTSD. Based on Guardsman Tromans, who fought in Iraq in 2003.
-Speaker describes shooting a looter dead in Iraq and how it has affected him.
-To show the reader that mental suffering can persist long after physical conflict is over.

Context
-"These are poems of survivors – the damaged, exhausted men who return from war in body but never, wholly, in mind." *Simon Armitage*
-Poem coincided with increased awareness of PTSD amongst the military, and aroused sympathy amongst the public – many of whom were opposed to the war.

Language
-"Remains" - the images and suffering remain.
-"Legs it up the road" - colloquial language = authentic voice
-"Then he's carted off in the back of a lorry" – reduction of humanity to waste or cattle
-"he's here in my head when I close my eyes / dug in behind enemy lines" – metaphor for a war in his head; the PTSD is entrenched.
-"his bloody life in my bloody hands" – alludes to Macbeth: Macbeth the warrior with PTSD and Lady Macbeth's bloody hands and guilt.

Form and Structure
-Monologue, told in the present tense to convey a flashback (a symptom of PTSD).
-First four stanzas are set in Iraq; last three are at home, showing the aftermath.
-Enjambment between lines and stanzas conveys his conversational tone and gives it a fast pace, especially when conveying the horror of the killing
-Repetition of 'Probably armed, Possibly not" conveys guilt and bitterness.

Exposure by Wilfred Owen

Themes: Conflict, Suffering, Nature, Reality of War, Patriotism | **Tones:** Tragic, Haunting, Dreamy

Content, Meaning and Purpose
-Speaker describes war as a battle against the weather and conditions.
-Imagery of cold and warm reflect the delusional mind of a man dying from hypothermia.
-Owen wanted to draw attention to the suffering, monotony and futility of war.

Context
-Written in 1917 before Owen went on to win the Military Cross for bravery, and was then killed in battle in 1918: the poem has authenticity as it is written by an actual soldier.
- Of his work, Owen said: "My theme is war and the pity of war".
-Despite highlighting the tragedy of war and mistakes of senior commanders, he had a deep sense of duty: "not loath, we lie out here" shows that he was not bitter about his suffering.

Language
-"Our brains ache" physical (cold) suffering and mental (PTSD or shell shock) suffering.
-Semantic field of weather: weather is the enemy.
-"the merciless iced east winds that knive us…." – personification (cruel and murderous wind); sibilance (cutting/slicing sound of wind); ellipsis (never-ending).
-Repetition of pronouns 'we' and 'our' – conveys togetherness and collective suffering of soldiers.
-'mad gusts tugging on the wire' – personification

Form and Structure
-Contrast of Cold>Warm>Cold imagery coveys Suffering>Delusions>Death of the hypothermic soldier.
-Repetition of "but nothing happens" creates circular structure implying never ending suffering
-Rhyme scheme ABBA and hexameter gives the poem structure and emphasises the monotony.
-Pararhymes (half rhymes) ("nervous / knife us") only barely hold the poem together, like the men.

Poppies by Jane Weir

Themes: Bravery, Reality of War, Suffering, Childhood | **Tones:** Tender, Tragic, Dreamy, Bitter

Content, Meaning and Purpose
-A modern poem that offers an alternative interpretation of bravery in conflict: it does not focus on a soldier in battle but on the mother who is left behind and must cope with his death.
-The narration covers her visit to a war memorial, interspersed with images of the soldier's childhood and his departure for war.

Context
-Set around the time of the Iraq and Afghan wars, but the conflict is deliberately ambiguous to give the poem a timeless relevance to all mothers and families.
-There are hints of a critical tone; about how soldiers can become intoxicated by the glamour or the military: "a blockade of yellow bias" and "intoxicated".

Language
-Contrasting semantic fields of home/childhood ("cat hairs", "play at being Eskimos", "bedroom") with war/injury ("blockade", bandaged", "reinforcements")
-Aural (sound) imagery: "All my words flattened, rolled, turned into felt" shows pain and inability to speak, and "I listened, hoping to hear your playground voice catching on the wind" shows longing for dead son.
-"I was brave, as I walked with you, to the front door": different perspective of bravery in conflict.

Form and Structure
-This is an Elegy, a poem of mourning.
-Strong sense of form despite the free verse, stream of consciousness addressing her son directly – poignant
-No rhyme scheme makes it melancholic
-Enjambment gives it an anecdotal tone.
-Nearly half the lines have caesura – she is trying to hold it together, but can't speak fluently as she is breaking inside.
-Rich texture of time shifts, and visual, aural and touch imagery.

Charge of the Light Brigade by Alfred, Lord Tennyson

Themes: Conflict, Suffering, Reality of War, Patriotism | **Tones:** Energetic, Tragic, Haunting

Content, Meaning and Purpose
- Published six weeks after a disastrous battle against the Russians in the (unpopular) Crimean War
-Describes a cavalry charge against Russians who shoot at the lightly-armed British with cannon from three sides of a long valley.
-Of the 600 hundred who started the charge, over half were killed, injured or taken prisoner.
-It is a celebration of the men's courage and devotion to their country, symbols of the might of the British Empire.

Context
-As Poet Laureate, he had a responsibility to inspire the nation and portray the war in a positive light: propaganda.
-Although Tennyson glorifies the soldiers who took part, he also draws attention to the fact that a commander had made a mistake: "Someone had blunder'd".
-This was a controversial point to make in Victorian times when blind devotion to power was expected.

Language
-"Into the valley of Death": this Biblical imagery portrays war as a supremely powerful, or even spiritual, experience.
-"jaws of Death" and "mouth of Hell": presents war as an animal that consumes its victims.
-"Honour the Light Brigade/Noble six hundred": language glorifies the soldiers, even in death. The 'six hundred' become a celebrated and prestigious group.
-"shot and shell": sibilance creates whooshing sounds of battle.

Form and Structure
-This is a ballad, a form of poetry to remember historical events – we should remember their courage.
-6 verses, each representing 100 men who took part.
-First stanza tightly structured, mirroring the cavalry formation. Structure becomes awkward to reflect the chaos of battle and the fewer men returning alive.
-Dactylic dimeter (HALF-a league / DUM-de-de) mirrors the sound of horses galloping and increases the poem's pace.
-Repetition of 'the six hundred' at the end of each stanza (epistrophe) emphasises huge loss.

Bayonet Charge by Ted Hughes

Themes: Conflict, Power, Reality of War, Nature, Bravery, Patriotism | **Tones:** Bewildered, Desperate, Dreamy

Content, Meaning and Purpose
-Describes the terrifying experience of 'going over the top': fixing bayonets (long knives) to the end of rifles and leaving a trench to charge directly at the enemy.
-Steps inside the body and mind of the speaker to show how this act transforms a soldier from a living thinking person into a dangerous weapon of war.
-Hughes dramatises the struggle between a man's thoughts and actions.

Context
-Published in 1957, but most-likely set in World War 1.
-Hughes' father had survived the battle of Gallipoli in World War 1, and so he may have wished to draw attention to the hardships of trench warfare.
-He draws a contrast between the idealism of patriotism and the reality of fighting and killing. ("King, honour, human dignity, etcetera")

Language
-"The patriotic tear that brimmed in his eye Sweating like molten iron": his sense of duty (tear) has now turned into the hot sweat of fear and pain.
-"cold clockwork of the stars and nations": the soldiers are part of a cold and uncaring machine of war.
-"his foot hung like statuary in midstride.": he is frozen with fear/bewilderment. The caesura (full stop) jolts him back to reality.
-"a yellow hare that rolled like a flame And crawled in a threshing circle": impact of war on nature – the hare is distressed, just like the soldiers

Form and Structure
-The poem starts 'in medias res': in the middle of the action, to convey shock and pace.
-Enjambment maintains the momentum of the charge.
-Time stands still in the second stanza to convey the soldier's bewilderment and reflective thoughts.
-Contrasts the visual and aural imagery of battle with the internal thoughts of the soldier = adds to the confusion.

War Photographer

Themes: Conflict, Suffering, Reality of War | **Tones:** Painful, Detached, Angry

Content, Meaning and Purpose
-Tells the story of a war photographer developing photos at home in England: as a photo develops he begins to remember the horrors of war – painting a contrast to the safety of his dark room.
-He appears to be returning to a warzone at the end of the poem.
-Duffy conveys both the brutality of war and the indifference of those who might view the photos in newspapers and magazines: those who live in comfort and are unaffected by war.

Context
-Like Tennyson and Ted Hughes, Duffy was the Poet Laureate.
-Duffy was inspired to write this poem by her friendship with a war photographer. She was intrigued by the challenge faced by these people whose job requires them to record terrible, horrific events without being able to directly help their subjects.
-The location is ambiguous and therefore universal: ("Belfast. Beirut. Phnom Penh.")

Language
-"All flesh is grass": Biblical reference that means all human life is temporary – we all die eventually.
-"He has a job to do": like a soldier, the photographer has a sense of duty.
-"running children in a nightmare heat": emotive imagery with connotations of hell.
-"blood stained into a foreign dust": lasting impact of war – links to Remains and 'blood shadow'.
-"he earns a living and they do not care": 'they' is ambiguous – it could refer to readers or the wider world.

Form and Structure
-Enjambment – reinforces the sense that the world is out of order and confused.
-Rhyme reinforces the idea that he is trying to bring order to a chaotic world – to create an understanding.
-Contrasts: imagery of rural England and nightmare war zones.
-Third stanza: A specific image – and a memory – appears before him.

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English: Poetry

Kamikaze by Beatrice Garland

Themes: Conflict, Power, Patriotism, Shame, Nature, Childhood | **Tones:** Sorrowful, Pitiful

Content, Meaning and Purpose	Context
-In World War 2, Japanese Kamikaze pilots would fly manned missiles into targets such as ships. -This poem explores a kamikaze pilot's journey towards battle, his decision to return, and how he is shunned when he returns home. -As he looks down at the sea, the beauty of nature and memories of childhood make him decide to turn back.	-Cowardice or surrender was a great shame in wartime Japan. -To surrender meant shame for you and your family, and rejection by society: **"he must have wondered which had been the better way to die".**

Language	Form and Structure
-The Japanese word **'kamikaze'** means **'divine wind'** or 'heavenly wind', and has its origin in a heaven-sent storm that scattered an invading fleet in 1250. -"**dark shoals of fish flashing silver**": image links to a Samurai sword - it conveys the conflict between his love for nature/life and his sense of duty. Also has sibilance. - **"they treated him as though he no longer existed":** cruel irony – he chose to live but now must live as though he is dead. -**"was no longer the father we loved":** the pilot was forever affected by his decision.	-Narrative and speaker is third person, representing the distance between her and her father, and his rejection by society. -The first five stanzas are ordered (whilst he is flying on his set mission). -Only full stop is at the end of Stanza Five: he has made his decision to turn back. -The final two are in italics and have longer line to represent the fallout of his decision: his life has shifted and will no longer be the same. -Direct speech (**"My mother never spoke again"**) gives the poem a personal tone.

The Emigree by Carol Rumens

Themes: Conflict, Power, Identity, Protest, Bravery, Childhood | **Tones:** Mournful, Defiant, Nostalgic

Content, Meaning and Purpose	Context
-'Emigree' – a female who is forced to leave their county for political or social reasons. -The speaker describes her memories of a home city that she was forced to flee. The city is now **"sick with tyrants".** -Despite the cities problems, her positive memories of the place cannot be extinguished.	-Emigree was published in 1993. The home country of the speaker is not revealed – this ambiguity gives the poem a timeless relevance. -Increasingly relevant to many people in current world climate

Language	Form and Structure
-**"I left it as a child":** ambiguous meaning – either she left when *she* was a child or the city was a child (it was vulnerable and she feels a responsibility towards it). -**"I am branded by an impression of sunlight":** imagery of light - it will stay with her forever. -Personification of the city: **"I comb its hair and love its shining eyes"** (she has a maternal love for the city) and **"My city takes me dancing"** (it is romantic and passionate lover) -**"My city hides behind me":** it is vulnerable and – despite the fact that she had to flee – she is strong. -Semantic field of conflict: **"Tyrant, tanks, frontiers"**	-First person. -The last line of each stanza is the same (epistrophe): **"sunlight":** reinforces the overriding positivity of the city and of the poem. -The first two stanzas have lots of enjambment – conveys freedom. The final stanza has lots of full-stops – conveys that fact that she is now trapped.

Checking Out Me History by John Agard

Themes: Power, Protest, Identity, Childhood | **Tones:** Defiant, Angry, Rebellious, Cynical

Content, Meaning and Purpose	Context
-Represents the voice of a black man who is frustrated by the Eurocentric history curriculum in the UK – which pays little attention to the black history. -Black history is quoted to emphasise its separateness and to stress its importance.	-John Agard was born in the Caribbean in 1949 and moved to the UK in the 1970s. -His poetry challenge racism and prejudice. -This poem may, to some extent, have achieved its purpose: in 2016, a statue was erected in London in honour of Mary Seacole, one of the subjects of the poem.

Language	Form
-Imagery of fire and light used in all three stanzas regarding black historic figures: **"Toussaint de beacon", "Fire-woman", "yellow sunrise".** -Uses non-standard phonetic spelling (**"Dem tell me wha dem want"**, to represent his own powerful accent and mixes Caribbean Creole dialect with standard English. -**"I carving out me identity":** metaphor for the painful struggle to be heard, and to find his identity.	-Dramatic monologue, with a dual structure. -Stanzas concerning Eurocentric history (normal font) are interspersed with stanzas on black history (in *italics* to represent separateness and rebellion). - Black history sections arranged as serious lessons to be learned; traditional history as nursery rhymes, mixed with fairytales (mocking of traditional history). - The lack of punctuation, the stanzas in free verse, the irregular rhyme scheme and the use of Creole could represent the narrator's rejection of the rules. -Repetition of **"Dem tell me":** frustration.

Ozymandias by Percy Bysshe Shelley

Themes: Power of Nature, Decay, Pride | **Tones:** Ironic, rebellious

Content, Meaning and Purpose	Context
-The narrator meets a traveller who tells him about a decayed stature that he saw in a desert. -The statue was of a long forgotten ancient King: the arrogant Ozymandias, **'king of kings.'** -The poem is ironic and one big metaphor: Human power is only temporary – the statue now lays crumbled in the sand, and even the most powerful human creations cannot resist the power of nature.	-Shelley was a poet of the 'Romantic period' (late 1700s and early 1800s). Romantic poets were interested in emotion and the power of nature. -Shelley also disliked the concept of a monarchy and the oppression of ordinary people. -He had been inspired by the French revolution – when the French monarchy was overthrown.

Language	Form and Structure
-'**sneer of cold command**': the king was arrogant, this has been recognised by the sculptor, the traveller and then the narrator. -**'Look on my works, ye Mighty, and despair.':** '*Look*' = imperative, stressed syllable highlights commanding tone; ironic – he is telling other 'mighty' kings to admire the size of his statue and 'despair', however they should really despair because power is only temporary. **'The lone and level sands stretch far away.':** the desert is vast, lonely, and lasts far longer than a statue.	-A sonnet (14 lines) but with an unconventional structure... the structure is normal until a turning point (a volta) at Line 9 (..these words appear). This reflects how human structures can be destroyed or decay. -The iambic pentameter rhyme scheme is also disrupted or decayed. -First eight lines (the octave) of the sonnet: the statue is described in parts to show its destruction. -Final two lines: the huge and immortal desert is described to emphasise the insignificance of human power and pride.

My Last Duchess by Robert Browning

Themes: Power, Pride, Control, Jealousy, Status | **Tones:** Sinister, Bitter, Angry

Content, Meaning and Purpose	Context
-The Duke is showing a visitor around his large art collection and proudly points out a portrait of his last wife, who is now dead. He reveals that he was annoyed by her over-friendly and flirtatious behaviour. -He can finally control her by objectifying her and showing her portrait to visitors when he chooses. -He is now alone as a result of his need for control. -The visitor has come to arrange the Duke's next marriage, and the Duke's story is a subtle warning about how he expects his next wife to behave.	-Browning was a British poet, and lived in Italy. The poem was published in 1842. -Browning may have been inspired by the story of an Italian Duke (Duke of Ferrara): his wife died in suspicious circumstances and it was rumoured that she had been poisoned.

Language	Form and Structure
-**'Looking as if she was alive'**: sets a sinister tone. -**'Will't please you sit and look at her?'** rhetorical question to his visitor shows obsession with power. -'**she liked whate'er / She looked on, and her looks went everywhere.':** hints that his wife was a flirt. -**'as if she ranked / My gift of a nine-hundred-years-old name / With anybody's gift'** she was beneath him in status, and yet dared to rebel against his authority. -**'I gave commands; Then all smiles stopped together':** euphemism for his wife's murder. -**'Notice Neptune, though / Taming a sea-horse':** he points out another painting, also about control.	-Dramatic Monologue, in iambic pentameter. -It is a speech, pretending to be a conversation – he doesn't allow the other person to speak! -Enjambment: rambling tone, he's getting carried away with his anger. He is a little unstable. -Heavy use of caesura (commas and dashes): stuttering effect shows his frustration and anger: '**She thanked men, – good! but thanked / Somehow – I know not how'** -Dramatic Irony: the reader can read between the lines and see that the Duke's comments have a much more sinister undertone.

Tissue by Imtiaz Dharker

Themes: Power of Nature, Control, Identity | **Tones:** Gentle, Flowing, Ethereal

Content, Meaning and Purpose	Context
-Two different meanings of 'Tissue' (homonyms) are explored: firstly, the various pieces of paper that control our lives (holy books, maps, grocery receipts); secondly, the tissue of a human body. -The poet explores the paradox that although paper is fragile, temporary and ultimately not important, we allow it to control our lives. -Also, although human life is much more precious, it is also fragile and temporary.	-Imtiaz Dharker was born in Pakistan and grew up in Glasgow. 'Tissue' is taken from a 2006 collection of poems entitles 'The Terrorist at My Table': the collection questions how well we know people around us. -This particular poem also questions how well we understand ourselves and the fragility of humanity.

Language	Form and Structure
-Semantic field of light: ('**Paper that lets light shine through', 'The sun shines through their borderlines', 'let the daylight break through capitals and monoliths'**) emphasises that light is central to life, a positive and powerful force that can break through 'tissue' and even monoliths (stone statues). -'**pages smoothed and stroked and turned':** gentle verbs convey how important documents such as the Koran are treated with respect. -'**Fine slips [...] might fly our lives like paper kites':** this simile suggests that we allow ourselves to be controlled by paper.	-The short stanzas create many layers, which is a key theme of the poem (layers of paper and the creation of human life through layers) -The lack of rhythm or rhyme creates an effect of freedom and openness. -All stanzas have four lines, except the final stanza which has one line ('**turned into your skin'**): this line focuses on humans, and addresses the reader directly to remind us that we are all fragile and temporary. -Enjambment between lines and stanzas creates an effect of freedom and flowing movement.

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Extract from The Prelude: Stealing the Boat by William Wordsworth

Themes: Power of Nature, Fear, Childhood | **Tones:** Confident > Dark / Fearful > Reflective

Content, Meaning and Purpose
- The story of a boy's love of nature and a night-time adventure in a rowing boat that instils a deeper and fearful respect for the power of nature.
- At first, the boy is calm and confident, but the sight of a huge mountain that comes into view scares the boy and he flees back to the shore.
- He is now in awe of the mountain and now fearful of the power of nature which are described as 'huge and mighty forms, that do not live like living men.'
- We should respect nature and not take it for granted.

Context
- Published shortly after his death, The Prelude was a very long poem (14 books) that told the story of William Wordsworth's life.
- This extract is the first part of a book entitled 'Introduction – Childhood and School-Time'.
- Like Percy Shelley, Wordsworth was a romantic poet and so his poetry explores themes of nature, human emotion and how humans are shaped by their interaction with nature.

Language
- 'One summer evening (led by her)': 'her' might be nature personified – this shows his love for nature.
- 'an act of stealth / And troubled pleasure': confident, but the oxymoron suggests he knows it's wrong; forebodes the troubling events that follow.
- 'nothing but the stars and grey sky': emptiness of sky.
- 'the horizon's bound, a huge peak, black and huge': the image of the mountain is more shocking (contrast).
- 'Upreared its head' and 'measured motion like a living thing': the mountain is personified as a powerful beast, but calm – contrasts with his own inferior panic.
- 'There hung a darkness': lasting effects of mountain.

Form and Structure
- First person narrative – creates a sense that it is a personal poem.
- The regular rhythm and enjambment add to the effect of natural speech and a personal voice.
- The extract can be split into three sections, each with a different tone to reflect his shifting mood:
  - Lines 1-20: (rowing) carefree and confident
  - Lines 21-31: (the mountain appears) dark and fearful
  - Lines 32-44: (following days) reflective and troubled
- Contrasts in tone: 'lustily I dipped my oars into the silent lake' versus 'I struck and struck again' and 'with trembling oars I turned'.

Storm on the Island by Seamus Heaney

Themes: Power of Nature, Fear | **Tones:** Dark, Violent, Anecdotal

Content, Meaning and Purpose
- The narrator describes how a rural island community prepared for a coming storm, and how they were confident in their preparations.
- When the storm hits, they are shocked by its power: its violent sights and sounds are described, using the metaphor of war.
- The final line of the poem reveals their fear of nature's power

Context
- Seamus Heaney was Northern Irish, he died in 2013.
- This poem was published in 1966 at the start of 'The Troubles' in Northern Ireland: a period of deep unrest and violence between those who wanted to remain part of the UK and those who wanted to become part of Ireland.
- The first eight letters of the title spell 'Stormont': this is the name of Northern Ireland's parliament. The poem might be a metaphor for the political storm that was building in the country at the time.

Language
- 'Nor are there trees which might prove company': the island is a lonely, barren place.
- Violent verbs are used to describe the storm: 'pummels', 'exploding', 'spits'.
- Semantic field of war: 'Exploding comfortably' (also an oxymoron to contrast fear/safety); 'wind dives and strafes invisibly' (the wind is a fighter plane); 'We are bombarded by the empty air' (under ceaseless attack).
- This also reinforces the metaphor of war / troubles.
- 'spits like a tame cat turned savage': simile compares the nature to an animal that has turned on its owner.

Form and Structure
- Written in blank verse and with lots of enjambment: this creates a conversational and anecdotal tone.
- 'We' (first person plural) creates a sense of community, and 'You' (direct address) makes the reader feel immersed in the experience.
- The poem can split into three sections:
  - Confidence: 'We are prepared.' (ironic)
  - The violence of the storm: 'It pummels your house'
  - Fear: 'it is a huge nothing that we fear.'
- There is a turning point (a volta) in Line 14: 'But no:'. This monosyllabic phrase, and the caesura, reflects the final calm before the storm.

London by William Blake

Themes: Power, Inequality, Loss, Anger | **Tones:** Angry, Dark, Rebellious

Content, Meaning and Purpose
- The narrator is describing a walk around London and how he is saddened by the sights and sounds of poverty.
- The poem also addresses the loss of innocence and the determinism of inequality: how new-born infants are born into poverty.
- The poem uses rhetoric (persuasive techniques) to convince the reader that the people in power (landowners, Church, Government) are to blame for this inequality.

Context
- The poem was published in 1794, and time of great poverty is many parts of London.
- William Blake was an English poet and artist. Much of his work was influenced by his radical political views: he believed in social and racial equality.
- This poem is part of the 'Songs of Experience' collection, which focuses on how innocence is lost and society is corrupt.
- He also questioned the teachings of the Church and the decisions of Government.

Language
- Sensory language creates an immersive effect: visual imagery ('Marks of weakness, marks of woe') and aural imagery ('cry of every man')
- 'mind-forged manacles': they are trapped in poverty.
- Rhetorical devices to persuade: repetition ('In every..'); emotive language ('infant's cry of fear').
- Criticises the powerful: 'each chartered street' – everything is owned by the rich; 'Every black'ning church appals' - the church is corrupt; 'the hapless soldier's sigh / Runs in blood down palace walls' – soldier's suffer and die due to the decisions of those in power, who themselves live in palaces.

Form and Structure
- A dramatic monologue, there is a first-person narrator ('I') who speaks passionately about what he sees.
- Simple ABAB rhyme scheme: reflects the unrelenting misery of the city, and perhaps the rhythm of his feet as he trudges around the city.
- First two stanzas focus on people; third stanza focuses on the institutions he holds responsible; fourth stanza returns to the people – they are the central focus.

Key themes and connections: poems that you might choose to compare

Language for comparison

When poems have similarities
Similarly, …
Both poems convey / address…
Both poets explore / present…
This idea is also explored in…
In a similar way, …
Likewise, …

When poems have differences
Although…
Whereas…
Whilst…
In contrast, …
Conversely, …
On the other hand, …
On the contrary, …
Unlike…

Assessment Objectives

Ensure that your answer covers all of these areas:

AO1
- Write a response related to the key word in the question.
- Use comparative language to explore both poems.
- Use a range of evidence to support your response and to show the meaning of the poems.

AO2
- Comment on the effect of the language in your evidence, including individual words.
- Identify any use of poetic techniques and explain their effects.

AO3
- What might the poet's intentions have been when they wrote the poem?
- Comment on the historical context – when was the poem published and what impact might it have had then, and today?

Poetic Techniques

LANGUAGE
Metaphor – comparing one thing to another
Simile – comparing two things with 'like' or 'as'
Personification – giving human qualities to the non-human
Imagery – language that makes us imagine a sight (visual), sound (aural), touch (tactile), smell or taste.
Tone – the mood or feeling created in a poem.
Pathetic Fallacy – giving emotion to weather in order to create a mood within a text.
Irony – language that says one thing but implies the opposite eg. sarcasm.
Colloquial Language – informal language, usually creates a conversational tone or authentic voice.
Onomatopoeia – language that sounds like its meaning.
Alliteration – words that are close together start with the same letter or sound.
Sibilance – the repetition of s or sh sounds.
Assonance – the repetition of similar vowel sounds
Consonance – repetition of consonant sounds.
Plosives – short burst of sound: t, k, p, d, g, or b sound.

STRUCTURE
Stanza – a group of lines in a poem.
Repetition – repeated words or phrases
Enjambment – a sentence or phrase that runs onto the next line.
Caesura – using punctuation to create pauses or stops.
Contrast – opposite concepts/feelings in a poem.
Juxtaposition – contrasting things placed side by side.
Oxymoron – a phrase that contradicts itself.
Anaphora – when the first word of a stanza is the same across different stanzas.
Epistrophe – when the final word of a stanza is the same across different stanzas.
Volta – a turning point in a poem.

FORM
Speaker – the narrator, or person in the poem.
Free verse – poetry that doesn't rhyme.
Blank verse – poem in iambic pentameter, but with no rhyme.
Sonnet – poem of 14 lines with clear rhyme scheme.
Rhyming couplet – a pair of rhyming lines next to each other.
Meter – arrangement of stressed/unstressed syllables.
Monologue – one person speaking for a long time.

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Mathematics

Transformations
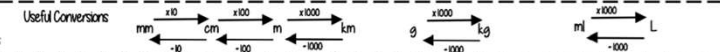
Translation
Describe with a vector

Rotation
To describe a rotation you need:
- the angle of rotation
- the direction
- the coordinates of the centre

Rotation of 90°, clockwise, about centre (2,-1)

anti-clockwise   clockwise

Centre of rotation

Reflection
Describe by naming the line of symmetry

Reflection in the line x = 2.

Enlargement
Centre

Negative enlargements – HIGHER only!

Enlargement, scale factor 3, centre (0,7)

To describe an enlargement you need:
- the scale factor
- coordinates of the centre

Enlargement of scale factor -2

Always use TRACING PAPER for translation, reflection & rotation.

Ratio between similar shapes
Angles in similar shapes do not change. e.g. if a triangle gets bigger the angles can not go above 180°

The two rectangles are similar.

3 m   4.5 m   ? m   8 m

Corresponding sides:
3m : 4.5m → 1m : 15 m
8m : 12m → 1m : 15 m

Note: Simplify to the same ratio

Work out the gradient of the line.

For every __2__ across, it goes __4__ up.

For every __1__ across, it goes __2__ up.

The gradient of the line is __2__

Trigonometry

OPPOSITE Located opposite the included angle

HYPOTENUSE

ADJACENT Located between the right angle and the included angle

Greek letter 'Pheta' – represents the angle

Pythagoras
Hypotenuse (c)
Short Side 2 (b)
$a^2 + b^2 = c^2$
Short Side 1 (a)

Angle of Elevation and Depression
The **angle of elevation** is the angle between a horizontal line from the observer and the line of sight to an object that is above the horizontal line.

Object
elevation
Horizontal line

The **angle of depression** is the angle between a horizontal line from the observer and the line of sight to an object that is below the horizontal line.

Horizontal line
depression
Object

Pythagoras worked examples
f = 3   ? h   g = 4
$h^2 = f^2 + g^2$
$h^2 = (3)^2 + (4)^2$
$h^2 = 9 + 16$
$h^2 = 25$
h = 5

f = 3   h = 5   ?   g
$h^2 = f^2 + g^2$
$g^2 = h^2 - f^2$
$g^2 = (5)^2 - (3)^2$
$g^2 = 25 - 9$
$g^2 = 16$
g = 4

f ?   h = 5   g = 4
$h^2 = f^2 + g^2$
$f^2 = h^2 - g^2$
$f^2 = (5)^2 - (4)^2$
$f^2 = 25 - 16$
$f^2 = 9$
f = 3

Sharing a whole into a given ratio
James and Lucy share £350 in the ratio 3:4
Work out how much each person earns

Model the Question
James : Lucy
$3 : 4$
£350

Find the value of one part
Whole: £350
7 parts to share between (3 James, 4 Lucy)
£350 ÷ 7 = £50
☐ = one part = £50

Put back into the question
James : Lucy
(×50) 3 : 4 (×50)
£150 : £200

James = 3 × £50 = £150
Lucy = 4 × £50 = £200

Units are important:
When using a ratio – all parts should be in the same units

Useful Conversions

Direct Proportion
As one variable changes the other changes at the same rate
This is a multiplicative change

4 cans of pop = £2.40

4 cans of pop = £2.40
2 cans of pop = £1.20

4 cans of pop = £2.40
12 cans of pop = £7.20

This multiplier is the same in the same way that this would be for ratio

Sometimes this is easiest if you work out how much one unit is worth first e.g. 1 can of pop = £0.60

We can compare ratios by writing them in the form 1 : m or m : 1, where m is any number.

For example, the ratio 5 : 8 can be written in the form 1 : m by dividing both parts of the ratio by 5.
+5 (5 : 8) +5
= 1 : 1.6

The ratio 5 : 8 can be written in the form m : 1 by dividing both parts of the ratio by 8.
÷8 (5 : 8) ÷8
= 0.625 : 1

Start by finding out the weight of 1 metre of piping:
÷25 (25 m weighs 50 kg) ÷25
1 m weighs 2 kg

Now scale this up to find out how much 150 metres weighs:
×150 (1 m weighs 2 kg) ×150
150 m weighs 300 kg

The weight of 150m of piping falls within the weight limit, and so will be suitable for the job.

Direct Proportion using y=kx
The line must be straight to be directly proportional – variables increase at the same rate k

Direct proportion graphs always start at (0,0) as they are describing relationships between two variables

Sin, Cos, Tan: Angles
Inverse trigonometric functions

ADJACENT 3 cm
OPPOSITE 4 cm

Label your triangle and choose your trigonometric ratio
Substitute values into the ratio formula

$Tan\theta = \frac{3}{4}$
$\theta = Tan^{-1} \frac{3}{4}$
$\theta = 36.9°$

$\theta = Tan^{-1} \frac{opposite\ side}{adjacent\ side}$
$\theta = Sin^{-1} \frac{opposite\ side}{hypotenuse\ side}$
$\theta = Cos^{-1} \frac{adjacent\ side}{hypotenuse\ side}$

Tangent ratio: side lengths
$Tan\theta = \frac{opposite\ side}{adjacent\ side}$

Substitute the values into the tangent formula

ADJACENT x cm   34°   10cm OPPOSITE

$Tan34 = \frac{10}{x}$

Equations might need rearranging to solve

$x \times Tan34 = 10$
$x = \frac{10}{Tan34} = 14.8cm$

Exact Trig Values

	0°	30°	45°	60°	90°
sin	0	$\frac{1}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{\sqrt{3}}{2}$	1
cos	1	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{1}{2}$	0
tan	0	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$	–

Sin and Cos ratio: side lengths
OPPOSITE x cm
$Sin\theta = \frac{opposite\ side}{hypotenuse\ side}$
50°   12 cm HYPOTENUSE

NOTE: The Sin(x) ratio is the same as the Cos(90-x) ratio

ADJACENT x cm
$Cos\theta = \frac{adjacent\ side}{hypotenuse\ side}$
40°   12 cm HYPOTENUSE

Substitute the values into the ratio formula
Equations might need rearranging to solve

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Mathematics

Construct sample space diagrams

Sample space diagrams provide a systematic way to display outcomes from events

The possible outcomes from rolling a dice

The possible outcomes from tossing a coin

	1	2	3	4	5	6
H	1H	2H	3H	4H	5H	6H
T	1T	2T	3T	4T	5T	6T

This is the set notation to list the outcomes S =

In between the { } are a, the possible outcomes

S = { 1H, 2H, 3H, 4H, 5H, 6H, 1T, 2T, 3T, 4T, 5T, 6T}

Probability from sample space

The possible outcomes from rolling a dice

The possible outcomes from tossing a coin

	1	2	3	4	5	6
H	1H	2H	3H	4H	5H	6H
T	1T	2T	3T	4T	5T	6T

What is the probability that an outcome has an even number and a tails?

This is the set notation that represents the question P

$$P(\text{Even number and Tails}) = \frac{3}{12}$$

In between the ( ) is the event asked for

There are three even numbers with tails

Numerator: the event

Denominator: the total number of outcomes

There are twelve possible outcomes

Probability from Venn diagrams

100 students were questioned if they played badminton or went to swimming club. 40 went swimming, 25 went to badminton and 11 went to both

This whole curve includes everyone that went swimming

Because 11 did both we calculate **just** swimming by 40 - 11

Swimming 29 11 14 Badminton

46
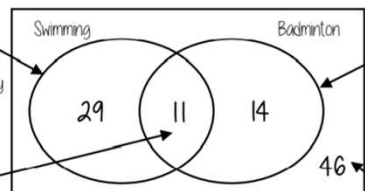
This whole curve includes everyone that went to badminton

Because 11 did both we calculate **just** badminton by 25 - 11

$$P(\text{Just swimming}) = \frac{29}{100}$$

The intersection represents both Swimming AND badminton

The number outside represents those that did **neither** badminton or swimming   100 − 29 − 11 − 14

Length
×10	×100	×1,000
cm → mm	m → cm	km → m
÷10	÷100	÷1,000

Mass
×1,000	×1,000	×1,000
g → mg	kg → g	t → kg
÷1,000	÷1,000	÷1,000

Volume
×1,000	×10	×100
l → ml	cl → ml	l → cl
÷1,000	÷10	÷100

Reverse Percentage

A jacket costs £102 after a discount of 25%. What is the original price of the jacket?

100% − 25% = 85% = 0.85

Original Price ? → x 0.85 / ÷ 0.85 → New Price £102

Original price = £102 ÷ 0.85 = £120
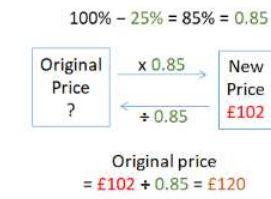
The price of a ticket costs £30 inclusive of 12% tax. What is the pre-tax cost of the ticket?

100% + 12% = 112% = 1.12

Original Price ? → x 1.12 / ÷ 1.12 → New Price £30

Original price = £30 ÷ 1.12 = £26.79

Distance = Speed × Time

$$\text{Time} = \frac{\text{Distance}}{\text{Speed}}$$

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

$$\text{Volume} = \frac{\text{Mass}}{\text{Density}}$$

$$\text{Density} = \frac{\text{Mass}}{\text{Volume}}$$

Mass = Density × Volume

Example 1: Convert 70 km/h to m/s

Working:

Method 1: By proportion

1 h → 70 km
1 h → 70 000 m
3600 s → 70 000 m
$$1s \rightarrow \frac{70\,000}{3600} = 19.4 \text{ m} \quad (3 \text{ s.f.})$$

Note:
1 km = 1000 m
1 h = 3 600 s

So, 70 km/h is approximately 19.4 m/s

Direct Proportion
$$y \propto x$$
$$y = kx \text{ for a constant } k$$

y = kx

Inverse Proportion
$$y \propto \frac{1}{x}$$
$$y = \frac{k}{x} \text{ for a constant } k$$

$$y = \frac{k}{x}$$

A and B are positive numbers. A is inversely proportional to B. When A = 4, B = 36. Find the value of A when B = A.

$$A \propto \frac{1}{B}$$
$$A = \frac{k}{B}$$
$$4 = \frac{k}{36} \quad k = 144$$
$$A = \frac{144}{B}$$
$$A = \frac{144}{A}$$
$$A^2 = 144$$
$$A = 12$$

$$\text{Acceleration (m/s}^2) = \frac{\text{Change in velocity (m/s)}}{\text{Time (s)}}$$

A fair dice is thrown twice. The tree diagram shows the probability of throwing 3, P(3), and the probability of not throwing 3, P(N).

1st Throw	2nd Throw	Outcomes
$\frac{1}{6}$ 3	$\frac{1}{6}$ 3	3 3
	$\frac{5}{6}$ N	3 N
$\frac{5}{6}$ N	$\frac{1}{6}$ 3	N 3
	$\frac{5}{6}$ N	N N

The probability of throwing two 3s.
$$P(33) = \frac{1}{6} \times \frac{1}{6} = \frac{1}{36}$$
The probability of throwing one 3.
$$P(3N) = \frac{1}{6} \times \frac{5}{6} = \frac{5}{36}$$
$$P(N3) = \frac{5}{6} \times \frac{1}{6} = \frac{5}{36}$$
$$P(3N) \text{ or } P(N3) = \frac{5}{36} + \frac{5}{36} = \frac{10}{36}$$

Probability from two-way tables

	Car	Bus	Walk	Total
Boys	15	24	14	53
Girls	6	20	21	47
Total	21	44	35	100

$$P(\text{Girl walk to school}) = \frac{21}{100}$$

The event

The total in the set

The total number of items

Independent Events	The outcome of a **previous event does not influence/affect the outcome of a second event**.
Dependent Events	The outcome of a **previous event does influence/affect the outcome of a second event**.

Mathematics

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Linear Sequences

Key point 10

In an **arithmetic sequence**, the terms increase (or decrease) by a fixed number called the **common difference**.

Key point 11

The nth term of an arithmetic sequence = common difference $\times n$ + zero term

Example 3

a Work out the nth term of the sequence 3, 7, 11, 15, …   b Is 45 a term of the sequence?

a $4n$ 4, 8, 12, 16, … $\big\} -1$

3, 7, 11, 15, …

$+4$ $+4$

The nth term is $4n - 1$.

b $45 = 4n - 1$

$46 = 4n$

$11.5 = n$

45 cannot be in the sequence because 11.5 is not an integer.

> The common difference is 4. Write out the first five terms of the sequence for $4n$, the multiples of 4. Work out how to get from each term in $4n$ to the term in the sequence.

> Write an equation using the nth term and solve it.

Exam hint

Explain means show your working, then answer the question with either:
Yes, Ben is correct because …
No, Ben is not correct because …

Exam-style question

Here are the first five terms of an arithmetic sequence.

3, 9, 15, 21, 27

a Find an expression, in terms of n, for the nth term of this sequence.   **(2 marks)**

b Ben says that 150 is in the sequence. Is Ben right? Explain your answer.   **(1 mark)**

Non-Linear Sequences

Fibonacci Sequence

Key point 13

In a Fibonacci type sequence the next number is found by adding the previous two numbers together. e.g. 1, 1, 2, 3, 5, 8, 13, 21, … is a Fibonacci type sequence because $1 + 1 = 2$, $1 + 2 = 3$, $2 + 3 = 5$ and so on.

Quadratic Sequences

Geometric Sequences

Key point 14

In an **geometric sequence** the terms increase (or decrease) by a **constant multiplier**.

Key point 15

A **quadratic sequence** has n^2 and no higher power of n in its nth term.

Key point 16

The second differences of a quadratic sequence, $u_n = an^2 + bn + c$, are constant and equal to $2a$.

Example 4

Find a formula for the nth term of the sequence 8, 23, 48, 83, 128, …

sequence	8	23	48	83	128
1st differences	+15	+25	+35	+45	
2nd differences	+10	+10	+10		

So $a = 10 \div 2 = 5$

The formula has a $5n^2$ term in it.

$5n^2$	5	20	45	80	125
Sequence	8	23	48	83	128

The nth term is $5n^2 + 3$.

> Work out the second differences.

> Halve the second difference to find the coefficient of n^2.

> Compare the given sequence with $5n^2$.

> The numbers in the second row are 3 more than those in the first row.

Exam-style question

Write down the first four terms in the sequence

a with nth term $u_n = 2^n$.   **(2 marks)**

b State the term-to-term rule.   **(1 mark)**

c Use algebra to show that the product of any two terms in the sequence is also a term in the sequence.   **(2 marks)**

Other sequences

Fibonacci Sequence

1, 1, 2, 3, 5, 8 …   Each term is the sum of the previous two terms

Triangular Numbers — look at the formation

1, 3, 6, 10, 15 …

Square Numbers — look at the formation

1, 4, 9, 16 …

Sequences are the repetition of a patten

Exam hint

The question refers to any two terms so no credit is given for just checking it out for particular numbers.

Direct and Indirect Proportion

Key point 1

The symbol $\propto$ means 'is directly proportional to'.
$y \propto x$ means y is directly proportional to x.
In general if y is directly proportional to x,
$y \propto x$ and $y = kx$
where k is a number, called the **constant of proportionality**.

Example 1

y is directly proportional to x.
When $y = 20$, $x = 8$.
a Express y in terms of x.
b Find x when $y = 35$.

a $y \propto x$

So, $y = kx$

$20 = k \times 8$

$k = 2.5$

$y = 2.5x$

b $35 = 2.5 \times x$

$x = 14$

> Write y is directly proportional to x, using the symbol $\propto$.

> Write the equation using k.

> Substitute $y = 20$ and $x = 8$. Solve to find k.

> Substitute the value of k back into the equation.

> Substitute $y = 35$ into $y = 2.5x$.

Key point 2

A quantity can be directly proportional to the *square*, the *cube*, or the *square root* of another quantity. For example:
- If y is proportional to the square of x then $y \propto x^2$ and $y = kx^2$
- If y is proportional to the cube of x then $y \propto x^3$ and $y = kx^3$
- If y is proportional to the square root of x then $y \propto \sqrt{x}$ and $y = k\sqrt{x}$

Exam-style question

y is directly proportional to the square of x.
When $x = 5$, $y = 150$.
Find the value of y when $x = 3$.   **(4 marks)**

Reasoning Which graph shows variables in inverse proportion?

A   B   C

Key point 3

When y is inversely proportional to x

$y \propto \dfrac{1}{x}$ $y = \dfrac{k}{x}$

$y = \dfrac{k}{x}$
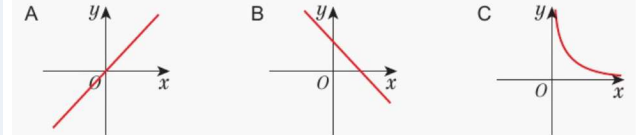
Example 2

y is inversely proportional to x.
When $y = 2$, $x = 3$.
a Write a formula for y in terms of x.
b Calculate the value of y when $x = 8$

a $y \propto \dfrac{1}{x}$ so $y = \dfrac{k}{x}$

$2 = \dfrac{k}{3}$ so $k = 6$

$y = \dfrac{6}{x}$

b $y = \dfrac{6}{8} = \dfrac{3}{4}$

> Write y is inversely proportional to x using the $\propto$ symbol. Then write the equation using k.

> Substitute $y = 2$ and $x = 3$. Solve to find k.

> Substitute k back into the equation.

> Substitute $x = 8$ into your formula.

Mathematics

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Circle Geometry 2D and 3D

Arc length
Remember an arc is part of the circumference
Circumference of the whole circle $= \pi d = \pi \times 9 = 9\pi$
$= \frac{240}{360} \times 9\pi$
$= \frac{2}{3} \times 9\pi = 6\pi$

Arc length $= \frac{\theta}{360} \times$ circumference

Perimeter
Perimeter is the length around the outside of the shape
This includes the arc length and the radii that encloses the shape
Perimeter $= \frac{\theta}{360} \times$ circumference $+ 2r$
$= 6\pi + 9$

Sector area
Remember a sector is part of a circle.
Area of the whole circle $= \pi r^2 = \pi \times 6^2 = 36\pi$

Sector area $= \frac{\theta}{360} \times$ area of circle

$= \frac{120}{360} \times 36\pi$
$= \frac{1}{3} \times 36\pi = 12\pi$

Volume of a cone and a cylinder
Volume Cylinder $= \pi r^2 h$
Volume Cone $= \frac{1}{3}\pi r^2 h$

A cylinder is a prism — cross section is a circle
A cone is a pyramid with a circular base

$V = \pi r^2 h$
$= \pi \times 4^2 \times 10$
$= \pi \times 160$
$= 160\pi \text{ cm}^2$

The height of a cone is the perpendicular height from the vertex to the base

Give your answer in terms of π' means NOT in terms of pi
$= 502.7 \text{ cm}^2$

Look out for trigonometry or Pythagoras theorem — the radius forms the base of a right-angled triangle

Surface area of a sphere
Surface area $= 4\pi r^2$

Radius = 5cm
Surface area $= 4\pi r^2$
$= 4 \times \pi \times 5^2$
$= 4 \times \pi \times 25$
$= 100\pi$

The curved surface area of a sphere $= 100\pi$

A hemisphere has the curved surface AND a flat circular face
$= 100\pi \div 2 = 50\pi$
$= 50\pi + \pi \times 5^2$
Hemisphere $= 75\pi$

Surface area of cones and cylinders
Surface area cylinder $= 2\pi r^2 + \pi dh$
Curved surface area Cone $= \pi rl$

The area of two circles (top and bottom face) + the area of the curved face

Look out for the use of Pythagoras to calculate the length l

Total surface area $=$ curved face $+$ circle face (area of base)

The length of shape B is the circumference of the circles

Volume of a sphere
Volume Sphere $= \frac{4}{3}\pi r^3$

Volume Sphere $= \frac{4}{3}\pi r^3$
$= \frac{4}{3} \times \pi \times 3^3$
$= \frac{4}{3} \times \pi \times 27 = 36\pi$

NOTE: This is now a cubed value

A hemisphere is half the volume of the overall sphere
$= 36\pi \div 2$
$= 18\pi$

Look out for hemispheres being placed on other 3D shapes, e.g. cones and cylinders

Transformations

You can use a **column vector** to describe a translation.
The top number describes the movement to the left or right, and the bottom number describes the movement up or down. For example:
$\binom{3}{2}$ means 3 right, 2 up
$\binom{-4}{-5}$ means 4 left, 5 down.

Example 1
Translate shape P by the column vector $\binom{7}{-1}$.

$\binom{7}{-1}$ means 7 right, 1 down.

Translate each vertex separately.

Join up the new vertices to make the new shape.

Communication hint A vertex is a corner. The plural of vertex is **vertices**.

Key point 2
To describe a reflection on a coordinate grid you need to give the equation of the **mirror line**.

Example 2
Describe fully the transformation that maps shape A onto shape B.

Find the mirror line halfway between the vertices of the image (B) and the original (A).

Write down the type of transformation (reflection) and the equation of the mirror line.

Reflection in the line $y = 2$.

Key point 3
You rotate a shape by turning it around a point called the **centre of rotation**.

Example 3
Rotate the shape 90° anticlockwise about the point (1, 2).

(1, 2) is the centre of rotation.

Mark the point (1, 2) with a cross.

Trace the shape.

Rotate the tracing paper 90° anticlockwise about (1, 2).

Lift up the tracing paper and draw the image on the grid.

Key point 5
When you enlarge a shape using a **centre of enlargement**, you multiply the distance from the centre to each vertex by the scale factor.

Example 4
Enlarge shape A by scale factor 2, using centre of enlargement (1, 3). Label the image.

Count the squares from the centre of enlargement to each vertex. Multiply all the distances from the centre by the scale factor.

The distance to the top vertex changes from 4 up, 2 right to 8 up, 4 right.

Check that the lengths of the image are twice as long as the original.

Mark the centre of enlargement.

Simultaneous Equations

Is (x, y) a solution?
x and y represent values that can be substituted into an equation

Does the coordinate (1,8) lie on the line $y = 3x + 5$?

This coordinate represents $x = 1$ and $y = 8$

$y = 3x + 5$
$8 = 3(1) + 5$

As the substitution makes the equation correct the coordinate (1,8) IS on the line $y = 3x + 5$

Is (2,7) on the same line?
$7 \neq 3(2) + 5$
No 7 does NOT equal 6+5

Substituting known variables
A line has the equation $3x + y = 14$
Two different variables, two solutions

Stephanie knows the point $x = 4$ lies on that line. Find the value for y

$3x + y = 14$
$3(4) + y = 14$
$x = 4$
$12 + y = 14$
$-12 \quad -12$
$y = 2$

Substituting in an expression
Substitute $2y$ in place of the x variable as they represent the same value

$x = 2y$
$x + y = 30$
$x = 2y$
Pair of simultaneous equations (two representations)
$3y = 30$
$\div 3 \quad \div 3$
$y = 10$
$x = 20$

Solve graphically
$x + y = 6$
$y = 2x$

Linear equations are straight lines
The point of intersection provides the x and y solution for both equations

(2, 4) is the point of intersection

The solution that satisfies both equations is
$x = 2$ and $y = 4$

Solve by subtraction
$3x + 2y = 18$
$x + 2y = 10$
$2x = 8$
$\div 2 \quad \div 2$
$x = 4$

$x + 2y = 10$
$(4) + 2y = 10$
$-4 \quad -4$
$2y = 6$
$\div 2 \quad \div 2$
$y = 3$

$x = 4$
$y = 3$

Solve by addition
$3x + 2y = 16$
$6x - 2y = 2$
$9x = 18$
$\div 9 \quad \div 9$
$x = 2$

$3x + 2y = 16$
$3(2) + 2(y) = 16$
$6 + 2y = 16$
$-6 \quad -6$
$2y = 10$
$y = 5$

Addition makes zero pairs

Solve by adjusting one
$h + j = 12$ No equivalent values
$2h + 2j = 29$

$2h + 2j = 24$
$2h + 2j = 29$

By proportionally adjusting one of the equations — now solve the simultaneous equations choosing an addition or subtraction method

Solve by adjusting both
$2x + 3y = 39$
$5x - 2y = -7$

Use LCM to make equivalent x OR y values
Because of the negative values using zero pairs and y values is chosen choice

$4x + 6y = 78$
$15x - 6y = -21$
Now solve by addition

Addition makes zero pairs

Similarity and Congruence

Similar triangles
Shares a vertex
Because corresponding angles are equal the highlighted angles are the same size.

Parallel lines — all angles will be the same in both triangle.

As all angles are the same this is similar — it only one pair of sides are needed to show equality

Congruence and Similarity
Congruent shapes are identical — all corresponding sides and angles are the same size.

$\angle CB = \angle ML$

Because all the angles are the same and AC=KM BC=LM triangles ABC and KLM are congruent

All three angles in both triangles are the same and so similar

Vertically opposite angles

Because all angles are the same, but all sides are enlarged by 2 ABC and KLJ are similar.

Conditions for congruent triangles
Triangles are congruent if they satisfy any of the following conditions:

Side-side-side
All three sides on the triangle are the same size

Angle-side-angle
Two angles and the side connecting them are equal in two triangles

Side-angle-side
Two sides and the angle in-between them are equal in two triangles (it will also mean the third side is the same size on both shapes)

Right angle-hypotenuse-side
The triangles both have a right angle, the hypotenuse and one side are the same.

Information in similar shapes
Compare the equivalent side on both shapes

Scale Factor is the multiplicative relationship between the two lengths

$\times 1.5$

Shape ABCD and EFGH are similar.

Notation helps as find the corresponding point

AB and EF are corresponding
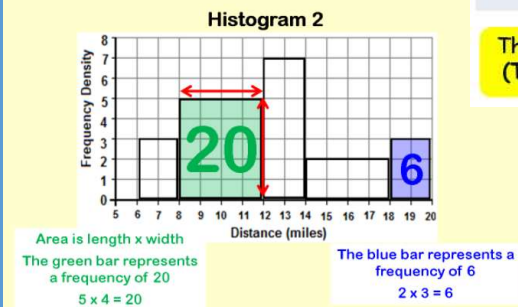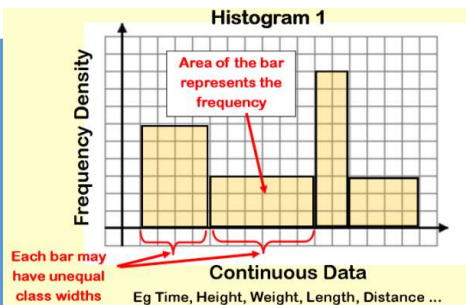
Remember angles do not increase or change with scale

Identify similar shapes
Angles in similar shapes do not change.
e.g. if a triangle gets bigger the angles can not go above 180°

Similar shapes
Scale Factor
Both sides on the bigger shape are 1.5 times bigger

Compare sides:
$6 : 9 \quad 8 : 12$
$2 : 3 \quad 2 : 3$
Both sets of sides are in the same ratio

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Histogram 1

Frequency Density

Area of the bar represents the frequency

Each bar may have unequal class widths

Continuous Data
Eg Time, Height, Weight, Length, Distance ...

Histogram 2

Frequency Density

Distance (miles)

Area is length x width
The green bar represents a frequency of 20
5 x 4 = 20

The blue bar represents a frequency of 6
2 x 3 = 6
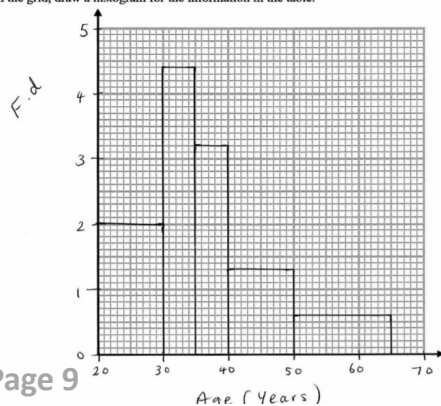
Median – Cumulative Addition

1st step is add the extra column, and do Cumulative Addition.

Cappuccinos	f	Cumulative f
0-3	2	2
4-7	3	5
8-11	8	13
12-15	3	16
16-19	2	18
TOTAL	**18**	

We add a new column where we do continual Totalling of the "f" Frequency values.

(Use Zig Zag Pattern)

The other step is to find the half-way frequency using
(Total f + 1) / 2 = (18 + 1) / 2 = **9.5th position**.

Plotting cumulative frequency graphs

Time holding breath

time in seconds	cumulative frequency
0 < t ≤ 35	9
0 < t ≤ 40	21
0 < t ≤ 45	45
0 < t ≤ 50	73
0 < t ≤ 55	89
0 < t ≤ 60	100

The cumulative frequency for each interval is plotted at the **upper** boundary for the interval.

The first point plotted is the lower boundary of the first class interval, which has cumulative frequency 0.

5 of 13

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total cumulative frequency

cumulative frequency

Upper Quartile — 75% of cumulative freq.

Median — 50% cumulative freq.

Lower quartile — 25% cumulative freq.

values

interquartile range — range

Lower quartile — Median — Upper Quartile

Averages from Grouped Frequency Tables

The frequency table gives information about the times it took some office workers to get to the office one day.

If you struggle to find the midpoint, add the two numbers in the group together and divide by 2
Eg 20 + 30 = 50 ÷ 2 =25

Time (t minutes)		Frequency		fx
0 < t ≤10	5	x 4		20
10 < t ≤20	15	x 18		270
20 < t ≤30	25	x 24		600
30 < t ≤40	35	x 16		560
40 < t ≤50	45	x 6		270
50 < t ≤60	55	x 12		660

Multiply the midpoints of each group by the frequency to fill our fx column

Add up our fx and frequency columns to find their total….
*NOTE – NEVER ADD UP YOUR MIDPOINTS!!!!!!!

80 | 2130

Calculate an estimate for the mean average.

This means we know we must add an fx column at the end of our table and multiply our frequency with the midpoints of the groups………

Finally, all we have to do is divide our fx total, by the frequency total to give us our estimate of the mean……

2130 ÷ 80 = 26.625
(Show your full calculator display and then round accurately if asked)

The table shows information about the age of 80 teachers.

$F.d = \frac{Freq}{width}$

Age (years)	Frequency	F.d.
20 < a ≤ 30	20	2 [20÷10]
30 < a ≤ 35	22	4.4 [22÷5]
35 < a ≤ 40	16	3.2 [16÷5]
40 < a ≤ 50	13	1.3 [13÷10]
50 < a ≤ 65	9	0.6 [9÷15]

On the grid, draw a histogram for the information in the table.

Age (years)

Frequency polygons allow us to display grouped data.

Example 1: A number of boxes of sweets were opened and the contents were counted. Draw a frequency polygon to illustrate this data.

Number of Sweets	Mid Value	Frequency
12 - 16	14	8
17 - 21	19	11
22 - 26	24	19
27 - 31	29	16
32 - 36	34	5

Draw the axes using suitable scales.

Plot each frequency against the mid-value of each range.
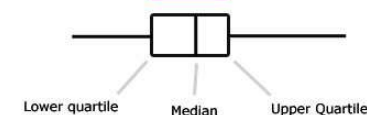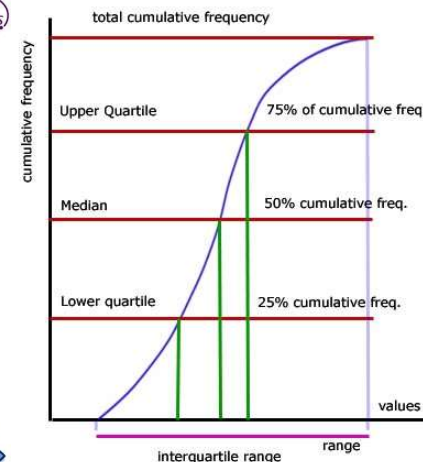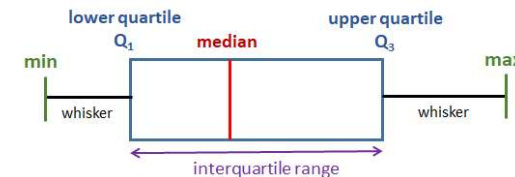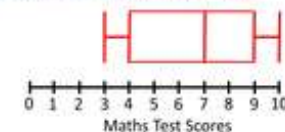
Join the points to produce a frequency polygon.

Number of Sweets

Box and Whisker Plot

A box and whisker plot (also called a box plot) shows the five-number summary of a set of data: **minimum**, **lower quartile**, **median**, **upper quartile**, and **maximum**.

lower quartile Q_1 — median — upper quartile Q_3

min — max

whisker — whisker

interquartile range

• Here are the maths test results of 23 male students:

3, 3, 3, 3, 4, 4, 4, 5, 6, 6, 7, 7, 8, 8, 8, 8, 8, 9, 9, 9, 9, 10, 10

Lower Quartile: $\frac{n+1}{4} = \frac{23+1}{4} = \frac{24}{4} = 6^{th} = 4$

Median: $\frac{n+1}{2} = \frac{23+1}{2} = \frac{24}{2} = 12^{th} = 7$

Upper Quartile: $3 \times LQ = 18^{th} = 9$

Maths Test Scores

Capture, Recapture

$$\frac{M}{N} = \frac{m}{n}$$

$$N = \frac{Mn}{m}$$

N is the population size to be estimated.
M is the number of members of the population that are captured initially and tagged.
n is the number of members of the population that are captured subsequently.
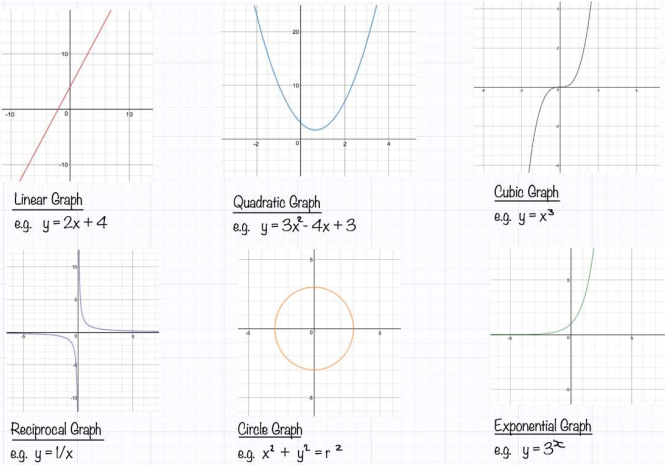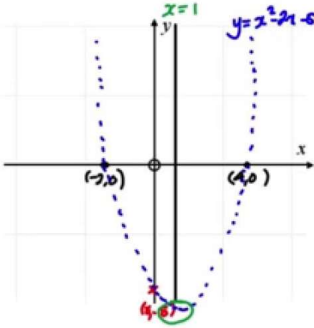m is the number of members of this subsequent captured population that are tagged.

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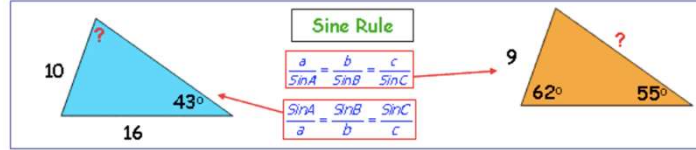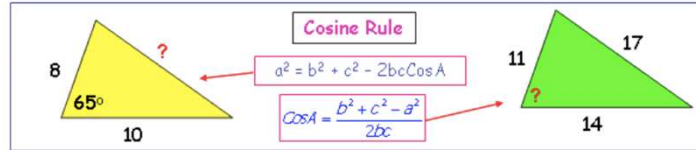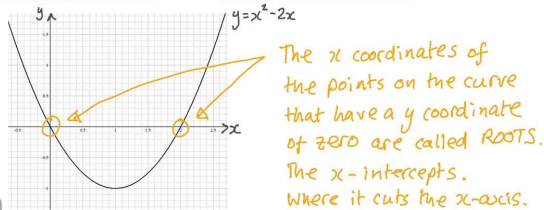
Sketch a fully labelled quadratic graph

Example (by factorising)
Sketch the graph with equation $y = x^2 - 2x - 8$

① $+x^2$ ∪

② y-int: $x = 0$ $y = -8$ $(0, -8)$

③ x-int: $y = 0$ $0 = x^2 - 2x - 8$
$0 = (x-4)(x+2)$
$x = 4$ $x = -2$
$(4, 0)$ $(-2, 0)$

④ $\frac{4 \pm 2}{2} = \frac{2}{2}$
$= 1$

⑤ $x = 1$ $y = (1)^2 - 2(1) - 8$
$y = 1 - 2 - 8$
$y = -$

Graphs

Linear Graph
e.g. $y = 2x + 4$

Quadratic Graph
e.g. $y = 3x^2 - 4x + 3$

Cubic Graph
e.g. $y = x^3$

Reciprocal Graph
e.g. $y = 1/x$

Circle Graph
e.g. $x^2 + y^2 = r^2$

Exponential Graph
e.g. $y = 3^x$

FINDING THE ROOTS OF A QUADRATIC EQUATION FROM A GRAPH

$y = x^2 - 2x$

The x coordinates of the points on the curve that have a y coordinate of zero are called ROOTS.
The x - intercepts.
Where it cuts the x-axis.

Cosine Rule
$a^2 = b^2 + c^2 - 2bc\cos A$
$\cos A = \frac{b^2 + c^2 - a^2}{2bc}$

Sine Rule
$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$
$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$

	Finding Sides	Finding Angles
Cosine Rule	Need 2 sides and included angle	Need all 3 sides
Sine Rule	Need 2 angles and any side	Need 2 sides and an angle not included

KEY POINT Area $= \frac{1}{2} ab \sin C$, or $A = \frac{1}{2} bc \sin A$, or $A = \frac{1}{2} ac \sin B$

Example
Find the area of this triangle.
Area $= \frac{1}{2} ab \sin C$
$= \frac{1}{2} \times 14 \times 12 \times \sin 65$
$= 76.13$ cm²

1. The area of the triangle is √300 cm².

$\sqrt{300}$
$= \sqrt{100 \times 3}$
$= 10\sqrt{3}$
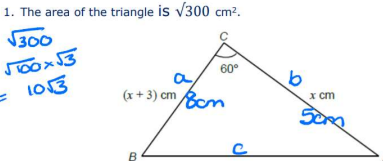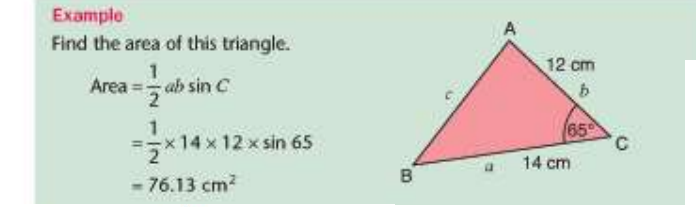
Calculate the length of AB.

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

$\sqrt{300} = \frac{1}{2} \times (x+3) \times x \times \sin 60$

$10\sqrt{3} = \frac{1}{2} x(x+3) \times \frac{\sqrt{3}}{2}$

$\times 2$
$\div \sqrt{3}$
$20 = \frac{1}{2} x^2 + \frac{3}{2} x$

$\times 2$
$x^2 + 3x - 40 = 0$
$(x+8)(x-5) = 0$
$x = -8$ $x = 5$
not a solution.

then using
$c^2 = b^2 + a^2 - 2ba \cos C$
$= 5^2 + 8^2 - 2 \times 5 \times 8 \cos 60$
$= 25 + 64 - 80 \times 0.5$
$= 89 - 40$
$c = \sqrt{49}$
$c = 7$ cm
∴ AB = 7 cm

[8]

$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

Complete the square on the following quadratic and sketch the graph

$x^2 + 10x + 9 = 0$
$(x+5)^2 - 16 = 0$
$(x+5)^2 = 16$
$(x+5) = \pm\sqrt{16}$
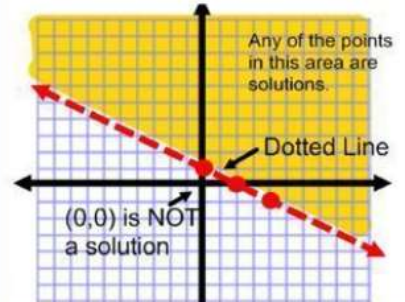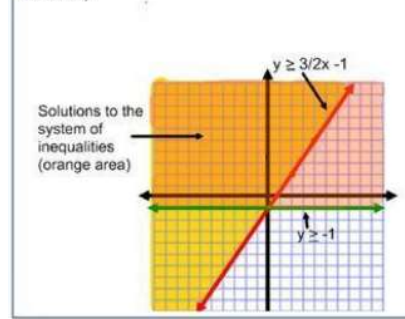$x = \pm\sqrt{16} - 5$
$x = -1$ or -9

(-1, 0)
(-9, 0)

Vertex = (-5, -16)

First draw a set of axes:
$(+\infty, +\infty)$
x-axis (y=0)

$y = (x+3)(x-1)(x-4)$
$(x+3)(x-1)(x-4) = 0$
$x = -3, x = 1, x = 4.$

y-axis (x=0)
$(0+3)(0-1)(0-4)$
$= (3)(-1)(-4)$
$= 12$

Local maximum point

Local minimum

The most dominant part of $y = (x+3)(x-1)(x-4)$ is x^3 i.e. $(x)(x)(x)$
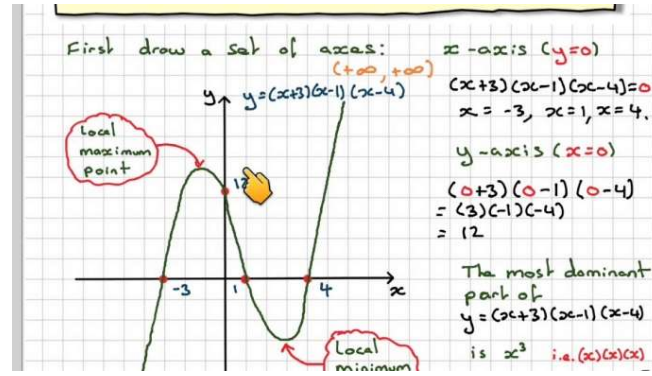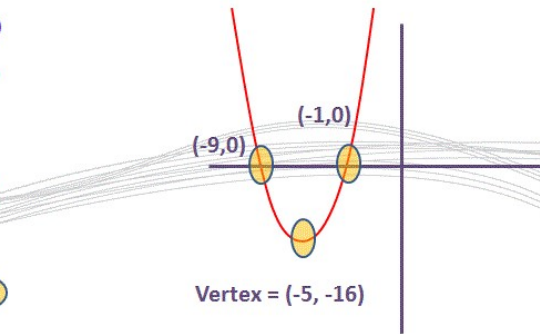
Graphing Inequalities in Two Variables
Graph for: $y > -1/2x + 1$

1. Graph $y = -1/2x + 1$, but dot the line since the symbol is >. The points on the line are **not** solutions.
2. Pick a point such as (0,0) and substitute it into the inequality. (0,0) is **not** a solution, therefore, shade the side of the line that does not contain (0,0).

Systems of Inequalities
Graph each inequality as shown above. **ONLY** the area that is shaded by **BOTH** inequalities is the solution set (orange section)

$y \geq 3/2x - 1$

Solutions to the system of inequalities (orange area)

$y \geq -1$

Any of the points in this area are solutions.

Dotted Line

(0,0) is NOT a solution

Infection and Response Knowledge Organiser – Foundation and Higher

Communicable Disease

Pathogens are **microorganisms** that enter the body and cause communicable disease (infectious). Plants and animals can be infected by them.

Bacteria are small cells that can reproduce very quickly in the body. They produce **toxins** that make you feel ill, damaging your cells and tissues.

Viruses are much smaller than bacteria; they can also reproduce quickly in the body. Viruses live inside your cell where they replicate. They then burst out of the cell, releasing new viruses.

Protists are eukaryotes (multicellular). Some are parasites which live on or inside other organisms, often carried by a vector.

Fungi are sometimes single celled, others have hyphae that grow and penetrate human skin and the surface of plants. They can produce spores which can spread to other plants.

spore case
↓ bursts

sporangium →

← stem

hyphae
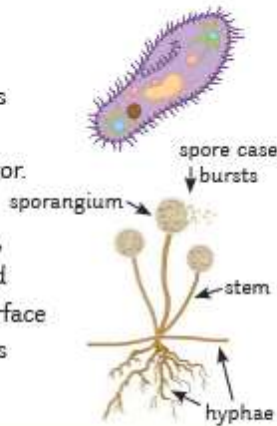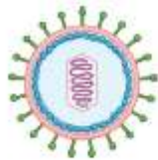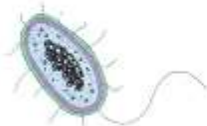
How Pathogens Are Spread

Pathogens can be spread in many ways, for example:

Water – by drinking dirty water, e.g. cholera.

Air – carried by air and breathed in, e.g. influenza.

Direct contact – touching contaminated surfaces including the skin, e.g. athlete's foot.

Viral Diseases

Measles is spread by droplets of liquid from sneezes and coughs etc., symptoms include a red rash on the skin and a fever. Measles can be serious or even fatal, it can lead to pneumonia. Most people are vaccinated against measles when they are very young.

HIV is spread by sexual contact or exchanging body fluids. HIV can be controlled be antiviral drugs; this stops the viruses replicating. The virus attacks the cells in the immune system. If the immune system is badly damaged, the body cannot cope with other infections. This is the late stage and is called aids.

Tobacco mosaic virus affects plants, parts of the leaves become discoloured. This means plants cannot carry out photosynthesis; this will affect the plants growth.

Fungal and Protist Diseases

Fungal

Rose black spot shows as black spots on the leaves of the plant, this means less photosynthesis occurs. As a result, the plant does not grow as well. It is spread by the wind or the water. They can be treated by using fungicides and taking the leaves off the infected plant.

Protists

Malaria is caused by a protist, mosquitoes are the vectors. They become infected when they feed on an infected animal. The protist is inserted into the blood vessel. Malaria can cause fever, it can also be fatal.

Bacterial Diseases

Salmonella bacteria causes food poisoning. Symptoms include fever, stomach cramps, vomiting and diarrhoea. The symptoms are caused by the toxins produced by the bacteria. Food contaminated with salmonella can give you food poisoning. Most poultry in the UK will have had a vaccination against salmonella.

Gonorrhoea is a sexually transmitted bacterial disease, passed on by sexual contact. Symptoms include pain when urinating and thick yellow/green discharge from the vagina or penis. To prevent the spread, people should be treated with antibiotics and use a condom.

How to prevent the spread:

Being hygienic –

washing hands thoroughly.

Destroying vectors –

killing vectors by using insecticides or destroying their habitat.

Isolation –

isolating an infected person will prevent the spread.

Vaccination –

people cannot develop the infection and then pass it on.

Infection and Response Knowledge Organiser – Foundation and Higher

Fighting Diseases

Defence System

1. The skin acts as a barrier to pathogens.
2. Hairs and mucus in your nose trap particles.
3. The trachea and bronchi secrete mucus to trap pathogens. They also have cilia which move backwards and forwards to transport the mucus towards the throat. This traps any pathogens and the mucus is usually swallowed.
4. The stomach contains hydrochloric acid to kill any pathogens that enter the body via the mouth.

The Immune System

This kills any pathogens that enter the body.

White blood cells:

- **Phagocytosis** is when white blood cells engulf pathogens and then digest them.
- They produce **antitoxins** to neutralise the **toxins**.
- They also produce **antibodies**. Pathogens have **antigens** on their surface, antibodies produced by the white blood cells lock on to the antigen on the outside of the pathogen. White blood cells can then destroy the pathogens. Antibodies are specific to one antigen and will only work on that pathogen.
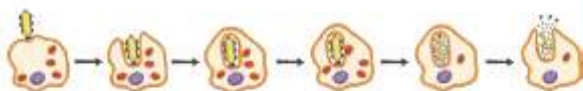
Vaccinations

Vaccinations have been developed to protect us from future infections. A vaccination involves an injection of a **dead** or **weakened** version of the pathogen. They carry antigens which cause your body to produce antibodies which will attack the pathogen. If you are infected again, the white blood cells can produce antibodies quickly.

Pros	Cons
Helps to control communicable diseases that used to be very common.	They don't always work.
Epidemics can be prevented.	Some people can have a bad reaction to a vaccine – however, that is very rare.

Fighting Disease – Drugs

Painkillers relive the pain and symptoms, but do not tackle the cause.

Antibiotics kill the bacteria causing the problem, but do not work on viruses. Viruses are very difficult to kill because they live inside the body cells.

Developing Drugs

There are three main stages in drug testing:

Pre-clinical testing:

1. Drugs are tested on human cells and tissues.
2. Testing carried out on living animals.

Clinical testing:

3. Tested on healthy human volunteers in clinical trials. Starts with a very low dose, then tested on people with the illness to find the optimum dose.

Placebo is a substance that is like the drug, but does not do anything.

Placebo effect is when the patient thinks the treatment will work even though their treatment isn't doing anything.

Blind trial is when the patient does not know whether they are getting the drug or the placebo.

Double-blind trial is when both the doctor and the patient do not know whether they are getting the drug.

Drugs from Plants

Chemicals produced by plants to defend themselves can be used to treat human diseases or help with symptoms.

Drug	Plant/Microorganism
aspirin	willow
digitalis	foxglove
penicillin	mould - penicillium

New drugs are now made by chemists, who work for the pharmaceutical industry, in laboratories.

Key Vocabulary

antibodies
antigens
antitoxins
bacteria
blind trial
double-blind
fungus
microorganism
phagocytosis
placebo
protist
toxins
vaccination
vector
virus

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AQA GCSE Chemistry (Combined) Unit 5 Energy Changes Knowledge Organiser

Exothermic and Endothermic Reactions

When a chemical reaction takes place, **energy** is involved. Energy is transferred when chemical **bonds are broken** and when new **bonds are made**.

Exothermic reactions are those which involve the transfer of energy **from the reacting chemicals to the surroundings**. During a practical investigation, an exothermic reaction would show an **increase in temperature** as the reaction takes place.

Examples of exothermic reactions include **combustion, respiration and neutralisation** reactions. Hand-warmers and self-heating cans are examples of everyday exothermic reactions.

Endothermic reactions are those which involve the transfer of energy **from the surroundings to** the reacting chemicals. During a practical investigation, an endothermic reaction would show a **decrease in temperature** as the reaction takes place.

Examples of endothermic reactions include the **thermal decomposition** of calcium carbonate. Eating **sherbet** is an everyday example of an endothermic reaction. When the sherbet dissolves in the saliva in your mouth, it produces a cooling effect. Another example is **instant ice packs** that are used to treat sporting injuries.

Exothermic   Endothermic
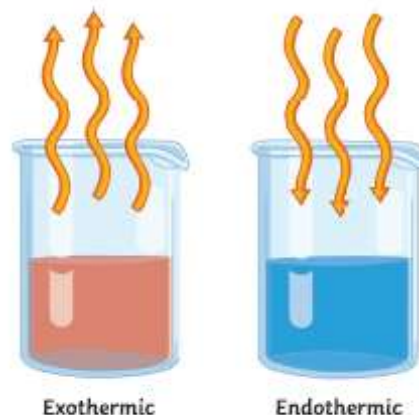
Activation Energy

Activation Energy – the minimum amount of energy required for a chemical reaction to take place.

Catalysts – increase the rate of a reaction. Catalysts provide an alternative pathway for a chemical reaction to take place by **lowering** the activation energy.

Bond Making and Bond Breaking

In an **endothermic** reaction, energy is needed to break chemical bonds. The **energy change (ΔH)** in an endothermic reaction is **positive**.

You may also find, in some textbooks, **ΔH** referred to as the **enthalpy change**.

In an **exothermic** reaction, energy is needed to form chemical bonds. The **energy change (ΔH)** in an exothermic reaction is **negative**.

Bond energies are measured in **kJ/mol**.

Reaction Profiles – Exothermic

Energy level diagrams show us what is happening in a particular chemical reaction. The diagram shows us the **difference in energy** between the reactants and the products.

In an exothermic reaction, the **reactants** are at a **higher** energy level than the products.

In an **exothermic** reaction, the difference in energy is **released** to the surroundings and so the **temperature** of the surroundings **increases**.
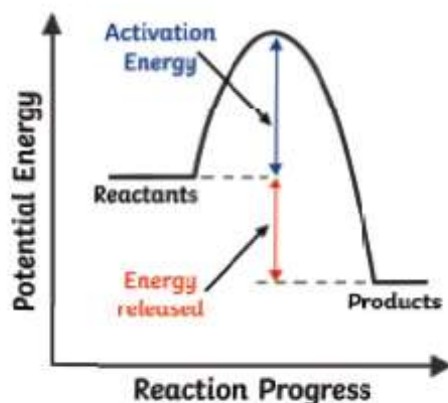
Reaction Profiles – Endothermic

In an **endothermic** reaction, the **reactants** are at a **lower** energy level than the products.

In an **endothermic** reaction, the difference in energy is **absorbed** from the surroundings and so the **temperature** of the surroundings **decreases**.

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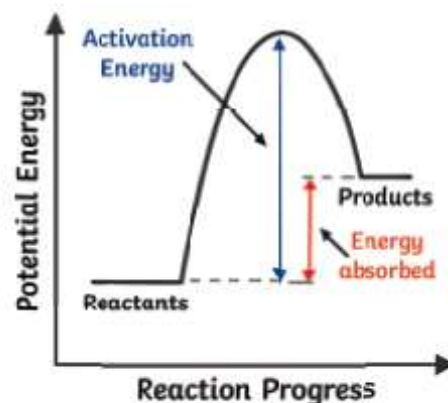
Calculations Using Bond Energies (Higher Tier Only)

Bond energies are used to calculate the change in energy of a chemical reaction.

Calculate the change in energy for the reaction: $2H_2O_2 \rightarrow 2H_2O + O_2$

The first step is to write the symbol equation for the reaction. Once you have done this, work out the bonds that are breaking and the ones that are being made.

$2H-O-O-H \rightarrow 2H-O-H + O=O$

Bond	Bond Energy kJ/mol
H-O	464
O-O	146
O=O	498

On the **left-hand side** of the equation, the **bonds are breaking**.

There are two **O-H** bonds and one **O-O** bond.

So 464 + 146 + 464 = 1074

There are two moles of H_2O_2 therefore the answer needs to be multiplied by two.

So 1074 × 2 = 2148

On the **right-hand** side of the equation, the **bonds are made**.

There are two **H-O** bonds

So 464 + 464 = 928

Two moles of H_2O are made therefore the answer needs to be multiplied by two.

So 928 × 2 = 1856

There is also one **O=O** bond with a bond energy of 498

So 1856 + 498 = 2354

ΔH = sum (bonds broken) – sum (bonds made)

ΔH = 2148 – 2354 = -206 kJ/mol

The reaction is exothermic as ΔH is negative.

Required Practical

Aim

To investigate the variables that affect temperature changes in reacting solutions, e.g. acid plus metals, acid plus carbonates, neutralisations and displacement of metals.

Equipment

- polystyrene cup
- measuring cylinder
- thermometer
- 250cm³ glass beaker
- measuring cylinder
- top pan balance

Method

1. Gather the equipment.
2. Place the polystyrene cup inside the beaker. This will prevent the cup from falling over.
3. Using a measuring cylinder, measure out 30cm³ of the acid. Different acids such as hydrochloric or sulfuric acid may be used. Pour this into the polystyrene cup.
4. Record the temperature of the acid using a thermometer.
5. Using a top pan balance, measure out an appropriate amount of the solid (for example, 10g) or use one strip of a metal such as magnesium.
6. Add the solid to the acid and record the temperature. You may choose to record the temperature of the acid and metal every minute for 10 minutes.

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AQA Combined Science: **Physics Topic 3 Particle Model of Matter**

Required Practical

Measuring the density of a regularly shaped object:

- Measure the mass using a balance.
- Measure the length, width and height using a ruler.
- Calculate the volume.
- Use the density (p = m/V) equation to calculate density.

Measuring the density of an irregularly-shaped object:

- Measure the mass using a balance.
- Fill a eureka can with water.
- Place the object in the water – the water displaced by the object will transfer into a measuring cylinder.
- Measure the volume of the water. This equals the volume of the object.
- Use the density (p = m/V) equation to calculate density.

Particles

Solids have strong forces of attraction. They are held together very closely in a fixed, regular arrangement. The particles do not have much energy and can only vibrate.
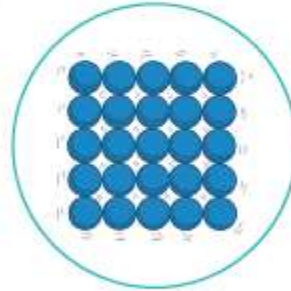
Liquids have weaker forces of attraction. They are close together, but can move past each other. They form irregular arrangements. They have more energy than particles in a solid.
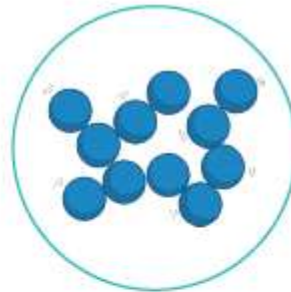
Gases have almost no forces of attraction between the particles. They have the most energy and are free to move in random directions.
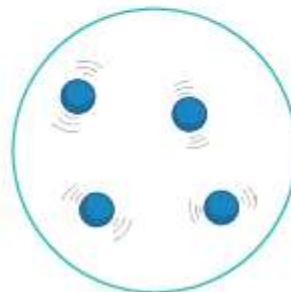
Particles

Gas particles can move around freely and will collide with other particles and the walls of the container. This is the pressure of the gas.

If the temperature of the gas increases, then the pressure will also increase. The hotter the temperature, the more kinetic energy the gas particles have. They move faster, colliding with the sides of the container more often.

Density

Density is a measure of how much mass there is in a given space.

Density (kg/m^3) = mass (kg) ÷ volume (m^3)

A more dense material will have more particles in the same volume when compared to a less dense material.

Density

The density of an object is 8050kg/m^3 and it has a volume of 3.4m^3 – what is its mass in kg?

8050 = mass ÷ 3.4
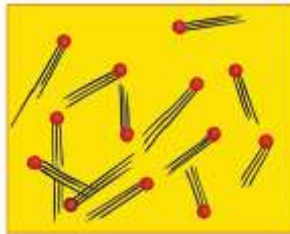
8050 × 3.4 = mass

27 370kg

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Internal Energy

Particles within a system have kinetic energy when they vibrate or move around. The particles also have a potential energy store. The total internal energy of a system is the kinetic and potential energy stores.
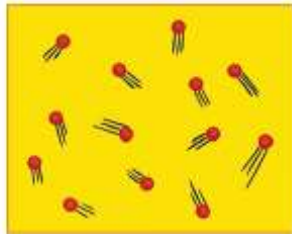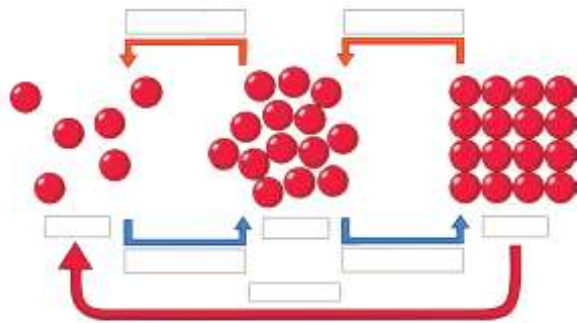
Low Temperature	High Temperature

If the system is heated, the particles will gain more kinetic energy, so increasing the internal energy.

Changing State

If a system gains more energy, it can lead to a change in temperature or change in state. If the system is heated enough, then there will be enough energy to break bonds.

When something changes state, there is no chemical change, only physical. No new substance is formed. The substance will change back to its original form. The number of particles does not change and mass is conserved.

Specific Latent Heat

Energy is being put in during melting and boiling. This increases the amount of internal energy. The energy is being used to break the bonds, so the temperature does not increase. This is shown by the parts of the graph that are flat.
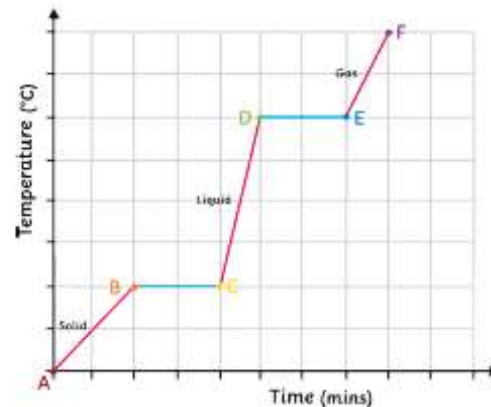
When a substance is condensing or freezing, the energy put in is used to form the bonds. This releases energy. The internal energy decreases, but the temperature does not go down.
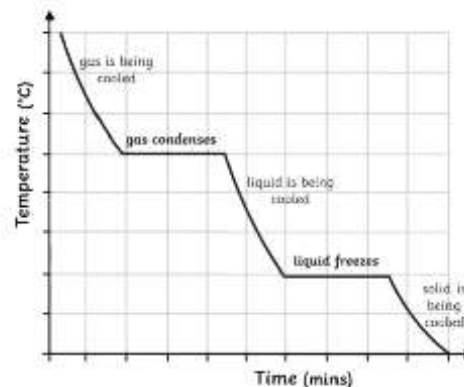
The energy needed to change the state of a substance is called the latent heat.

Specific latent heat is the amount of energy needed to change 1kg of a substance from one state to another without changing the temperature. Specific latent heat will be different for different materials.

- solid ⟶ liquid – specific latent heat of **fusion**

- liquid ⟶ gas – specific latent heat of **vaporisation**

Specific Latent Heat Equation

The amount of energy needed/released when a substance of mass changes state.

energy (E) = mass (m) × specific latent heat (L)

$E = mL$

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Year 10 French Term 3

Studio AQA Units 4 & 5, Local area & holidays (Theme 2).

		Où habites-tu ? / Where do you live?
A		**Où habites-tu ?** / **Where do you live?**
1	I live in a village close to Derby.	J'habite dans un village près de Derby.
2	There is nothing to do here because it is quite small.	Il n'y a rien à faire ici car c'est assez petit.
3	However, in centre-town one can go shopping and	Cependant, au centre-ville on peut faire les magasins et
4	visit the cathedral and other historic buildings.	visiter la cathédrale et d'autres bâtiments historiques.
5	There was a leisure centre but now it's closed.	Il y avait un centre de loisirs mais maintenant c'est fermé.
6	In my region there are a lot of green spaces	Dans ma région il y a beaucoup d'espaces verts
7	so it's super when it is nice weather, but	donc c'est super quand il fait beau, mais
8	there is no public transport, which is rubbish.	il n'y a pas de transport en commun, ce qui est nul.
9	If I was the mayor of my village there would be	Si j'étais maire de mon village, il y aurait
10	a swimming pool, an ice-rick and a cinema	une piscine, une patinoire et un cinéma
11	so that young people could have fun.	afin que les jeunes puissent s'amuser.
B	**Where would you like to live?**	**Où voudrais-tu habiter ?**
12	In the future I would like to live in London cause it's cool	A l'avenir je voudrais habiter à Londres car c'est cool
13	although it is far from my family	bien que ce soit loin de ma famille
14	and there is too much traffic and noise.	et il y a trop de circulation et de bruit.
C	**What have you done recently in town? What are you going to do?**	**Qu'est-ce que tu as fait récemment en ville ? Qu'est-ce que tu vas faire ?**
15	Last weekend, I went for a walk	Le week-end dernier, j'ai fait une promenade
16	near the canal with my best friend at	près du canal avec mon meilleur copain et
17	we talked about everything. It was quite fun	on a discuté du tout. C'était assez amusant,
18	but next weekend we are going to go to the stadium	mais le week-end prochain on va aller au stade
19	where we are going to see a football match,	où on va voir un match de foot,
20	which will be more exciting.	ce qui sera plus passionnant.
D	**Tell me about your holidays.**	**Parle-moi de tes vacances.**
21	Normally I spend my holidays in England	Normalement je passe mes vacances en Angleterre
22	but last year I went to France.	mais l'année dernière je suis allée en France.
23	It was fantastic because it was sunny everyday.	C'était fantastique car il faisait du soleil tous les jours.
24	Not like here where it always rains!	Pas comme ici où il pleut toujours !
25	We went to the beach and I relaxed	On est allées à la plage et je me suis reposée
26	while reading a crime novel.	en lisant un roman policier.
27	One evening I ate sea bass at a restaurant	Un soir j'ai mangé du loup de mer au resto
28	but unfortunately it was not cooked and I vomited!	mais malheureusement ce n'était pas cuit et j'ai vomi !
E	**Describe your dream holiday.**	**Décris tes vacances de rêve.**
30	If I had the choice I would travel to the US	Si j'avais le choix je voyagerais aux États-Unis
31	I have always wanted to go to New York	J'ai toujours voulu aller à New York
32	I would go to Central Park and I would do a lot of tourism.	J'irais à Central Park et je ferais beaucoup du tourisme
33	It would be unforgettable !	Ce serait inoubliable !

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Studio AQA Units 4 & 5, Local area & holidays (Theme 2).

Sentence builder 1: Describing your town & local area.

J'habite à …. I live in…	**C'est** It is	**un village** a village **une petite/grande ville** a small/big town	**dans le nord/le sud/l'ouest/l'est** in the north/south/west/east **de l'Angleterre** of England
Aussi also **Avant** before **L'année prochain** next year	**il y a** there is **il y avait** there was **il y aura** there will be	**un centre commercial** a shopping centre **un centre de loisirs** a leisure centre **un lac** a lake	
Cependant however	**il n'y a pas de** there is not/there are not **il n'y a plus de** there is no longer a… NB : you don't need **un**, **une** or **des** after 'il n'y a pas/plus de' !	**un musée** a museum **un port de pèche** a fishing port **une bibliothèque** a library **une patinoire** an ice rink **des plages** some beaches **des collines** some hills	
Si j'étais le maire, il y aurait… If I was the mayor, there would be…		**des espaces verts** some green spaces **des fermes** some farms **des forêts** some forests **des magasins** some shops **des stations du ski** some ski resorts **des transports en communs** some public transport	
(où) on peut (where) you can		**faire les magasins/faire du sport** do shopping/do sport **faire des promenades/des randonnées** do walks/hikes **se retrouver avec des amis** meet up with friends	
ce qui est which is **ce qui n'est pas** which isn't **À mon avis c'est** in my opinion it's **Je pense que c'est** I think that it's	**très** very **trop** too **vraiment** really **assez** quite **un peu** a bit		**amusant** fun **intéressant** interesting **ennuyeux** boring **joli/moche** pretty/ugly **nul/utile** rubbish/useful
À l'avenir je voudrais habiter In the future I would like to live	**à l'étranger** abroad **à la campagne** in the countryside **à la montagne** in the mountains **au bord de la mer** at the seaside	**parce que c'est** because it is	**plus** more **moins** less	**animé/tranquille** lively/calm **passionnant** exciting
		parce qu'il y a beaucoup à faire. because there is a lot to do. **parce qu'il y a moins de monde/de circulation/de bruit.** because there is less people/traffic/noise. **bien que ce soit loin de ma famille.** although it's far from my family.		

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Studio AQA Units 4 & 5, Local area & holidays (Theme 2).

Sentence builder 2: Describing holidays in the past/future.

Normalement normally	**je vais** I go	**en France** to France		**avec ma famille** with my family	
mais l'année dernière but last year	**je suis allé(e)** I went	**en Espagne** to Spain		**avec mes amis** with my friends	
		aux États-Unis to America		**avec mes camarades de classe**	
l'été dernier last summer		**au bord de la mer** to the seaside		with my classmates	
On a voyagé en We travelled by	avion plane **bateau** boat train train car coach **voiture** car	**et on a logé dans** and we stayed in	**un hôtel de luxe** a luxury hotel **un camping** a campsite **une auberge de jeunesse** a youth hostel **une caravane** a caravan **une tente** a tent	**(in)confortable** (un)comfortable **(pas) cher/chère** (not) expensive **nul(le)** rubbish	

Le premier jour The first day **Puis** then **Ensuite** next **Le soir** in the evening **Le dernier jour** The last day	**j'ai fait de la voile/de la planche à voile/du ski** I did sailing/windsurfing/skiing **j'ai fait les magasins/du tourisme** I did shopping/tourism **j'ai fait des promenades en ville/des randonnées en plein air** I went for walks in town/hikes in the fresh air **j'ai visité les monuments/les bâtiments historiques** I visited historic monuments/buildings **je suis allé(e) à la plage/au restaurant** I went to the beach/restaurant **j'ai mangé du poisson/des plats traditionnels** I ate fish/traditional dishes **j'ai pris un coup de soleil** I got sunburned **on m'a volé mon portefeuille** Someone stole my wallet	**ce qui était** which was	**c'était** it was	**amusant** fun **ennuyeux** boring **fascinant** fascinating **relaxant** relaxing **fantastique** fantastic **incroyable** incredible **inoubliable** unforgettable **désastreux** disastrous **catastrophique** catastrophic **délicieux** delicious

Après After	**je me suis reposé sur la plage** I rested on the beach **à l'hôtel** at the hotel	**en lisant un roman.** while reading a book. **en écoutant de la musique.** while listening to music. **en buvant une limonade.** while drinking lemonade.	

J'avais de la chance car I was lucky because **C'était un désastre car** It was a disaster because	**il faisait beau** it was good weather **il faisait du soleil** it was sunny **il faisait chaud** it was hot **il faisait froid** it was cold **il pleuvait** it rained		**tout le temps** all the time **tous les jours** every day **tous les jours sauf un** every day except one

L'année prochaine Next year **L'été prochain** Next summer	**je voudrais aller** **j'aimerais aller** I would like to go **j'irai** I will go	**à la montagne** to the mountains **à l'Asie** to Asia **en Australie** to Australia **au Japon** to Japan	**car c'est /** **parce que c'est** because it is	**plus** more **moins** less	**touristique** touristy **animé** lively **calme/tranquille** calm
			pour faire les sports d'hiver to do winter sports **pour profiter de la nature là-bas** to enjoy the nature there		

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Studio AQA Units 4 & 5, Local area & holidays (Theme 2).

Grammar: Describing holidays in different tenses

Higher

PRESENT	PAST (PERFECT)	NEAR FUTURE	PAST (IMPERFECT)	SIMPLE FUTURE	CONDITIONAL
Normalement… Normally… Chaque année… Every year…	L'année dernière… Last year… L'été dernier Last summer…	L'année prochaine Next year… L'été prochain… Next summer…	Quand j'étais plus jeune… When I was younger…	Quand je serai plus âgé(e)… When I'm older…	Pour mes vacances de rêve For my dream holidays Si j'avais le choix If I had the choice Si je gagnais au loto If I won the lottery
je vais en France I go to France	je suis allé(e) en France I went to France	je vais aller en France I am going to go to France	j'allais en France I used to go to France	j'irai en France I will go to France	j'irais en France I would go to France
je fais des magasins I do shopping	j'ai fait des magasins I did shopping	je vais faire des magasins I am going to do shopping	je faisais des magasins I used to do shopping	je ferai des magasins I will do shopping	je ferais des magasins I would do shopping
je loge dans un hôtel de luxe I stay in a luxury hotel	j'ai logé dans un hôtel de luxe I stayed in a luxury hotel	je vais loger dans un hôtel de luxe I am going to stay in a luxury hotel	je logeais dans un hôtel de luxe I used to stay in a luxury hotel	je logerai dans un hôtel de luxe I will stay in a luxury hotel	je logerais dans un hôtel de luxe I would stay in a luxury hotel
je visite un musée I visit a museum	j'ai visité un musée I visited a museum	je vais visiter un musée I am going to visit a museum	je visitais un musée I used to visit a museum	je visiterai un musée I will visit a museum	je visiterais un musée I would visit a museum
je nage dans la mer I swim in the sea	j'ai nagé dans la mer I swam in the sea	je vais nager dans la mer I am going to swim in the sea	je nageais dans la mer I used to swim in the sea	je nagerai dans la mer I will swim in the sea	je nagerais dans la mer I would swim in the sea
je me repose sur la plage I relax on the beach	je me suis reposé(e) sur la plage I relaxed on the beach	je vais me reposer sur la plage I am going to relax on the beach	je me reposais sur la plage I used to relax on the beach	je me reposerai sur la plage I will relax on the beach	je me reposerais sur la plage I would relax on the beach
C'est super It is super	n/a	Ça va être super It is going to be super	C'était super It was super	Ce sera super It will be super	Ce serait super It would be super

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Geography

AQA GCSE Geography: Physical Landscapes of the UK (Intro/Processes)

Relief of the UK

Relief of the UK can be divided into uplands and lowlands. Each have their own characteristics.

Key	
Lowlands	
Uplands	

Areas +600m: Peaks and ridges cold, misty and snow common. i.e. Scotland

Areas -200m: Flat or rolling hills. Warmer weather. i.e. Fens

Types of Erosion

The break down and transport of rocks – smooth, round and sorted.

Attrition	Rocks that bash together to become **smooth/smaller**.
Solution	A chemical reaction that **dissolves** rocks.
Abrasion	Rocks **hurled** at the base of a cliff to break pieces apart.
Hydraulic Action	Water enters cracks in the cliff, air **compresses**, causing the crack to expand.

Mass Movement

A large movement of soil and rock debris that moves down slopes in response to the pull of gravity in a vertical direction.

1	Rain saturates the **permeable** rock above the impermeable rock making it heavy.
2	Waves or a river will **erode** the base of the slope making it unstable.
3	Eventually the weight of the **permeable** rock above the impermeable rock weakens and collapses.
4	The debris at the base of the cliff is then removed and transported by waves or river.

Types of Transportation

A natural process by which eroded material is carried/transported.

Solution	Minerals **dissolve** in water and are carried along.
Suspension	Sediment is carried along in the flow of the water.
Saltation	Pebbles that bounce along the sea/river bed.
Traction	Boulders that roll along a river/sea bed by the force of the flowing water.

Original position / Slumped mass

Types of Weathering

Weathering is the breakdown of rocks where they are.

Carbonation	Breakdown of rock by changing its chemical composition.
Mechanical	Breakdown of rock without changing its chemical composition.

What is Deposition?

When the sea or river loses energy, it drops the sand, rock particles and pebbles it has been carrying. This is called deposition.

Suspension / Solution / Traction / Saltation / River Bed

Geography

AQA GCSE Geography: Physical Landscapes of the UK (Coasts)

Formation of Coastal Spits - Deposition

Example: Spurn Head, Holderness Coast.
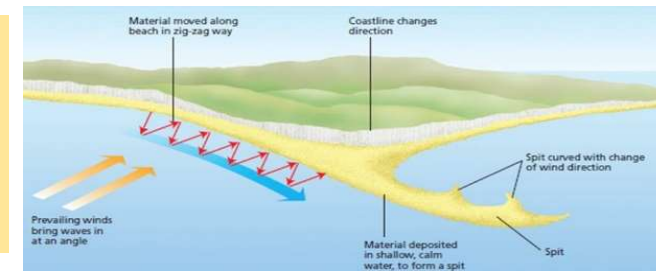
1) **Swash** moves up the beach at the angle/direction of the **prevailing** wind.
2) Backwash moves debris/water back down the beach at 90° to coastline, due to **gravity**.
3) Zigzag movement (**Longshore Drift**) transports material along beach.
4) Deposition causes beach to extend, until reaching a river estuary.
5) Change in **prevailing wind** direction forms a hook.
6) Sheltered area behind spit encourages deposition, salt marsh forms.

How do waves form?

Waves are created by wind blowing over the surface of the sea. As the wind blows over the sea, friction is created - producing a swell in the water.

Why do waves break?

1	Waves start out at sea.
2	As waves approaches the shore, **friction** slows the base.
3	This causes the orbit to become **elliptical**.
4	Until the top of the wave breaks over.

Size of waves

- **Fetch** how far the wave has travelled
- Strength of the wind.
- How long the wind has been blowing for.

Formation of Bays and Headlands

1) Waves attack the coastline.
2) Softer rock is eroded by the sea quicker forming a bay, calm area cases deposition.
3) More resistant rock is left jutting out into the sea. This is a headland and is now more vulnerable to erosion.
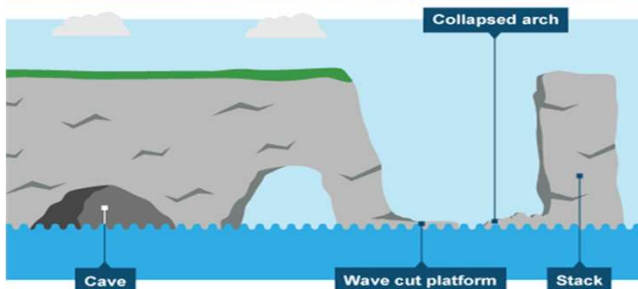
Types of Waves

Constructive Waves	Destructive Waves
This wave has a **swash that is stronger** than the backwash. This therefore builds up the coast.	This wave has a **backwash that is stronger** than the swash. This therefore erodes the coast.

Formation of Coastal Stack

1) **Hydraulic action** widens cracks in the cliff face over time.
2) **Abrasion** forms a **wave cut notch** between high tide and low tide.
3) Further **abrasion** widens the wave cut notch to from a cave.
4) Caves from both sides of the **headland** break through to form an arch.
5) Weather above/erosion below –**arch** collapses leaving **stack**.
6) Further weathering and erosion eaves a **stump**.

Example: Old Harry Rocks, Dorset

Geography

AQA GCSE Geography: Physical Landscapes of the UK (Coasts)

Coastal Defences

Hard Engineering Defences

Groynes	Wood barriers prevent longshore drift, so the beach can build up.	✔ Beach still accessible. ✘ No deposition further down coast = erodes faster.
Sea Walls	Concrete walls break up the energy of the wave . Has a lip to stop waves going over.	✔ Long life span ✔ Protects from flooding ✘ Curved shape encourages erosion of beach deposits.
Gabions or Rip Rap	Cages of rocks/boulders absorb the waves energy, protecting the cliff behind.	✔ Cheap ✔ Local material can be used to look less strange. ✘ Will need replacing.

Soft Engineering Defences

Beach Nourishment	Beaches built up with sand, so waves have to travel further before eroding cliffs.	✔ Cheap ✔ Beach for tourists. ✘ Storms = need replacing. ✘ Offshore dredging damages seabed.
Managed Retreat	Low value areas of the coast are left to flood & erode.	✔ Reduce flood risk ✔ Creates wildlife habitats. ✘ Compensation for land.

Case Study: Hunstanton Coast

Location and Background
Located on the North-West coast of Norfolk. The town is a popular sea resort for tourists to visit all year round.
In 2013, the town suffered damage from a storm surge. The Sea Life Centre was flooded and closed for a number of months.

Geomorphic Processes
- Old Hunstanton is dominated by dunes that are formed when sand is trapped and built up behind objects.
-Hunstanton Cliffs are made from three different bands of rock (sandstone, red chalk and white chalk).
-Hunstanton Cliff are exposed to cliff retreat. This is when a wave-cut notch develops enough for the cliff face to become unstable and eventually collapses.
-Longshore drift travels from Sheringham in the north to the Wash in the south.

Management
-Hunstanton is protected by a number of groynes. These trap sand to build up the beach for better protection.
-The town is also protected by large sea walls to prevent flooding and deflect the waves energy.
-$15 million has been spent on beach nourishment to add sediment to beach for increased protection against flooding.

Geography

AQA GCSE Geography: Physical Landscapes of the UK (Rivers)

Middle Course of a River

Here the gradient get gentler, so the water has less energy and moves more slowly. The river will begin to erode **laterally** making the river wider.

Upper Course of a River

Near the source, the river flows over steep **gradient** from the hill/mountains. This gives the river a lot of energy, so it will erode the riverbed vertically to form narrow valleys.

Lower Course of a River

Near the river's mouth, the river widens further and becomes flatter. Material transported is deposited**.**

Water Cycle Key Terms

Precipitation	Moisture falling from clouds as rain, snow or hail.
Interception	Vegetation prevent water reaching the ground.
Surface Runoff	Water flowing over surface of the land into rivers
Infiltration	Water absorbed into the soil from the ground.
Transpiration	Water lost through leaves of plants.

Formation of Floodplains and levees

When a river floods, fine **silt/alluvium** is **deposited** on the valley floor. Closer to the river's banks, the heavier materials build up to form natural **levees**.

✓ Nutrient rich soil makes it ideal for farming.
✓ Flat land for building houses.

Natural levees / River
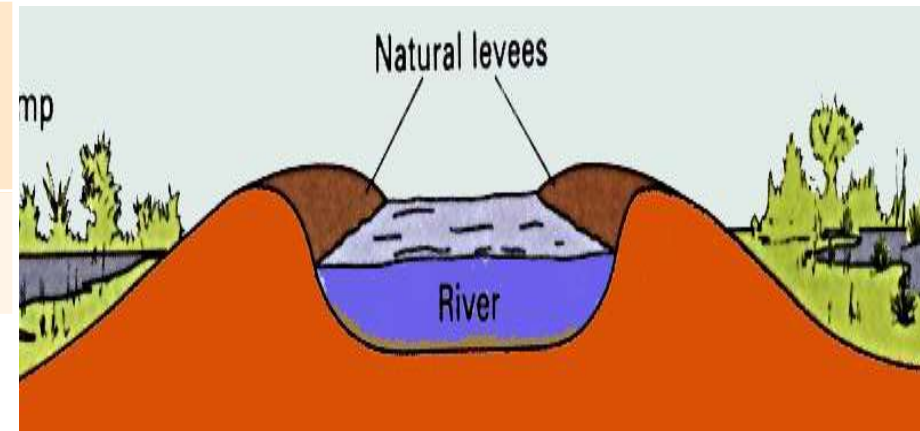
Formation of a Waterfall
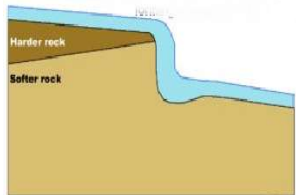
1) River flows over **alternative** types of rocks (harder and softer.

2) River **erodes** soft rock faster creating a step.

3) Further **hydraulic action** and abrasion form a **plunge pool** beneath.
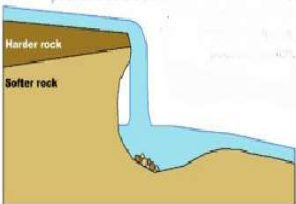
4) Hard rock above is **undercut** leaving cap rock which collapses providing more material for erosion.

5) Waterfall retreats leaving steep sided **gorge**.

Formation of Ox-bow Lakes

Step 1		Step 2	
	Erosion of outer bank forms river cliff. Deposition inner bank forms **slip off slope.**		Further **hydraulic action** and **abrasion** of outer banks, **neck** gets smaller.
Step 3		**Step 4**	
	Erosion breaks through **neck**, so river takes the fastest route, redirecting flow		Evaporation and deposition cuts off main channel leaving an **oxbow** lake.

Geography

AQA GCSE Geography: Physical Landscapes of the UK (Rivers)

River Management Schemes

Soft Engineering	Hard Engineering
Afforestation – plant trees to soak up rainwater, reduces flood risk. **Demountable Flood Barriers** put in place when warning raised. **Managed Flooding** – naturally let areas flood, protect settlements.	**Straightening Channel** – increases velocity to remove flood water. **Artificial Levees** – heightens river so flood water is contained. **Deepening or widening river** to increase capacity for a flood.

Physical and Human Causes of Flooding.

Physical: **Prolong & heavy rainfall** Long periods of rain causes soil to become saturated leading runoff.	*Physical:* **Geology** Impermeable rocks causes surface runoff to increase river discharge.
Physical: **Relief** Steep-sided valleys channels water to flow quickly into rivers causing greater discharge.	*Human:* **Land Use** Tarmac and concrete are impermeable. This prevents infiltration & causes surface runoff.

Hydrographs and River Discharge

River discharge is the volume of water that flows in a river. Hydrographs who discharge at a certain point in a river changes over time in relation to rainfall

1. **Peak discharge** is the discharge in a period of time.

2. **Lag time** is the delay between peak rainfall and peak discharge.

3. **Rising limb** is the increase in river discharge.

4. **Falling limb** is the decrease in river discharge to normal level.
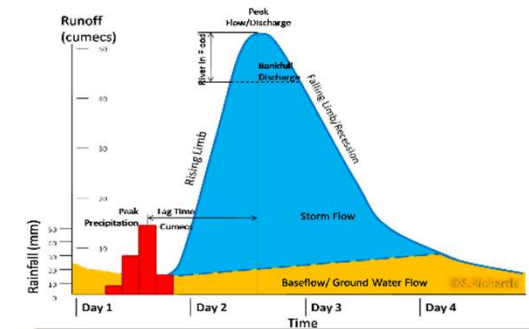
Case Study: The River Tees

Location and Background
Located in the North of England and flows 137km from the Pennines to the North Sea at Red Car.
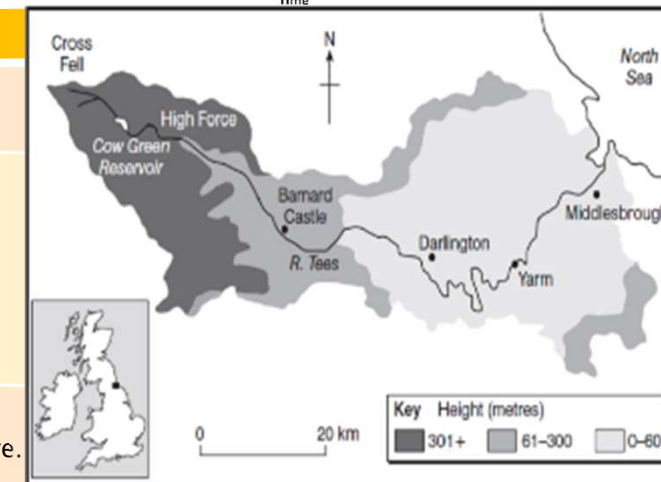
Geomorphic Processes
Upper – Features include V-Shaped valley, rapids and waterfalls. High Force waterfall drops 21m and is made from harder Whinstone and softer limestone rocks. Gradually a gorge has been formed.
Middle – Features include meanders and ox-bow lakes. The meander near Yarm encloses the town.
Lower – Greater lateral erosion creates features such as floodplains & levees. Mudflats at the river's estuary.

Management
-Towns such as Yarm and Middleborough are economically and socially important due to houses and jobs that are located there.
-Dams and reservoirs in the upper course, controls river's flow during high & low rainfall.
- Better flood warning systems, more flood zoning and river dredging reduces flooding.

History

History:
Germany before WW1

Key Terms	Definitions
Militarism	The belief that a country should maintain a strong army
Kaiser	Germany emperor
Reichstag	German parliament
Industrialisation	The process of changing from a mainly agriculture based economy to one based on manufacture
Trade unions	An association of workers formed to protect their interests
SPD	Social Democratic Party. It wanted to improve the lives of the working classes
Weltpolitik	World policy
Mutiny	Rebellion by soldiers or sailors
Abdicate	Giving up the throne
Armistice	Agreement to end a war
November Criminals	The nickname give to the politicians who signed the armistice

How was Germany ruled?
✓ Before World War I, Germany was ruled by **Kaiser Wilhelm II**
✓ German men over 25 could vote in **Reichstag** elections, although the **Kaiser** could ignore the **Reichstag** if he wanted to
✓ The **Social Democrats (SPD)** were the largest party in the **Reichstag** after 1912
✓ The **army** held a great deal of political power & **militarism** was very important in Germany

Germany under the Kaiser
Wilhelm wanted Germany to overtake Britain as the most powerful & **industrialised** country. By 1913 Germany was producing more iron & steel than Britain.
Increased **industrialisation** led to more profits for factory owners. Workers wanted better wages and working conditions, so many joined **trade unions**. These organised strikes to force the Kaiser to improve their conditions. Many workers also voted for the **SPD**.

Foreign Policy
Wilhelm wanted Germany to gain an empire, like other European countries. This was known as **Weltpolitik**. As a result he built up Germany's navy through a series of Naval Laws between 1989 & 1912. The army was increased too. These increases were paid for by higher taxes.

The First World War
The British blockade quickly resulted in food shortages & there were some protests early on. 1918: civilians starving. Germany losing on the battlefield. Ludendorff told the Kaiser to give more democratic freedoms in order to get a better deal from the Allies. But these changes achieved little.
28th October 1918: the German navy **mutinied.** This spread to nearby ports & towns. Soldiers who were sent to deal with mutiny joined it. Workers councils were set up all over Germany. The Kaiser was forced to **abdicate**.
Ebert, leader of the SPD became leader of the new government.

Impact of the war

Germany was bankrupt	Society divided further	More politically unstable
• Germany had borrowed money & needed to pay it back • 60,000 war widows & 2 million children without fathers	• Some factory owners made a fortune, but workers had their wages restricted • Women worked in factories, some people say this as damaging family values	• Germany had been rich & stable, now there was **mutiny** & revolution • Many Germans blamed the new government for signing the **armistice**. Calling them the **November Criminals**

History

History: The Early Weimar Republic

The new Weimar Republic
Ebert ordered new elections but introduced reforms in housing & help for the unemployed. In January 1919 his party, the SPD gained the most votes in the elections.

Rebellions
Spartacist League: communists who wanted Germany run by workers councils. 6th January 1919, they tried to take over Berlin. Ebert sent in the **Free Corps (Frei Korps)** to put down the rebellion. The Spartacist leaders, Rosa Luxemburg & Karl Liebknecht were murdered.
Kapp Putsch: March 1920 Kapp & 5000 **Free Corps**, took over Berlin. Kapp wanted to make Germany strong again & recover the lands lost under Versailles. Ebert & the government fled but ordered the people to go on strike. Kapp was forced to flee.
Red Rising: After Kapp fled, left-wing workers of the Ruhr stayed on strike & took over several towns. The government sent soldiers & **Free Corps** to deal with it. Over 1000 workers killed.

The Weimar Constitution
- ✓ The **Weimar Constitution** was very **democratic**: all men and women could vote, **Reichstag deputies** and the **President** were elected, the **President** appointed a **Chancellor** to run the government, usually from the largest party in the **Reichstag**
- ✓ However, the constitution had some weaknesses: **Article 48** allowed the **President** to rule without the **Reichstag** in an emergency & the system of **proportional representation** led to weak **coalition** governments which struggled to pass laws
- ✓ The **Weimar Republic** were blamed for surrendering in World War I.
- ✓ Weimar politicians were mocked as the **November Criminals** by nationalists and the 'Stab in the Back' myth became **widespread**

Key Terms	Definitions
Weimar Republic	The new German government
Free Corps (Frei Korps)	A right-wing group of ex-soldiers
Reichstag	German parliament
Democratic	When all the people decide who rules them
President	The head of state, elected every 7 years. Stayed out of the day-to-day running of the government
Chancellor	Normally the leader of the biggest party, responsible for the day-to-day running of the country
Article 48	Special emergency degrees, which could be passed by the president
Proportional representation	Proportion of votes = proportion of votes
Coalition	When a group of parties join together to form a government
November Criminals	The nickname give to the politicians who signed the armistice

Left wing/right wing

Left wing	Right wing beliefs
- Workers should have the power & rule through workers councils - There should be equality - Change is welcome - Example: Communist Party	- Strong leaders should rule - Your own country should be strong & powerful - Change is not welcome - Example: Nazi Party

German reactions to the Treaty of Versailles
The German people hated the treaty because:
- It was seen as too harsh & they would be unable to pay the reparations
- It was seen as diktat – a forced peace, which they were made to sign
- The politicians were hated fro signing the treaty & were seen as betraying the army. They were known as the **November Criminals**

History

History:
The early Weimar Republic

Key Terms	Definitions
Hyperinflation	A sudden, dramatic rise in prices.
Brownshirts	The Nazi's private army. Also known as stormtroopers.
Rentenmark	The new currency introduced by Stresemann
Daws Plan	Agreement between the USA & Germany, giving Germany US loans in order to help them recover
Young Plan	Agreement to reduce reparations between Germany & the countries they owned money to after WW1
Locarno Pact	Normally the leader of the biggest party, responsible for the day-to-day running of the country

The hyperinflation crisis
Germany's failure to pay reparations led to the 1923 Ruhr Crisis
- In 1922, Germany missed a **reparations** payment to **France**
- In 1923, French soldiers occupied the **Ruhr**, Germany's industrial region, and began to take coal, iron, and steel as **reparations** payments
- The Weimar Republic ordered German workers to go on strike rather than work with the French (**passive resistance**)
- In order to pay the striking workers in the **Ruhr**, the government **printed money** which led to **hyperinflation**

Hyperinflation seriously damaged the German economy
- The **Weimar** government's decision to print money led to **hyperinflation** as paper money became worthless
- Prices increased rapidly: a loaf of bread cost **201 billion marks** by November 1923
- People with **savings**, especially the **elderly**, suffered as their savings became worthless

Hitler & the Nazi Party
Hitler made big changes to the Nazi Party including: setting out a 25 Point Programme which made his aims clear. These included destroying the ToV & making Germany great again. He introduced the swastika as the Nazi symbol& set up the **brownshirts** as his private army. They were used to beat up their opponents. The membership of the party grew to 5000 in 1921.

The Munich Putsch
Hitler's attempt to take over the government of Bavaria in 1923, with the support of General Ludendorff (WW1 general). It failed. Hitler was convicted of treason & sent to prison. Whilst in prison he wrote Mein Kampf (My Struggle). Hitler decided to change his tactics & seize power through political means.

Recovery under Stresemann
Hyperinflation: Stresemann replaced the old currency with a new one. This ended **hyperinflation**, however, people who had lost their savings did not get them back.
The Ruhr: Stresemann arranged for the USA to lend Germany money under the **Dawes Plan**. Germany could start paying back the reparations & the French & Belgian troops left the Ruhr. In 1929, the reparations were negotiated down & Germany was given longer to pay them. This was known as the **Young Plan**.
Regain international power: 1925 Germany signed the **Locarno Pact** with GB, France, Belgian & Italy, agreeing never to go to war. In 1926 Germany joined the League. Germany recovered it's international status but she did not recover her land lost in the ToV.
Improving the German economy: Stresemann used some money from the Dawes Plan to build factories, houses, schools & roads. Some American factories relocated to Germany.

Recovery?
- There were still many political parties & none could gain enough votes to get a majority. This resulted in coalitions.
- Political parties with extreme ideas continued to hate the politicians in the Reichstag.
- The recovery was built on American loans. If the USA asked for the money back, Germany would be in trouble.

History

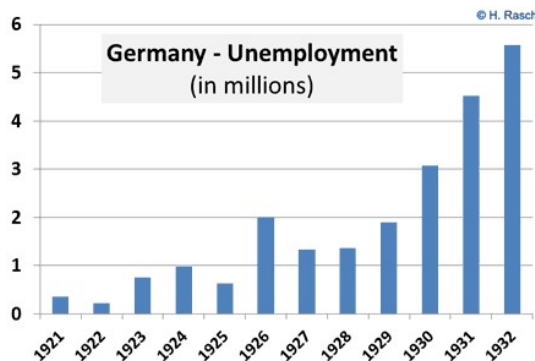**History: The Early Weimar Republic & Hitler's appeal**

Key Terms	Definitions
Depression	A time in the 1930s when many banks & businesses failed and unemployment rose
Propaganda	The spreading of ideas & information, in order to influence people's thinking
Extremist parties	Political parties such as the Nazis & Communists who were on the far edge of political ideas

Germany's Golden Age

The Kaiser had controlled entertainment but these controls were removed under the new Weimar government.

- Cinema: Became very popular. Metropolis was the most technologically advanced film of the decade.
- Nightlife: Germany became the centre for new plays, operas & theatres shows. The Threepenny Opera was a box office smash & would have be banned by the Kaiser. Jazz music also flourished.
- Literature: Important works such as All Quiet On The Western Front (anti-war) were published.
- Art: Avant-garde artists such as Otto Dix & George Grosz believed art should show the reality of life e.g. the differences in social class & society.
- Some Germans hated the changes as they believed Germany was being led into moral decline.

The Depression

The Stock Market Crash in 1929 resulted in the USA asking for it's loans back. The USA stopped buying goods from Germany, so factories shut down. Businesses went bankrupt & unemployment rose. The government couldn't deal with the problems & people started to turn to extremist parties such as the Nazis & Communists.

Germany - Unemployment (in millions)

© H. Rasch

Data Source: StJbDR 1939/40

Why did the Nazi Party become more popular?

The Depression: Hitler promised to deal with the economic problems. He also stated the ToV was a crime & Jews should be blamed for the economic problems. People started to listen to his ideas.

Germans were unhappy with the Weimar government: Chancellors were unable to sort out the economic problems. Chancellor Bruning was forced to rule through the use of Article 48, until he lost Hindenburg's support. People started to turn to extremist parties.

Fear of other extremist parties: many groups in society were worried about the threat from the Communists (they didn't want to lose their business & wealth) The Communists were also anti-religion. Hitler said he was anti-communist & used the SA to attack them.

The appeal of Hitler: his charismatic personality & passionate speaking won over a lot of people.

Nazi Party structure, methods & tactics: After the Munich Putsch Hitler realised he needed to win power legally. Nazi Party offices were set up all over Germany to recruit more followers. It used propaganda through new media such as radio broadcasts & cinema news reports. Goebbels was put in charge of propaganda. Hitler took part in fabulous parades which showed off Nazi power & the Hitler Youth was set up to encourage young followers.

Who voted for the Nazis?

Farmers: had been hit hard by the Depression, as people were buying lesson food. The Nazis promised them higher prices for their crops & protect them from a communist takeover.

Women: some felt that the Weimer government had impacted on social morals. The Nazis promised to encourage family life & encourage self-discipline.

Old soldiers & young people: Hitler promised to get rid of the ToV & make the country strong again. Young people liked his promise of more jobs in the armed forces.

Middle classes: small business owners, bank workers & doctors voted for the Nazis in large numbers. They often feared law & order would break down in the Depression & wanted strong government.

Upper classes: liked Hitler's promise of strong leadership & a more powerful nations. He might use their factories to rearm

History

History: From Democracy to Dictatorship

Key Terms	Definitions
Cabinet	The group of senior politicians who are responsible for controlling government policy
Enabling Law/Act	A law which allowed the Nazis to make their own laws without consulting the Reichstag
Gestapo	Secret police
Fuhrer	Hitler's new title meaning leader

How did Hitler become Chancellor

1930 election: The Nazis become the second largest party in the Reichstag. Bruning becomes chancellor in a coalition government. He was not popular.

The Nazis worked hard to increase their support through propaganda.

July 1932: Bruning resigned
Hindenburg appointed von Papen as Chancellor. Von Papen called an election, hoping to gain more support.
In the election the Nazis become the biggest party, winning 230 seats.
Hitler demands the job of Chancellor, but Hindenburg refuses (he thought eh Nazis were disruptive & violent). Von Papen was given the job again & he calls another election.

November 1932: the Nazi support fell slightly, but they were still the biggest political party. Von Papen's support fell & he resigned.

Hindenburg made von Schleicher Chancellor. He had no support & resigned. 30th Jan 1933: Hitler appointed Chancellor. In an effort to control him, Hindenburg only allowed 2 Nazis in the **cabinet** & von Papen was made Vice Chancellor.

Hitler did not have complete control of Germany. Hindenburg could easily replace him, Germany was still a democracy & the Communist were a threat.
Feb 1933: Hitler called a new election to take place in March 1933. In the meantime he would used the newspapers & radio stations to get his message across.
27th Feb: The Reichstag burns done & a communist, Marinus van der Lubbe is found outside with matches. Hitler claims it is a communist plot.

28th Feb: Hitler asks Hindenburg to pass a special emergency 'Protection Law' to deal with Germany's problems
March 1933: the law for the 'Protection of the People and State' banned leading Communists from taking part in the election campaign, 4000 communists jailed & their newspapers shut down.
5th March: the Nazis get more votes in the election but still not a majority
23rd March: The Centre Party joins with the Nazis, giving him a majority in the Reichstag. He passes the Enabling Act, giving him the power to make laws without asking the rest of the politicians in the Reichstag.
7th April: The Gestapo was formed & concentration camps set up.
2nd May: Trade unions banned
14th July: all political parties banned apart from the Nazis. Anyone who trying to set up & run a political party would go to prison for 3 years.
30th June 1934: Night of the Long Knives
2nd August 1934: Hindenburg died. Hitler merged the role of Chancellor & President & became Fuhrer. The army swore an oath of loyalty to him personally.

The Night of the Long Knives
Rohm, the leader of the SA wanted to join it with the army. This would make him very powerful, which alarmed Hitler. The army leaders did not want to be under Rohm's control. There were also rumours that Rohm wanted to seize power.
30th June 1934: Hitler purged the leaders of the SA, key politicians & other opponents.
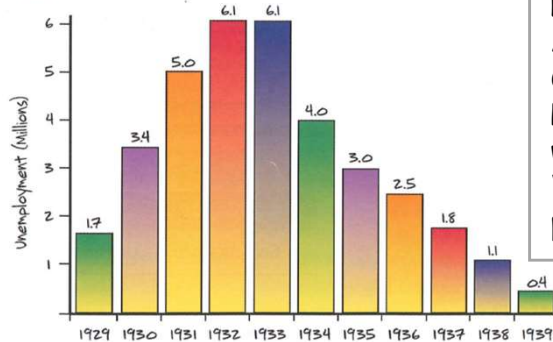**Impact**: Hitler had eliminated many people who he saw as a threat. The SS, led by Himmler would now be responsible for Hitler's security. Hitler was open about what he had done & he literally got away with murder.

History

History: Dealing with Unemployment & Work

▼ B The rise and fall of unemployment in Germany, 1929–39

Reducing Unemployment
National Labour Service (RAD)
All men aged 18-25 had to spend 6 months in the RAD
Planted forests, dug ditches & worked on farms
Wore uniforms & lived in camps, paid pocket money.

Key Terms	Definitions
Autobahn	Motorway
Rearmament	Building up stocks of weapons
Conscription	Forcing men to join the army. All men aged 18-25 were required to serve for 2 years
Invisible unemployment	When the Nazis hid or changed unemployment figures to make them look better
Self-sufficient	Having a 'closed' economy, where Germany would not need to trade with other countries; producing all its own goods

Public work schemes June 1933: Nazis ordered the creation of autobahns. Nearly 100,000 employed. By 1938, 3,800km completed. Schools & hospitals also built.
Rearmament: thousands of new jobs were created to supply the armed forces with weapons. Factory owners & businessmen made a fortune. Conscription increased the size of the army from 1000,000 to 1,400,000 men.
BUT invisible unemployment: Women & Jews who were sacked from their jobs were not counted in the unemployment figures. Part time jobs were counted as full time.

Did The Nazis Help Farmers?
✓ Hitler cut farmer's taxes & he guaranteed farmers could not be thrown off their land if they got into debt
✗ Farmers were prohibited from dividing up their land & giving a part to each of their children & as a result some famers argued their children were forced to leave the countryside to work in cities

Did Hitler make Germany self-sufficient?
1933: Schacht appointed Minister of Economics. He signed deals with other countries in South America & south-east Europe to supply Germany with raw materials in return for German made goods. But Germany was still dependent on raw materials from foreign countries. Schacht was replaced by Goering.
1936: Goering introduced the Four Year Plan to get Germany ready for war. This aimed to increase military production. Ordering weapons, uniforms & equipment created jobs. High targets were set & achieved in industries such as steel & explosives but not in other key areas such as oil production. Germany was still not ready for war in 1939. Substitutes were developed for goods that were difficult to find e.g. making petrol from coal, coffee from acorns & cotton from pulped wood.

Were people better off under the Nazis?
• More people were working
• German Labour Front (DAF) replaced trade unions & promised to protect the rights of workers & improve conditions. It ran:
• Beauty of Labour: a scheme to improve the working environment
• Strength through Joy: a scheme which organised leisure activities to encourage hard work.
• There was also a scheme to help people save for a car. No one ever received one.
• Wages didn't increase, workers lost rights as trade unions banned, workers couldn't quit without the government's permission & were banned from striking.
• Food cost more & wages didn't increase for many.

History

History: War, Women & Children

Key Terms	Definitions
Hitler Youth	Nazi youth groups
Total War	When country's economy is geared towards providing the resources needed to supply the armed forces

The Impact Of War
At first the war went well & Germany benefitted from the resources & luxury goods taken from the conquered countries.
1941: Germany invaded the USSR & started to lose.
- Severe food shortages, clothing was rationed.
- From 1942 the country was organised for **Total War**. Factories opened for longer, leisure activities were stopped & women were drafted to work in the factories. Foreign workers were used as slave labour in factories.
- The Allies bombed German cities. Electricity & water supplies were affected, as was transport. Large numbers of refugees left their homes seeking safety.
- Support for the Nazis started to weaken.

Youth Groups
1922: Hitler Youth Organisation set up.
Boys taught military skills, girls taught how to be good wives & mothers.
1933: all other youth groups banned (e.g. cub scouts).
1936: Law for the Incorporation of German Youth gave Hitler Youth equal status to school & home (HY was as important as the other two).
1939: membership of HY made compulsory.
Children expected to attend meetings several times a week, weekends were spent camping. Children were encouraged to inform on their parents & teachers. Not all children joined. Edelweiss Pirates & Swing Youth – both gangs which refused to conform. They went camping, sang anti-Hitler songs & sometimes attacked HY groups.

The Young
- Hitler wanted to brainwash the young into following his beliefs. They would continue to follow him for the rest of their lives.
- School subjects were changed e.g. History taught that the Germans had been badly treated in the ToV. Race Studies (Eugenics) taught Nazi race theories such as Aryans were the superior race.
- All teachers had to join the German Teachers League & any who refused to teach as the Nazis wanted were sacked.
- Adolf Hitler Schools were set up for future Nazi leaders.

Universities: Between 1933 & 1934 15% of all university professors were replaced, 1/3 for racial reasons & ½ for political.
- Many leading academics left the country e.g. Albert Einstein. University courses were changed to teach Nazi ideas.
- The Nazis didn't see university as a particularly important & fewer Germans attended during the Nazi years.

Women
- Nazis wanted to raise the birth rate & encourage women to stay at home
- Kinder, Kirche & Kuche (children, church & cooking)
- Many women were sacked from their jobs
- Social controls were introduced e.g. women banned from smoking, wearing trousers
- Marriage loans encouraged women to have children & women with large families were rewarded with the medals
- Birth rate did increase
- During the war, the Nazis needed women in the factories & working, but women were not called up to work.

History

History: Religion & Hatred

Key Terms	Definitions
Concordat	An agreement between the Pope & Hitler, not the interfere with each other
Euthanasia	The deliberate killing of a person
German Christians	Protestant group, largely under Nazi control
Confessional Church	German Protestant group determined to have nothing to do with the Nazis or German Christians
Undesirables	People who the Nazis saw as weak or a burden on the state
Forcibly sterilised	Operating on people to prevent them from having children

Christianity
Religion important feature of German society
Some Christian & Nazi views were similar e.g. both believed in the importance of marriage, the family & moral values
Both disliked communism.
Catholic Church
1933: Hitler & the Pope signed the **Concordat.** Hitler soon broke this agreement & started arresting Catholic priests & closed down Catholic youth groups
1936: Pope issues 'With Burning Anxiety' saying the Nazis were hostile to the church.
1941: Archbishop Galen openly criticised the Nazis for their use of **euthanasi**a & concentration camps. He was put under house arrest.
Protestant Church – some Protestants supported Hitler. They were known as '**German Christians**' & were led by Ludwig Muller. They often wore Nazi uniforms & placed Mein Kampf next to the Bible.
The Protestant **Confessional Church** criticised the Nazis. Led y Pastor Martin Niemoller. Around 8000 pastors including Niemoller were arrested.

The Nazis & other religious groups
About 1/3 of Jehovah Witnesses died in concentration camps because of their pacifist beliefs
Salvation Army & Christian Scientists also targeted

Persecution of racial groups
Hitler believed some races were superior to others. Germans were the master race, with the right to dominate other inferior races such as Jews & gypsies.
Undesirables such as tramps & beggars weakened the nation. Problem families, prostitutes were also sent to the camps.
Around 350,000 physically & mentally disabled people were **forcibly sterilised**. From 1939 the Nazis started to murder them

Laws against Jews
March 1933: all Jewish lawyers & judges sacked April 1933: All Jews banned from sports clubs
Jan 1934: all Jewish shops marked with the star of David
Sept 1935: Nuremburg Laws banned marriages between Jews & non-Jews. Jews not allowed to vote
Nov 1938: Jewish children banned from schools. Kristallnacht: Jewish homes, synagogues & businesses attacked. Around 100 Jews killed & 20,000 sent to concentration camps.
April 1939: Jews could be evicted from their homes for no reason

Anti-Semitism during the Second World War
Anti-Semitic policies were introduced into the countries occupied by the Nazis .
Jews in eastern European countries were placed in ghettos or sent to camps. Execution squads shot & gassed as many Jews as they could find. In 1942 the Nazis introduced the Final Solution'. Extermination camps were built & Jews from all over Europe were transported to them.

Jewish resistance
Some Jews fought back. Some escaped to local forests & formed resistance groups which attacked German soldiers. The Warsaw Ghetto Uprising of 1943 lasted 43 days before it was put down.

History

History: The Terror State

Key Terms	Definitions
Gestapo	Secret police
Propaganda	The spreading of ideas and information
Censorship	Controlling the information people have access to
Passive resistance	Refusing to do what you are told, without using violence

The police state

Concentration camps: held 'enemies of the state' for any length of state. The aim was to 'correct' people who were not doing what the Nazis wanted. Inmates were forced to work hard & could be killed.

The SS: originally were Hitler's personal bodyguards, led by Himmler. They looked after security & ran concentration & death camps.

Police & courts: the police ignored crimes committed by Nazis. All top jobs in the police were to Nazis. Courts were under Nazi control & the death penalty could be given for even telling an anti-Hitler joke.

The Gestapo: they spied on people, tapped telephone calls & had the power to arrest & imprison anyone without trial. People were encouraged to inform on their families, neighbours and strangers.

Propaganda: Goebbels was appointed Minister of Enlightenment & **Propaganda**. He understood **propaganda** worked best with basic ideas, with short messages & powerful images. The Nazis key messages appeared repeatedly in all forms of media.

Censorship: Anything that was viewed as harmful to the Nazis (books, films, newspaper articles) was banned.

Only positive stories about the Nazis were published in newspapers. All film plots were shown to Goebbels before they were made. Cheap radios meant that the Nazis were able to reached a large amount of the population. Mass rallies were held to celebrate Hitler's greatness.

Resistance & opposition: it was difficult to show opposition to the Nazis. Some people grumbled about them or told anti-Hitler jokes.

Passive resistance: people might refuse to give the Heil Hitler salute or give money to the Hitler Youth.

Open opposition: the Swing Group listened to jazz music & had Jewish friends.

The White Rose group: handed out anti-Hitler leaflets, put up posters & wrote graffiti on walls.

Edelweiss Pirates: a banned youth group, beat up Nazi officials and helped army deserters

Kreisau Circle: army officers, university professors & aristocrats who discussed assassinating Hitler

July Bomb Plot: 1944, von Stauffenberg tried to blow Hitler up but failed.

How did the Nazis affect the arts & culture?

Chamber of culture set up. All musicians, artists, writers & actors had to be members. If they refused to join they were not allowed to work. All aspects of art & culture had to give the message that Nazi beliefs & ideas were correct.

Cinema: Goebbels directly controlled which films were made. Nazi messages included that German soldiers were heroes, Jews were mean & nasty.

Music: should be German or Austrian. Jewish composers were banned, as was Jazz because it had it's origins among the black people of America.

Theatre: plays had to focus on German history & politics.

Literature: certain books were banned e.g. All Quite On The Western Front (anti-war message). Mein Kampf was the best selling book. Books about race, the glory of war & the brilliance of the Nazis were encouraged.

Design: Hitler did approve of modern design such as Bauhaus, so the movement was closed down

Olympics
- 1936 Berlin Olympics. The Nazis used this as an opportunity to showcase Nazi Germany. Anti-Semitic posters & newspapers were stopped.
- The German Olympic squad came top of the medal table . Hitler claimed this proved his race theories.
- The events were filmed by Leni Riefenstahl, which showed Germany's technological advances to the world.

AO1

Develop ideas through investigations and showing understanding of sources

Mind map

Keywords – add branches to your mind map that include key ideas and words, using one word for each branch will allow you to develop more ideas rather than using a phrase or sentence

Central idea – this is the starting point of your mind map and shows the topic you are exploring. All keywords should link from this idea.

Include images – imagery can convey much more than a word or sentence and can help you to develop your ideas as we

Mood board

Theme – consider your theme, have you got a set idea already or are you happy to collect a wider range of ideas

Use a range of sources – don't find pictures from just one place use different sources like, photographs, wallpapers/fabric samples, lettering, magazines etc…

Pick a style – pull it all together with a colour/theme or style to make your page 'work' as a whole

Apply ideas – your mood board should be a visual representation of your mind map

Artist Research and Analysis of Work

There are several things you must include in your research to show understanding of your chosen artist

Bio – a quick gathering of facts with the artists birth/death, style, important works

Collect images – select images of their work that are relevant and images that appeal to you, comment on why you like them

Analysis – To show understanding of the artist you must discuss their work. This will allow you to explore ideas and consider different options before you begin creating you own art work.

Reproduction – either copy a small piece of their work or work in the artist's style to show your understanding of their work

Content – Looking at the subject of the work.
What is it? What exactly can you see? What is happening? What does the work represent?
What does the artist call the work?
Does the title change the way we see the work?
What is the theme of the work?
Landscape, portrait, journey, moment, memory, event, surreal, fantasy, abstract, message.

Form – Looking at the formal elements.
What colours does the artist use? Why? How is the colour organised?
What kind of shapes can you see?
What kinds of lines and marks does the artist use?
What is the surface like? What textures can you see?
What patterns can you see?
How big is the work?
Light, delicate, layered, strong, rough, dark, peaceful, dripped, textured, scale, vivid, bright.

Process – How the work has been developed and made.
What materials and tools have been used?
What is the evidence for how it has been made?
Painted, drawn, woven, printed, cast, stitched, constructed, collaged.

**Mood** – Looking at the communication of moods and feelings.
How does the work make you feel?
Why do you feel like this?
Does the colour, texture, form or theme of the work affect your mood?
Quiet, contemplative, thoughtful, hopeful, peaceful, elated, joyful, reflective.

Da Vinci Academy
A L.E.A.D. Academy

AO2

Refine ideas by experimenting with appropriate media, materials, techniques and processes

You don't have to use a specific media in your project, just show some variation.
For example if an artists uses pen, you could try using, pen, pencil, charcoal, biro, coloured pen etc.
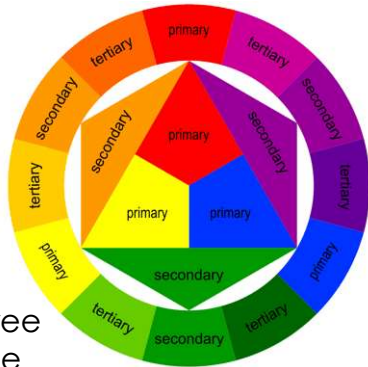
Colour Theory

Primary colours are the three main colours, they can't be made, but are used to mix all of the other colours

Secondary colours are made by mixing two primary colours

Tertiary colours are made by mixing a primary and a secondary colour

Harmonious colours are next to each other on the colour wheel

Complementary colours are opposite each other on the colour wheel

Tint – when you add white to a colour to make it lighter

Shade – when you add black to a colour to make it darker

Experimentation
You MUST try things more than once to show improvement and refinement. See how the artist has tried the same sketches in lots of different media and on different surfaces.

Be brave in your use of media, aim to show off your best skills.

Observational Experiments ...
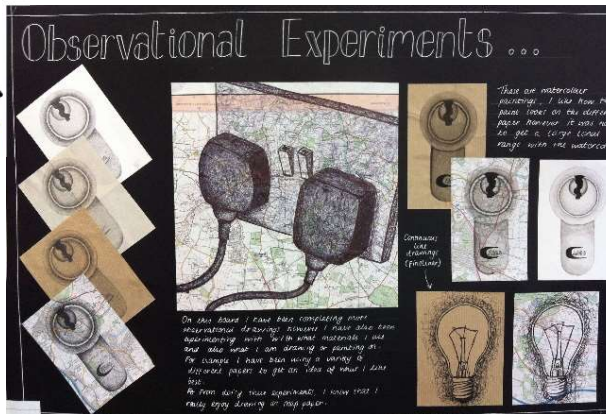
Pencil		The basic tool for drawing, can be used for linear work or for shading
Biro		Drawings can be completed in biro and shaded using hatching or cross hatching
Pastel (chalk/oil)		Oil and chalk pastels can be used to blend colours smoothly, chalk pastels give a lighter effect
Coloured pencil		Coloured pencil can be layered to blend colours, some are water soluble
Acrylic paint		A thick heavy paint that can be used smoothly or to create texture
Watercolour		A solid or liquid paint that is to be used watered down and layered
Monoprint		Where ink is transferred onto paper by drawing over a prepared surface
Collograph		A printing plate constructed of collaged materials
Card construction		Sculptures created by building up layers of card or fitting together

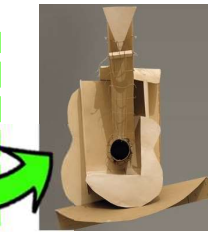|	
Media	The substance that an artist use to make art
Materials	The same as media but can also refer to the basis of the art work eg, canvas, paper, clay
Techniques	The method used to complete the art work, can be generic such as painting or more focus such as blending
Processes	The method used to create artwork that usually follows a range of steps rather than just one skill

AO3

Record observations, ideas and understandings as you develop your work

Take your own photographs and work from them as much as possible. Taking your own photographs will allow you to create a more personalised response.

Create both primary and secondary studies.

Create **maquettes** (a miniature scale model) in paper, card, etc to show your ideas.

You may want to produce another mood board or mind map as you develop your project and narrow down ideas.

All ideas and observations **MUST** clearly link to your project/theme. No random art work.

How to 'record'

Observational drawing	Drawing from looking at images of objects
Primary observation	Drawing directly from looking at objects in front of you
Secondary observation	Drawing from looking back at images of objects
Photographs	Using a camera or smartphone to take pictures to draw from (this is also classes as a primary observation)
Sketches	Basic sketches and doddles to show undeveloped and initial ideas.
Annotations	Writing about your art work

Annotation

Describes writing notes, using images and explain your thoughts to show the development of your work.

You must annotate and reflect on your work as it progresses to show your intentions and ideas.

Step 1 – Describe

What is the image of?

What have you done?

Step 2 – Explain

How was this work made?

How did you produce these effects?

How did you decide on the composition?

Step 3 - Reflect

Why did you use these methods?

Why do some parts of the work 'work' better than others?

Why might you do things differently next time?

AO4

Present a personal and meaningful response that realises intentions and shows an understanding of visual language

Avoid sticking with your first idea. Sometimes your initial idea is worth pursuing but before a final piece is decided upon you should have considered at least three different design ideas.

Telling a story with your art and sketchbook, using your work to convey a message instead of relying on words.

Sketchbook checklist

- ❑ Have you demonstrated what the starting point, theme or brief means to you personally?
- ❑ Have you established a link between the starting point and your chosen sources?
- ❑ Have you reflected your understanding of the social and cultural context?
- ❑ Is there a clear link between your sources and your own work?
- ❑ Is it clear what ideas or techniques from your sources you have developed?
- ❑ Have you selected and presented your studies carefully?
- ❑ Made use of your discoveries?
- ❑ Made clear links between your work and that of other artists, designers and craftspeople?
- ❑ Collected images to show your inspiration and stimuli?
- ❑ Made use of drawings, sketches, jottings, photographs and experiments with different media?
- ❑ Annotated images to explain how they fit into your development process?
- ❑ Demonstrated your understanding through correct use of art and design vocabulary?
- ❑ Shown experimentation and selection of the most successful results for your project?
- ❑ Organised your recordings and presented them to show and explain your decisions?
- ❑ Clearly linked all of your work to your starting point?

Thinking about your Final Piece

- Use materials and media that you can control well and have practised with.
- Your final piece should show influences from the artists you have studied
- Remember to think about composition rules when designing your final piece

Present your work well, this doesn't mean fancy background. Just take care on every page.

A rough idea	A visual Maquette	Final piece
A basic sketch of a final idea	A small image or model created in materials that replicate the end result	An image or sculpture pulling all prep work together.
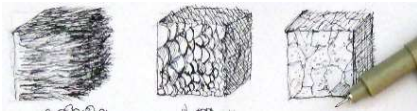
| The Formal elements of Art	
Tone	How light or dark something is
Line	A mark which can be long, short, wiggly straight etc…
Colour	What you see when light reflects off something. Red, blue and yellow are primary colours
Texture	How something looks or feels e.g. smooth or rough
Pattern	A symbol or shape that is repeated
Shape	A 2D area which is enclosed by a line e.g. a triangle
Form	Something which has 3 dimensions e.g. a cube, sphere or a sculpture

Drawing

The **Grid method** is a tool used to help you draw whilst keeping everything in proportion. It allows you to break down drawings into lots of small squares. Therefore you can concentrate on smaller sections at a time.
The more squares the use the more accurate you can be.

Another method to consider when drawing is using the grid method.

Constructing a drawing is important to ensure you keep correct proportion. Use simplified shapes to develop the structure of your drawing. Start with the largest structures first.

1. **Large rough shapes** – block out the most basic version of your drawing
2. **Accurate shapes** - Refine shapes so that they resemble the object more closely
3. **Detail** – add the detailed sections of the drawing like fine lines etc (then apply tone once drawing is completed)
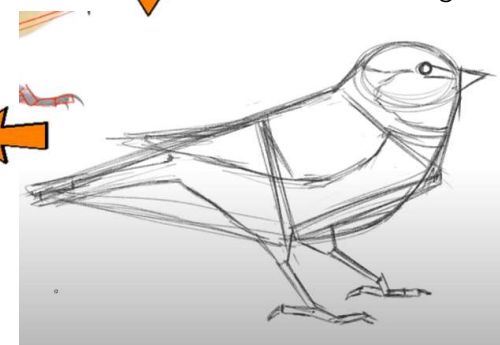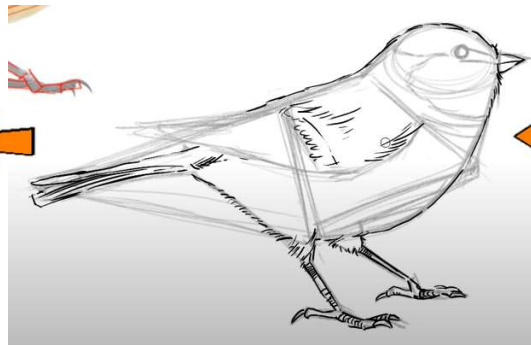
Take a look at the images below to see how it is done

Block out the large rough shapes that make up your image.

Draw out those shapes on their own
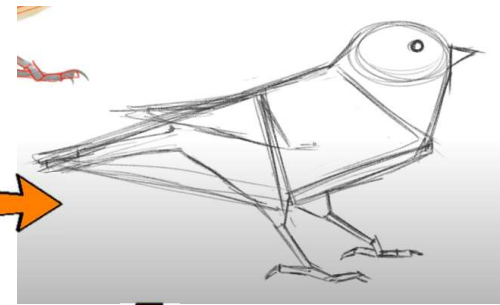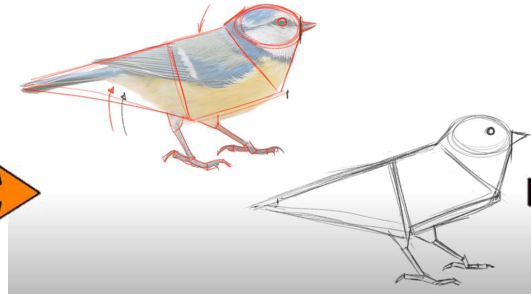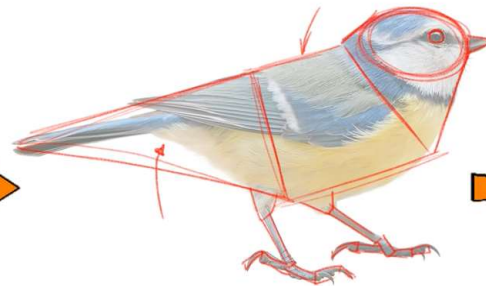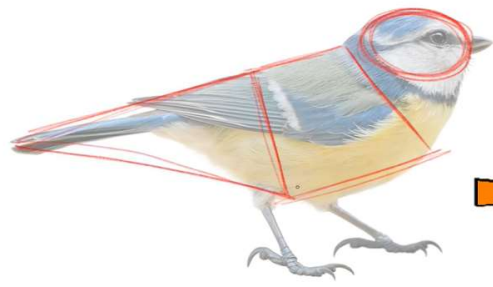
Add other structural detail i.e. the wings

Develop lines so they more closely resemble they way the final image will look. See how the breast of the bird is now curved, not straight and angular.

Rub out the large rough shapes so you can barely see them and draw using lines that show the texture of the finished object, in this case a bird.

Completely remove any construction lines.

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Adding Tone

Grades of pencil

Pencils come in different grades, the softer the pencil, the darker the tone.

H=Hard B=Black

In art the most useful pencils for shading are 2B and 4B. If your pencil has no grade, it is most likely HB(hard black) in the middle of the scale.

9H 8H 7H 6H 5H 4H 3H 2H 1H F
HB B 2B 3B 4B 5B 6B 7B 8B 9B

Making things look 3D: To stop drawings looking flat use a range of tone and marks. Pressing harder and light and layering with your pencil creates different tones and adds depth.

Mark Making: To make drawings look more realistic try to use different marks on the surface. You can do this by changing the direction, pressure or length of your marks. Mark making can be used in conjunction with shading or separately.

When **applying tone** to a drawing you must remember to apply base shades first to add depth and suggest form. Secondly, add mark making to develop the texture and fine details line work to finish.
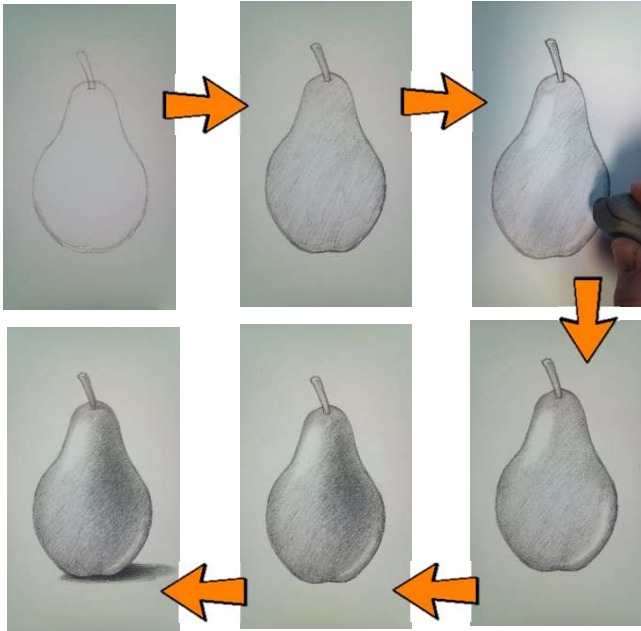
Directional shading is shading that follows the contours of an object. Using this method makes your work appear more realistic. Look at the portrait, see how the shading changes direction and curves with the shape of the figure. This technique should be used on all drawings. See how it has been used on the spheres below.
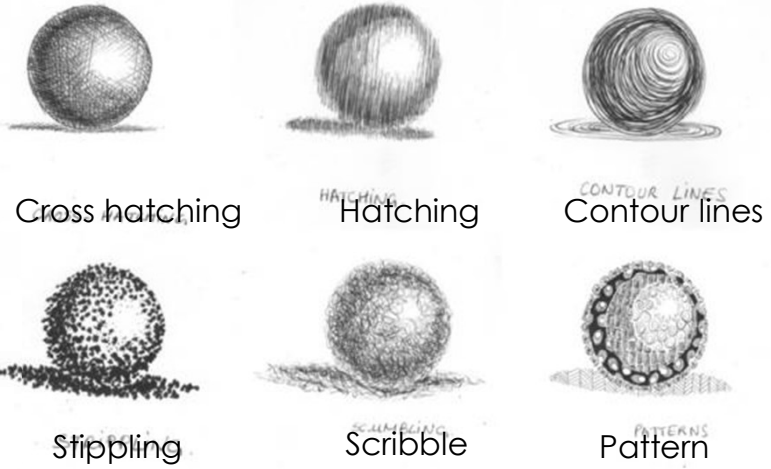
Tonal shade

Produce a range of tones by varying the pressure and layering - consider using softer pencils for darker shades

Mark Making - techniques

Cross hatching   Hatching   Contour lines
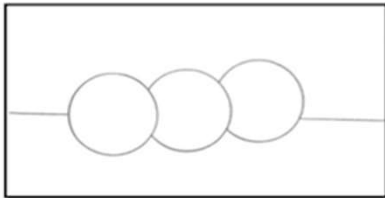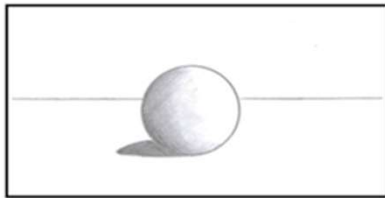
Stippling   Scribble   Pattern

Composition

Rule of thirds – Place focal elements (objects) at 1/3 or 2/3 of the image horizontally or vertically, not in the middle

Creating a sense of **space and depth** is important in art work to make it feel sophisticated and well thought out. Knowing how to raise objects over the top of each other is important in communicating space and depth to your viewer.
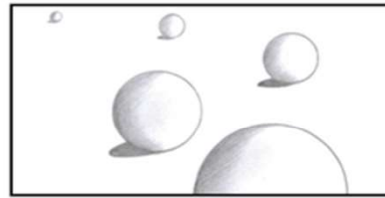
Repetition and grouping
Try grouping objects in odd numbers, this often looks better than an even number of objects.

Simplify and fill – Enlarge or crop the image to fill the space and draw your viewers attention to that particular object

Overlap
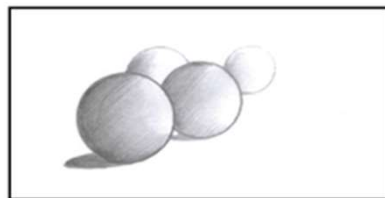One object appears to be behind the other

Shading
Light and shadow create the illusion of form and space
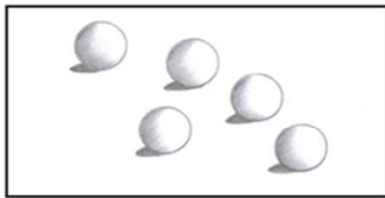
Placement
Objects higher in the picture appear to be in the distance

Size
Small objects look distant, while closer objetcs should be larger

Balance elements – If there is an emphasis on one side of the piece balance it out with smaller objects on the other side.

Value and Focus
Lighter values and less details suggest distant objects
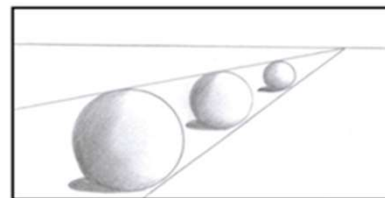
Linear Perspective
Parallel lines and edges seem to go toward one or more vanishing points
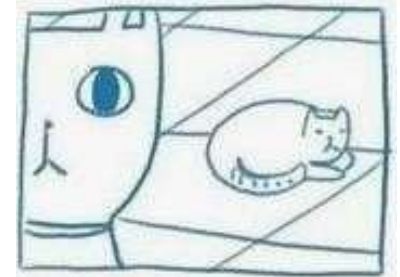
Line – Use lines to draw the viewers eye across the work. The lines don't have to be straight, think about using S or C shaped lines.
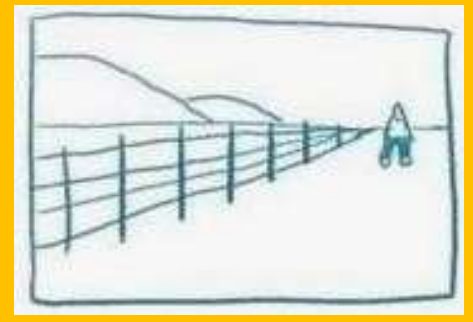
Taking a Good Photograph

Light
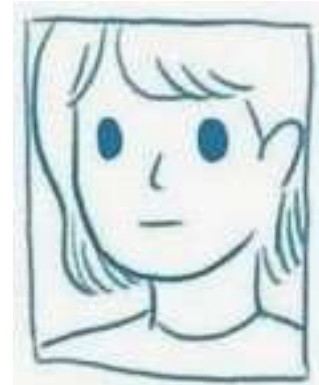Use natural light as much as possible. The best times for shooting are sunrise and sunset. As far as possible avoid taking shots in artificial light i.e. bedroom lights or with flash.

Artificial   Natural

in-camera flash   natural light
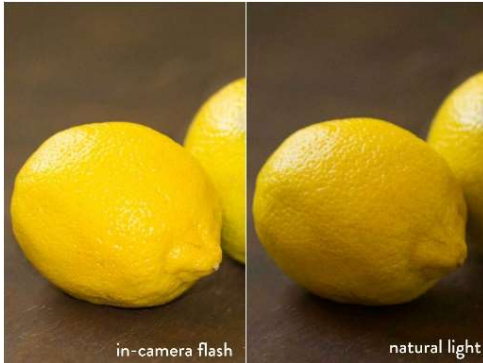
Notice that most of the tone is removed with flash on

Noise   No noise

Noise
Avoid digital zoom, it can make images grainy, this is called noise in photography. Try to get physically closer to your subject instead (if you can).

Noise   No noise

Taking a good photograph will be key to your project. You will be using these images to draw from. Photography is another great way to record (AO3) the work you are carrying out.

If your picture is blurry, it means you are probably too close to your subject. Move back a little bit until your image becomes sharper.

Blur From Camera Shake   No Camera Shake

When there is less light your camera finds it harder to focus and often it will create an image with 'camera shake'. If you need to take an image in low light try to rest your camera of a flat surface to help steady it.
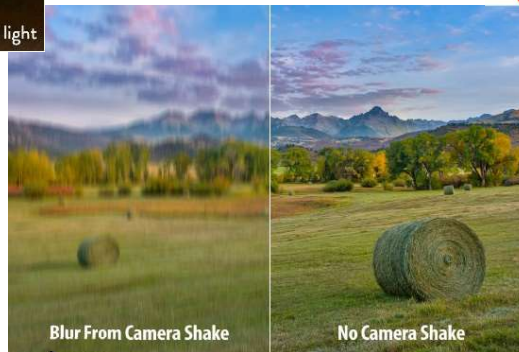
Think – don't just point your camera and click. Think about what you want to take a picture of, is it…
- Texture? Get in really close, just make sure your picture is focused and not blurry.
- A portrait? Make sure nothing distracts from your main subject, try to use a plain background,
- Landscape? Then hold your camera steady, stand far back and line up your scene with the rule of thirds.

Grid lines – on most phones/cameras you can go into the settings and add grid lines. Using these grid lines will help you to create a successful composition and therefore photograph. Check out the 'Composition' page and look at the 'rule of thirds'.

To switch the grid on ...
iPhone: Go to "Settings," choose "Photos & Camera," and switch "Grid" on.
Samsung Galaxy: Launch the camera app, go to "Settings," scroll down and switch the "grid lines" option to "on."

Pro tip: Take lots of pictures from similar angles and only make slight changes with each photograph. Once you have finished capturing you can choose which images are the best.

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Painting
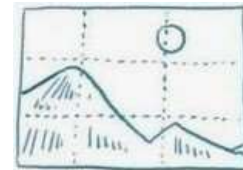
Tape Masking
- Tape of sections of your paper with masking tape.
- Paint over the tape and let dry.
- Peel tape off and reveal white paper underneath.

Blot
- Use a paper towel to blot up wet paint to reveal white paper underneath.

Salt
- Sprinkle salt into a wet (still shiny) wash of watercolor paint.
- The results will appear when dry.

Too much water!

Painting with watercolour – Tips
- If water is pooling at all on the paper, you generally have too much water, it will be harder to control the flow of the paint.
- Use two jars of water, once for cleaning your brushes and one with clean water to mix paints.
- Use thicker 'watercolour paper' normal paper will become wavy as it cannot handle so much water.
- Tape down your paper before, during and after painting until your image is completely dry, this way you will have nice flat paintings.
- Let you watercolour dry between layers,
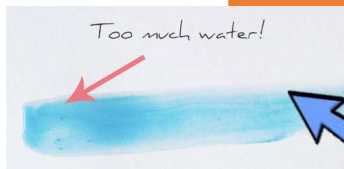- Use a layering technique, just remember that you cannot put lighter colours over darker colours when using watercolour, work from light to dark.

Consider using some of the watercolour techniques mentioned here to give your work texture and visual interest.

Crayon Resist
- Draw with any color of crayon on dry paper.
- Paint wet watercolor over crayon to reveal drawing underneath.
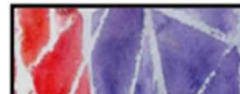
Wet-in-Wet
- Apply clean water to your paper.
- Before the water dries, load up your brush with paint and touch it to the water. The color will spread quickly.

Dry Brush
- Start with a dry brush and almost dry paint.
- Run your brush over your paper to create grass or scratchy lines.

Wash
- Load your brush with plenty of wet paint. Smooth your brush over the paper with swooping strokes.

Painting in layers
Painting, just like drawing (or making a sandwich) needs to be done in layers.
You must start from the base of your image and work forwards.
Think about background, midground and foreground
- We can add different materials or techniques individually one over the other,
- waiting until one layer is dry before applying the next.
- Each layer could be the same technique as before, or a different one.
- A layer doesn't have to cover the surface in its entirety.

A **layer** can consist merely of one small dab of paint, or can involve thick overlays covering the whole surface. A technique does not have to be applied over the whole surface to qualify as a layer.

Painting with acrylic - In stages
Once you have finished drawing out what you want to paint you should follow these rules when painting with acrylic

Brights: a colour that is lighter than your background
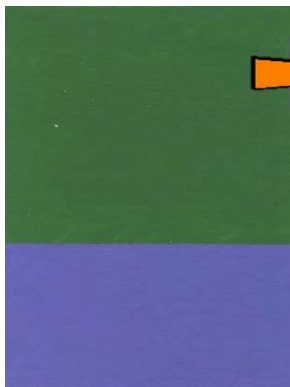
| Paint a background | White under brights | Brights over white(block colour) | Apply tonal range, shadows/highlights | Soften edges and blend colours |

Colour Theory

Colour Theory

Primary colours are the three main colours, they can't be made, but are used to mix all of the other colours

Secondary colours are made by mixing two primary colours

Tertiary colours are made by mixing a primary and a secondary colour

Tint – when you add white to a colour to make it lighter

Shade – when you add black to a colour to make it darker

Hue – any colour that appears on the colour wheel, note that neither black nor white appear on there

Tone – used to describe a colour that has had grey added to it.

Warm

Cold
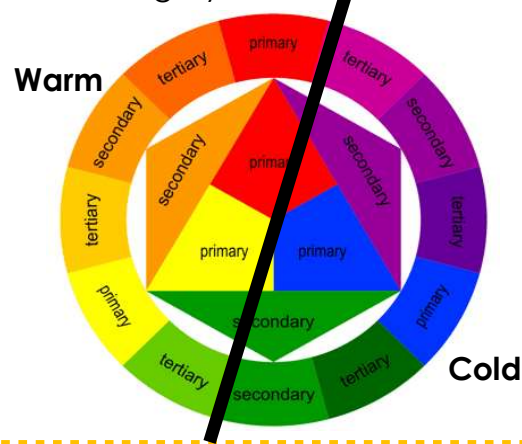
Complementary colours are opposite each other on the colour wheel. When placed next to each other, there is an extremely strong contrasting and vibrant effect. If overused, your painting may become jarring and uncomfortable to look at.
You should select a dominant colour and use the other colour as an accent.

Harmonious colours are relaxing colour combinations using colours positioned next to each other on the wheel. Harmonious colour combinations were famously used by impressionist artists such as Claude Monet to create beautiful harmonious paintings. It is often most effective to select one dominant colour, a secondary colour and a third accent colour.

Colour and emotion
Colour has a powerful influence over human behaviour, to the extent it can manipulate your perception of what is actually there.
- Red: Passion, love, anger and danger
- Orange: Vitality, creativity and activity
- Yellow: Energy, light and hope
- Green: Health, nature and wealth
- Blue: Trust, security and spirituality
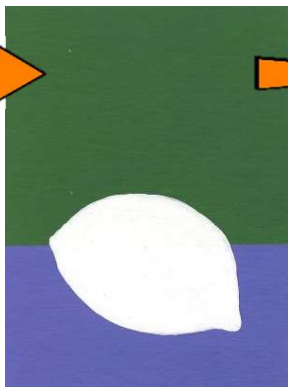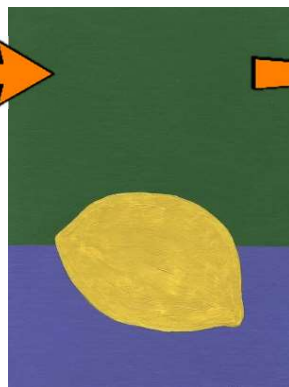- Purple: Creativity, royalty and wealth

We can use these psychological triggers to influence how we want the viewer to perceive the painting. If you want the viewer to have a passionate and aggressive response, then you should be utilizing reds and other warm colours. If you want a calming scene, then greens and blues should be utilized.

What can I actually see?
We all have preconceived ideas of what colour an object should be, i.e. a tree is green. But that is not always the case. If you are not careful and do not observe the tree for what it actually is, then you may be drawn towards adding more green than is necessary. This is because we forget to observe and we try to paint from a memory or idea. - **Paint what you see, not what you think.**

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Construction – Unit 3

CDM
The Construction (Design and Management)
Regulations 2015

Construction Design Management (CDM)

•Plan the work so the risks involved are managed from start to finish
•have the right people for the right job at the right time
•cooperate and coordinate your work with others
•have the right information about the risks and how they are being managed
•communicate this information effectively to those who need to know
•consult and engage with workers about the risks and how they are being managed

Gantt chart Important points:
•Gives team a reference point
•Regularly updated by planner
•All factors that influence the procurement, design and construction processes are factored into the plan
•Can be produced using powerful software or excel spreadsheets or by hand.

Planning Permission:
Planning permission is managed by the local Council, whereas Building Regulations are managed by private companies such as Inspectors

Building regulations: Building Regulations are minimum standards for design, construction and alterations to virtually every building.
The Building Regulations 2010 cover the construction and extension of buildings and these regulations are supported by Approved documents.

What is the difference between them?
Planning permission relates to the principal of development, covering issues such as siting, scale and appearance, whereas the Building Regulations deal with the technical issues such as structural stability, fire drainage and energy conservation.

Building Regulations: how do they apply to renovation and conversion projects?
Some homeowners are unaware that they will require Building Regulation approval for work that they are planning to carry out, believing that once they received Planning permission (if it is required), that is all that is required do and they can carry on with the building work.

Summary: The planning of projects remains the same whether a refurbishment, extension, new build or infrastructure project.

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Construction – Unit 3

Project planning: The pre-construction period , construction phase and maintenance period will be planned in detailed schedules and programmes of work at an early stage, to help inform, guide and check the procedures, activities and processes of construction and quality checking during the project.

Building trades.: **trades** (as carpentry, bricklaying, plumbing) that are essential to and chiefly practiced in connection with **building construction**.
Professional Tradesman: Generally a tradesman that has been educated to degree level such as an architect, site manager or Civil Engineer.

Three Stages of Drawing-
Preliminary Conception-Drawn by hand then reworked digitally
Tender Drawings- These show more detail and have been approved by the client
Construction Drawings- Accurate drawing ready to be used by contractors

Common Factors That Effect

Location – Working in remote locations or far away from an organisation, head office can be costly

Value of project- A large multi million pound office development may be impossible for a small contractor to attempt due to restricted cash flow

Size of the project- A large building maybe too complex for a small company to manage resources without needing more staff

Availability of resources- Shortages of labour, plant or materials are common when constructing buildings, when there is a demand for buildings prices increase

Site clearance: This can happen once **permission** to proceed and **risk assessment** taken place. The site clearance is a vital activity that allows **controlled waste removal**. Waste that needs to be removed in a controlled manner: Vegetation, asbestos, contamination, redundant buildings and infrastructure, and waste to be removed from site in a controlled manner and taken for disposal or recycling locally. **Legislation** linked to the removal of asbestos:
Control of Asbestos Regulations 2012
Tests completed: •Contamination e.g. asbestos or oil in the subsoil, •Presence of tree roots, water sources and antiquities.
*if it is a historically significant site an archaeologist will attend

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Construction – Unit 3

Scaling: an important tool that is used in the construction industry to help you comprehend the ratios of measurements to a consistent scale. The scale is often agreed at a scale that is comfortable to the persons eye.

Scale	Equal to	Use
1:50	For every 50mm this is equal to 1mm on the scale rule	Plans, evaluations and sections
1:100	For every 100mm this is equal to 1mm on the scale rule	Plans, evaluations and sections
1:200	For every 200mm this is equal to 1mm on the scale rule	Site plans

Key terms

Substructures: all structures below the superstructure, which in general terms is considered to include all structures below ground level but including the ground floor bed.

Superstructures: all structures above ground level both internally and externally

'**Soft Landings**': The building logbook and manuals help the owners optimise its energy consumption, owners and new owners know and understand how the building works and how it should be maintained.

Percentages: Percentages are a common means of understanding the specific part of a material that has been formed into products or requires some form of division.

Scaling: an important tool that is used in the construction industry to help you comprehend the rations of measurements to a consistent scale. The scale is often agreed at a scale that is comfortable to the persons eye.

Best value: is the procurement process by which the buyer investigates the value of these goods and services not just by its commercial cost/value £ alone

Tolerances: are the primary quality control measure used to set the standards for the design and construction process, and give a definitive value that the tradesperson must work to.

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Construction – Unit 3

Calculations needed:
Content:
•Area, volume
•Percentages, scaling
•Best value, tolerances
•VAT, tender price
Resources:
•Plant
•Labour
•Materials

Client responsibilities
•Satisfy themselves that the project is feasible in
•Choose experienced construction professionals
•Trust the selected team to procure, design, construct
•Pre-determine what the possible risks are that may threaten the development and act when appropriate.

Primary Sources of information: Status of drawing

The Architect, checks that the client or user of the building is satisfied and that it is compliant with the specialist members of the team
This allows the team to understand that the drawing has been developed, checked and double-checked by everyone responsible for designing and coordinating the drawings.

Status A – highest level of drawing approval
Status B – moderate level of approval and indicates there are minor changes such as spelling still to be made, but the drawing can be used for manufacturing or construction purposes, providing any recommendations are followed.
Status C – means the drawing is not in a condition to be used for construction or manufacturing purposes
Why are there so many levels of approval?
To make sure the complex design process is compliant. Any mistakes at this stage will be very costly in terms of money and time. As drawings can take several days or weeks to revise, the status helps the builder know if they can order materials and therefore save time on the programme.

Secondary Sources of Information

Spreadsheets- Useful in formatting large amounts of data E.g.: dimensions, area, time and cost. Data can be changed and updated easily.
Catalogues- Produced by suppliers or manufacturers to offer products. Can be produced digitally and issued through social media to compare and contrast different materials.
Suppliers materials lists- These are used to compare the most current and compliant ready equipment and products

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Construction – Unit 3

The **RIBA** plan of works is a timetable of how a construction project can be managed and delivered. It shows how there is a cycle of **analysis and improvement**

Key terms
Infrastructure: important building and transportation network
Validate: Prove the accuracy
Transparency: Financial decisions must be clearly recorded and follow UK and European procurement law. This is so investment decisions can be made
Feasibility: Deciding whether the building is either practicable or will proceed
Lead time:
The time taken between ordering an item and it being delivered. Resources such as windows are usually made to order, which would require planning to make sure they arrive when they are needed to ensure work isn't delayed.

Secure Site.
Risks: stealing plant and machinery, tools, belongings
sensitive information: electronic data, ID, bank details, personal information
What other **primary measures** can be added to the perimeter fence to increase security? •Controlled access gates •Guardrooms
Secondary measures can also be added: •CCTV •Reactive guarding arrangements e.g. alarm, security guards, guard dogs

By applying the principle of **SLAM** we can proactively or reactively understand the measures that need to be used to minimise the risk to security

STOP: Engage your mind before your hands. Look and think how security could be compromised. Always stay alert!

LOOK: At your workplace and find the security hazards that may impact you and your colleagues. Report your findings to your supervisor. Look for gaps!

ASSESS: The effects of hazards may have on you, work procedures, pressures, colleagues and the environment. Do you have the knowledge, training and tools to do the task? Can theft, vandalism or privacy occur? Secure valuables when they are left unattended.

MANAGE: If you or your environment doesn't feel secure or if you suspect there could be an issue then stop working. Tell your supervisor what you think the issues are.

Potential effect of factors on project success
•**Internal** e.g. lack of qualified and certified key personnel, sourcing of finance, security
•**External** e.g. penalty clauses, weather conditions

Section 106
A Section 106 is a legal agreement between an applicant seeking planning permission and the local planning authority, which is used to mitigate the impact of your new home on the local community and infrastructure. In other words, a new house will mean another car(s) on the roads and perhaps your children will attend nearby schools, putting a little more strain on local services

Good food hygiene practices are necessary in order to produce, make and supply food that is safe to eat. This involves more than just being clean. A simple way to remember is the **4C**s:

- **cleaning;**
- **cooking;**
- **chilling;**
- **cross-contamination**.

FOOD SAFETY

COOK – cook to proper temperatures
SEPARATE – do not cross-contaminate
CLEAN – wash hands and surfaces often
CHILL – refrigerate promptly

give bacteria no chance

Keyword	Meaning
Cross Contamination	The transfer of bacteria from one source to another. Usually, raw food to ready to eat food but can also be the transfer of bacteria from unclean hands, equipment, cloths or pests. Can also relate to allergens.
Danger zone	Bacteria will multiply most rapidly between 5-63°C.
Optimum temperature	Bacteria that cause food poisoning reproduce around body temperature (37°C).

Sources of Food Contamination

Physical: A foreign object has dropped into the food, e.g. hair, jewellery, finger nail, machinery components.

Chemical: Cleaning products & pesticides causing liver damage, internal burns & nerve damage.

Biological: Bacteria, viruses, moulds & fungi which cause food poisoning.

Temperatures to remember

To reduce the risk of food poisoning, good temperature control is vital:

- 5-63°C – the danger zone where bacteria grow most readily.
- 37°C – body temperature, optimum temperature for bacterial growth.
- 8°C – maximum legal temperature for cold food, i.e. your fridge.
- 5°C (or below) – the ideal temperature your fridge should be.
- 75°C – if cooking food, the core temperature, middle or thickest part should reach at least this temperature.
- 75°C – if reheating food, it should reach at least this temperature. In Scotland food should reach at least 82°C.

°C thermometer scale: -20 to 100
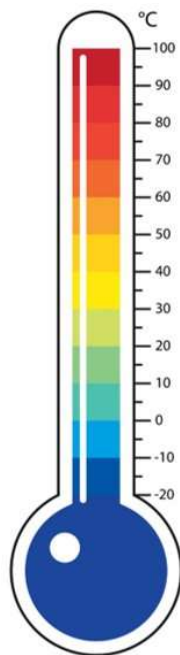
Causes of Food Spoilage	
microorganisms	Bacteria, yeast, moulds, fungi.
enzymes	Speed up the process of decay.
insects and rodents	Leaves behind bacteria, urine and faeces.
chemical reactions	Reaction between food, oxygen and moisture.
environmental factors	Warmth, pH, oxygen and moisture.
time	Speed of spoilage, hygiene, correct storage and temperature.

Keyword	Meaning
HACCP (Hazard Analysis Critial Control Point	A system for recognising and assessing food hazards and controlling the hazards to keep food safe
Critical Control Point	Identify the hazard which must be controlled in order to remove or reduce it to a safe level

Signs of Food Spoilage:
- discoloration
- visible mould
- changes in texture
- unpleasant odour
- changes in flavour
- 'blown' cans and jar lids

High-Risk Foods – short shelf life
- cooked meats, fish and poultry
- dairy products
- gravies, stocks and sauces
- shellfish
- cooked rice

Ambient Foods – can be safely stored at room temperature
- tinned vegetables
- crisps
- cereal
- dried pasta
- sugar

'Use By' Date
- short shelf life
- high-risk foods
- Given as a safety warning.
- If consumed after the date, there is risk of food poisoning.

Grown

Where does our food come from?
All our food comes from plants and animals

Reared

Caught

Keyword	Meaning
Genetically modified	A food which has had its genes altered to give it a useful characteristic such as improving its growth or colour
Intensive farming	Uses chemicals to achieve maximum yields (can also be known as conventional farming

Different Types of Food Production

Red Tractor is a food assurance scheme showing the food has been farmed, processed and packed in the **UK**. It is **traceable,** safe to eat and has been produced responsibly.

Foods:

Milk, cheese, yoghurt, poultry

The **animals** have access to outdoor space and can live naturally. The **welfare** standards are high.

Foods:

Eggs, meat

Foods that have this label mean the **animals** have had a good life and have been treated with respect

Foods:

Eggs, meat & fish

This means the food has been produced without using any chemicals. Only **natural fertilisers and pesticides** are used to help the crops grow.

Foods:

Eggs, chicken, fruit and vegetables

The **farmer** gets a **fair price** for his produce and fair working and living conditions.

Foods:

Sugar, bananas, coffee, tea

Using **sustainable methods** of fishing to prevent the decline in number of **fish** in our seas.

Foods:

Fish, seafood

Food Packaging Date Marks

Date Mark	Description	Food Examples	
Use By USE BY 01-01-07	A safety date. Used on high risk foods that usually need to be stored in the fridge. If you eat the food after this date you risk food poisoning.	Meat Fish Seafood Cheese Milk Cream	
Best Before BEST BEFORE 01-01-07	A quality date. Food can still be eaten after but the quality will be reduced. E.g. cereals or biscuits will not be as crunchy.	Bread Cereals Sugar Flour Pasta	

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Foods and Cuisines from Around The World

A **cuisine** is a style of cooking from a particular country or region of the world. Different cuisines have different ingredients, styles and preparation & cooking techniques. **Some examples are shown below.**

Staple foods are crops that grown in particular parts of the world due to their climate and conditions. E.g. wheat in Europe, rice in Asia or maize in South America.

UK
Roast dinner. Fish & Chips. Bakewell Tart.

Japan
Sushi. Ramen. Udon noodles. Jasmine Rice.

Italy
Pizza, Pasta, Lasagne, Risotto, Gelato.

China
Spring Rolls. Stir fry. Sweet & Sour. Chow Mein.

Mexico
Chilli Con Carne, Burritos, Tacos, Salsa, Guacamole

India
Samosas, Curries, Tandoori Chicken, Nan Breads

Environmental Issues With Food Production

Environment	Refers to the air, water and land where people and animals live.
Sustainability	We need to look after our environment by using less energy, reducing the consumption of water, avoiding waste and recycling/reusing as much as possible.
Carbon footprint	A measure of the impact your personal lifestyle has on the environment (**including your food choices**).
Landfill	Nearly a third of all food we produce ends up in landfill sites where it gives off methane gas as it decomposes. This adds to carbon emissions.

Composting - Left over food can be composted for the garden. (vegetable peelings, fruit waste, teabags, eggshells, toilet roll tubes, egg boxes etc). **Meat, fish and dairy products cannot be composted.**

DID YOU KNOW? MORE THAN 95% OF FOOD WASTE THAT COULD BE COMPOSTED ENDS UP IN LANDFILLS AND INCINERATORS.

5 ways to reduce your carbon FOODPRINT

1 **only buy what you need**
20-50% of everything we buy ends up in landfill

2 **eat less meat and dairy**
70% of the world's foodprint is from animal products

3 **eat less processed food**
the more processed a food is, the bigger its foodprint

4 **buy local and in season**
these foods have travelled less and stored less

5 **grow your own food**
the ultimate in local, seasonal, unprocessed food

Reuse left over food to make another dish. E.g. left over chicken in a curry, fruit in a smoothie.
Recycle/reduce as much packaging as you can. Reuse jars/containers, use bags for life, avoid buying over packaged food.

LOVE FOOD hate waste

What can impact our food choice?

Food choices for a balanced diet depend on many factors, such as:
- advertising and other point of sale information;
- cost and economic considerations;
- cultural or religious practices;
- environmental and ethical considerations;
- food availability;
- food preferences;
- food provenance;
- health concerns;
- individual energy and nutrient needs;
- portion size;
- social considerations.

Environmental and ethical considerations

Some considerations when buying food might be:
- fair trade;
- local food;
- genetically modified (GM) food;
- organic food;
- free range.

Health concerns

People may choose their food based on their own or their family's health and wellbeing:
- allergy and intolerance, e.g. lactose intolerance, coeliac disease, wheat allergy, diary allergy;
- body image;
- health issues, e.g. coronary heart disease, type 2 diabetes, inflammatory bowel disease, over or under malnutrition;
- mental health.

Cultural or religious practices

People around the world choose to eat or avoid certain food due to their cultural or religious practices.

Religion	Pork	Beef	Lamb	Chicken	Fish
Islam	x	Halal only	Halal only	Halal only	✓
Hinduism	x	x	✓	✓	✓
Judaism	x	Kosher only	Kosher only	Kosher only	✓
Sikhism	x	x	✓	✓	✓
Buddism (strict)	x	x	x	x	x
Seventh-day Adventist Church	x	x	x	✓	✓
Rastafari movement	x	x	x	x	x

Food Choice – KEY WORDS

Keyword	Meaning
Advertising	Advertising is a form of communication for marketing and used to encourage, persuade, or manipulate an audience to continue or take some new action.
Ethical	Relating to personal beliefs about what is morally right and wrong.
Food certification and assurance schemes	Defined standards of food safety, quality or animal welfare.
Marketing	Promoting and selling products or services, including market research and advertising.
Religion	A particular system of faith and worship.
Seasonal food	Food grown at a particular time of year

Food prices

Food prices can and do change throughout the year and over time. This may be due to a variety of reasons, including:
- climate and weather patterns;
- crop failure;
- crop disease;
- seasonality;
- consumer demand;
- agricultural costs increase;
- fuel prices go up;
- increased use of bio fuels.

Budgeting

There are many things that we can do to spend money wisely on food. Examples can include:
- eating the seasons;
- stocking up on food with a long shelf-life;
- taking time to plan meals and write a shopping list;
- cooking using one pot;
- making fake-aways rather than buying takeaways;
- using leftovers;
- replacing branded items with cheaper items;
- comparing prices and shop around to find the cheapest items;
- growing your own food.

Athletics

Keyword	Definition
Drive	The part of the race where the athlete keeps low and has short powerful strides.
Maximal	The largest amount possible.
Pace	The speed at which someone moves.
Power	The speed at which strength can be used.
Angle	The direction something is released at.
Stride	The length of step.
Relay	To send something from one person to another.
Performance	The way in which an activity is completed.

Sprinting technique

The sprint start:
'On your marks' – set feet with lead leg in front
'Set' – move forward with weight on shoulders raising hips
'Go' – push out off lead leg driving legs and arms forward
Keep head down and body at 45 degree angle
Sprint technique
Running on toes and lifting knees high
Use of 'drive' when getting out of the blocks
A straight arm action
Stand tall after 'drive' phase

Middle distance and long distance

Middle distances such as 800m and 1500mand long distance e.g. 500m and 100m usually focus on pacing
Pacing is where you don't set off too fast in order to have enough energy to finish the race strongly.

Throwing

Javelin technique
Grip the javelin in the middle
Turn sideways and extend arm backwards
The javelin tip should be next to your cheek
To throw, bring arm forwards so javelin moves in a straight line
Lean back and rotate chest
Release at 45 degree angle

Throwing

Shot putt technique
Hold shot in fingers against your neck 'clean palm, dirty neck'
Face backwards
Align toe, knee and chin, and have a high elbow
Rotate, opening out chest, releasing at 45 degrees
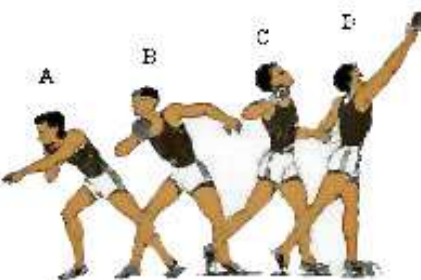
Jumping

Long jump technique
Mark out your run up to stop your stuttering
Jump of lead leg [strongest leg]
Use arms to project body forward
Stretch legs as if jumping over a box
Push forwards on landing

Jumping

High jump technique
The Fosbury Flop is the most effective way to complete the high jump:
Approach on a curve
Take off outside leg, driving the other leg as high as you can
Rotate in the air to land on your back with feet facing the ceiling

Softball Y7

Knowledge Organiser

Scoring System:. The aim of the game is to score more RUNS than the opposition, and a run is scored when a player on the batting team advances around all three bases and back to the home base (called HOME PLATE) from whence she started. Unless you hit the ball so far that you can run around all the bases before it's returned (a HOME RUN), you'll probably have to stop at one or more bases on your way around and wait for the next batter to hit the ball so you can advance further. Team with the most runs wins the game.
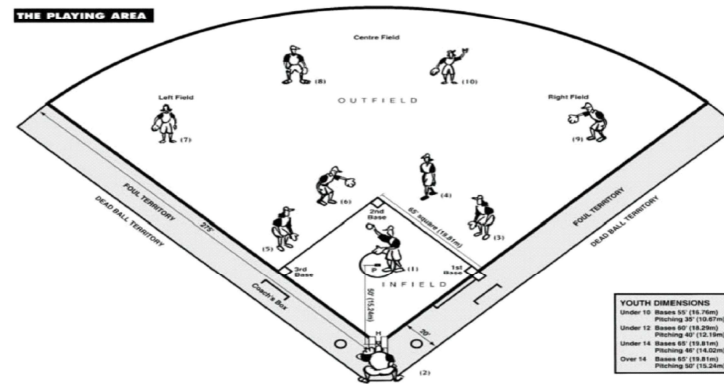
Players:

Most slowpitch softball is played by mixed teams, where men and women play together, usually in a 5:5 ratio. However, this ratio sometimes varies, and slowpitch is sometimes played by single-sex teams as well.

How to get someone out
1. If the ball the batter has just hit is caught without first bouncing.
2. The ball is thrown to a base before a runner gets there.
3. A player running between bases is tagged by the ball (touched by the ball or the glove of the defending player).
4. If three strikes are called by the umpire.
5. They run more than 3ft (0.9m) out of the base line to avoid being tagged.

Softball playing area: A softball playing area is contained within a 90-degree angle, and is usually called a DIAMOND, because the central part of the playing field – the INFIELD - is diamondshaped. The OUTFIELD extends outward from the infield to a boundary, either actual or notional.

Skills and Techniques

Catching: The right catching skills allow a player not only to catch the ball without getting hurt but also to position. T.P's; Bring hands to chest as you catch, eyes on ball, cushion catch. Pairs to experiment with low and high catches

Throwing: Throwing is one of the two most important defensive skills a player must learn in softball.

Batting: Hitting is probably the most challenging and enjoyable skill to learn in softball. Teaching points; Stance & Grip, bat back in preparation, follow through

Fielding Tactics: To understand the fielders roles and base responsibilities. To perform and replicate a combination of skills to outwit opponents in a game situation

Pitching: Teaching points; grip, step into bowl, must pass between shoulder and knee

Rules:
1. Two teams (of nine players) alternate turns at batting and fielding (often called defense).
2. The aim for the team batting is to advance a runner around all bases to the home plate to score runs.
3. The defending team tries to defend its bases by getting three outs and not allowing the batting team to score.
4. The team that scores the most runs in seven innings wins. (A tiebreaker procedure comes into play if the scores are tied after the seventh innings.)
5. Each team's innings ends when three of its batters have been ruled out and then the team that was defending goes in to bat.

PLAYER | COACH

REFEREE | FIT 4 LIFE
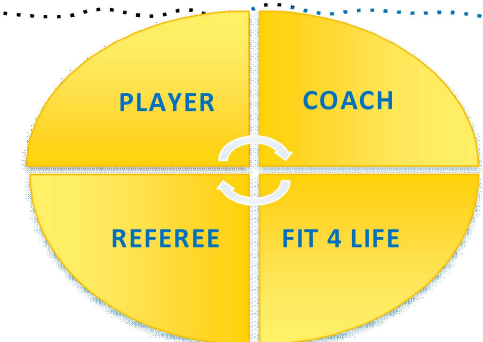
Tennis
Knowledge Organiser

Keywords:
Deception: Forehand: Backhand: Court: Serving: Net shot: Hawk eye: Top spin: Back Spin: Co-ordination: Slice

Scoring System-
You need to score four points to win a game of tennis. The points are known as 15 (1 point), 30 (two points), 40 (three points) and the fourth would result in the winning point and the end of that game. If the scores went to 40-40 this would be known as deuce. When a game reaches deuce the player must then win by two clear points.

Skills & Techniques
Forehand Shot: The **forehand** in **tennis** is a **shot** made by swinging the racket across one's body with the hand moving palm-first. Most **forehands** are hit with topspin because it helps keep the ball from landing outside the court.

Backhand Shot: The **backhand** is a **tennis shot** in which one swings the racquet around one's body with the back of the hand preceding the palm. The **backhand** can be a one-handed or two-handed stroke.

Footwork: Keep your feet moving between points; shuffle, and jump up and down — just keep on your toes. A player who is moving their feet is poised to run in an instance.

Anticipation: One of the key abilities of good **tennis** players is **anticipation**. It's an ability to predict with very high probability what the opponent will play. ... The player anticipates opponent's shot / tactic and prepares the right response.

Volleying: A **volley in tennis** is a shot in which the ball is struck before it bounces on the ground. Generally a player hits a **volley** while standing near the net, although it can be executed farther back, in the middle of the **tennis** court or even near the baseline.

Forehand and Backhand:

Tactics:
Know opponents weaknesses and strengths
Surprise your opponent with spin
Aggressive second serve
Move into the net
Open the court up

Doubles and Singles:
Single tennis Involves two players, one either side of the net. Doubles involves four players two either side of the net. The court Is larger for doubles.

PLAYER   COACH

REFEREE   FIT 4 LIFE
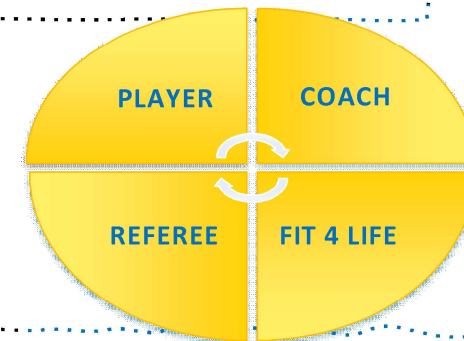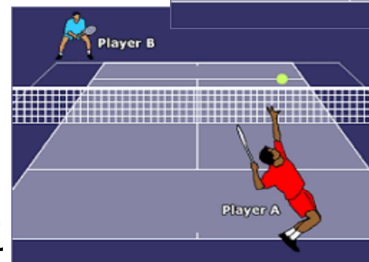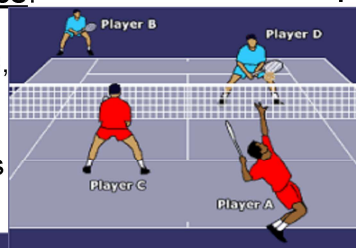
Rules:
1. Alternate serve after games
2. Fault and double fault
3. Scoring
   No points are scored = Love
   • 1 point scored = 15 points
   • 2 points scored = 30 points
   • 3 points scored = 40 points
   • 4 points earned = set point (set over
4. Overarm serving
5. 'In or out'
6. Once a serve has been made the amount of shots Is unlimited
7. A point is won by hitting the ball so the opponent fails to return it to the scoring area

Tennis Court:

Overarm Serving:

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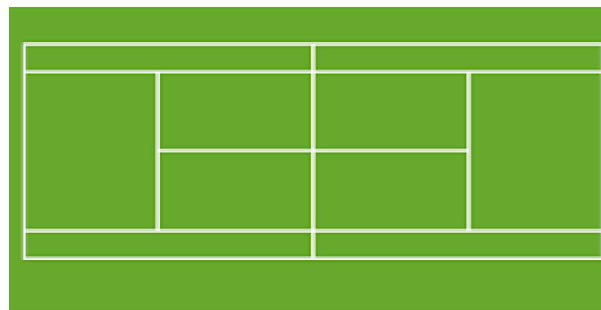
Knowledge Organiser

Rounders

ROUNDERS ENGLAND

TOP TIP Bats and balls should be kept dry, to maintain a good grip.

What is Rounders?

- A sport with two teams with a maximum of **15 players**. No more than 9 players on the field at any one time.

- Games are played on a square shaped pitch, divided by posts and boxes.

- Score points by hitting the ball. One point or half a point (Rounder) depending on where the player gets to in the field.

- The bowler bowls the ball to the batter who hits the ball forward on the Rounders Pitch. The batter then runs to as many posts as possible before the fielders return the ball to touch the post the batter is heading for.

- Players are assigned "positions".

- If the batter reaches the 2nd or 3rd post in one hit, the batting team scores ½ a Rounder. If the batter reaches 4th post in one hit, the batting team scores a Rounder.

- Games are usually played over 2 innings with the aim of the game to score the most rounders. This is normally 30 "good balls".

- The play should be recorded on an accompanying scoresheet.

FAB FACTS!

The game is split into two innings

You can play with three types of bats.
Wooden, aluminum and plastic.

You can play in an adult team at age 13!

Invented in Tudor times.

Key Words

Batting Team– This is the team who are batting, normally 9 players.
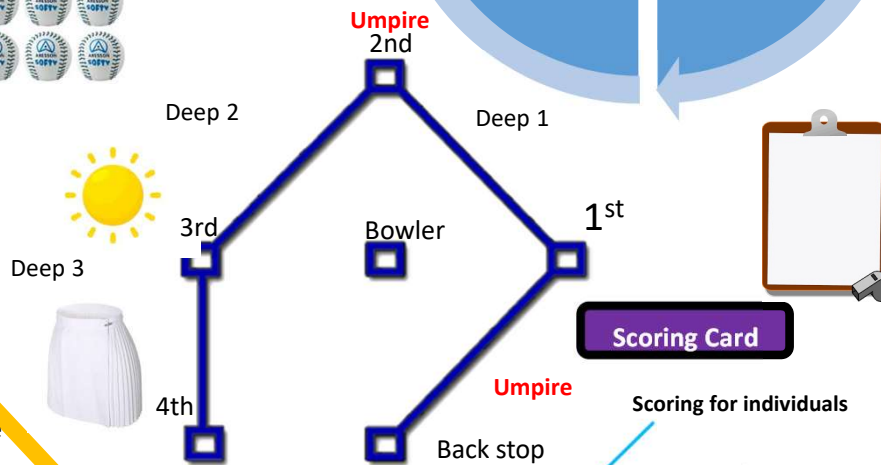**Fielding Team**:-This is the team who are in field, normally 9 players.
"OUT" – This means you have been caught or stumped out.
"IN" –This means the umpire has deemed you are in.
Obstruction – This is where a player gets in the way of another player, normally in field. The player who is obstructed get ½ rounder.
Wait at first –You have hit the ball backwards, you have to wait at first post.
Ball – These can be hard or softer, you need to catch the ball to get someone out.
Bat –There are three types of batt you can use. This is used to hit the ball.
Post – These are normally white and used to 'stump' the ball.
Stump: This is the motion of the ball touching the base or post.
Rounder- This means you have scored 1 (point) called a rounder.
Half a Rounder-This means you have scored ½ (point) called a rounder.

Pitch Layout

Umpire
2nd

Deep 2   Deep 1

3rd   Bowler   1st

Deep 3

4th   Umpire

Back stop

Scoring Card

Scoring for individuals

Balls remaining

Score Sheet

Team Players Name	No	Performance	Score

Good balls

Players Out

RUNNING TOTALS

Players name

Running Totals and final scoring

Players Out

Health and Safety

Before a game, the **umpire** will check not only the pitch but also the players to make sure that: -
- All shoe laces are tied- to stop the player from tripping over
- All hair is tied back- so that no hair gets in the way of your face which could result in you being unable to see.
- All jewellery is removed (including earrings and piercings)- to stop a risk of injury such as piercings being pulled out or necklaces getting caught round necks
- The pitch is safe. No water or rubbish. The posts are secure.
- The ball and the bat, are the right specification.
- Spiked footwear is prohibited. But football boots and astro shoes can be worn.
- Gum shields, shin pads and fingerless gloves CAN be worn.
- It is common to wear rounders uniform, including a skort and matching top.
- You might need to apply sun cream in warm weather.

Exit Routes and Club Information

Solihull Outdoor/Indoor Rounders League
Location: West Midlands
Lead Contact: Clair Andrews
Email: clairandrews@leagues4you.co.uk

Rounders England
PO Box 4458
Sheffield
S20 9DP
T: 0114 248 0357
E: enquiries@roundersengland.co.uk

Applying the Principles of Personal Training : Unit 3

Learning Outcomes:

A design a personal fitness training programme

B know about the musculoskeletal system and cardiorespiratory system and the effects on the body during fitness training

C implement a self-designed personal fitness training programme to achieve own goals and objectives

D review a personal fitness training programme.

A - Design A Personal Fitness Training Programme

Physical-Related Fitness Components That You Should Look To Improve

Aerobic Endurance: The ability of the heart and lungs, to work for a long period of time.
Sports: Long distance running, Football, Road Cycling.

Muscular Endurance: The ability of a muscle, to work continuously without tiring. Sports: Hockey, Rugby, Endurance Sports

Flexibility: The range of movement at a joint.
Sports: Gymnastics, Dance, Diving.

Muscular Strength: The maximum amount of force a muscle can produce in a short period of time.
Sports: Rugby, Powerlifting, Boxing.

Speed: The ability to cover distances quickly. 3 types of speed; Accelerative Speed, Pure Speed & Speed Endurance.
Sports; Athletics, Football, Rugby.

Body Composition: The ratio of Fat to fat-free mass In the body.
Different sports will need a different body fat percentage

Skill Related Fitness Components That You Should Look To Improve

Agility: Ability to change direction quickly and efficiently.
Sports: Tennis, Rugby, Football.

Balance: Ability to maintain centre of mass over a base of support.
Two types; Static and Dynamic Balance.
Sports; Gymnastics, games sports.

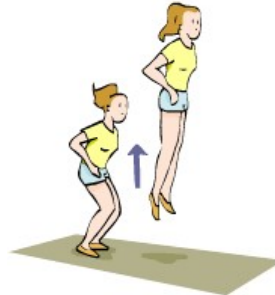**Co-Ordination:** Smooth flow of movement to be able to perform a motor skill fluently.
Sports; Tennis, Rugby, Gymnastics.

Power: Combination of Speed and Strength.
Sports; Long Jump, Rugby, American Football.

Reaction Time: The ability to react quickly to a stimulus.
Sports; Sprinting, Tennis, Table tennis.

Principles of Training
For any training to be successful, it must stick to the following principles;

Specificity: Tailoring training to your goals and sport.

Progressive Overload: Gradually increasing exercise intensity to cause adaptation.

Variation: Changing the type of training, to increase motivation.

Adaptation: Changes in the body caused by exercising at a high intensity.

Reversibility: When you stop training, you lose any fitness adaptations you will have gained.

Rest & Recovery: The time required to allow your body to repair any damage sustained during training/competition. The body will repair itself and become stronger than before.

F — Frequency
I — Intensity
T — Time
T — Type

Frequency: How often you train
Intensity: How hard you train
Time: How long you train for
Type: what type of training do you do
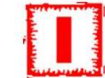
Exercise Intensity
Measure how hard you are training by using your heart rate (BPM). Maximum heart rate = 220 – age Target heart rate zone for Aerobic training 60-85% of your maximum heart rate.
Therefore, you should be training had enough, that your heart rate is between 60-85% of your maximum heart rate. This will cause your body to adapt.
Borg's RPE scale can also predict intensity and heart rate.
RPE X 10 = HR
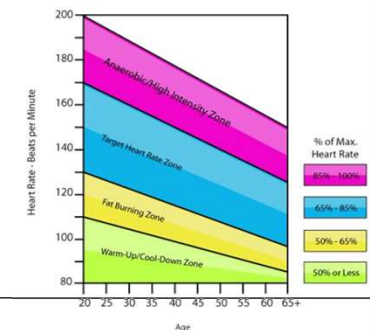
Principles of fitness training programmes
When designing training programmes, there are two key questions:
1. What am I trying to improve?
2. How am I going to improve it?

You need detailed knowledge of different components of fitness and the different training methods used to improve them.
Before you can design a training programme, you will need to set individual goals. Without these, you will not know what to direct your training towards. The programme must be flexible but capable of meeting these goals and personal needs. Each individual has different ambitions and aspirations and your programme should reflect these.
The athletes aims and objectives should be broken down into short-term (up to one month), Medium term (One to three months) and long term goals (three months to one year). Goals should be

All the targets that you set must be SMARTER targets:
➤ **Specific** – they say exactly what you mean (e.g. to improve flexibility in the hamstring muscle group)
➤ **Measurable** – you can prove you have reached the (e.g. increase flexibility by 5cm using the sit and reach test)
➤ **Achievable** – they are actions you can achieve (e.g. practice and improve flexibility through training)
➤ **Realistic** – you will be able to achieve them but they will still challenge you (e.g. the increase in flexibility must be manageable – a 20cm increase in two weeks is not achievable)
➤ **Timed** – they have deadlines (e.g. to reach target within six weeks)
➤ **Exciting** – ensure you look forward to and never get bored with your training programme.
➤ **Recordable** – keep accurate records of everything you do in a training diary. This will be an excellent resource and source of inspiration to keep you fit and healthy.

A - Design A Personal Fitness Training Programme

Training Methods for physical fitness-related components

To develop different components of fitness to meet the needs of different sports you need to use a variety of training methods. These can be indoor or outdoor environments or using a range of equipment.

Aerobic Training Methods

Three most common methods used to improve aerobic endurance are:

- **Continuous Training**
- **Fartlek Training**
- **Interval Training**
- **Circuit Training**

There is insufficient evidence to suggest which training method is best, but all will lead to improvements.

Aerobic training is often used by people who want to lose or manage their weight by reducing their body fat content. Body fat is reduced because training increases levels of hormones epinephrine and norepinephrine which help break down fat to be used as an energy source. Aerobic endurance training can also help to improve blood volume, improve mitochondrial size and density, develop neuromuscular patterns and improve muscle tone.

Types of Aerobic Training

Continuous Training – Also known as a steady-state or long, slow distance training – athlete trains at a steady pace over a long distance. Intensity should be moderate (equal to or less than 70% of VO2 max) over a long distance and time.

This method is suited to long-distance runners and swimmers. Due to lower level of intensity, an athlete can train for longer. It can also be use for:

- Beginners who are starting structured exercise
- Athletes recovering from injury
- Specific groupings of individuals such as children or elderly people.

Disadvantages – Risk of injury when running long distances on harder surfaces. It can be boring and it is not always sport specific with the sport specific benefits being small.

Continuous Training can be performed in a gym using a range of cardiovascular equipment (treadmills, cross-trainers or exercise bike) or outdoors at a suitable park or track area.

Circuit Training –

A number of different stations will be set up around the room. Each station contains a different activity. Individuals are set a time limit to do these exercises. Between stations there should be a rest period.

A circuit can be designed to improve aerobic endurance, muscular endurance or strength or a combination of all three. To avoid fatigue, the stations should allow consecutive exercises to use different muscle groups.

To increase progression and overload, the individual may wish to:

- Decrease rest periods
- Increase the number of stations
- Increase the number of circuits
- Increase the time spent at each station
- Increase the number of circuit sessions per week.

Circuit training can be performed in a gym although space can be an issue. Circuit training can use cardiovascular equipment, free weights, resistance machines or simply body weight exercises at stations. Circuit training can also be performed outdoors at a suitable park or track area as long as you have mobile equipment.

Fartlek Training –

Based on running outdoors and intensity is varied depending upon athletes requirements. The intensity is changed by varied terrain such as sand, hills, soft grassland or woodland.

Some of the benefits of fartlek training are improving aerobic endurance, muscular endurance and improving balance and **proprioception** in the ankle, knee and hip all of which have a variety of benefits ranging from improved sport performance during a game to helping with injury rehabilitation.

Can be more useful than continuous training because it can be individual and sport specific. This methods uses both aerobic and anaerobic endurance and can involve changes in direction, so it is useful for team players as it can mimic the sport.

In fartlek training there is no rest period but the athlete has more control and can decrease intensity at any time to rest. The benefits are:

- Less technical than other methods making it easier to use.
- Athletes can control their own pacing
- Boredom is reduced.

Can be performed in a gym using a range of cardiovascular equipment (treadmills, cross-trainers or exercise bike) so long as speed, gradient and resistance can be changed or outdoors at a suitable park where intensity can be changed by varying terrain.

Interval Training – improves both aerobic and anaerobic endurance by varying the intensity and length of work periods. Athletes perform a work period, followed by a rest period, before completing another work period. This can be repeated many times, depending upon fitness level.

When designing an interval training programme you should consider:

- The number of intervals (rest and work periods)
- Intensity of the work and rest intervals
- The duration of the work and rest intervals.

Sets and reps are common terms that provide structure and organization when referring to the number of exercises in the training programme.

Repetitions (REPS) – how many times you perform an exercise.

Set – how may times you repeat that exercise for the set number of reps.

Can be performed in a gym using a range of cardiovascular equipment (treadmills, cross-trainers or exercise bike) so long as speed, gradient and resistance can be changed or outdoors at a suitable park or track area where running or cycling can be undertaken safely.

Maximum heart rate (MHR) and training zones

MHR is used to calculate how hard you should work your heart to develop either aerobic or anaerobic fitness. (MHR) can be calculated as follows: **220 – age = MHR.**

✓ **Warm-up or cool-down zone** = 50 per cent of MHR (mainly for sedentary / unfit individuals new to training).

✓ **Target heart rate** = 60–75 per cent of MHR (this has the greatest benefit for cardiovascular health).

✓ **Activity recovery zone** = 60 per cent of MHR (useful for aiding recovery, removing waste products; the next step for those new to training).

✓ **Peak performance zone** = 80–90 per cent of MHR (highest zone of cardiovascular training, which is geared towards competitive sport and will help develop speed).

✓ **Fat burning zone** = 60–70 per cent of MHR (required for fat burning management and for athletes training for long distances).

✓ **Anaerobic threshold** = 90–100 per cent of MHR (this is the point where you can no longer meet your aerobic requirements, so the body uses your anaerobic systems. Training at this level is only suitable for advanced athletes).

✓ **Aerobic fitness zone** = 70–80 per cent of MHR (where you develop aerobic endurance; it is suitable for active / trained individuals).

B- Know About The Musculoskeletal System And Cardiorespiratory System And The Effects On The Body During Fitness Training
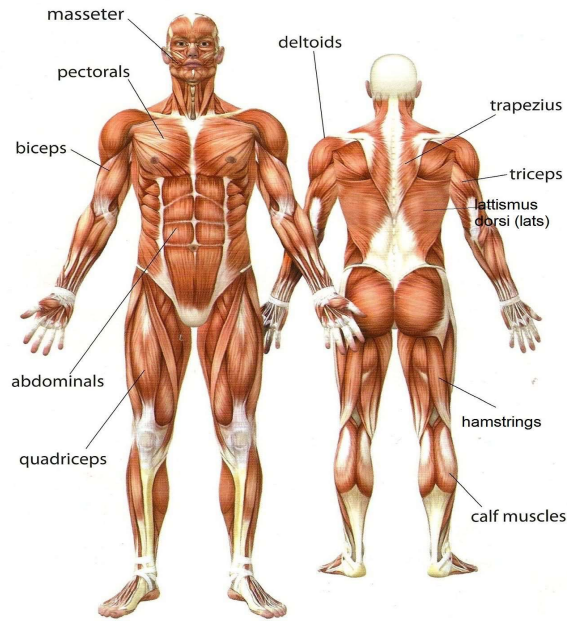
Short-term effects of fitness training on the musculoskeletal system:

A warm up must be used within your training plan and it must include three phases:

Pulse Raiser: To raise HR and speed up oxygen delivery to the muscles.
Examples, jogging up and down a pitch.

Stretching: Stretching the muscles and sport tissues you are about to use and increasing their elasticity and range of motion. For example lunges, hamstring stretch.

Sports Specific: These are more intense practices relating to the main session such as dribbling if you are about to play basketball, or complete a session on co – ordination.

Planning for progressive overload to encourage micro tears in muscle fibres
Each session you must ensure that you are progressing over time. This means that you are placing your muscles under stress to cause microtears to happen within the muscles. These tares will then repair over time and become stronger. If you don't work at a high enough intensity in the first place during your training sessions you will not progress.

Synovial Joints:

Knee: Hinge Joint – Flexion and extension are available at the knee, by the use of the quadriceps (Knee flexion) and Hamstrings (Knee extension).

Elbow Hinge joint – Flexion and extension are available at the elbow by the use of the triceps (Elbow extension) and Biceps (Elbow Flexion)

Hip Ball and Socket joint – Flexion, extension, rotation circumduction, abduction and adduction are all available at the hip using the gluteus, and hip flexor muscles.

Shoulder Ball and Socket joint – Flexion, extension, rotation circumduction, abduction and adduction are all available at the hip using the deltoid muscles.
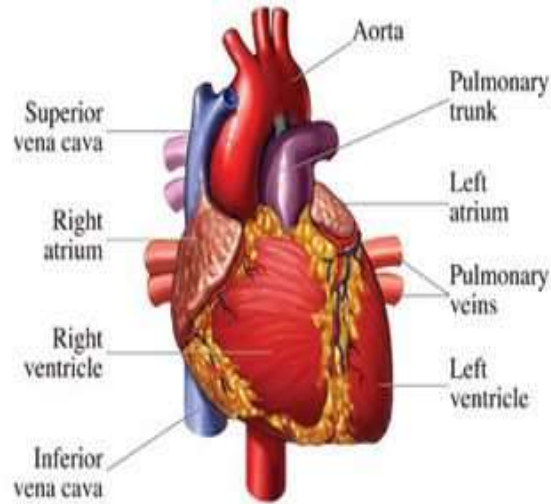
Short-term effects of fitness training on the cardiorespiratory system:

1.increased heart rate and breathing rate during fitness training activities
to supply oxygen to working muscles
As you start exercise there is an increase in demand for energy.
This energy can be supplied through aerobic (with oxygen) or anaerobic
(without oxygen) respiration. As there is an increase in demand for energy
this must be supplied through blood which is why we see an increase
in heart rate ad more blood is being delivered to active muscles.
Following exercise the cardio respiratory system will slowly return to its resting values.

2. Increased build-up of lactic acid as a result of increased intensity in the main component.
As a by product of exercise lactate or 'lactic acid' is produced which leads to fatigue.
This is due to the increased acidity in the cells as a result of the reactions taking place
to release the required energy. During recovery when oxygen is available lactate
can be broken down and removed from the body and some can be converted
back into energy for physical work.
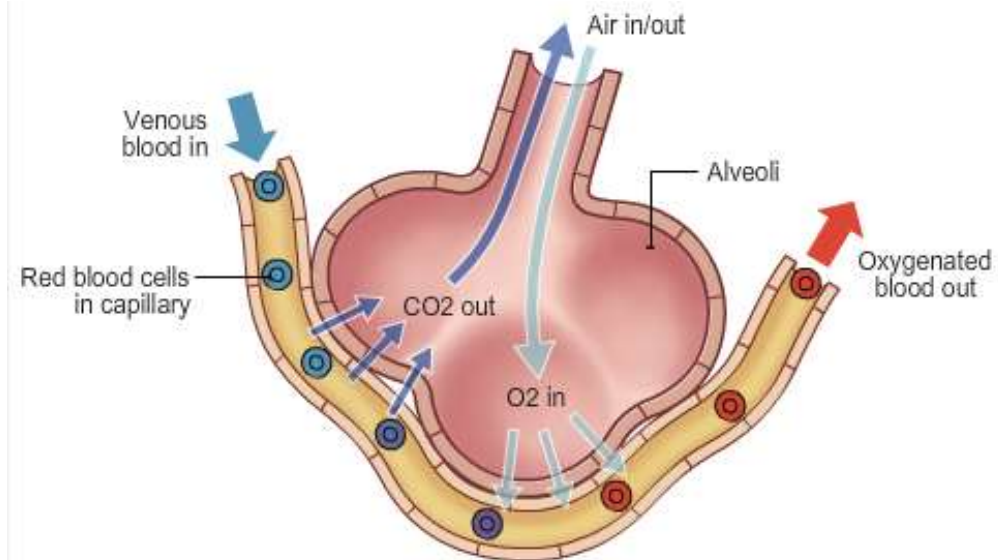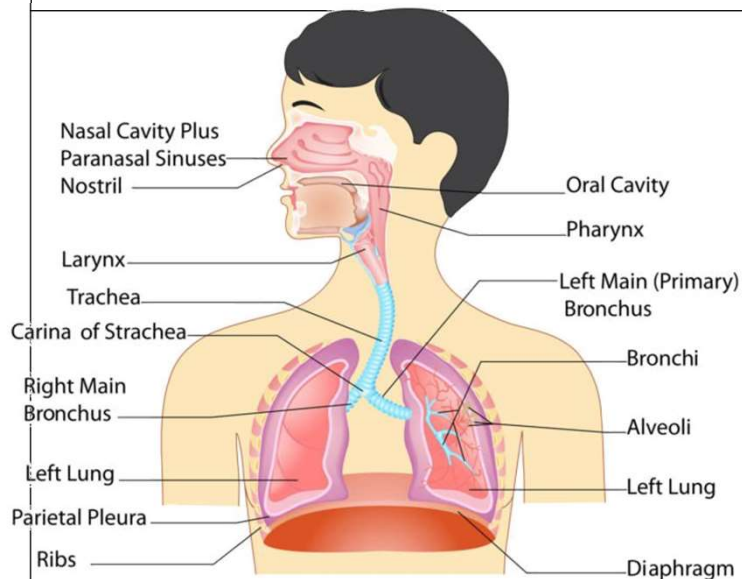
C Implement A Self-designed Personal Fitness Training Programme To Achieve Own Goals And Objectives

Safety

- You must ensure that the plans in which you are designing **can be carried out safely**. You must choose an appropriate training method for your sport (the sessions in which you have planned) to the best of your ability. If you miss **ANY** sessions they must be done during your own time.
- **The use of equipment**. If you are using any equipment you must ensure that it is used correctly and you have had the required training to use that piece of equipment. For example when using Fitness Suite equipment that you use the appropriate weight for your sessions, and that you have an awareness of wider safety of other people.
- **Wearing the correct clothing** – If you do not dress appropriately for your sessions they are unsafe and you will not be able to complete your session.
- You must take responsibility to **record each session**, and the reps, weight, time, and sets that you complete following every session.

Measures For Success:

How will you measure your success of your training program?
Things to consider:

- **Types of motivation (intrinsic and extrinsic) –** How motivated were you during every session? Why was this?
- **Benefits of motivation and self-confidence to successfully complete a fitness training programme** – Why would motivation have an impact on your session?
- **Motivation for training ,including details in the diary of personal feelings before, during and after each training session** – Looking at your training diary was your training designed perfectly for you? Did you enjoy it the whole time?
- **Details of how the programme has been adapted to ensure continued commitment to training, for example using a variation of activities/training methods** – How did you keep yourself interested in the training?
- **Achievement against personal aims, goals and objectives ,for example how performance has been taken to a higher level** – Have you achieved your goals? If so why, if not why?

Training Diary
A Training diary will be kept which will include the following:

- **Date, time and location for training undertaken**.
- **Aims and objectives** for each session
  What are you working on in the session and why?
- **Session duration** – How long did your session last?
- **Type of training undertaken**–selected method/ activity.
- **Programme details** (FITT).
- **Log of personal performance and achievements**
  What weight did you lift? What was your time/ HR during?
- **Resources** required,
  e.g. equipment, cones, ladders, chest press machine.
- **The principles of progressive overload** and details of how progressive overload has been achieved over the course of the programme.
- **Details of programme intensity** using % HR max and RPE.
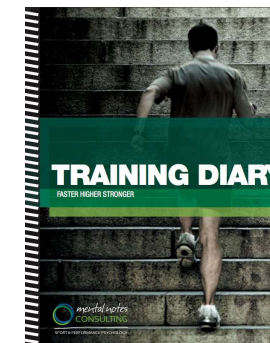
D Review A Personal Fitness Training Programme.
Review Programme

You will complete a review of your training programme once it has been completed. It must include:
- **Short term physiological effects**, improvements as a result of the programme to meet the activity/sport goal – Has it improved your component of fitness?
- **After each training session** – How did you feel after each session/
- **Evidence of modifying** the programme to achieve planned personal goals – Along the way you may change your programme because of lack of equipment, boredom or a change of goal. This **must** be included.
- **Strengths:**
  Areas of the programme where and how personal aims and objectives have been achieved with reference to measures of success – What worked really well? What did you enjoy doing the most?
- **Improvement:**
- When did you not achieve your goal and why?
- **Recommendations for improving future training** and performance,
  For example personal training needs, use of different training methods/activities or strategies, use of psychological training techniques to improve performance.

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Film Studies

NARRATIVE

once upon a time...

Narrative includes both story and plot.

The story includes the events within the film that are not shown but are relevant.

The plot of a film refers to how the conflicts within the narrative are established and then resolved.

The main features you should be able to recognise.

- ✓ The difference between plot and story.
- ✓ Cause and Effect of the structure of the narrative.
- ✓ Narrative conventions.
- ✓ The role of the characters.
- ✓ Themes and issues raised.
- ✓ The impact the narrative has on the audience.
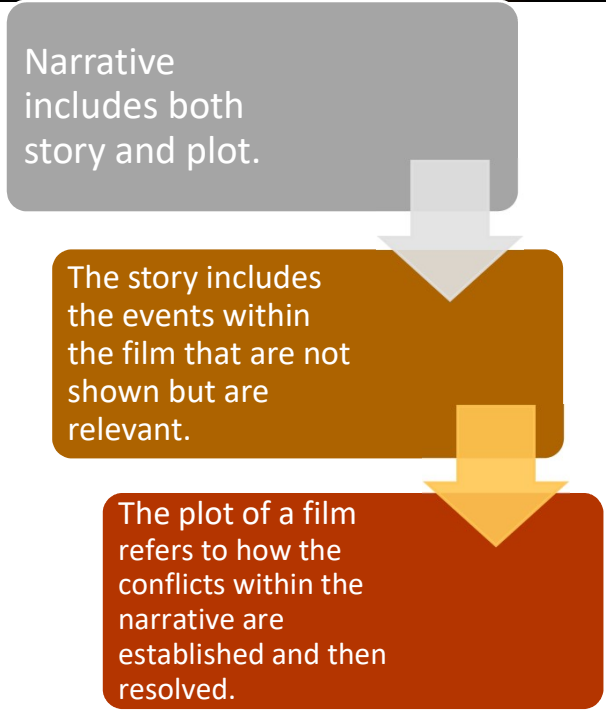
Structure	Viewpoint	Theory
Linear	Voice Over	Binary Oppositions
Circular	Restricted	Character Types
Episodic	Omniscient/ Unrestricted	Enigma Codes
Cause and Effect		
Flashback/ Flash Forward		

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Film Studies

STRUCTURE

There are three ways in which a narrative can be structured.

| Circular | Linear | Episodic |

A narrative that starts at the end then goes back in time to return to this point later on. Generally a film that starts at the end. These narrative structures may use a series of flashbacks.

A narrative that is told in a chronological order. It is the most simple and commonly used narrative structure. These can often lead to cause and effect narratives as the consequences of one event can lead to an effect.

A narrative that has clearly separated sections, often broken up by title, date or by the cut back to a narrator. This is like when books have chapters. This can sometimes disrupt the chronological flow.

Remember the Theorists?
Strauss
Todorov
Barthes
Propp

Year 10/11 BTEC Unit 1: The Music Industry

UNIONS

VENUES TYPES –

LARGE/MULTI-PURPOSE: Arena, Stadium, Large outdoor festivals, Large Theatres
SMALL: Pub, Club, Small Theatre, School Hall

HEALTH & SAFETY AT VENUES :
- Heating, lighting, ventilation
- Safe electrical equipment
- Hygiene (toilets, clean drinking water)
- First Aid Qualified Staff
- Emergency Exits
- No tripping hazards
- Adequate
- Disables Access
- Security Guards (SIA license)
- No Smoking

ROYALTY COLLECTION AGENCIES

MU
The Musicians' Union is an organisation which represents over 30,000 musicians working in all sectors of the British music business.

Musician | Composer/Songwriter | Record Producer | Session Musician

Equity
Equity is the UK trade union for professional performers and creative practitioners. It represents artists from across the entire spectrum of arts and entertainment.

Musician | Session Musician | Broadcaster

PRS
Performing Rights Society represents their members' performing rights, whenever a piece of music is performed or played in any public space or place outside of the home. They then collect royalties for this in the form of licenses.

PPL
Phonographic Performance Limited licenses the right to play recorded music and music videos in public. They then collect royalties for this.

MCPS
The Mechanical Copyright Protection Society represents their members' mechanical rights, whenever a piece of music is reproduced as a physical product. They then collect royalties for this.

BECTU
The Broadcasting Entertainment Cinematograph and Theatre union is the UK's media and entertainment trade union. It represents 26,000 members who work in broadcasting, film, theatre, entertainment, leisure and interactive media.

TRADE BODIES

MPG
The Music Producers Guild represents the interests of all involved in the production of recorded music in the UK

APRS
Association of Professional Recording Services represents those who work in the audio industry in the UK.

PLASA
Professional Lighting and Sound Association represents those who supply technologies and services to events in entertainment in the UK

RECORD COMPANIES

HIRE & TRANSPORT COMPANIES

Lighting and Sound Equipment	Transport
• Company will have technical expertise with the equipment and can also give advice about best set up or needed specifications.	• They will transport equipment when on tour so equipment is always at the venue when needed.
• The equipment will be higher quality and looked after properly.	• Transport company may provide Roadies to carry and install equipment.
• Engineer to take care of sound/lights so that the artist can focus on the music	• Hire a bigger live in coaches for tours around the country or abroad.

The Big Three Major Record Labels

Advantages of a major record label are:

- They have a great deal of money at their disposal.
- They have many connections with other labels and artists
- They have great links when it comes to promotion of an artist
- Because of their large size, they can get the best deals on manufacturing, advertising and links to media outlets.

Disadvantages of a major record label are:

- Difficult to stand out in such a big pool of artists
- Deals that are balanced in the favour or the record label making money as opposed to the artist.

Promotion Companies

Promotion companies support the marketing and promotion of an artist and encourages publicity of an artists product for public awareness. This can include live shows, record signings, public appearances etc. Many of the big record labels will have a promotions company within their label rather than outsourcing to other companies.

PUBLISHING

Advantages of a major publishing house are:

- Major publishing houses are better equipped to distribute music, through funds they have available and already establish connections.
- The music published is associated with a certain quality and can be packaged and printed to reflect this.
- There are lot more opportunities for marketing and promotion as the publishing house will do this for you and have greater funds to do this more extensively.
- More opportunity to make significant amounts of money

Disadvantages of a major publishing house are:

- Usually need to go through an agent who will take a percentage of the money you earn.
- It is harder to have music published when the company is large
- They may insist on further editing to your music and certain changes made.

Published Sheet Music

Advantages of an independent record label are:

How does this compare to major record labels

- There are usually less artists so there is more time that can be spent with the artist
- The contracts are more fair to the artist, giving them a more even split of the money made
- Due to more time spent with the artist, a closer personal relationship can exist
- The artist can have more creative freedom with the songs chosen and the sound of the music.

Disadvantages of an independent record label are:

- Less funds available to make records
- Less funds to publicise and promote a record
- Organisation of record label can be difficult due to less employees and more informal nature
- Can have less contacts with the media for advertising and promotion.

Which label would you choose?

Which way of publishing would you pick and why?

Self Publishing (Online)

Advantages of self publishing are:

- Don't need to go through an agent as you can send your work directly to them
- You are more in control with the editing process
- It can be a stepping stone to a larger company
- May cater to a specific genre that is different from the style required of the major publishing houses.

Disadvantages of self publishing are:

- Less marketing and promotion through online publishing. This will need to be carried out by the composer
- You are likely to make less money from online publishing, especially in the short term.
- Not the same possibilities of distribution of your work.

Musician

A musician is someone who performs music through the playing of an instrument or singing. Musicians play many different styles of genre's, from Jazz to Pop, from Classical to Folk.

Musicians main responsibilities are:

Why is it difficult to be a professional musician?

- Train and practise regularly to keep skills to a high standard
- Turn up to rehearsals on time and ready to play
- Look after their instrument or their voice
- Learn new music for a show.

Ed Sheeran (Guitarist and Vocalist)

Studio Manager

A Studio Manager makes sure that the studio is organised, in terms of bookings, equipment and administration. They are involved in the business side of the operations and making sure that they keep existing clients satisfied and attract new business to the recording studio.
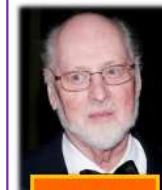
Studio Managers main responsibilities are:

- Ensure that the studio is run effectively and that it is financially profitable
- Schedule times and liaise with clients
- Employ session musicians and engineers
- Promotion and marketing of studio
- Check Health and Safety is in place to safeguard clients and employees

What health and safety concerns are there at a studio?

Abbey Road Studios (London)

Composer/Song Writer

A Composer is someone who writes music. This can be in the form of music written for an orchestra or brass band, music written for film or television, electronic music written on computers or through song writing.

Composers main responsibilities are:

- Compose music for a TV programme (quiz show, soap, commercial)
- Compose songs for singers
- Compose music for a special event (coronation, Olympics)
- Keep to a deadline
- Work with the performer so that the song/composition is at their ability level of singing/performance (correct range)

What ways can a composer/ song writer earn money?

John Williams (Film Composer: Star Wars)

Live Sound Technician

A Live Sound Technician controls the sound at live events such as theatre performances and music concerts. They operate microphones, amplifiers and control desks to balance the sound levels, as well as providing background music and sound effects.

Live Sound Technicians main responsibilities are:

Why are sound checks important?

- Choose suitable microphones and equipment and make sure these are looked after.
- Position and rig-up microphones
- Do sound-checks
- Operate the sound desk during shows/recording

Live Sound Technician at a Concert

Promoter

A Promoter is typically hired as an independent contractor by music venues, earning an agreed-to fee or royalties. They work with agents, or in some cases, directly with the bands, and with clubs and concert venues to arrange for a show to take place. Promoters then are in charge of making sure the word gets out about that show.

How would a promoter go about arranging a show?

Promoters main responsibilities are:

- Work with venues to arrange for a show
- In charge of 'putting on' the show
- Work with artists' management
- Promote the show through advertisement and publicity

Local Flyering to Promote a Concert

Sound Engineer

A Sound Engineer is required to assemble, operate and maintain the technical equipment used to record, amplify, enhance, mix or reproduce sound.

Sound Engineers main responsibilities are:

- Planning recording sessions with producers and artists
- Setting up microphones and equipment in the studio
- Making sure the volume and recording levels are set correctly
- Operating recording equipment and adding effects
- Recording each instrument or item onto a separate track
- Mixing tracks to produce a final 'master' track

How does this compare to a Live Sound Technician?

A Sound Engineer Recording a Drum Track

Venue Manager

The venue manager must ensure the smooth running of their venue and make sure that the venue is a profitable business. This involves working closely with artists, ensuring the quality of the music performed and negotiating fees for the use of the venue.

Venue Managers main responsibilities are:

What financial aspects does the Venue Manager need to consider?

- Ensure that all services are opened and fully functional during scheduled times
- Check Health and Safety is in place to safeguard clients and employees
- Give consistent and excellent level of service to clients
- Book artists for the venue.
- Assist with preparations of shows and supervise the whole process

O2 Academy Shepherds Bush (London)

Marketer

A Music marketer is someone who is in charge of raising awareness of an artist and creating a brand that can be easily recognisable to the public. In order for the artist to be popular, a marketer must help create a fan base through various types of media and publicity campaigns.

Marketers main responsibilities are:

- Design and implement marketing (i.e selling) plans: album sales, streams
- Gather prices for advertisements and promotions
- Devise promotional events, giveaways, sponsorships
- Have a radio/ online campaign for an artist
- Create the artist's image/brand

Social Media used to Market an Artist

Why is a brand/image important?

Mastering Engineer

A mastering engineer is a person skilled in the practice of taking audio (typically musical content) that has been previously mixed and preparing it for use in distribution, whether by physical media such as a CD, vinyl record, or as some method of streaming audio.

Mastering Engineers responsibilities are:

- Complete the audio mastering process for an album
- Prepare and transfer audio from one format to a desired master format
- Refine the sound quality and make subtle changes to create an appealing sound

Why is a Mastering Engineer important?

A Mastering Engineer Making Subtle Changes to the Audio

Record Producer

A Record Producer (or Music Producer) has a very broad role in overseeing and managing the recording (i.e. "production") of a band or performer's music. They have a lot of responsibility over the final recording made and are often likened to the director of a film in terms of their importance and overall creative input.

Record Producers main responsibilities are:

What coaching would they give the artist? And why?

- Oversee and manage the recording of an artist's music
- Gather ideas for the project and select songs
- Hire session musicians for the project
- Coach the artist in the studio
- Control the recording session
- Supervise the entire process through mixing to mastering
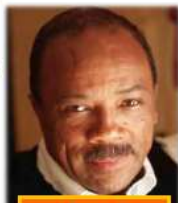
Quincy Jones (Record Producer: Thriller)

Music Journalist/Blogger

Music journalism is reviewing and reporting about popular music topics, including pop music, rock music, and related styles. Music journalism is an aspect of entertainment journalism, covering popular music and including profiles of singers and bands, live concert, and album reviews.

Music Journalists main responsibilities are:

- Write reviews about an artist's concert and album
- Attend shows, concerts, events and interview people
- Listen to CDs, online music, new talent to stay up to date with the latest music scene

Why should artists do interviews?

Taylor Swift on the Cover of Rolling Stone

Session Musician

A session musician is a musician that is called in to play on recordings or in bands at short notice. They must learn and play parts almost immediately and should therefore be musicians of a high ability and have very good performance skills.

Venue Managers main responsibilities are:

Why would anyone want to be a session musician?

- Turn up on time to recording sessions or performances
- Rehearse music and keep instrumental level high
- Follow instructions given by producer/conductor
- Bring instrument and keep it in good condition for regular playing
- Contribute partly, at times, to the writing of an arrangement

Session Musicians Recording Their Part

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O2 Academy Shepherds Bush (London)

* Give consistent and excellent level of service to clients
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Taylor Swift on the Cover of Rolling Stone

Software Programmer/App Developer

A programmer, computer programmer, developer, coder, or software engineer is a person who writes computer software. Software is extremely beneficial to the music industry and it has made it easier than ever to set up home studios and produce music in a more accessible way.

Programmers main responsibilities are:

How has software benefitted the industry?

* Create apps, musical programmes: sequencing (Logic), notation software (Sibelius), music games
* Up date the programme regularly

Computer Sequencing Software

* Create computer programmes that assist musicians with their training (aural tests, music theory)

Roadie

The road crew (or roadies) are the technicians or support personnel who travel with a band on tour and handle every part of the concert productions except actually performing the music with the musicians

Roadies main responsibilities are:

* Carry equipment
* Set up equipment before event
* Look after the equipment
* Pack away the equipment at the end of the event

CD/Vinyl Manufacturer

A Manufacturer is someone who takes the final master copy of a record and presses it onto CD or Vinyl to be distributed to retail stores for consumers to purchase.

Manufacturers main responsibilities are:

* Master CD's/Vinyl's of high quality
* Transport to distribution outlets (stores or online)
* Duplicate CD's/Vinyl's

CD Manufacturing

What dangers does a Manufacturer face?

DJ

DJs play music for audiences at live venues. DJ's use various formats including vinyl, CD or MP3, and a range of equipment such as turntables, mixers, microphones and amplifiers. DJ's develop the skill to seamlessly transition from one recording of a song to another by using turntable skills that involve the simultaneous use of two record turntables and a DJ mixer

DJ's responsibilities are:

* Play and mix records in clubs or bars, to create atmosphere or keep people dancing

What other job roles could a DJ become involved in?

* Choose music to suit the audience's taste and the venue's music policy

David Guetta (DJ)

* Create their own sounds by manipulating beats, using samples, adding extra music and sound effects
* Work with an artist who raps or sings over the music.

Distributer

A music distributor links a record label or independent musical group to consumers. Their job is to sell recordings and to increase the group's visibility and popularity by convincing stores to stock and promote its recordings. Much of that comes through the distributor's sales reps, who build relationships with the chains and independent stores.

Distributers main responsibilities are:

* Convince stores to sell their clients album.
* Work with stores to promote their clients album
* Build good relationships with stores for future sells.

Distributing to Online Retailers

What skills do you need to have to build relationships with people?

Retailer

A Retailer is someone who works in a business that sells music to consumers. This could be in the form of physical copies sold through high street shops or through online stores where music can be downloaded or streamed.

Examples of Retailers:

* Online: ITunes, Amazon, Spotify.
* Shops: HMV, Fopp, specialist record shops.

Music Retailer (HMV)

Why are high street retailers under threat?

Distributer

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Distributing to Online Retailers

What skills do you need to have to build relationships with people?

Instrument Technician

Instrument Technicians are those that have specialist knowledge of specific instruments and can therefore support with the use of them. They also have knowledge of how they should be used or the best configuration to get the best sound.

Instrument Technicians main responsibilities are:

What expertise would you need to have and know?

* Look after the instrument
* Fix the instrument when broken (e.g. broken strings)

Instrument Technician Repairing a Guitar

* Give advice regarding best use of equipment

Artists and Repertoire (A&R)

Artists and repertoire (A&R) is the division of a record label or music publishing company that is responsible for talent scouting and overseeing the artistic development of recording artists and songwriters.

A&R main responsibilities are:

What would they look for in new talent?

* Scouting for new talent and sign to a record label
* Oversee all the aspect of the process from delivery to finished recordings
* Development of artist as they grow and mature
* Manage the recording process
* Help find songs appropriate for the artist

Simon Cowell (A&R Exec: One Direction)

Artistic Manager/Talent Manager

A artistic manager, also known as a talent manager, band manager or music manager, is an individual who guides the professional career of artists in the music industry.

Artistic Managers main responsibilities are:

* Organise and confirm show dates and tours
* Liaise with record companies

Why can't artists manage themselves?

* Assist with studio planning
* Support artist on a personal level, with advice on lifestyle choices
* To maintain the high standard needed of the artist
* Exploit marketing opportunities.

Scooter Braun (Talent Manager: Justin Bieber)

Travel & Tourism

Unit 2: UK Travel and Tourism Destinations

What you need to know – tourist destinations	Explanation/Answers
Capital Cities of the UK	The capital of the UK is London The capital of England is London, the capital of Northern Ireland is Belfast, of Scotland is Glasgow and of Wales is Cardiff
The location of a variety of seaside resorts in the UK	For example, Skegness, Great Yarmouth, Margate, Brighton, Newquay, Weston-Super-Mare, Barry Island, Bangor (Wales), Bangor (N. Ireland), Southport, Blackpool, Portishead, South Shields, Whitby
The location of major countryside areas in the UK	For example National Parks such as the Peak District, Snowdonia, Cairngorms, Exmoor, Brecon Beacons, Snowdonia, Lake District, and Areas of Outstanding Natural Beauty such as the Cotswolds, Causeway Coast, Isles of Scilly
The location of the UK's major cultural destinations (and why they are culturally significant)	For example Stratford-upon-Avon (Shakespeare), Warwick (Castle), London (Arts and Performance), Edinburgh (Festival of Arts and Entertainment), Nottinghamshire (Robin Hood)

What you need to know – UK entry points	Explanation/Answers
Major airports in the UK, their location and three-letter code	London Heathrow (LHR), London Gatwick (LGW), London Stansted (STN), London Luton (LTN), Bristol (BRS), Birmingham (BHX), East Midlands (EMA), Manchester (MAN), Leeds Bradford (LBA), Newcastle (NCL), Edinburgh (EDI), Glasgow (GLA), Belfast International (BFS)
Major UK passenger sea ports and their routes to Ireland or Continental Europe	Fishguard to Rosslare, Holyhead to Dublin, Newcastle to Amsterdam, Hull to Rotterdam, Harwich to Hook of Holland, Dover to Oostend, Dover to Calais, Newhaven to Dieppe, Portsmouth to Caen, Plymouth to Santander

What you need to know – UK travel routes	Explanation/Answers
Major motorways in the UK, including the cities they serve	M1 – London, Milton Keynes, Derby/Nottingham, Sheffield, Leeds M4 – London, Reading, Bristol, Cardiff M25 – London orbital M3 – London, Basingstoke, Southampton M20 – London, Maidstone, Dover
Major rail lines in the UK, including the cities they serve	Midland Mainline – London, Leicester, Derby, Sheffield West Coast Main Line – London, Birmingham, Crewe, Carlisle, Glasgow East Coast Main Line – London, Peterborough, York, Newcastle, Edinburgh, Inverness Great Western – London, Reading, Bristol, Newport, Cardiff, Swansea Great Eastern – London, Diss, Norwich

Unit 2: UK Travel and Tourism Destinations

Why do people visit the UK? What facilities do they use?	Explanation/Answers
Visitor attractions	National trust and English Heritage Properties, theme parks, museums, historical sites, heritage sites and wildlife parks
Natural features	Mountains, beaches, lakes, rivers and coasts
Accommodation	Hotels, guest houses, bed and breakfast, self catering, camping, caravanning, holiday parks, boats
Facilities	Sport and Leisure facilities, shopping, restaurants
Arts and entertainment	Theatres, exhibitions, art galleries, exhibitions, local festivals/events
Sightseeing	Guided tours, ghost walks, boat trips, road trains
Transport links	Road, rail, air, sea links

What are visitors to the UK like?	Explanation/Answers
Visitor types	Groups, families, age of visitor, culture, level of understanding of English, individual needs
Where they come from	Inbound (arriving the UK from overseas), Domestic (UK residents)

How can destinations increase their appeal?
You need to understand how and why a destination or facility can appeal to a greater range of tourists. What might they do?
- Improve facilities
- Appeal to a specific customer type
- Offer better transport links
- Adjust costs/admission
- Offer add-ons
- Appeal to a wider range of visitors
- Appeal to a different age group
- Improve interactivity
- Become part of a 'bundle' of attractions – one price for multiple sites

You will need to suggest what techniques different tourist facilities or destinations can use, and be able to justify these fully.

Travel & Tourism

Unit 2: UK Travel and Tourism Destinations

Other than by using the internet, how else can visitors find information about facilities, attractions and holidays in the UK?

| Guidebooks | Tourist Leaflets | Atlases | Holiday Brochures | Tourist Information Centres |
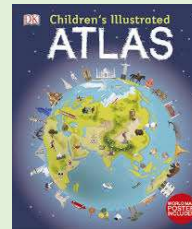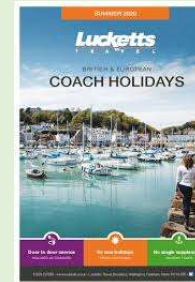
How do you plan a holiday for somebody?	Explanation/Answers
Visitor requirements	A summary of what the visitors would like
Preferred dates/times	It is important to understand exactly when the person wishes to travel. What date? What time on that date? Sometimes, if a visitor is flexible, they can save money
Travel requirements	Are they travelling independently (e.g. by road, rail, air etc.) or as part of an organised tour (coach tour, cruise etc.)
Accommodation requirements	What standard of accommodation (e.g. star rating), type of accommodation (e.g. stately home, hotel, apartment, holiday park, campsite etc.). On what board basis?
What is their motivation for travel?	Are they travelling to relax? To undertake activities? For a special occasion?
What do they want to see?	Are they looking to visit natural features? Cultural features?
What is their budget?	How much are they aiming/willing to spend?

Travel & Tourism

Travel and Tourism

Unit 1

Knowledge Organiser

Key Facts

What are the different types of tourism?

Types of Tourism

Inbound Tourism · Outbound Tourism · Domestic Tourism

Why do people travel? LEISURE TRAVEL

Leisure travel: Travelling to relax and enjoy yourself, outside of work hours.

- **Day trips**, visiting an attraction and returning home in one day.
- **Short breaks**, less than 4 nights away from home.
- **Holidays**, a period of rest and pleasure away from work, usually 1 week but could be longer, usually during school holidays.
- **Visiting Friends and Relatives (VFR)**, travel to get together with friends and family
- **Staycations**, a holiday spent at home or in your hometown doing activities or going on trips that there isn't normally time for because of work.
- **Special Events**, a one-off or repeated event that people travel to specifically attend; such as concerts, festivals, football matches.

Why do people travel? BUSINESS TRAVEL

MICE — Meeting (Conferences, seminars), Incentive (Incentive and training travel), Convention (Society meetings, international conferences), Exhibition (Exhibitions, fairs)

Why do people travel? SPECIALIST TRAVEL

- Adventure tourism
- Cultural/heritage
- Health tourism
- Education
- Volunteer Tourism
- Dark tourism
- Eco-tourism
- Conservation

What is SUSTAINABLE TOURISM?

- Meeting the needs of the present population whilst protecting natural, historic and cultural resources for the future.
- Environmental factors:
    - Make best use of natural resources
    - Protect the environment
    - Protect wildlife
- Social/cultural factors:
    - Be good for the country and local people
    - Improve local quality of life
    - Protect traditions/traditional way of life
- Economic factors:
    - Make money for local people
    - Make jobs for local people
    - Improve life for the poor

What are the benefits of sustainable tourism?

- It helps to protect the environment
- It reduces the amount of energy used, e.g. electricity, petrol
- It reduces the amount of waste created
- t creates links with the local community
- It makes businesses more competitive
- It improves the image of businesses
- It saves business money

Travel & Tourism

Travel and Tourism

Unit 1

Knowledge Organiser

Key Facts

How important is tourism to the UK economy? EMPLOYMENT	How impoerant is tourism to the UK economy? GDP	What is the TOURISM MULTIPLIER EFFECT?
- Direct employment - Jobs that are created by the travel and tourism industry, for example airline cabin crew, train driver, travel agent - Indirect employment - Jobs that are created to SUPPLY and SUPPORT the travel and tourism industry, for example the baker who supplied pastries to the hotel, the mechanic who fixes coaches used by the tour operator etc.	- GDP stands for Gross Domestic Product - It is the total value of goods and services bought and sold over a set period – usually a year. - Tourism is worth around £250bn in a normal year - It is very important to our GDP	- This is where tourism has an impact not just on the place the tourist is visiting, but upon other people/places nearby. Eg: - A new hotel opens up - They pay a local laundrette to clean their sheets - The new launderette employs a new member of staff for this job - That member of staff spends more money in local stores - Local store owners benefit through increased income

What is a TOUR OPERATOR?	What is a TRAVEL AGENT?	What are the advantages and disadvantages of using online travel services?
- A company which takes the separate elements of a holiday, and packages them together to be sold to a customer. - A tour operator may typically sell you a package which includes: - A flight to your destination - Transfers between the holiday airport and the holiday accommodation - Holiday accommodation and services - Tour operators can be DOMESTIC (UK holiday), OUTBOUND (holidays abroad for UK tourists), and INBOUND (holidays in the UK for foreign tourists)	- The travel agent is the place from where the tour operator's package can be purchased, or, you can buy the different elements and other elements of the holiday from them. - For example, you could buy the package holiday mentioned previously from the Travel Agent, who may then also sell you: - Travel insurance - Foreign currency - UK airport parking - Car hire whilst abroad - Attraction tickets - The may be MULTIPLES (lots of branches, e.g. Hayes Travel), INDEPENDENTS (one-off independent retailers) or ONLINE (web presence only, e.g. Expedia)	**Advantages of Online Travel Services** - Easy for the customer to book their holiday when they want 24/7 availability - Customers can compare products and costs of services of lots of holiday providers. - Easy to make up the holiday that matches your own needs. - You find out instantly what is available, making it easy to get last minute deals. - Offers of Blogs for further information **Disadvantages of Online Travel Services.** - No expert help, no one to talk to for advice. - Limited choice of itinerary. - Lack of security online can lead to credit card theft or identity theft. - Customer has to sort out their own problems if something goes wrong. - It is easy to miss things when you book yourself e.g. transport to and from the airport, insurance etc. - Difficult for group bookings

What is road travel?	How popular is rail travel in the UK?	Is air travel all the same?
- Most domestic travel takes place by road, usually by car or by coach **Advantage of Road Travel** - Cars can stop whenever they want - They can take more luggage - There are not many toll roads (ones you have to pay to travel on) in the UK - You can listen to your own music-as loud as you want! - These days navigation is easy if you have a sat nav device. **Disadvantages of Road Travel** - Fuel is expensive - There is a lot of traffic which slows you down - It is hard for inbound tourists who have to get use to driving on the opposite side of the road. - You have to concentrate to avoid accidents, (there are more road accidents than other forms of travel), this is tiring for the driver.	- Rail travel tends to be very popular in the UK for both local and long distance journeys. Our stations tend to be centrally located and the network is comprehensive **Advantages of Rail Travel** - Very comfortable (especially first class) - You can get almost everywhere by rail. - You can sleep, read and work while travelling. - There is a very good safety record - You can buy food and drink, there is a toilet and some have a restaurant. - Most now have charging facilities and WiFi **Disadvantages Of Rail Travel** - It is expensive - Prices can be very confusing - Changes can be difficult for foreign travellers. - Sometimes you have to change train a few times to get to where you want to go, this can be difficult with a lot of luggage or children. - Can be very busy and noisy. - Trains can be cancelled and delayed.	- SCHEDULED FLIGHTS operate to a regular fixed timetable and travel between major airports and provide some services – e.g. Air France - LOW COST AIRLINES offer very limited services and charge for most 'extras' such as refreshments, suitcases. They sometimes fly from less well-known airports - CHARTER FLIGHTS one company pays the airline to operate the entire flight. Timetables may be irregular

Travel & Tourism

Travel and Tourism

Unit 1

Knowledge Organiser

Key Facts

What types of sea travel exist?	What types of ACCOMMODATIONS to tourists tend to stay at?	What are the main purposes of VISITOR ATTRACTIONS in the UK?

• Most people who travel by sea from the UK g on short ferry crossings, e.g. Dover to Calais or Holyhead at Dublin.
• Some crossings are longer (e.g. Portsmouth to Santander in Spain takes 24 hours)
• Most ferries accept cars and lorries/coaches
• Some people travel onboard as 'foot passengers;
• Some ferries are fast – e.g. Seacat Catamarans
• A small number of hovercraft services still operate – passenger only between Southampton and the Isle of Wight.
	• Serviced accommodation
	   • Hotels
	   • Motels
	   • Guest houses/B&B's
	• Non-serviced Accommodation
	   • Self Catering (e.g. apartments)
	   • Youth Hostels
	   • Caravans and campsites
	   • Holiday parks
		• Entertainment – many purpose built visitor attractions are designed to give people a fun experience
		• Education – some purpose built visitor attractions are there to educate people about the past, present or future.
		• Leisure and recreation – the natural environment creates a place for outdoor activities e.g. climbing. Some leisure places are built for relaxation or healthy activities e.g. spa
		• Conservation – these are attractions designed to protect the natural environment. They can also provide education and enjoyment
		• Visitor Attractions provide a range of products and/or services; These include information and interpretation for people who cannot speak English, rides, exhibits, events, tours and guides, educational talks, hospitality and catering and souvenirs.

What types of visitor attractions exist in the UK?

Type of attractions	Definition	Example 1	Example 2	Example 3
Natural attraction	A natural feature of the environment that is interesting to tourists. Some natural areas have been built to help protect the environment.	National Park	Dorset coast	Amazon rainforest
Purpose built attraction	A man-made attraction that has been built to attract tourists	London Eye	Alton Towers	Chester zoo
Heritage attractions	Attractions associated with history and/or culture. These can include: 1. Historic buildings or historic coastlines that were NOT built for tourists in the past however, they do attract tourists due to their history. 2. Places that contain pieces of history. E.g. museum. Heritage tourism may also help protect traditions and historic features.	Windsor Castle	Manchester museum	Stone Henge

Why else would people visit the UK?

- ARTS AND ENTERTAINMENT
  - Mega events (e.g. the Olympic Games)
  - Hallmark Events (regularly scheduled special events, e.g. Chelsea Flower Show)
  - Major Events (those which attract national TV coverage, e.g. the Grand Prix)
  - Local Events (which people in a specific area may know of, e.g. Derby Carnival
- FESTIVALS are events which occur (usually) once per year and celebrate something special
- THEATRE: Drama, comedy, plays, musicals, ballet etc.

Travel & Tourism

Travel and Tourism

Unit 1

Knowledge Organiser

Key Facts

Who leads and regulates the UK tourism industry?

Trade organisation (Letters)	Full name of the trade organisation	What they do.
CAA	Civil Aviation Authority	• Regulate aviation (flying) • Make sure that the air is managed safely and customers are protected.
ATOL	Air Travel Organisers' Licence	• Financial protection scheme. • Run by CAA. • Ensures that travellers do not lose their money or become stranded abroad.
ORR	Office of Rail Regulation	• Regulates health and safety on Britain's railways. • Makes sure customers are treated fairly and gives taxpayers value for money.
ABTA	Association of British Travel Agents	• Regulates British travel agents and tour operators. • Ensures that customers receive a high standard of service. • Has a fund to help repatriate stranded holidaymakers.
AITO	Association of Independent Tour Operators	• Represent independent tour operators and travel agents. • They want high levels of customer satisfaction and good quality service.
N/A	UK Inbound	• Their aim is to encourage inbound tourism by helping members manage a successful business.

What are ANCILLIARY ORGANISATIONS?

- These are organisations or companies which can sell you a product to enhance/make better/support a travel experience. For example:
  - Car hire firms like Herz or Europcar
  - Travel Insurance such as Norwich Union
  - Price Comparison Sites
  - Airport Service Providers
  - Event Booking

What types of organisations operate in the UK tourism sector?

- Private: -Most organisations in the travel and tourism industry are privately owned by an individual or partners or by a group of people called shareholders. The main function is to make a profit, which can then be paid out to shareholders or kept by the owner. Profits can be made by selling more holidays, flights or other tourism products and services. Examples include; TuI, EasyJet, Haven and Hilton. Theme parks, travel agents and tour operators are all privately owned.
- Public: - Public sector organisations are run by the government. Their primary aim is to not make a profit; instead they exist to provide a service to the community by informing, educating and advising the customer
- Voluntary:- These organisations are often charities. They do not try to make a profit any money made funds their cause. They get their money from merchandise (things sold in shops), donations and grants. Some exist to educate the public, to promote a cause, educate and inform

What is HORIZONTAL INTEGRATION?

- HI is where a company in the travel and tourism sector buys-out, merges, or forms a company at a different stage in the holiday chain.
- For example, a travel agent may buy a tour operator, who has an airline, and between them, then invest in a chain of hotels and bring it all under one name/brand

What is VERTICAL INTEGRATION?

- VI is where a company buys another similar one in order to make it bigger/more dominant.
- This can reduce competition and force prices up.
- In the early 2000s, Ryanair (largest airline at Stansted) purchased an airline called BUZZ (the 2nd largest airline at Stansted)

What is COMMON OWNERSHIP and BUSINESS PARTNERSHIP?

- Common ownership is where one company owns multiple different organisations.
- Business partnerships see companies owned by different owners work in partnership with each other

What are the advantages of common ownership and business partnerships?

Advantages of Common Ownership and Commercial Partnerships
- Increases sales and money coming in due to more efficient business operations.
- Marketing and promotion (advertising) efforts are doubled, increasing customer and trade recognition (more people know who they are).
- Combined expertise helps companies to provide good customer care.
- Gives them more power over suppliers (because they are buying more, suppliers don't want to lose them as customers so make their prices cheaper).
- Enables greater economies of scale (when making larger quantities of one thing it costs less to make each one), this happens because they are selling more of the same product
- Shared resources (things all the business can share)
- Wider customer base (more customers).

What are the disadvantages of common ownership and business partnerships?

Disadvantages of Common ownership and commercial partnerships:
- Size of operation, it becomes too big to manage properly.
- Less competition means that the customer has less choice.
- Loss of personalised customer care.
- The company ends up monopolising the market (having most of the customers) so it has more control over the whole industry.
- Inflexibility, not easy for them to change products to meet changing customer wants and needs.
- Can lead to large scale redundancies (people losing their jobs) if the company decides to close branches and offices

How can consumer technology benefit the industry?

- Online bookings – available 24/7
- Virtual tours
- Online check-in for flights etc
- Self-service ticketing machines
- M-Tickets/E-Tickets
- Websites

Da Vinci Academy
A L.E.A.D. Academy

Why EMPOWER children;

i)   Legal right
ii)   Show child is respected and valued
iii)   Help children to respect themselves and others
iv)   Involve children in decision making

How Adults Can Support a Child's Empowerment

Physical Care Routines

Privacy   Help Themselves During Meals

Support Child Initiated Play

Empowerment benefits development in the following ways

Physical	Cognitive	Emotional	Social
Confidence Motivation Develops decision making skills	Motivation Perseverance Decision making skills Concentration	Self esteem Decision making Manage own behaviour	Develop self respect Respect & value others feelings
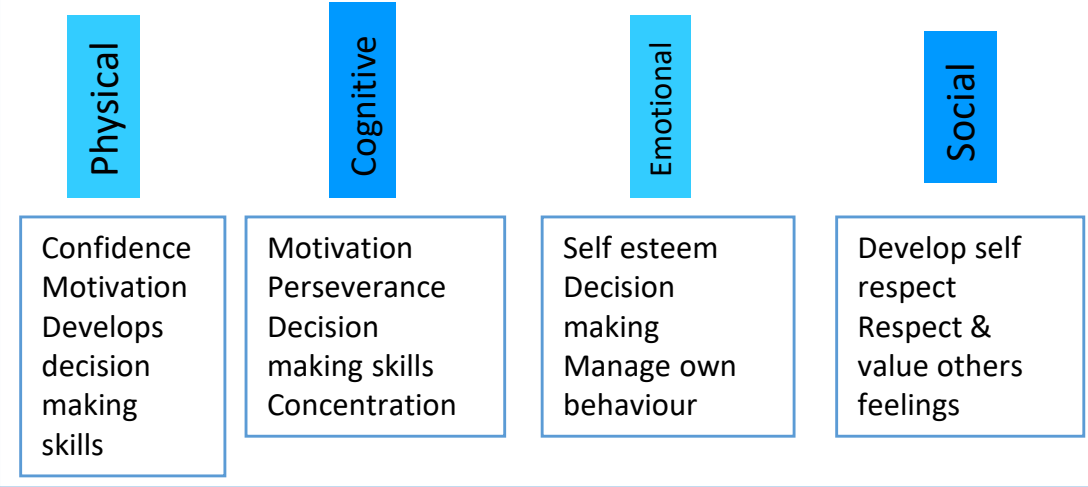
Involve Children in Planning & Feedback

Preparing the Environment

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- A key person is someone who develops a strong bond with a child and their family and is responsible for them and their needs being met

Legal requirement – it is a statutory requirement for Early Years Foundation Stage that all children in early years settings are allocated key workers.

Why the key person approach used in early years settings

The main roles:
- Developing a strong bond with the child – this is important so the child feels safe and encouraged. The key person should care for the child and the relationship should be enjoyable for both.
- Share information with the parent – inform the parents about what the child has done (water play, painting, baking) eaten and accomplished (any milestones hit) that day as well as if they have had any accidents.
- Supports settling in and transitions – the key person should help a child settle in to a new environment by being there for taster sessions and starting to get the know the child during these. They also would help with transitions such as the child becoming a sibling by playing with dolls and talking about what will happen to prepare the child.
- Observing the child – this is to watch the child's development and check they are approaching the relevant milestones. If a child is slightly behind they may plan tasks to help the child's development in this area. For example if they are 3 and can't yet throw and aim a large ball they might plan an activity around this task to help the

Why approach is used:
- To allow parents to have a person they can contact and give information to such as the child's medical conditions, dietary needs such as if the child is a vegetarian, their likes (dinosaurs), their dislikes (clowns), routines and anything that may affect their mood or behaviour at nursery.
- A key person is needed to support the child's physical and care needs are met. This means the key person is responsible for ensuring the child takes their medicine or doesn't eat certain foods. They will know specific things about the child such as if they need a dummy to go to sleep or that they don't like to eat with purple cutlery.

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Writing needs the following to also be effective:
- Be precise
- Well structured
- Choice of vocabulary

- Punctuation
- Written in the correct style and format
- Grammatically correct

To add:
Also…
Furthermore…
Additionally…
Another…
Subsequently…
Equally important is…
In addition…
To elaborate…
Firstly…secondly….thirdly…
Moreover…
Besides…
Then again…
As well as…

Write like an expert!

Reader response:
The writer/This [technique]…

…makes the reader reassess who has their sympathy…

…reminds the reader of …

…causes us to question the motives of …

…reinforces the reader's suspicion that …

… allows the reader a greater understanding of …

… emphasises the idea that …

Cause
…affects…
The relationship between …
Consequently…
…contributes to…
As a result…
Therefore…
…supports…
Thus…
Effect

To give an idea:
Suggests: implies/insinuates/connotes
Shows: conveys/expresses/evokes illustrates/demonstrates/portrays
Makes clear: clarifies/exemplifies/establishes
Shows importance of: Emphasises/highlights/reinforces
Builds: expands/develops

To compare:
In comparison…
Likewise…
Complementary to this…
To contrast:
…whereas…
And yet…
In the same way…
On the other hand…
In contrast…
Similarly…
This contradicts…
Equally…
…disputes…
Conversely …
However…

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Sentence Types Knowledge Organiser

Key terminology	Definition
Main clause	A group of words which contains a verb and makes sense on its own.
Subordinate/ dependent clause	A clause which does not make sense on its own (it is reliant on the main clause).
Co-ordinating conjunction	Link words or phrases that join two equal clauses.
Subordinating conjunction	Link words or phrases that join clauses where one is dependent on the other.

Sentence Types	Definition
Simple	A sentence containing one main clause.
Complex	A sentence containing a main clause and at least one subordinate/dependent clause.
Compound	A sentence containing two main clauses joined by a conjunction.
Complex compound	A sentence containing two main clauses and one or more subordinate or dependent clauses.
Minor	A word, phrase or a clause which is an incomplete sentence but functions as a sentence.

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Subject	Verb	Object
The cat	chased	the dog.

Subject	Verb	Compliment
Mumbai	Is	big

Subject/Verb	Adverbial	Object
It is	after all	a small world

Sentence Functions	Definition
Declarative	A statement.
Imperative	A command.
Interrogative	A questions.
Exclamations	An expressive or emotive exclamation.

Voice	Definition
Active Voice	Where the subject/ agent performs the action expressed by the verb.
Passive Voice	Where the subject is filled by a patient who receives the action expressed by the verb. The agent is omitted or placed later in the clause.

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Noun Type	Description	Example
Proper	Refers to names of people or places.	James, England
Abstract	Refers to states, feelings and ideas which do not have a physical existence.	Love, anger, justice
Concrete	Refers to objects with a physical existence.	Table, chairs
Collective	A noun that identifies a group of individuals	Government, family, community

Pronouns	Description	Example
Personal	Can replace a noun and identify in terms of person.	I, you, she, he, they
Demonstrative	Orientates the reader/ listener to an idea either nearby or further away.	This, these, that, those
Indefinite	Refers to a person or object that is non specific	Someone, anybody, everything

Verbs	Description	Example
Dynamic/ material	Shows actions or events	Hit, jump, wash
Stative/ Relational	Identifies states of being	Be, appear, seem, become
Auxiliary	A verb that forms tense or mood of other verbs	Be, do, have
Modal auxiliary	A verb that shows degree of certainty, probability or possibility	Should, must, might, could, will

Adjectives	Description	Example
Base	The basic form of an adjective	Big, interesting, happy
Comparative	A form used to compare two instances by adding –er	Bigger, more interesting, happier
Superlative	Identifies the best example	Biggest, most interesting, happiest

Determiners	Description	Example
Articles	Shows if something is definite or indefinite	The (definite) a/an (indefinite)
Possessives	Shows ownership	My, her, your, our
Quantifiers	Shows either specific or non specific quantities of a noun	One, some, any a few

Adverbs	Description	Example
Manner	Answer the question 'how?'	Carefully, quickly
Place	Answer the question 'where?'	Here, outside
Time	Answer the question 'when?'	Yesterday, today,
Frequency	Answer the question 'how often?'	Daily, always, usually, seldom

Conjunctions	Description	Example
Co-ordinating	Links words, phrases or clauses together where equal	And, but, or yet
Sub-ordinating	Links clauses where one is dependent on the other	Because, although, while, for