WOOTTON PARK

'Ipsum quod faciendum est diutius'

Knowledge Maps
Year 10: Term 1

GCSE Subjects including

Trilogy Sciences

Contents page

Subject: English	Term: 1	Topic: Power poetry

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Week 1 – Language

A	Language and tone	
1	Simile	Figurative language / imagery using 'like' or 'as'
2	Metaphor	Figurative language / imagery that directly compares two things
3	Onomatopoeia	A word that resembles the sound it makes when said aloud
4	Alliteration	The repetition of the same sound or letter at the beginning of words
5	Plosive	A harsh consonant sound (t, k, p, b, g, t)
6	Sibilance	The repetition of 's' sounds, e.g. sly, venomous serpent
7	Assonance	The repetition of vowel sounds, e.g. crumbling thunder
9	Juxtaposition	Two things placed closely together for contrasting effect
10	Oxymoron	A figure of speech where two contradictory words are placed together, e.g. 'friendly fire'
12	Ambiguity	A word or phrase with two possible meanings but it is unclear which is the correct one
13	Cliché	An overused phrase or saying
14	Hyperbole	Exaggeration
15	Irony	A use of words to mean something very different from what they appear to mean
16	Tone	The general feeling or mood of the poem
17	Symbolism	The use of symbols to represent bigger ideas / qualities
18	Motif	A recurring idea or symbol in a text
19	Pattern of language	Words used throughout a poem that are similar in meaning

Week 2 – Structure

B	Form and structure	
1	Rhyme	Repeated sounds, usually at the end of a line
2	Rhythm	A repeated or sequenced pattern of sound in a poem
3	Couplet	A pair of rhyming lines which follow placed together
4	Stanza	A group of lines separated from another in a poem
5	Enjambment	When a sentence runs from one line to next without punctuation at the end of the line
6	Caesura	A stop or pause in a line of poetry, usually caused by punctuation
7	Blank verse	Poetry written in non-rhyming, ten-syllable lines
8	Dramatic monologue	A poem in which an imagined speaker addresses the reader
9	Elegy	A form of poetry which is about the death of its subject
10	Quatrain	A four-line stanza
11	Sestet	A six-line stanza
12	Sonnet	A fourteen-line poem with a clear rhyme scheme, usually on the topic of love
13	Free verse	Non-rhyming, non-rhythmical poetry
14	Pathetic fallacy	When a character's feelings, thoughts or emotions are displayed through the environment around them, e.g. when a character is depressed and it is raining
15	Speaker/ persona	The person speaking in the poem (not the poet)
16	Protagonist	The main character in the poem
17	Volta	A turning point in the line of thought / argument of the poem
18	Shift	A change from one place or thing to another

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Week 3 – Themes

Conflict	Remains, Exposure, Charge of the Light Brigade, Bayonet Charge, War Photographer, Kamikaze, The Emigree,
Suffering	Remains, Exposure, Poppies, Charge of the Light Brigade, War Photographer
Reality of War	Remains, Exposure, Poppies, Charge of the Light Brigade, Bayonet Charge, War Photographer
Nature	Exposure, Bayonet Charge, Kamikaze
Patriotism	Exposure, Charge of the Light Brigade, Bayonet Charge, Kamikaze
Bravery	Poppies, Bayonet Charge, The Emigree
Childhood	Poppies, Kamikaze, The Emigree, Checking Out Me History, Extract from The Prelude
Power	Bayonet Charge, Kamikaze, The Emigree, Checking Out Me History, My Last Duchess, London
Shame	Kamikaze
Identity	The Emigree, Checking Out Me History, Tissue
Protest	The Emigree, Checking Out Me History
Power of Nature	Ozymandias, Tissue, Extract from The Prelude, Storm on the Island
Decay	Ozymandias
Pride	Ozymandias, My Last Duchess
Control	My Last Duchess, Tissue
Jealousy	My Last Duchess
Status	My Last Duchess
Fear	Extract from The Prelude, Storm on the Island
Inequality	London
Loss	London
Anger	London

Week 4 – Assessment Objectives

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?

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Week 5 – Ozymandias and Prelude

Ozymandias by Percy Bysshe Shelley

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

Content, Meaning and Purpose
-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.

Context
-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
-**'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.

Form and Structure
-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.

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'**.

Week 6 – My Last Duchess and Storm on the Island

My Last Duchess by Robert Browning

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

Content, Meaning and Purpose
-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.

Context
-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
-**'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.

Form and Structure
-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.

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.

Subject: English	Term: 1	Topic: Power poetry

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Week 7 – Tissue and London

Tissue by Imtiaz Dharker

Themes: Power of Nature, Control, Identity

Tones: Gentle, Flowing, Ethereal

Content, Meaning and Purpose

-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.

Context

-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

-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.

Form and Structure

-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.

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.

Subject: Maths 10(DAB) Higher	Term: 1	Topic: Equations and Inequalities

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Week 1: Quadratic Equations

There are several ways to solve a quadratic equation. You can **factorise** the equation, **complete the square**, or use the **quadratic formula**.

When you factorise an expression, you are looking for the **common factors** between terms, which allows you to re-write the expression in to brackets.
For example:

Solve $x^2 + 2x - 8 = 0$

$(x+4)(x-2) = 0$ — Factorise

So either $x + 4 = 0$ or $x - 2 = 0$ — The product of the factors is 0 so one or both factors equals 0

$x = -4$ or $x = 2$ — Solve the linear equations.

In order to complete the square, you need to re-write the equation in the format

$$y = \left(x + \frac{b}{2}\right)^2 - \left(\frac{b}{2}\right)^2 + c$$

Write $x^2 + 2x + 7$ in the form $(x+p)^2 + q$

$[x^2 + 2x] + 7$ — Separate the x terms from the constant.

$x^2 + 2x \equiv (x+1)^2 - 1$ — Find the perfect square which will give the correct x^2 and x terms, then subtract the constant to make the identity true.

So $[x^2 + 2x] + 7 = [(x+1)^2 - 1] + 7$ — Substitute the identity into the original expression.

$= (x+1)^2 + 6$ — Simplify the expression.

So $p = 1$ and $q = 6$ — Compare $(x+1)^2 + 6$ with $(x+p)^2 + q$ and write down the values.

The quadratic formula is: $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ where $y = ax^2 + bx + c$

Week 2: Simultaneous Equations

When we have an equation with two unknown values, we need to use two equations to help us find the answer. We call this solving **simultaneous equations**.

The word simultaneous means "at the same time", in other words, we are **solving to find the two unknowns at the same time.**

Worked examples:

Solve the simultaneous equations
$5x + 2y = 16$
$4x - 3y = -1$

① $5x + 2y = 16$ ① × 3: $15x + 6y = 48$ ③
② $4x - 3y = -1$ ② × 2: $8x - 6y = -2$ ④

Multiply equation ① by 3 and equation ② by 2 to make the coefficients of y equal.

③ + ④ $23x = 46$ — Add these equations to eliminate y.

$x = 2$

$10 + 2y = 16$ — Substitute $x = 2$ into equation ①

$2y = 6$

$y = 3$

Check: $4 \times 2 - 3 \times 3 = 8 - 9 = -1$ ✓ — Check your answers by substituting into equation ②

Subject: Maths 10(DAB) Higher	Term: 1	Topic: Equations and Inequalities

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Week 3: Solving linear and quadratic simultaneous equations

Using the method of solving equations simultaneously, we can also solve a quadratic equation and a linear equation at the same time.

Effectively, what we are **finding are the coordinates** for where the straight line graph and the quadratic graph **intersect**. Therefore, there will be two possible values for x and two possible values for y

Worked example:

Solve these simultaneous equations.

① $2x + y = 3$

② $x^2 + y = 6$

$y = 3 - 2x$ — Rearrange equation ① to make y the subject.

$x^2 + (3 - 2x) = 6$ — Substitute $y = 3 - 2x$ into equation ②

$x^2 - 2x + 3 = 6$

$x^2 - 2x - 3 = 0$ — Expand the bracket and rearrange so the right-hand side is 0.

$(x + 1)(x - 3) = 0$ — Solve the quadratic equation.

So either $(x + 1) = 0$ or $(x - 3) = 0$

$x = -1$ or $x = 3$

$2 \times (-1) + y = 3$ — Substitute $x = -1$ into equation ① to find one value of y.

$-2 + y = 3$

$y = 5$

$2 \times 3 + y = 3$ — Substitute $x = 3$ into equation ① to find the second value of y.

$6 + y = 3$

$y = -3$

So the solutions are $x = -1, y = 5$ and $x = 3, y = -3$

Week 4: Linear inequalities

If a solution could be a range of values, then we can use an **inequality** to express this. An inequality can be written using the symbols shown below. It can also be drawn on a number line or on a graph.

More than	Less than	More than or equal to	Less than or equal to
$x > \cdots$	$x < \ldots$	$x \geq \cdots$	$x \leq \ldots$

If we represent an inequality on a number line, then we use circles to represent the information. To show where we are considering values more (or equal to) or less than (or equal to), we can use an arrow pointing towards the direction of values that satisfy the inequality

More than or **Less than** — ○

More than or equal to or **Less than or equal to** — ●

We can solve an inequality to find the starting value in the same way that we would solve a linear equation. The only difference being is that we must make sure we use the correct inequality symbol when giving our final answer.

Key point: When you multiply or divide an inequality by a negative number, the sign inverses (swaps around)

You can write your answer in two ways.

Set notation

$\{x : x > 2\}$

the set of x such that

Algebraically

$x > 2$

Subject: Maths 10(DAB) Higher	Term: 1	Topic: Probability

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Week 5: Combined events and mutually exclusive events

Combined Events:

To calculate the probability of an event, we can use the formula:

$$probability = \frac{number\ of\ successful\ outcomes}{total\ number\ of\ possible\ outcomes}$$

A sample space diagram shows all of the possible combined outcomes of two events. For example: The sample space diagram below shows the possible scores when the outcome from a red and blue 5-sided spinner are added together

		Red spinner				
		1	2	3	4	5
Blue spinner	1	2	3	4	5	6
	2	3	4	5	6	7
	3	4	5	6	7	8
	4	5	6	7	8	9
	5	6	7	8	9	10

Mutually Exclusive Events:

Mutually exclusive events are **events that cannot occur at the same time**. For example, you cannot physically fully stand up and fully sit down at exactly the same time. The **probability of mutually exclusive events always sums to 1**.

Therefore: **P(A) + P(B) = 1**
And: **P(A or B) = (P(A) + P(B)**

Remember: probabilities can be written as a **decimal, fraction or percentage.**

Week 6: Experimental and Theoretical Probability

In a probability experiment, a trial is repeated many times and the outcomes are recorded.

The relative frequency of an outcome is called the **experimental probability**.

We can calculate the experimental probability of an outcome by:

$$\frac{frequency\ of\ outcome}{total\ number\ of\ trials}$$

Theoretical probability is calculated without doing an experiment. Essentially, what do we expect the probability to be should the experiment be fair.

Josh uses this spinner for a game.

a What is the theoretical probability that the spinner will land on the letter B?

Josh is going to spin this spinner 300 times.

b Estimate how many times the spinner will land on the letter B.

a $P(B) = \frac{2}{6}$

$= \frac{1}{3}$

Simplify fractions where possible.

b $\frac{1}{3} \times 300$

$= 100$ times

Expected number of outcomes = number of trials × probability

The more the experiment is carried out, the closer the experimental probability will get to the theoretical probability.

Subject: Maths 10(DAB) Higher	Term: 1	Topic: Probability

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Week 7: Tree diagrams

An **independent event** is when the probability of that event occurring is not affected by the other events. For example, flipping a heads on a coin has no affect on being able to roll a 6 on a dice.

To find the probability of two independent events occurring, we multiply their probabilities together. Therefore: **P(A and B) = P(A) x P(B)**

Conditional probability is when the outcome of the first event affects the possible outcome of the second event. For example, Selecting a red card from a pack of cards on the first pick will mean that there is one less red card in the pack of cards, which reduces the chances of another red being picked. Therefore the probability for the second pick will reduce by 1.

Worked example: Independent event

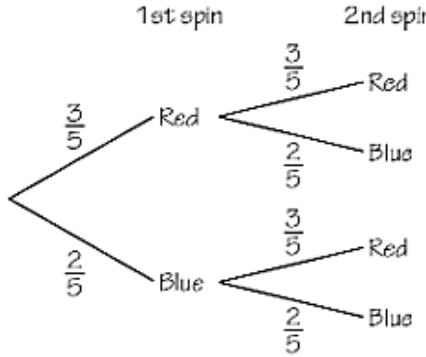
This fair five-sided spinner is spun twice.

a Draw a tree diagram to show the probabilities.

b What is the probability of both spins landing on red?

c What is the probability of landing on one red and one blue?

a



Write the probability on each branch of the diagram.

b $P(R, R) = \frac{3}{5} \times \frac{3}{5} = \frac{9}{25}$

Go along the branches for Red, Red. The 1st and 2nd spins are independent, so multiply the probabilities.

c $P(R, B) = \frac{3}{5} \times \frac{2}{5} = \frac{6}{25}$

$P(B, R) = \frac{2}{5} \times \frac{3}{5} = \frac{6}{25}$

Go along the branches for Red, Blue and Blue, Red.

$P(R, B \text{ or } B, R) = \frac{6}{25} + \frac{6}{25} = \frac{12}{25}$

The outcomes Red, Blue and Blue, Red are mutually exclusive, so add the probabilities of their outcomes.

Worked example: Dependent events (conditional probability)

There are 10 pencils in Toby's pencil case.

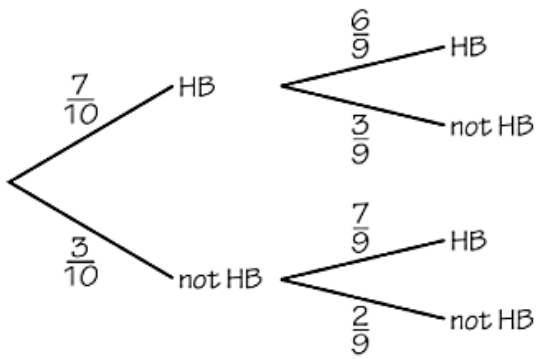
Seven of the pencils are HB pencils.

Toby takes two pencils out of his pencil case.

a Draw a tree diagram to show all the possible outcomes.

b Work out the probability that he picks out at least one HB pencil.

a



Taking two pencils from the pencil case at the same time is the same as taking one pencil, then another (without replacement).

b $P(\text{at least 1 HB}) = 1 - P(\text{no HB})$

$P(\text{not HB, not HB}) = \frac{3}{10} \times \frac{2}{9} = \frac{6}{90} = \frac{1}{15}$

$P(\text{at least 1 HB}) = 1 - \frac{1}{15} = \frac{14}{15}$

You don't need to simplify probability fractions, but sometimes it makes calculations easier.

Subject: Maths 10 Foundation	Term: 1	Topic: Graphs

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Week 1: Coordinates

A **coordinate** is made up of two values. The first number represents how far along the x-axis you should travel. The second number represents how far up or down you need to travel on the y axis.

For example: The coordinate (3, 4) means that we should travel…

3 in the **horizontal** direction to the right
and
4 in the **vertical** direction, upwards

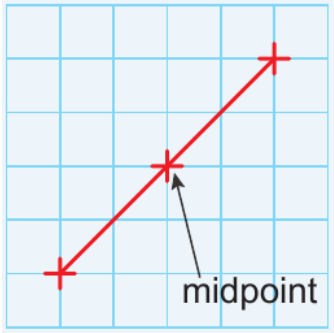
horizontal

vertical

For the x value:
If it is **positive**, you move to the **right**
If it is **negative**, you move to the **left**

For the y value:
If it is **positive**, you move **up**
If it is **negative**, you move **down**

The **midpoint** of a **line segment** is exactly in the middle
- A **line segment** is a line on a graph that has a start and end point



Worked example: Find the midpoint of the line segment with coordinates (3,2) and (7,9)

$$\frac{(3+7)}{2} = 5$$ x- coordinate

$$\frac{(2+9)}{2} = 5.5$$ y- coordinate

Midpoint = (5, 5.5)

Week 2: Linear Graphs

A **linear graph** is a straight line graph. We can plot a linear graph on to a coordinate grid using a table of values to find sets of coordinates that will fall on the line.

For example:
To plot the graph, $y = 3x + 2$, we can set up a table of values, as shown below

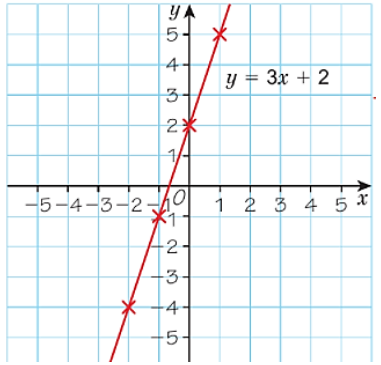
x	−2	−1	0	1
$y = 3x + 2$	−4	−1	2	5

This shows us that when the x coordinate is – 2, the y coordinate will be -4.

To work this out, we can use a **function machine**.
If -2 is the input, then…

Input -2 → x 3 → + 2 → output -4

Once our table of values is complete, we can plot the **coordinates** on to a grid.
Lastly, connect the coordinate marks to form a straight line.



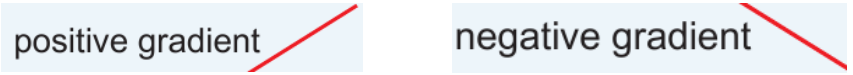
Subject: Maths 10 Foundation	Term: 1	Topic: Graphs

WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

Week 3: Gradient

The **gradient** of a line explains how steep the line is. A line can have a **positive gradient** or **negative gradient**.



To work out the gradient of a line, we can consider **"how many units up do we move for every <u>one unit across</u>"**

We can also calculate the gradient by considering:

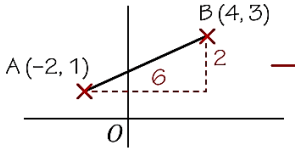
$$\frac{total\ distance\ up}{total\ distance\ across}$$

Or we can use the formula:

$$\frac{y_2 - y_1}{x_1 - x_2}$$

Worked example:

Find the gradient of the line joining the points A (−2, 1) and B (4, 3).



Sketch a diagram. Draw in lines across and up. Work out the distances across and up.

$$\text{Gradient} = \frac{\text{total distance up}}{\text{total distance across}} = \frac{2}{6} = \frac{1}{3}$$

Week 4: y = mx + c

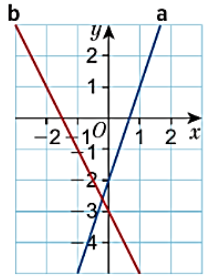
A linear equation can always be written in the form $y = mx + c$

The **m** refers to the **gradient** of the line.
The **c** refers to where the graph crosses the y axis. We call this the **y-intercept**

If m is positive, then the gradient will be positive. If m is negative, then the gradient of the line will be negative.

Worked example:

Write the equation of each line.



a $y = mx + c$

$m = 3$ — Work out the gradient, m.

$c = -2$ — The line crosses the y-axis at −2.

Equation of line is $y = 3x - 2$ — Substitute $m = 3$ and $c = -2$ into $y = mx + c$

b $y = mx + c$

$m = -2$ — This line slopes down so its gradient is negative.

$c = -3$

Equation of line is $y = -2x - 3$

Subject: Maths 10 Foundation	Term: 1	Topic: Graphs Transformations

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Week 5: Distance – time graphs

A **distance-time graph** represents a journey. The **vertical axis** represents the **distance** from the starting point. The **horizontal axis** represents the **time taken**.

To calculate the average speed, we can use the formula:

$$\text{Average speed} = \frac{\text{distance travelled}}{\text{time taken}}$$

On a distance-time graph, the **gradient** represents the **speed of the journey.**

A **rate of change graph** shows how a **quantity changes over time**. The **gradient on a velocity – time graph** represents the **acceleration**

Worked Example:

Jenny walks 500 metres in 5 minutes, then arrives at the bus stop.
She waits 5 minutes for the bus.
She travels 3000 metres on the bus and gets off 16 minutes after she left home.

a Draw a distance–time graph for her journey.

b Work out the average speed in km/h of Jenny's walk.

a

After 16 minutes she has travelled 500 + 3000 m. Plot the point (16, 3500) and join your points with straight lines.

After 5 minutes she has travelled 500 m. Plot the point (5, 500).

After 10 minutes she has still only travelled 500 m. Plot the point (10, 500).

b Jenny walks 500 m in 5 minutes.

×12 (5 min → 60 min) 500 m → 6000 m ×12

6000 m = 6 km

Average walking speed = 6 km/h

Week 6: Translation

A **translation** allows you to **move a shape around a coordinate grid**. The direction of the shape and the size of the shape does not change, only its position on the grid.

To describe a translation…
We can use words, for example: The shape has moved 2 spaces to the right and 3 spaces up

Or, we can use a **column vector**.

The **first number** describes the movement in the **horizontal direction**. The **second number** describes the movement in the **vertical direction**.

For example:

$\begin{pmatrix} 3 \\ 4 \end{pmatrix}$ tells us that we should move 3 to the right and 4 spaces up

$\begin{pmatrix} -4 \\ 6 \end{pmatrix}$ tells us that we should move 4 to the left and 6 spaces up

$\begin{pmatrix} 2 \\ -5 \end{pmatrix}$ tells us that we should move 2 to the right and 5 spaces down

When translating a shape, you should choose a **vertex** at a time and apply the transformation. Then you should join up the **vertices** for form the new shape.

A **vertex** is a corner, and the plural for vertex is **vertices**.

Subject: Maths 10 Foundation	Term: 1	Topic: Transformations

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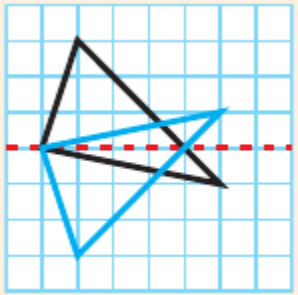
Week 7: Reflection

A **refection** is when a shape appears on the **opposite side of a line of reflection**. You can also think of the line of reflection as a **mirror line**. This means that the new vertices will be on the opposite side of the mirror line.



Where are reflections used in real life?

Scientists and engineers use reflection to measure distance. Telescopes, radar and X-ray machines also use reflections to construct maps and pictures

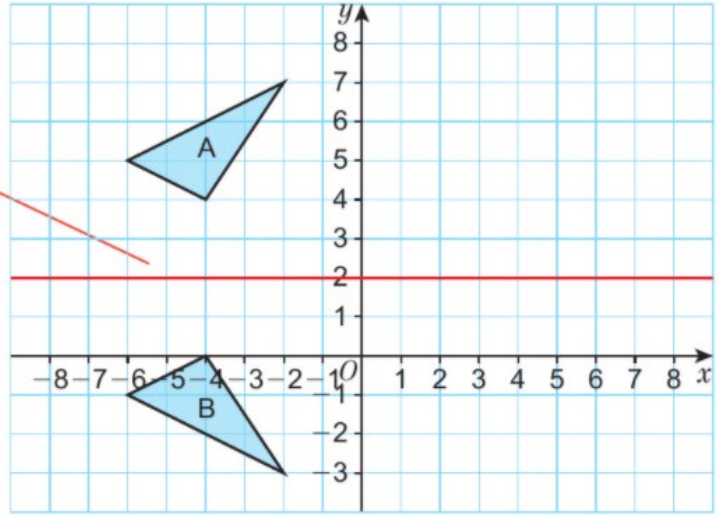
When describing a reflection, you need to make sure you find the equation of the mirror line.
Worked Example:

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 $y = 2$.



Subject: Trilogy Science	Term: 1	Topic: Photosynthesis

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Week 1-2

Photosynthesis

Photosynthesis is the process by which plants make food. Photosynthesis occurs in chloroplasts which contain a green substance called chlorophyll. It is an **endothermic** reaction and needs an input of energy from the environment. This energy comes from sunlight:

$$Carbon\ dioxide + water \xrightarrow{light} glucose + oxygen$$

$$6CO_2 + 6H_2O \xrightarrow{light} C_6H_{12}O_6 + 6O_2$$

Producing oxygen

You can show that a plant is photosynthesising by the oxygen gas it gives off as a by-product. Oxygen is a colourless gas, so in land plants it isn't easy to show that it is being produced. However, if you use water plants such as *Cabomba* or *Elodea*, you can see and collect the bubbles of gas they give off when they are photosynthesising. The gas will relight a glowing splint, showing that it is rich in oxygen.

Figure 1 *The oxygen produced during photosynthesis is vital for life on Earth. You can demonstrate that it is produced using water plants such as this Cabomba*

Leaf adaptations to make them good at photosynthesis:

- Most are broad to give them a large surface area
- Most are thing so diffusion distances are shorter
- They contain chlorophyll in the chloroplasts to absorb light
- They have veins, which bring water in the xylem to the cells of the leaves and remove products of photosynthesis in the phloem
- They have air spaces that allow carbon dioxide to get to the cells, and oxygen to leave by diffusion
- Guard cells that open and close the stomata to regulate gas exchange

.

Rate of photosynthesis

Plants need light, warmth, and carbon dioxide if they are going to photosynthesise. Sometimes any one or more of these things can be in short supply and limit the amount of photosynthesis a plant can manage. This is why they are known as limiting factors.

- **Light** - No light = no photosynthesis
- **Temperature –** too how or cold the enzymes used for photosynthesis are denatured
- **Carbon dioxide –** No carbon dioxide = no photosynthesis

If the amount of chlorophyll in a leaf is limited in any way, less photosynthesis will take place.

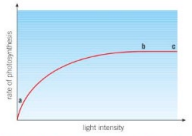
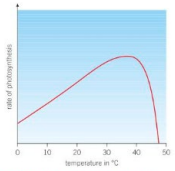


Figure 1 *Investigating the effect of light intensity on the rate of photosynthesis*



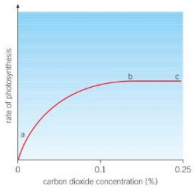


Figure 2 *The effect of increasing temperature on the rate of photosynthesis*

How plants use glucose.

Plants produce glucose as a product of photosynthesis. They can build up the glucose to make complex carbohydrates such as cellulose to strengthen their cell walls. Some glucose can be converted to starch so that it can be stored.

Starch present in a leaf or plant is evidence of photosynthesis. You can test a leaf for starch using the iodine solution test.

Glucose can be used to make amino acids. These are built into proteins including enzymes. The glucose is also used to build up fats and oils. These may be used in the cells as an energy store in the plant and in their seeds. Seeds then provide food for the new plant to respire as it germinates.

Making the most of photosynthesis

The more a plant photosynthesises, the more biomass it makes and the faster it grows. In theory, if you give plants a warm environment with plenty of light and carbon dioxide, and water, they should grow as fast as possible. Out in the fields it is almost impossible to manipulate any of these factors, but we have found ways to artificially manipulate the environment of plants. For example the garden greenhouse.

Subject: Science	Term: 1	Topic: Respiration and the metabolism

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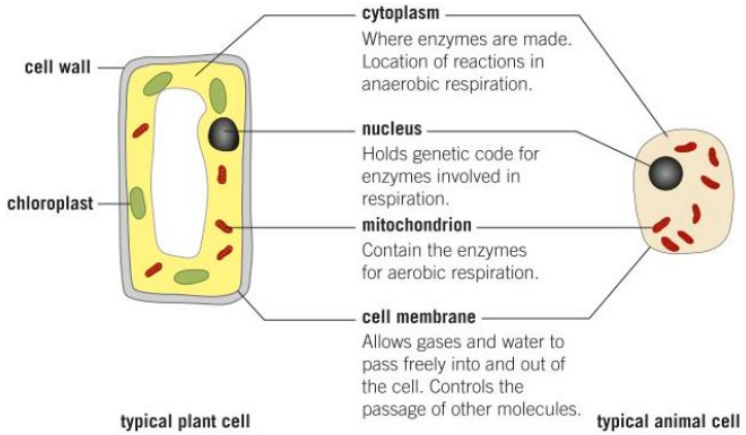
Week 3

Aerobic respiration

Aerobic respiration is when glucose reacts with oxygen. This reaction transfers energy that your cells can use. It is an **exothermic reaction** because energy is released into its surroundings.



$$Glucose + oxygen \rightarrow carbon\ dioxide + water\ (+\ energy)$$

$$C_6H_{12}O_6 + 6O_2 \rightarrow CO_2 + 6H_2O\ (+\ \text{energy})$$

Respiration occurs in the mitochondria in cells. They are tiny rod-shaped organelles found in plant an animal cells.

The response to exercise

Your muscles store glucose as the carbohydrate **glycogen**. This can be converted rapidly back into glucose when exercising. The glucose is used in aerobic respiration. During exercise:

- Heart rate increases to pump more oxygenated blood around the body to the muscles
- Breathing rate increases to allow more oxygen to diffuse into the red blood cells and waste products from the muscles to be removed.
- Glycogen stored in the muscles is converted back to glucose, to supply the cells with the fuel they need for increased cellular respiration.

Anaerobic respiration

Even though we breathe heavily and heart rate increases, sometimes we cannot get enough oxygen. This is called **anaerobic** respiration:

$$Glucose \rightarrow Lactic\ acid\ (+\ energy)$$

If anaerobic respiration occurs for too long the muscles become tired and fatigued and lactic acid builds up. This causes oxygen debt. The lactic acid that builds up needs to broken down by providing oxygen:

$$Lactic\ acid + oxygen \rightarrow carbon\ dioxide + water$$

This process can also be used in organisms for fermentation:

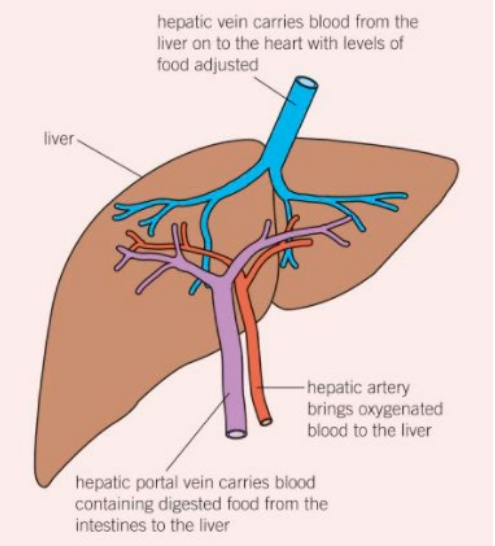
$$Glucose \rightarrow ethanol + carbon\ dioxide\ (+energy)$$

Metabolism and the liver

Metabolism is the sum of all reactions that take place in the cell or in the body. Here are some of the most common metabolic reactions:

- Conversion of glucose to starch
- Formation of lipid molecules
- Use of glucose and nitrate ions to form amino acids
- Reactions of respiration
- Reactions of photosynthesis
- Breakdown of excess proteins in the liver to form urea

The liver is used to detoxify poisonous substances such as ethanol, passing the breakdown products into the blood and breaking down old, worn out blood cells.



Subject: Science	Term: 1	Topic: Electrolysis and energy changes

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Week 4-5

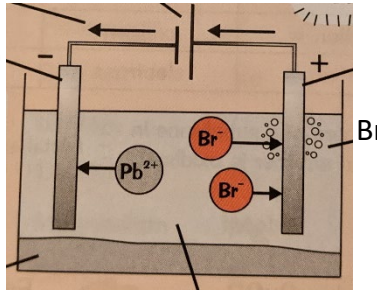
Electrolysis

Flow of electrons

d.c. power supply

Cathode (negative electrode)

Anode (positive electrode)



Positive metal (Pb^{2+}) ions move towards the cathode and are reduced.

$Pb^{2+} + 2e^- \rightarrow Pb$

Bromine gas is given off

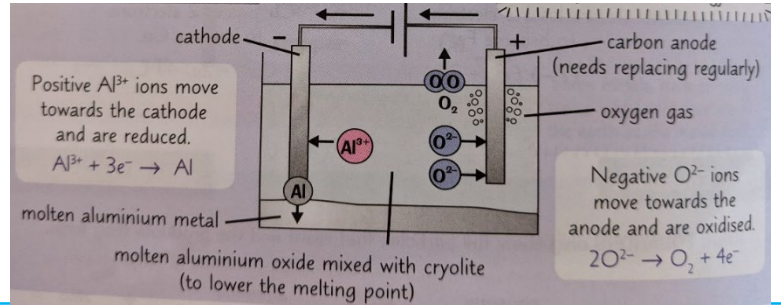
Negative non-metal (Br^-) ions move towards the anode and are oxidised.

$2Br^- \rightarrow Br_2 + 2e^-$

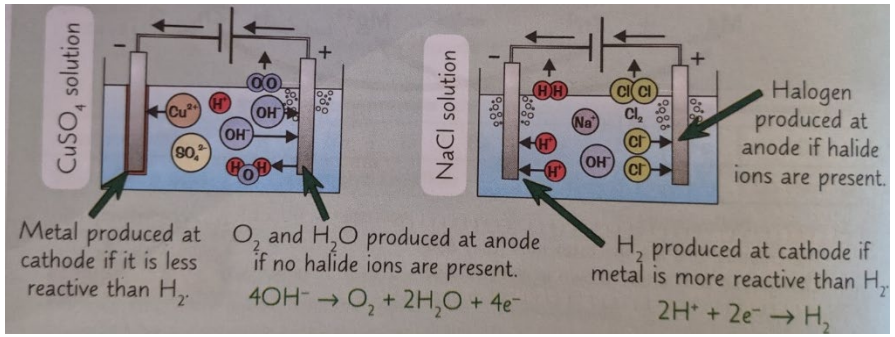
Molten lead metal sinks to the bottom

Molten lead bromide electrolyte

Extraction of aluminium



Electrolysis of aqueous ionic compounds



Week 6-8

Exothermic and endothermic reactions

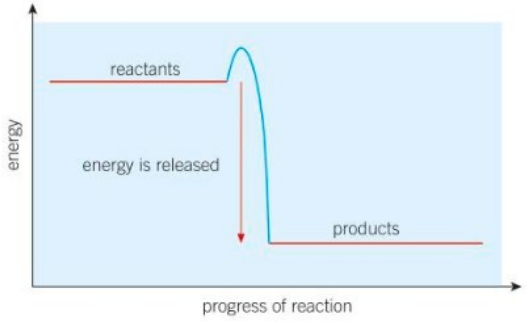
Many reactions transfer energy from the reacting chemicals to their surroundings. These are called **exothermic reactions.** The energy transferred from the reacting chemicals often heats up the surroundings. So you would see a **rise** in temperature, e.g. burning fuel.

Other reactions transfer energy from the surroundings to the reacting chemicals. These are called **endothermic** reactions as they take in energy from there surroundings and so we see a **decrease** in temperature, e.g. thermal decomposition.

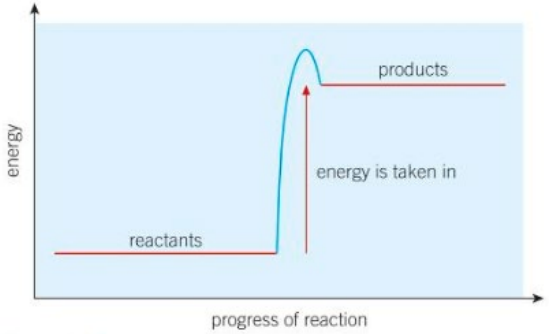
Reaction profiles

Reaction profiles show what is happening in a particular reactions. It tells us the amount of energy contained in the reactants and the products, measured in **kilojoules per mole (kJ/mol).**

The reaction profile for an exothermic reaction:



The reaction profile for an endothermic reaction:



Activation energy is the minimum amount of energy needed before colliding particles of reactants have enough energy to cause a reaction.

Subject: Geography	Term: 1	Topic: Rivers Y10

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Week 1- The middle course of a river

Landforms in the middle course of a river

The middle course of a river has more energy and volume than in the upper course. The gradient is gentler and more lateral (sideways) erosion widens the channel. The river channel has also become deeper. Meanders are typical landforms found in this stage of the river.

Meanders and Oxbow Lakes

A meander is a winding curve or bend in a river. They are typically found in the middle and lower course of a river. This is because vertical erosion is replaced by a sideways form of erosion called lateral erosion, plus deposition within the floodplain.

How are meanders formed?

Erosion, transportation and deposition are all processes that create the characteristic features of meanders shown in the images above. There are several stages involved in the creation of meanders and oxbow lakes.

Stage 1

In low flow conditions, straight river channels have bars of sediment on their beds. Flowing water weaves around these bars of sediment. This creates deeper pathways where most of the water flows called pools and shallow areas where less water flows called riffles. This causes the river flow to swing from side to side.

Week 1- The middle course of a river

Stage 2

Where the river swings toward the bank lateral (sideways) erosion causes undercutting. On the opposite side of the channel where the velocity (speed of the flow of water) is lower material is deposited. Therefore the river does not get any wider.

Stage 3

Continued erosion along the outer bank, as the result of hydraulic action and abrasion, creates a river cliff. A point bar forms on the inner bank. This is a gently sloping deposit of sand, gravel and pebbles. The image below shows a point bar.

Meanders are perpetuated through a process called helicoidal flow. As the surface flow of water hits the outer bank it corkscrews, flows along the river bed then deposits eroded material on the inner bank.

Step 4

Eventually, the neck of the meander will be breached by the river creating an ox-bow lake. The map to the right shows a meander in the River Derwent, North Yorkshire that has been recently breached.

Subject: Geography	Term: 1	Topic: Rivers Y10

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Week 2- Landforms on the lower course of the river

The volume of water in a river is at its greatest in the lower course. This is due to the contribution of water from tributaries. The river channel is deep and wide and the land around the river is flat. Energy in the river is at its lowest and deposition occurs.

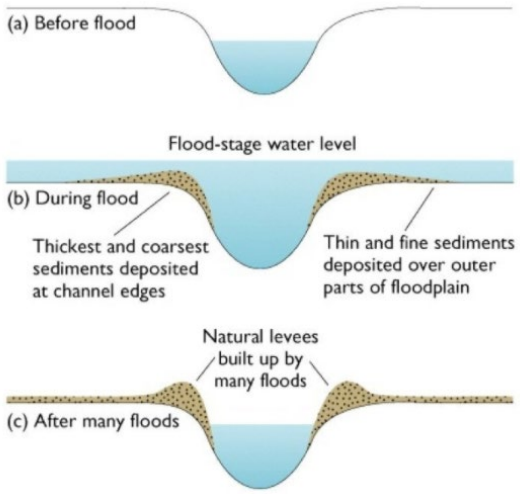
Flood Plain

Rivers flood on a regular basis. The area over which they flood is known as the floodplain, and this often coincides with regions where meanders form. Meanders support the formation of floodplains through lateral (sideways) erosion.

When rivers flood the velocity of water slows. As a result of this, the river's capacity to transport material is reduced and deposition occurs. This deposition leaves a layer of sediment across the whole floodplain. After a series of floods layers of sediment form along the flood plain.

Levee

When a river floods more substantial material and the majority of deposition occurs next to the river channel as the result of increased friction (with the flood plain). The velocity of the river slows and therefore rapidly reduce its ability to transport material. This leaves a ridge of higher material next to the river channel on both banks of the river known as a levee.



Week 2- Landforms on the lower course of the river

Estuary

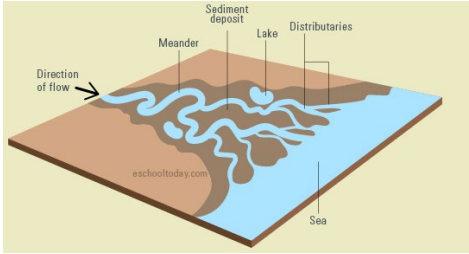
An estuary is a wide, sheltered body of water found at a river's mouth where it broadens into the sea. It is a combination of salt water from the sea and fresh water from a river. As the river meets the sea at high tide, it slows the flow of water leading to deposition. Mudflats and saltmarsh form in these areas. The mudflats can be seen at low tide but are covered by water at high tide. Over time, the mud flats can become colonised with vegetation forming salt marshes.

Deltas

Deltas are often found at the mouth of large rivers. An example is the Nile Delta. Deltas are formed when a river deposits material faster than the sea can erode it.

Deltas are formed in the following way:

1. Rivers typically contain their highest sediment loads near their mouth, where they meet seas and oceans. As the river enters a body of water its velocity drops
2. This causes sediment to be deposited, as does flocculation occurs, where clay sediments join together, gain in mass and sink.
4. Over time sediment builds up. This can create small islands that split the channel into smaller rivers called distributaries



Subject: Geography	Term: 1	Topic: Rivers Y10

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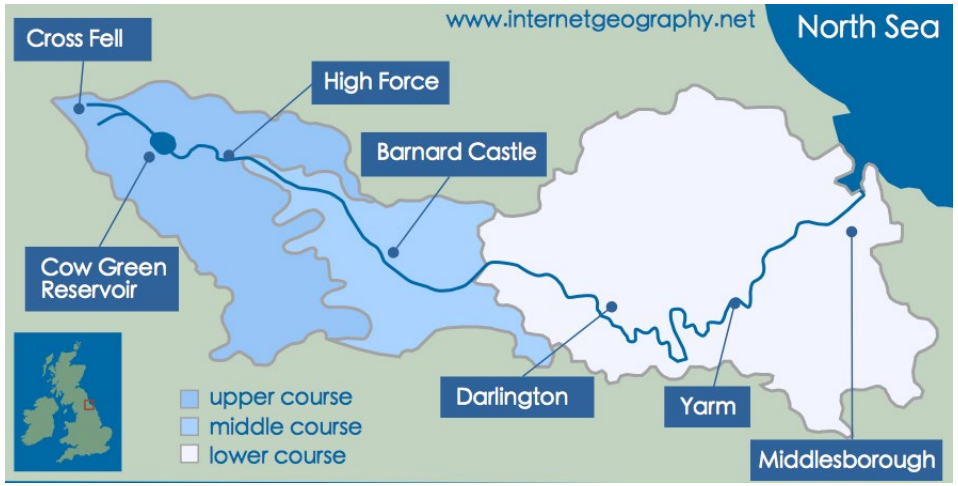
Week 3- The River Tees x=case study

The River Tees is located in the north of England. It flows east from its source in the Pennines to its mouth, on the North Sea coast.



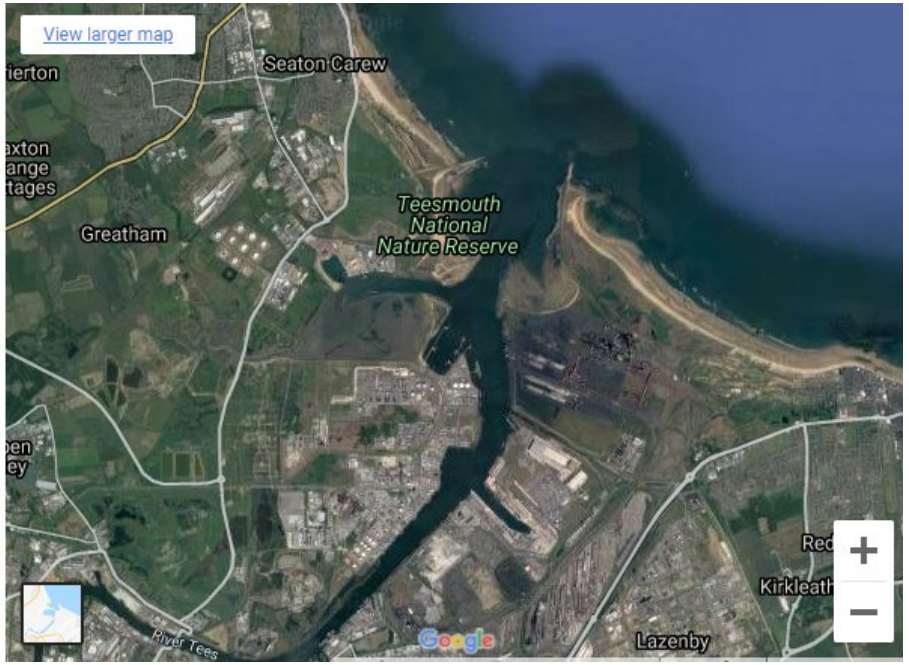
n its upper course, the River Tees flows over hard, impermeable rocks. Vertical erosion has formed classic V-shaped valleys. The image below shows interlocking spurs close to Cauldron Snout.

The UK's largest waterfall, High Force, is located in the upper course of the River Tees. An area of hard rock, called Whin Sill (or Whinstone), is located above a layer of soft rocks (sandstone and shale) and together they create the waterfall.

Week 3- The River Tees case study

As the River Tees reaches its middle course lateral erosion overtakes vertical erosion and is evidenced by winding meanders. Meanders in the lower course are much larger. Oxbow lakes have formed in some areas. Evidence of past flooding can be seen in the natural levees that have formed.

In the lower course, The River Tees has a large estuary with mudflats and sandbanks



Subject: Geography	Term: 1	Topic: Rivers Y10

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Week 4- River floods

Floods can bring both advantages and disadvantages to an area. Floods can deposit rich, fertile alluvium in agricultural areas. On the other hand, floods can destroy food supplies, homes and transport infrastructures.

Causes of flooding

- **Human causes:**
  Deforestation – Cutting down trees causes increased run-off (water flowing over the surface of the earth). Rainwater reaches rivers faster. Flooding becomes more likely.
- Urbanisation – Man-made surfaces such as concrete result in greater run-off. Rainwater reaches rivers faster and can cause flooding.
- **Natural causes:**
- Heavy rainfall
- Melting snow

Effects of flooding

Social impacts can include:

- damage to property
- injury or loss of life

. **Economic impacts of flooding include:**

- cost of repairs
- reduced tourism
- Finally, flooding can have an impact on the surrounding landscape.
  Environmental impacts of flooding can include:
- loss of livestock
- loss of habitats
- destruction of crops

Week 5- Managing river floods

MANAGING FLOODING – HARD ENGINEERING

Dams

Although very expensive, dams can significantly reduce the risk of flooding downstream

Levees

These are man-made embankments constructed along the edge of the river. They increase the capacity of the channel to prevent the overflow of water.

Flood Defence Barriers

Similar to levees, only constructed from man-made materials flood defence barriers increase the channel size of a river which prevents the overflow of water.

MANAGING FLOODING – SOFT ENGINEERING

Afforestation

Planting more trees reduces run-off and increases interception.

Flood Plain Zoning

Floodplain zoning policies influence how land on, or close to, floodplains are used.

River restoration

This involves removing any hard-engineering strategies and restoring the river to its original course. This can involve making the river less straight which can slow the flow of the river.

Subject: Geography	Term: 1	Topic: Rivers Y10

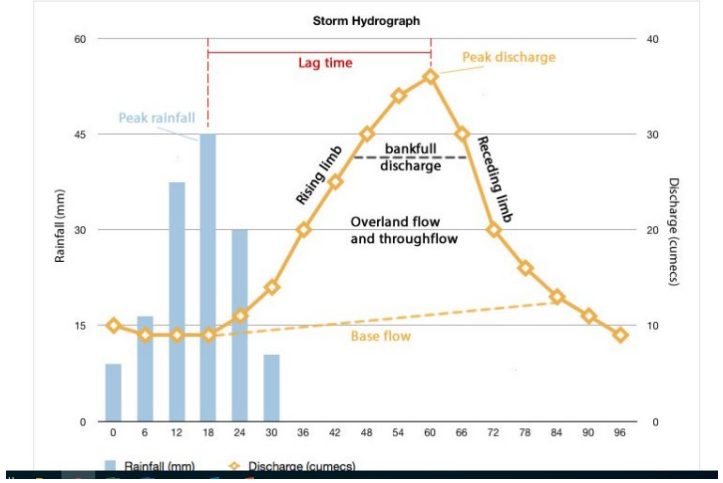
[redacted]

Week 6 and 7- Flood hydrographs

WHAT IS A HYDROGRAPH?

Hydrographs illustrate river discharge and rainfall over time. These can be used to show annual discharge patterns of flow in relation to climate. Over the short term, a flood or storm hydrograph (figure 1.) can be used to show short term variations in discharge and rainfall. They cover a relatively short time period, usually hours or days rather than weeks or months. Storm hydrographs allow us to investigate the relationship between a rainfall event and discharge.

A flood hydrograph shows the amount of rainfall in an area and the discharge of a river. The discharge of a river is the volume of water passing a point each second. It is expressed in cumecs (cubic metres per second). River discharge is displayed as a line graph. Precipitation is shown as a bar graph and is usually displayed in millimetres.



Week 6 and 7- flood hydrographs

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

[redacted]

How to read a flood hydrograph

The starting and finishing level show the base flow of a river. The base flow is the water that reaches the channel through slow throughflow and permeable rock below the water table.

As storm water enters the drainage basin the discharge rates increase. This is shown in the rising limb. The highest flow in the channel is known as the peak discharge. The fall in discharge back to base level is shown in the preceding limb. The lag time is the delay between the maximum rainfall amount and the peak discharge.

The shape of a hydrograph varies in each river basin and each individual storm event.

Flood hydrographs can be used to predict flooding by showing how different levels of precipitation affect a river during a storm.

Hydrographs can be different shapes. The characteristics of the river and how likely it is to flood affects its shape.

A gentle hydrograph shows the river is at low risk of flooding. These types of hydrograph have a gentle rising limb and a long lag time which means it takes longer for the peak rainfall to reach the river channel, so the river discharge is increasing slowly.

Flashy hydrographs have a steep rising limb and a small lag time. This indicates the river discharge increases rapidly over a short period of time, indicating rainwater reaches the river very quickly. This means the river is more likely to flood.

Subject: Y10 History	Term: 1	Topic: Migration, Empires and the People

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Week 1 – 4 Viking Invasion

Key Content

- The Vikings **invaded Britain in the 790s** (AD). They began by invading monasteries and villages in the north. Later they sailed up rivers and attacked further inland.
- They attacked Britain because of its **wealth, farming opportunities, religious freedom** and **inheritance opportunities**.
- **871 AD Alfred the Great** becomes king. He fought the Vikings and helped bring peace to the country.
- **876 AD, the Vikings tried to attack Wessex**. Alfred and his army go into hiding. 878 AD, Alfred beat the Vikings at the **Battle of Edington** – they both agree peace terms. **Danelaw** is created, meaning Vikings like in the north and east.
- After Alfred's death, his descendants recaptures parts of Danelaw, but Viking presence remained.
- **Edgar the Peaceful** (Alfred's great-grandson) become king in 959 and continues to keep the country peaceful.
- **Aethelred becomes king in 978**, he was considered a poor judge of character and was ill-advised. In **991, the Great Heathern Army (Vikings) invade**, Aethelred paid the Vikings to leave (**Dangeld**) but this becomes expensive so a mass killing of Vikings perused (**St Brice's Day Massacre**).
- **1016 Cnut becomes king.** Cnut added Britain to his **North Sea Empire** (Denmark, Norway and Sweden.) **Cnut married Emma of Normandy** (widow of Aethelred) – this helped Cnut forge the old way in England. She also brought lads to her marriage. Emma was a **strong leader** who was respected, she improved relations with the church, and was financially smart.

Key Questions:

-Why did the Vikings invade Britain?
-Why was Alfred so 'great'?
-How did the Vikings attempt to gain control?
-How did the Anglo-Saxons respond to Viking invasions?

Week 5-7 A Norman Kingdom

Key Content

- **Edward became King of England in 1042** after his half-brother (Cnut's son) died. Edward had strong links with the Normans, so when he died in 1066 there was a rush to the throne.
- **William Duke of Normandy**, **Harold Godwinson** and **Harald Hardrada** all wanted to be the next king. **Godwinson was elected by the Witan**.
- Hardrada invaded and fought Godwinson at the **Battle of Stamford Bridge** in September 1066, Godwinson won.
- William Duke of Normandy invaded in October 1066 and fought Godwinson at the **Battle of Hastings**, the Normans won. This made **Britain a Norman kingdom**.
- When William died in 1087, the Norman Kingdom was divided between his two sons. His son **Henry soon became Henry I of England and Duke of Normandy.**

Key Questions:

-Why was there a fight for the throne?
-What claims did William, Harold and Harald all have to the English throne?
-How did England change under the Normans?
-How did the Normans keep control after William's death?

Subject: History	Term: 1 and 2 Year 10	Topic: Conflict and Tension: Interwar: The Road to War (KQ3)

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Week 1-3

Key question 1: What were the Nazi aims on the road to war?

Hitler's aims were largely
- Overturning the **Treaty of Versailles**
- **Rearming** Germany to make it strong again and create jobs
- **Lebensraum**, living space in the east
- Uniting **Volksdeutsche and creating a Greater Germany**
- Uniting Germany and Austria in the **Anschluss**
- Destroying **communism**

These aims created a road to war, which started on the 1st September 1939.

Key question 2: What were Hitler's steps between 1936 and 1939?

The Nazis systematically broke several aspects of the Treaty of Versailles:

1th March 1936: **Reoccupation of the Rhineland** (Hitler sent troops into the Rhineland, which had been demilitarised since the Treaty of Versailles. The was a gamble as the allies might stop him – it paid off as they did not!

March 1938: **Anschluss with Austria**: Hitler always wanted to unite with Austria and made an attempt to do so in 1934, which failed. The Anschluss was successful in 1938, first by staging demonstrations against the government, later by moving troops into the area.

May- September 1938: Hitler wanted to take over the **Sudentenland** of Czechoslovakia, an area with many ethnic Germans. Again, the Nazis got Czech Nazis to stage a protest against the government. In an attempt to avoid war, Hitler was given the area in the **Munich Agreement** if he promised not to invade the rest of the country.

Week 4-6

Key question 3: How did the allies react?

The allies followed the policy of **appeasement,** which meant giving Hitler a little of what he wanted in the hope that this would avoid war. **Neville Chamberlain**, British Prime Minister, flew to Germany three times to find a solution with Hitler to the Czech crisis. He thought he had brought about **'Peace in our time'.** France would have gone to war over Hitler breaking the Treaty of Versailles, but Britain was reluctant. There are many reasons for and against appeasement and whether it was the correct policy.

Key question 4: What finally caused the outbreak of World War 2?

It soon became apparent that Hitler had no intentions of sticking to the Munich Agreement. Several events marked the increase in aggression and ultimately the road to war:

August 1939: **Nazi – Soviet Pact** between Hitler and Stalin
1st September 1939: **The Invasion of Poland and the declaration of war**

Further reading and research:

https://www.bbc.co.uk/bitesize/guides/z9s9q6f/revision/1
https://www.bbc.co.uk/bitesize/topics/zfd82hv
https://www.bbc.co.uk/bitesize/guides/z92hw6f/revision/1
https://www.bbc.co.uk/bitesize/guides/znxdnrd/revision/1

Subject: Spanish (Y10)	Terms: 1&2	Topic: Viva AQA **GCSE**; Módulo 4: *Intereses e Influencias* **Theme 1- Identity and Culture**

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Term 1 Week 1 & 2 -

- Talking about free times hobbies and activities
- Developing different opinions and reasons
- Using stem changing verbs

This is CORE vocabulary for this topic.

Mis ratos libres	My free time
las actividades de ocio	*leisure activities*
Tengo muchos pasatiempos.	*I have lots of hobbies.*
A la hora de comer…	*At lunchtime…*
Cuando tengo tiempo…	*When I have time…*
Después del insti…	*After school…*
Los fines de semana…	*At weekends…*
Mientras desayuno / como…	*Whilst I have breakfast / lunch…*
juego al billar / futbolín	*I play billiards / table football*
monto en bici / monopatín	*I ride my bike / I skateboard*
quedo con mis amigos	*I meet up with friends*
voy de compras	*I go shopping*
mi pasión es la música / la lectura	*my passion is music / reading*
hacer deporte	*do sport*
ir al cine	*go to the cinema*
leer libros / revistas / periódicos	*read books / magazines / newspapers*
salir con amigos	*go out with friends*
usar el ordenador	*use the computer*
ver la tele	*watch TV*
Es divertido / relajante / sano	*It's fun / relaxing / healthy*
Soy creativo/a / perezoso/a / sociable	*I'm creative / lazy / sociable*
Soy adicto/a a…	*I'm addicted to…*
me ayuda a relajarme	*it helps me to relax*
me ayuda a olvidarme de todo	*it helps me to forget everything*

- Changing the tense to talk about past and present activities
- Developing work to talk about what other people do
- Giving opinions, using adjectives and using a range of vocab

El deporte	Sport
Soy / Era…	*I am / I used to be…*
(bastante / muy) deportista	*(quite / very) sporty*
miembro de un club / un equipo	*a member of a club / a team*
aficionado/a / hincha de…	*a fan of…*
un(a) fanático/a de…	*a … fanatic*
juego al…	*I play…*
jugué al…	*I played…*
jugaba al…	*I used to play…*
bádminton / baloncesto	*badminton / basketball*
béisbol / balonmano	*baseball / handball*
críquet / fútbol	*cricket / football*
hockey / ping-pong	*hockey / table tennis*
rugby / tenis / voleibol	*rugby / tennis / volleyball*

This is CORE vocabulary for this topic.

hago…	*I do…*
hice…	*I did…*
hacía…	*I used to do…*
baile / boxeo / ciclismo	*dancing / boxing / cycling*
deportes acuáticos	*water sports*
equitación / escalada	*horseriding / climbing*
gimnasia / judo	*gymnastics / judo*
kárate / natación	*karate / swimming*
patinaje sobre hielo	*ice skating*
piragüismo / remo	*canoeing / rowing*

https://quizlet.com/275356063/spanish-gcse-module-4-flash-cards/

Term 1 Week 3 & 4 -

- Talking about different films and TV programmes
- Expanding to vary adjectives and linking to nationalities

This is CORE vocabulary for this topic.

La tele	TV
(No) Soy teleadicto/a.	*I'm (not) a TV addict.*
Mi programa favorito es…	*My favourite programme is…*
un concurso	*a game / quiz show*
un programa de deportes	*a sports programme*
un reality	*a reality TV show*
un documental	*a documentary*
un culebrón / una telenovela	*a soap*
una comedia	*a comedy*
una serie policíaca	*a crime series*
el telediario / las noticias	*the news*
Me gustan las comedias.	*I like comedies.*

Es / Son…	*It is / They are…*
aburrido/a/os/as	*boring*
adictivo/a/os/as	*addictive*
divertido/a/os/as	*fun*
entretenido/a/os/as	*entertaining*
tonto/a/os/as	*silly*
informativo/a/os/as	*informative*
malo/a/os/as	*bad*
emocionante(s)	*exciting*
interesante(s)	*interesting*

Las películas	Films
un misterio	*a mystery*
una película de amor	*a love film*
una película de terror	*a horror film*
una película de acción	*an action film*
una película de aventuras	*an adventure film*
una película de animación	*an animated film*
una película de ciencia ficción	*a sci-fi film*
una película de fantasía	*a fantasy film*
una película extranjera	*a foreign film*

SOLER- to usually/to 'tend to'
soler + infinitive

SUELO	I usually
SUELES	You (s) usually
SUELE	He/She/It usually
SOLEMOS	We usually
SOLÉIS	You (pl) usually
SUELEN	They usually

i.e
Suelo ver
Sueles jugar al

Nacionalidades	Nationalities
americano/a	*American*
argentino/a	*Argentinian*
británico/a	*British*
chino/a	*Chinese*
griego/a	*Greek*
italiano/a	*Italian*
mexicano/a	*Mexican*
sueco/a	*Swedish*

Make sure you practise to be able to use and recognise the vocab. Practise using 'look, cover, write, check'. Add other things you may wish to say to your list.

Subject: Spanish (Y10)	Terms: 1&2	Topic: Viva AQA **GCSE**; Módulo 4: *Intereses e Influencias* **Theme 1- Identity and Culture**

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Week 5 & 6 -

- Talking about what you usually do
- Using SOLER + verb structure
- Talking about different sports and hobbies
- Comparing two tenses- past and present.
- Understanding the difference between the Past tenses

https://conjuguemos.com/verb/119

Suelo…
descansar
escuchar música

This is CORE vocabulary for this topic.

I tend to / I usually …
rest
listen to music / the radio

IMPERFECT
It is used to talk about repeated actions in the past, past actions with no specific start/end point, interrupted/unfinished past actions or general description in the past. **It translates as 'was/were –ing' or 'used to …'.**

AR	IR/ER
aba	ía
abas	ías
aba	ía
ábamos	íamos
abais	íais
aban	ían

hacer deporte	*do sport*
ir al cine	*go to the cinema*
leer libros / revistas / periódicos	*read books / magazines / newspapers*
salir con amigos	*go out with friends*
usar el ordenador	*use the computer*
ver la tele	*watch TV*

www.conjuguemos.com

batir un récord	*to break a record*
correr	*to run*
entrenar	*to train*
jugar un partido contra…	*to play a match against…*
marcar un gol	*to score a goal*
montar a caballo	*to go horseriding*
participar en un torneo	*to participate in a tournament*
patinar	*to skate*
mi jugador(a) preferido/a es…	*my favourite player is…*
su punto culminante fue cuando…	*the highlight (of his/her career) was when…*
el campeón / la campeona	*the champion*
la temporada	*the season*

PRETERITE
It is used to talk about single completed actions in the past. **It translates as '–ed.'**

AR	IR/ER
é	í
aste	iste
ó	ió
amos	imos
asteis	isteis
aron	ieron

Week 7 & 8 -

- Talking about what 'is trending'
- Using the perfect tense to talk about what has happened
- Adding opinions and justifications. Adding variety of expression.

This is CORE vocabulary for this topic.

Temas del momento	*Trending topics*
he compartido…	*I have shared…*
he comprado…	*I have bought…*
he jugado…	*I have played…*
he leído…	*I have read…*
he oído…	*I have heard…*
he roto…	*I have broken…*
he subido…	*I have uploaded…*
¿Has probado…?	*Have you tried…?*
mi hermano ha descargado…	*my brother has downloaded…*
se ha estrenado…	*…has been released.*
la nueva canción	*the new song*
el último libro	*the latest book*
Ya lo/la/los/las he visto.	*I have already seen it/them.*
No lo/la/los/las he visto todavía.	*I haven't seen it/them yet.*
acabo de ver / jugar a…	*I have just seen / played…*

#trending

The PERFECT Tense… Is another past tense
Used to describe very recent events, or to talk about something with emphasis
Is a compound tense. It translates as ' have… -ed'

FORMATION:
You need to take the verb 'Haber' (to have) and the past participle. (AR → ADO/ ER/IR → IDO)

HABER:

He	Hemos	+ -ADO
Has	Habéis	+ - IDO
Ha	Han	

Subject: Spanish (Y10)	Terms: 1&2	Topic: Viva AQA **GCSE**; Módulo 4: *Intereses e Influencias* **Theme 1- Identity and Culture**

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Term 2 Week 1 & 2 -

- Using the Perfect Tense confidently
- Using words that have more than one meaning

This is CORE vocabulary for this topic.

Ir al cine, al teatro, etc.	***Going to the cinema, theatre, etc.***
¿Qué vamos a hacer…	*What are we going to do…*
esta tarde?	*this afternoon / evening?*
esta noche?	*tonight?*
mañana / el viernes?	*tomorrow / on Friday?*
¿Tienes ganas de ir…	*Do you fancy going…*
a un concierto / un festival?	*to a concert / a festival?*
a un espectáculo de baile?	*to a dance show?*
al cine / al teatro / al circo?	*to the cinema / theatre / circus?*
¿Qué ponen?	*What's on?*

Tengo ganas de ir al cine I fancy going to the cinema
Tenemos ganas de ir al concierto We fancy going to the concert

¿Cuándo? Where?
¿Quieres? Do you want?
¿Dónde? Where?
¿Hay…? Is/Are there?
¿Tienes…? Do you have?
¿Qué? What?
¿Te gusta(n)? Do you like?
¿Cómo? How?

Es una película / obra de…	*It's a … film / play*
¿A qué hora empieza / termina?	*What time does it start / finish?*
Empieza / Termina a las…	*It starts / finishes at…*
Dos entradas para…, por favor.	*Two tickets for …, please.*
para la sesión de las…	*for the … showing / performance*
No quedan entradas.	*There are no tickets left.*
¿Hay un descuento para estudiantes?	*Is there a discount for students?*
Aquí tiene mi carné de estudiante.	*Here is my student card.*

- Using 'TENER GANAS DE' structure
- Using Near Future Tense to talk about future plans
- Developing using question words to ask about plans

This is CORE vocabulary for this topic.

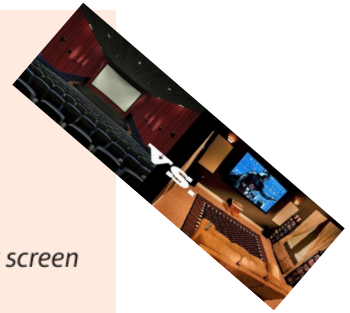
<u>The Near Future Tense…</u>
Talking about what you are going to do…
<u>FORMATION:</u>
Three steps to form
1) Present Tense of IR *to go* 2) a 3) verb
Voy Vas Va Vamos Vais Van

Term 2 Week 3 & 4 -

- Talking about preferences
- Comparing two different things
- Practising stem changing verbs- *preferir* ***to prefer***
- Varying reasons not just *porque es…*

This is CORE vocabulary for this topic.

¿En el cine o en casa?	***At the cinema or at home?***
(No) Me gusta ir al cine porque…	*I (don't) like going to the cinema because…*
Prefiero ver las pelis en casa porque…	*I prefer watching films at home because…*
el ambiente es mejor	*the atmosphere is better*
hay demasiadas personas	*there are too many people*
la imagen es mejor en la gran pantalla	*the picture is better on the big screen*
las entradas son muy caras	*the tickets are very expensive*



Prefiero
Prefieres
Prefiere
Preferimos
Preferís
Prefieren

las palomitas están ricas	*the popcorn is tasty*
los asientos no son cómodos	*the seats aren't comfortable*
los otros espectadores me molestan	*the other spectators annoy me*
ponen tráilers para las nuevas pelis	*they show trailers for new films*
si vas al baño te pierdes una parte	*if you go to the toilet you miss part of it*
tienes que hacer cola	*you have to queue*
una corrida de toros	*a bull fight*
en directo	*live*

Prefiero ver una película en casa dado que los asientos son más cómodos. Sin embargo, en el cine las palomitas están ricas

DADO QUE // PUESTO QUE // YA QUE // PORQUE
BECAUSE

Subject: Spanish (Y10)	Terms: 1&2	Topic: Viva AQA **GCSE**; Módulo 4: *Intereses e Influencias* **Theme 1- Identity and Culture**

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Term 2 Week 5 & 6 -

- Talking about who inspires you
- Discussing more challenging topic areas/vocabulary
- Expanding to explain what inspires other people

This is CORE vocabulary for this topic.

Admiro a… I admire
Mi hermana admira a… My sister admires
Mi padre admiraba a… My dad used to admire
Mi amiga admiró a… My friend admired

Los modelos a seguir	***Role models***
Admiro a…	*I admire…*
Mi inspiración / ídolo es…	*My inspiration / idol is…*
…es un buen / mal modelo a seguir	*…is a good / bad role model*
Un buen modelo a seguir es alguien que…	*A good role model is someone who…*
apoya a organizaciones benéficas	*supports charities*
recauda fondos para…	*raises money for…*
tiene mucho talento / éxito	*is very talented / successful*
trabaja en defensa de los animales	*works in defence of animals*
usa su fama para ayudar a los demás	*uses his / her fame to help others*
se emborrachan	*they get drunk*
se comportan mal	*they behave badly*
se meten en problemas con la policía	*they get into trouble with the police*
es amable / cariñoso/a / fuerte	*he/she is nice / affectionate / strong*
lucha por / contra…	*he/she fights for / against…*

la pobreza / la homofobia	*poverty / homophobia*
los derechos de la mujer	*women's rights*
los derechos de los refugiados	*the rights of refugees*
los niños desfavorecidos	*underprivileged children*
la justicia social	*social justice*
a pesar de sus problemas…	*despite his/her problems…*
ha batido varios récords	*he/she has broken several records*
ha creado…	*he/she has created…*
ha ganado … medallas / premios	*he/she has won … medals / awards*
ha sufrido varias enfermedades	*he/she has suffered several illnesses*
ha superado sus problemas	*he/she has overcome his/her problems*
ha tenido mucho éxito como…	*he/she has had lots of success as…*
siempre sonríe	*he/she always smiles*
solo piensa en los demás	*he/she only thinks of other people*

This is CORE vocabulary for this topic.

- Using the past tense to talk about what famous people 'have done'

Subject: Business Studies	Term: 1	Topic: Putting a Business Idea in to Practice

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

1.1 The Dynamic nature of business

Why new businesses come about	Description
Changes in technology	Improves products and services and make them more desirable. Can also help with the production process increasing speed.
-Changes in customer needs	Consumer needs change as society trends change. This can be caused by: fashion, economical, lifestyle, demographic or technological changes.
-Products and services become obsolete	Due to the dynamic nature and constant changes in customer needs and technology, products/services become obsolete. Many products only last a for a short period of time.

How new ideas come about:	Description
Original ideas	Idea created that has not been thought up beforehand or by someone else
Adapting existing products/services/ ideas	**Making changes to a product/service that already exists. For example, Apple launching the 11 Plus Pro Max. This has an improved version of the camera and other features**

The role of business enterprise and purpose of business activity:
To produce goods and services- a business may produce their own or use a supplier
To meet customer needs- this will result in higher sales
To add value- convenience, branding, quality, design, USPs

Entrepreneur
A person who takes the risk of starting and running a business

Enterprise is:
business activity that is often initially done by an individual (entrepreneur)

1.1.3 The role of business enterprise

1.1.2	The impact of risk and reward
Risk	**Reward**
▪**Business failure-** many small business fail in the first 5 years ▪**Financial loss** Possibility of losing money ▪ **Lack of security-** No guarantee of pay every month	▪ **Business success-** personal satisfaction excellent products/services, growth, recognition ▪**Profit- If successful, revenue will be greater than costs** Some successful entrepreneurs can make a lot of money ▪**Independence** Some people like to be their own boss and choose their own hours, holiday time, etc.

Risky business:
Seasonal demand
Highly competitive market
Small market

How can a business reduce risk?

Entrepreneurial roles:
1. Organise resources
2. Make business decisions
3. Take risks

Subject: Business Studies	Term: 1	Topic: Putting a Business Idea in to Practice

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Customer Needs

Meeting customer needs is one of the most important objectives of a business. It is what will enable them to be profitable and survive.

Customer Need	How can a company meet this need?
Price	Charging a price that is value for money. Ensuring it is better than competitors
Variety	Offer a variety of choice and options
Quality	Ensure the quality meets the expectations of the customer
Convenience	Can the product or service be accessed easily? Is it delivered etc?

Customer needs can vary for example they may be influenced by their family type, their personal preferences or their financial situation.

One customer may also have different needs for different products.
e.g.
For a coat they may value quality over price whereas for a meal out with their family convenience may be higher

Market research

A business will undertake market research in order to:
- Understand customer needs
- Identify gaps in the market
- Gain information to aid decision making
- Understand competitors
- Understanding the market
- Understanding the economy

Primary Market Research

New research that did not exist before
- Surveys
- Focus groups
- Social media – cheap and fast
- Observations
- Experiments
- Questionnaires

Benefits =
Specific to the business
Up to date
Direct contact with the Target Market

Secondary Market Research

Existing research that has been conducted by others
- Sales data
- Websites
- Market reports
- Government reports
- Newspapers
- Trade association publications

Benefits =
Less time consuming
Less expensive
Gives a wider range of information

Subject: Business Studies	Term: 1	Topic: Putting a Business Idea in to Practice

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Market Research Data

Data can be qualitative or quantitative. Qualitative is information on people's opinions. Quantitative is data that is numerical.

Qualitative offers more detailed information and the opportunity to gain clearer understanding.

Quantitative is easier to analyse and you can gain a larger data set which can increase the reliability of your results.

Market research can be expensive depending on the type undertaken. It is possible to pay other companies to do the research as they will have employees who are trained in market research

BIAS
Bias is the tendency to agree with an idea. This happens when the research isn't well constructed or the sample isn't representative of the target market. It is important to limit bias so that responses are useful

Reliability
It is important that data comes from an good quality source so that it is reliable

Accuracy
The larger the sample size the more accurate the results will be as you will be able to see trends and anomalies

Market Segmentation

Market segment = a group of potential customers with the same characteristics or needs

Segmentation helps a company to understand the needs of the target market more specifically. The market can be segmented by; age, gender, income, location, lifestyle or demographics.

Benefits of Segmentation
+ meets specific customer needs
+differentiate its products
+focus on specific customers
+can target marketing
+develop a USP

Drawback of Segmentation
- Can be expensive to target multiple groups
- Customer preferences can change over time so a business needs to continuously adjust
- An opportunity can be missed if you are focussing on one group only

Subject: GCSE D&T	Term:1	Topic: **Materials and their properties**

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Week 1 -

Papers & Boards

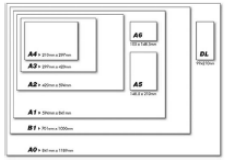
What you need to know:

- Know the primary sources of materials for producing papers & boards
- Be able to identify a range of papers & boards.
- Understand their properties and the functions they provide and how they are used?

Papers and boards are used for a variety of purposes from writing, drawing, packaging and model making. They are made from cellulose fibres found in wood or grasses which are all renewable.

Paper & boards can be plain, textured and can be laminated with other materials like plastic to make them waterproof.

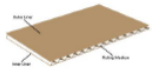
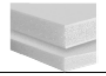
Paper and board is measured is sizes from A0 to A6 and in weight by grams per square metres (gsm). Boards (card or cardboard) are always greater the 200gsm



Types of papers

Papera	Example	Properties	Uses
Bleed proof		A smooth paper often used with water and marker pens which prevents bleed (e.g. when ink runs through the paper).	Presentation drawings
Cartridge paper		Good quality white paper with a slight texture.	Can be used for paints, markers and drawings
Grid		Paper printed with grids as guideline for drawing (e.g. isometric).	Quick model 3D drawings
Layout		Strong and lightweight	Initial sketching and tracing
Tracing		Fluted plastic – light, strong weather resistant material	Tracing copies of drawings

Types of boards

Boards	Example	Properties	Uses
Corrugated card		Strong lightweight material Made from two or more layers and has a fluted middle	Packaging such as pizza boxes, large boxes that are used to protect heavy items
Duplex board		Thin board that often has one side printed. This board can also be coated with wax so it can be used with food and drink	Packaging
Foil lined board		Board covered with one side of aluminum foil making it a good insulator	Packaging such a takeaway and ready meal packaging.
Foam core board		Two pieces of board with a foam core to increase the thickness but retain its light weight property.	Model making such as architectural models.
Solid white board		High quality cardboard, smooth on both sides which makes it good for printing.	Book covers, cards and packaging.

Processing paper & card:

This involves turning raw materials into usable products. In the case of paper, the raw material is usually wood.

In the first stage of paper manufacture, the wood is mashed up to make wood pulp.

This is done in one of two ways.

By machine

The wood is physically ground up. Paper made from machined pulp is weaker and turns yellow over time. It is used for newspapers.

By chemicals

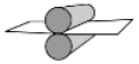
Wood chips are mixed with chemicals that dissolve the bonds between the fibres. Chemical pulp is used for writing and printing paper.

The wood pulp is then bleached to make it white, and fed into a **Fourdrinier** machine. This machine makes the pulp into paper.

1. Firstly, dyes and other chemicals are added to the pulp.

2. The pulp is then spread onto a moving wire mesh conveyer belt.

3. The mesh passes through a series of **metal rollers**.



The first rollers squeeze out the water.

The second rollers are heated to dry the paper.

4. The calendar rollers then smooth the paper and determine the thickness.

Selecting Papers & Boards

The type of paper & board used to make a product depends on the following factors:

- ❑ Aesthetics
- ❑ Size of product
- ❑ Where and how the product will be used?
- ❑ Stability
- ❑ Cost
- ❑ Size
- ❑ Weight
- ❑ Finish required
- ❑ Lifetime of the product
- ❑ Desired properties.

Sustainability

The UK use over 12 million tonnes of paper each year and it takes approximately 25 trees to make one tonne of paper. Trees take in Carbon Dioxide (CO^2) and produces oxygen but it takes a lot of energy to cut them down and make paper.

An alternative is to recycle paper and this is becoming more common as this uses between 40% to 70% less energy to produce.

Week 2 -

Timbers & Manufactured Boards

What you need to know:

- Know the primary sources of materials for producing papers & boards
- Be able to identify a range of natural timbers & manufactured boards.
- Understand their properties and the functions they provide and how they are used?

Natural Timbers		Manufactured Boards
Hardwood	**Softwood**	
		
Hardwoods are usually obtained from **deciduous** trees, which lose their leaves in autumn. ❑ usually grow in warmer more humid climates, mainly in South America and Asia ❑ grow slowly (80+ years) ❑ are more difficult to sustain than softwoods ❑ are more expensive than softwoods ❑ are strong and hardwearing.	Softwoods are usually obtained from **coniferous** trees, which keep their leaves in winter and are also known as evergreens. These grow quickly which makes them sustainable as they are renewable. This also makes them cheaper when compared to hardwoods. ❑ Usually grow in colder climates and are mainly grown in Scandinavia and Northern Europe ❑ Grow thin, needle-like leaves ❑ Grow relatively quickly (30 years) ❑ Are easier to sustain than hardwood trees ❑ Are easy to cut and shape ❑ Are usually cheaper than hardwoods	Manufactured boards are made from the waste sections of felled trees – the parts which are of little use as planks. The wood is reduced to pulp, particles or thin strips and bonded together using special adhesives or resins. Manufactured boards are made as alternative to natural timber. ❑ Come in sheet form (usually 1.2 x 2.4m) ❑ Are extremely stable and of uniform thickness ❑ Are less expensive than laminating planks of timber ❑ Can be covered with veneers ❑ Ae available in a variety of thicknesses (3, 6, 9, 12, 15, 18, 22mm)

Sustainable Timber

Wood is considered to be sustainable material as trees can be grown to replace those used for timber or fuel. A big issue is in many parts of the world timber is being used faster than trees are being replanted. This causes deforestation which is seen as a key factor to global warming.

To regulate this The Forest Stewardship Council (FSC) are dedicated to ensuring that timber supplies are regulated and sustainably harvested.

FSC

Types of Hardwoods

	Example	Properties	Uses
Ash		Tough and flexible, wide grained, shock resistant and finishes well	Sports equipment, hand tools and ladders
Beech		Strong, dense close grain but is prone to warping and splitting	Furniture, children's toys, bench tops
Mahogany		Strong and durable, easy to work with finishes well.	High end furniture
Oak		Strong and lightweight	Flooring, furniture and timber framed buildings
Balsa		Strong and durable but very lightweight. If too thin can snap & break.	Model making, floats and rafts

	Example	Properties	Uses
Medium Density Fibreboard (MDF)		This compressed board is rigid and stable and is easy to work with. It has a smooth surface but it is very absorbent.	Flat pack furniture, kitchens and toys
Plywood		This is a laminated board it is stable due to its alternate layering a 90°. It has good water resistance.	Furniture, shelving, skateboards and exterior fencing
Chipboard		This compressed board not as strong as MDF or plywood is prone to chipping	Flooring, low end furniture kitchen units & cupboards

Types of Softwoods

	Example	Properties	Uses
Larch		Tough and durable, good water resistance and finishes well	Fencing, cladding, decking, furniture
Pine		Lightweight easy to work with but can be knotty	Interior joinery and furniture and window frames.
Spruce		Easy to work with and is lightweight	Furniture, musical instruments and construction

Subject: GCSE D&T	Term:1	Topic : **Materials and their properties**

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Week 3 - Plastics (Polymers)

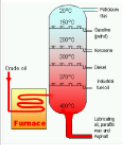
What you need to know:

- Know the primary sources of materials for producing polymers
- Be able to recognise and characterise different types of polymers
- Understand the physical working properties for a range of thermosetting and thermoplastics.

Man made (synthetic) plastics have replaced wood and metal in the manufacture of a wide range of products. The 1st synthetic plastic was celluloid. It was made from cotton and camphor and used for table tennis balls and film.

Commercial production of plastics really started after the 2nd World War. The raw materials used were either coal or oil. They contain a number of different chemicals which can be separated into parts by a process called Fractional Distillation.

Some of the fractions contain chemicals that are small molecules (Monomers). The monomers are chemically joined together to make longer molecular 'chains' called Polymers



Plasticisers are added to make plastic bendy.

Pigments are added to change colour.

Antistatics are used to reduce static charge

Antioxidants to reduce attack by air

Flame retardants to reduce burning

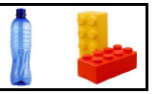
Problems of using plastics

Plastic products have a long shelf life, however it also means that they are difficult to dispose of

- Because they do not rot or corrode they are difficult to dispose of
- If burnt they produce black choking gasses
- When molten they are sticky and can cause severe burns
- Thermoplastics can be recycled by melting them down and reforming their shape, but usefulness can be become limited with frequent heating
- Plastic production itself can be polluting
- PVC contains many nasty pollutants and it is one of the most difficult plastics to recycle.

There are many different types of plastic and can be split into four groups :

THERMOPLASTICS are made from long chain polymers, joined by weak chemical bonds. When the plastic is softened by heat the bonds break making the plastic 'semi fluid' and able to be shaped. As the plastic cools, new weak bonds form and the shape will be fixed. Because no chemical reaction has taken place this process can be repeated many times, making them recyclable, however excessive heat will permanently damage the chemical structure.



THERMOSETS or thermosetting plastics are plastics which are converted into their final form by heat. Once set, they cannot be softened by further heating as they undergo a chemical change. They have strong chemical bonds that hold the long chains together. These make thermosets heat resistant but not recyclable. It is difficult to make products by extrusion or injection moulding as they harden as soon as heated. Manufacturing methods include casting, moulding and laminating.

ELASTOMERS are a type of thermoset. The bonds between the chains are 'springy' giving them a rubbery quality. Natural rubber is an example it can be vulcanised to make a rigid (ebonite). Latex is a stretchy elastomer used to make surgical gloves. Lycra is an elastomer used to make stretchy clothing.

Ebonite is an early form of plastic that was used to simulate ebony and is hard and used for bowling balls

COMPOSITES are when materials are combined to achieve specific advantages. Examples of composites are Kevlar, GRP (Glass reinforced plastic), Graphite and Carbon Fibre. These are used extensively for sporting uses e.g Bike parts, motor racing car bodies and tennis rackets.

Thermoplastics

Acrylonitrile Butadiene Styrene (ABS) is strong, tough, scratch resistant and resists heat and chemicals. It is injection moulded to make Lego bricks and is used extensively for household appliances like Kettles, vacuum cleaners and housings for cameras and telephones.

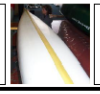
Polystyrene (PS) is used to make vending cups and model kits. It is light, transparent but quite brittle. It is vulcanised to make High Impact Polystyrene (HIPS) This is used for Vacuum forming in thin sheets, which are cheap and easy to work with. Expanded Polystyrene (EPS) is used as thermal insulation for packaging and food cartons. It is 90% air.

High Density Polythene (HDPE) is tough and can be blow moulded (bottles for bleach and shampoo) injection moulded (toys and buckets) and extruded (piping)

Low Density Polythene (LDPE) is Made into thin film (Carrier bags, wiring insulation and squeezy bottles)

Thermosetting plastics

Polyester Resins which are combined with fibreglass to produce GRP



Phenol Formaldehyde is tough and heat resistant often black in colour. (Used for saucepan handles)

Epoxy Resins which are mixed with a hardener and left to set. They can be used to make adhesives and flooring.

Week 4 - Metals and Alloys

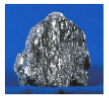
What you need to know:

- Know the primary sources of materials for producing metals and alloys
- Be able to recognise and characterise different types of metals and alloys
- Understand how the physical working properties of a range of metals and alloys affect their performance

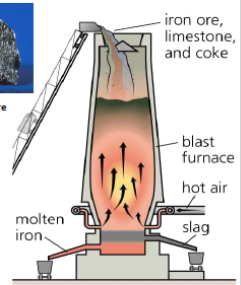
Metal bearing rocks are called ORES, these are mined or quarried from the earth's surface. Metals are obtained from raw ores by a process called smelting. Raw ore is mixed with charcoal and other chemicals, and air is blown into a furnace. The molten metal trickles from the bottom of the furnace and this can be cast or extruded into shapes.

The more the reactive the metal the higher the temperature needed to extract it from its ore. Copper needs 1100°C but iron requires 1500°C. A metal like aluminium cannot be extracted by smelting. It is dissolved in a 'cryolite solution' and electrolysed (electricity is passed through) at a temperature of around 650°C.

A few metals can be mined from the earth as pure metals. These include gold and some small amounts of copper and silver



Iron Ore

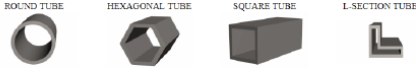


Recycling Metals

Metal ores are either mined or quarried which has an environmental impact. Metal extraction from ore demands a lot of energy, a great deal of which is lost as heat to the surroundings. The high cost has meant that recycling is becoming more and more important. Today the scrap metal industry has a vital role in the provision of metals for the future. Automated disassembly lines for recycling of metal parts for cars are coming ever closer. At present vehicles are collected sorted and shredded, and then materials are collected from them.

It takes 95% less energy to recycle aluminium cans than it does to produce new cans from aluminium ore. It is possible that future cans will be made from recycled material. Stainless steel can be made from as much as 70% of recycled material. Recycled copper can be refined to be as pure as new. Copper and its alloys have a high scrap value as they are relatively easy to recycle.

SECTIONS – Solids and tubes available



Ferrous Metals:

FERROUS METALS are those which are iron based. They contain iron and carbon in varying amounts. As iron is extracted from its ore in a furnace it contains a relatively high amount of carbon. This makes the iron hard but brittle this is known as cast iron. It resists compression but may break if dropped, hit or stretched. It is used to make car brake drums, railings and manhole covers. Cast iron has 4% carbon content.

High Carbon Steel is often referred to as Tool steel contains 0.6 - 1.5% Carbon. It is very hard and is used to make tools such as metalwork files and saw blades.

Mild Steel is very tough, can be bent or twisted and can resist strong impacts without breaking. It is easy to weld. Mild steel is used to make washing machines, construction girders, nuts and bolts and nails. It contains between 0.15 – 0.35% carbon.

Stainless Steel Contains about 1% carbon. It also contains other metals, mainly chromium. There are over 200 different types of Stainless Steel. They contain a minimum of 11% chromium and also contain nickel. Manganese is another metal often included. Stainless steel is often used for medical instruments, kitchen surfaces and pots and pans as it resists scratching and biofouling.

Wrought Iron is the most pure iron, containing few imperfections. It is difficult to cast although it makes excellent material for forge work because it is tough. It has less than 0.1% carbon. It is used for gates and railings

Non-Ferrous Metals:

NON-FERROUS METALS do not contain iron. There are many different metals that fall into this group.

Aluminium Pure aluminium is malleable and ductile but has a low tensile strength (aluminium foil). To improve strength it is usually alloyed with copper or magnesium. Because it resists corrosion it is used extensively outdoors in satellite dishes and window frames. Aluminium is very light metal and has a density a 1/3 that of copper and steel. It is a good conductor of heat and electricity. Aluminium alloys are used extensively in the aircraft industry and in motor cars. Approx 150,000 million aluminium cans are produced every year.

Lead is a metal that was once in common use for plumbing, roof flashing and car batteries. It has been replaced by copper, plastics and alloys in many cases but is still used in car batteries. Lead is a soft malleable metal. It is also an accumulative poison.

Alloys:

An ALLOY is a material of a mixture of metals or a metal and a non metal intermixed. Metal alloys have advantages. The alloy may contain the properties of two or more metals or other elements.

Brass is an alloy of copper and Zinc. Copper is malleable, resists corrosion and is a good conductor of electricity. Zinc is hard but brittle. Brass is used in musical instruments, Valves and in electrical plugs and sockets.

Different combinations of tin, lead and other metals are used to create solder. The combinations used depend on the desired properties. The most popular combination is 60% tin, 39% lead, and 1% alloys. This combination is strong, has a low melting range, and melts and sets quickly.

Subject: GCSE D&T	Term:1	Topic: **Materials and their properties**

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Textile Fibres & Fabrics

Week 5 -

What you need to know:

- Know the primary sources of materials for textile fibres & fabrics.
- To be able to identify a range of textile fibres & fabrics.
- Understand their properties and the functions they provide and how they are used?

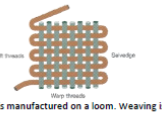
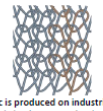
Natural fibres can come from plant or animal sources

	Origins	Example	Properties	Uses
Cotton	Cotton comes from the fine hairs on the seed pod of a cotton plant.		Soft and strong, absorbent, cool to wear and easily washable. Cotton fabrics can be given a brushed finish to increase their thermal properties	Most clothing, especially shirts, underwear and denim can be made from cotton. Also used for towels and bedsheets
Wool	Wool comes from a sheep the coat is known as fleece.		Warm and absorbent, does not crease easily and has low flammability. Has natural resilience to water, but when wet does take a long time to dry. Is difficult to Launder as it can shrink felt).	Jumpers, coats, suits and accessories worn for warmth. Specialist wools are very soft and expensive. Felt products and carpets
Silk	Silk comes from a cocoon of the silkworm.		Very soft and fine finish, gentle on skin, can feel cool in summer yet warm in winter, drapes well, absorbent, strong when dry (weaker when wet), tricky to wash, can crease easily and is usually expensive	Luxury clothing including nightwear and underwear, soft furnishings, bed sheets, silk paintings and wall hangings

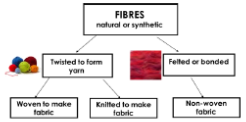
Synthetic fibres are manufactured from oil based chemicals.

	Example	Properties	Uses
Polyester		Tough, strong, hard wearing, very versatile, holds colour well, non-absorbent so quick drying, machine washes well. Often blended with other fibres. Easily coloured	Clothing, fleece garments bedsheets, carpets, wadding, rope, threads, backpacks, umbrellas and sportswear
Polyamide (Nylon)		Good strength, hard wearing, non-absorbent, machine washes well, easily and frequently blended	Clothing, ropes and webbings, parachutes and sports material. Used as a tough thread on garments
Elastane (Lycra)		Added to fabric to enhance working properties, particularly to add stretch. Allows freedom of movement, quick drying, holds colour well, machine washable	Sportswear, exercise clothing, swimsuits, hosiery, general clothing, surgical and muscular supports

Types of Fabrics

Fabric	Example	Properties	Uses
Woven fabric (Plain Weave)	 Woven fabric is manufactured on a loom. Weaving is a process where two yarns the warp and the weft are woven together at right angles to each other. The warp threads run the length of the loom with the weft threads being woven across. The edge that is wrapped around is called the selvedge.	Simple and cheaper to produce than more complicated weaves, stronger than other weave patterns	Used on textiles such as cotton calicos, cheesecloth and gingham, found on table cloths, upholstery and clothing
Knitted (Weft knitted)	 Knitted fabrics are produced by hand or by knitting machines. Knitting is produced horizontally. The loops above and below interlock holding the fabric together.	Warm to wear, different knits have different properties such as stretch and shape retention. Weft knits ladder and unravel more easily than warp	Jumpers, cardigans, sportswear and underwear fabrics, socks, tights and leggings, craft items such as soft toys
Warp Knitted	 Warp knitted fabric is produced on industrial knitting machines. Warp knitting has yarns that interlock vertically along the length of the fabric. Warp knitting is an industrial process only.	Fast production system (industrial process only). The fabric has stretch but can keep its shape and is hard to unravel, less likely to ladder. Complicated manufacturing so it is more expensive than weft knitting.	Sportswear, exercise clothing, swimsuits, hosiery, general clothing, surgical and muscular supports.
Non Woven	Non-woven fabrics are made directly from fibres without the production of yarn. There are two types of non-woven fabrics:  **Bonded** – Fibre bonded fabric are produced by either adhesives gluing the fibres together. Or heat bonded which melts the fibres so they bond together.  **Felted** – Felted fabric is produced by needles repeatedly pushing and bonding the fibres together.	**Bonded fabrics** lack strength, they have no grain so can be cut in any direction and do not fray. **Felted fabrics** can be formed with moisture and heat, once dry it has no elasticity or drape, and can pull apart easily. Woollen varieties can be expensive	Disposable products such as protective clothing worn for hygiene purposes, tea bags, dish cloths and dusters. Hats, handicraft, pads under furniture to prevent scratching, soundproofing and insulation

Fibres are the starting point from which all fabrics are made.



Blended Fibres
This is a combination of two or more fibres spun together into a yarn.

Mixed Fibres:
This is where two or more types of yarn are used when the fabric is woven.

Reasons for blending and mixing fibres:

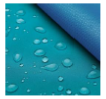
1. Improve the appearance of a fabric in terms of colour or texture.
2. Improve the quality of the fabric e.g. more durable, stronger and longer lasting.
3. Easier to wash and care for the fabric e.g. crease resistance.
4. Improve the feel (handle) of a fabric.
5. Improve the profitability of a fabric so that it is cheaper to produce and is more desirable to consumers.

Fabric Finishes

Once a fabric has been produced it often goes through a process to improve its appearance and/or properties. The main fabric finishes are:

Physical – machines are used to change the fabric
Chemical – chemicals used to change the fabric
Biological – bacteria & enzymes used on regenerated fibres
Coating – where fabrics are coated on one side

Why are fabrics finished?
To enhance: colour, pattern, lustre, texture, softer, firmer, drape, care properties, stain resistance, waterproof, flammability, colour fastness.

The type of fabric used to make a product depends on the following factors:

- ❑ Aesthetics
- ❑ Size of product
- ❑ Where and how the product will be used?
- ❑ Stability
- ❑ Cost
- ❑ Size of material
- ❑ Weight
- ❑ Finish required
- ❑ Lifetime of the product
- ❑ Desired properties.
- ❑ Workability
- ❑ Fabric availability

Smart & Modern Materials

Week 6 -

What you need to know:

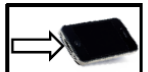
- To be able to identify a range of smart & modern materials.
- Understand what they do, their properties and the functions they provide.

What is a SMART material?

- *A 'smart material' can be defined as a material whose physical properties change in response to an input e.g. making them simpler or safer to use.*
- *A smart material reacts to external stimulus / changes in the environment without human intervention.*

Designers and manufacturers are utilising SMART materials in a whole range of mass consumer products which often makes them simpler or safer to use.

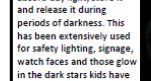
SMART Material	Property
Hydrochromic Ink	Changes colour with water
Thermochromic Pigment/ Paint	Changes colour with heat
Photochromic Material/ Dye	Changes colour with light
SMA - Shape Memory Alloy	Changes shape with heat
Phosphorescent Material	Glows in the dark
QTC – Quantum Tunnelling Composite	Soft Electrical Switch
Polymorph	A thermoplastic use for prototyping which can reheated and reused

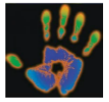


Hydrochromic paint is added to the charger socket of the Apple iPhone so apple knows when there has been water damage which voids the warranty.

Phosphorescent Materials absorb day light, store it and release it during periods of darkness. This has been extensively used for safety lighting, signage, watch faces and those glow in the dark stars kids have on their bedroom ceilings.

Thermochromic paints can be added to any surface like these mugs or a textiles or card based product to react to heat.





Polymorph is a clever thermoplastic which we can use for prototyping and is especially useful when it comes to modelling ergonomic grips. As it is thermoplastic you can reheat and reuse this material as many times as you wish.

QTC (Quantum Tunnelling Composite) is a simple soft switch material that allows an electrical current to flow when compressed. We can use it in children's toys or in many textiles products such as the jacket right >

Photochromic pigments react to changes in light. One example is reaction lenses where they darken with sunlight.

What is a MODERN material?

- *Modern materials are technical materials which have been manufactured for function.*

A good designer will utilise and exploit these materials where appropriate and keep up-to-date with the latest technological developments.

Modern Material	Property
Graphene	Is stronger than steel, flexible, conducts heat and electricity
Titanium	Is strong compared to its weight and is anti-corrosive
Metal foams	Are strong, lightweight, electrically & thermally conductive
Nanomaterials	Nanomaterials are between 1and 100 nanometres.
Fibre Optics	A hair like strands of pure glass designed to transmit signals
Corn Starch Polymers	Compostable plastics which are biodegradable

If it was not for the innovative technology of the fibre optical cabling the internet would not be possible. If your parents subscribe to Virgin this is what connects your broadband router or TiVo box to virgin. Without this cable we would not be able to download our music from iTunes or have a Skype conversation with family in Australia.

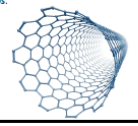
Shape Memory Alloys change shape easily but always return to their original shape when they are heated. There are many applications such as dental braces and unbreakable spectacles.

Titanium is a very versatile metal. It is usually alloyed with other metals to enhance the properties.
Pure titanium does not react to the human body and is used extensively in medical procedures such as artificial joints and dental implants. It is strong compared to its weight and is anti-corrosive.

Thermochromic pigments are added to plastics and react to specific temperatures. One use is enhancing the safety of a babies bowl.

Compostable plastics are biodegradable which are compostable & come from renewable raw materials like starch (e.g. corn, potato or tapioca). Polylactic acid (PLA), is made from fermented sugars, found in starch.

Nanomaterials are between 1and 100 nanometres (A nanometre one thousand-millionth of a metre). Nanomaterials include carbon nanotubes, fullerene and quantum dots. Nanomaterials are used in car manufacturing to create cars that are faster, safer and more fuel efficient. They can also be used to produce more efficient insulation and lighting systems. They are also used as thin films or surface coatings, on computer chips.



Graphene is a 2D material a honeycomb lattice carbon structure only one atom thick (a million times finer than a human hair) It is 200 times stronger than steel, very flexible, conducts heat and electricity, and is almost transparent. It is impermeable to all known substances. Electronics and energy storage could be revolutionised

Metal foams are porous metal structures made from aluminium and titanium. They are strong, lightweight, electrically & thermally conductive and absorb sound well. They are made by injecting gas into the liquid metal but still retain many properties of the original metal including being recyclable.

Subject: GCSE D&T	Term:1	Topic: **Materials and their properties**

WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

Composite Materials & Technical Textiles

Week 7 -

What you need to know:

- To be able to identify a range of composite materials and technical textiles..
- Understand what they do, their properties and the functions they provide.

What is a Composite material?

- *Composite materials are formed when two or more distinctly different materials are combined together to create a new material with improved properties.*

Composite Material	Property
Carbon Fibre	Aa very high strength-to-weight ratio, and is extremely rigid, waterproof but very expensive.
Glass reinforced plastic	A very high strength-to-weight ratio, resists corrosion, water resistant and is light weight.

Carbon fibre components are manufactured by laying up sheets of carbon fibre (fabric) and joining them together with a thermosetting resin (which makes them solid). We use them extensively in the automotive and aviation industries. It has a very high strength-to-weight ratio, and is extremely rigid, waterproof but very expensive.

Glass reinforced plastic (fibre glass) is made from fine glass fibres which are combined with a thermoset plastic resin and is moulded. It has a very high strength-to-weight ratio, resists corrosion, water resistant and is light weight. The fibre glass fibres are soaked in liquid plastic, and then pressed or heated until the material fuses together.

What are Technical Textiles?

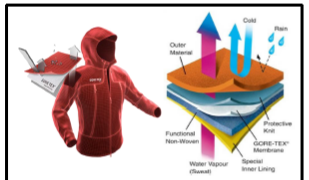
- *Technical textiles are manufactured for a specific use e.g. the function. As this is more important than the aesthetic quality.*

Modern Material	Property
Kevlar®	Is five times stronger than steel, flexible and lightweight.
Nomex®	Can withstand high temperatures (thermal stability) strong & flexible.
Gore-Tex®	Waterproof & breathable as it prevents sweating.
Microencapsulation	Substances are trapped into fibres and are released through friction.
Conductive fabrics	Electrical signals can to pass through them to power devices.

Types of Technical Textiles

Kevlar® can be a woven or knitted structure and has many applications, ranging from bicycle tyres, racing sails to body armour because of its lightweight, has high tensile strength-to-weight ratio; by this measure it is 5 times stronger than steel. It is also used to make components that need to withstand high impact.

Nomex® was developed to withstand high temperatures and reduce combustion when exposed to a naked flame. Nomex has many applications, ranging from protective clothing (fire service & military), racing suits and aerospace applications this is because of its strength, thermal stability, flexibility and resilience.



Gore-Tex® is a waterproof fabric that is 'breathable' it lets water vapour from perspiration (sweat) pass to the outside, but it stops rain drops from passing to the inside. Clothing or footwear made of Gore-Tex® is very useful to people who work or like outdoor pursuits and sports.

Microencapsulation traps liquid or solid substances within the fibres which embedded in to the fabric. When the fabric is rubbed or heated the substances can be released Micro capsules can hold a variety of substances depending on the fabrics intended purpose such as:

- Scents and smells are children's toys fused with a scent of chocolate or scratch and sniff T-shirts.
- Antibacterial solutions are added to fabrics to cuts down on bugs (used in anti-bacterial dressings).
- Insect repellent clothing, chemicals are added to fabrics to prevent mosquito bites.

Conductive textiles are also known as **e-textiles** these are highly conductive threads and fabrics which allow an electrical signal to pass through them to power LED's headphones and microphones.

EXTENSION MAP :Energy Generation

What you need to know:

- To understand how power is generated from renewable and non-renewable sources and be aware of the arguments for and against.

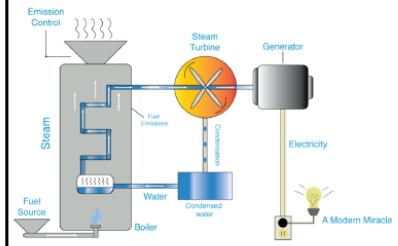
Energy generation

There are many ways to convert energy the two main categories are:

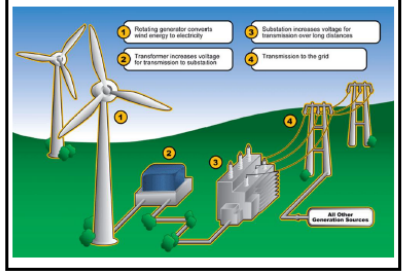
- *Fossil fuels (finite)*
- *Renewables (non-finite)*

Turbines & generators

Most forms of electricity production involve a rotating turbine which turns a generator. Fossil fuels are burned, this heats the water resulting in steam which turns the turbine which is linked to a generator to create electricity.



Renewable energy the energy is harnessed from the wind (wind turbines), wave (tidal) or falling water (hydroelectric) is converted into mechanical energy which rotates the turbine. A generator converts the mechanical energy into electricity.



Non-Renewable Resources

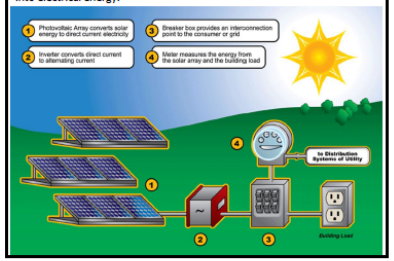
Traditionally designers have made products from raw materials that come from non-renewable (finite) resources that are in limited supply. Examples of these include oil, ores and minerals. They are natural materials but they will eventually run out.

Renewable Resources

Renewable means we can create more as long as they are regrown or replaced this includes materials like paper & wood. Energy that comes from the non-finite resources are considered renewable. This includes wind, wave, solar, geothermal, tidal and biomass.

Solar Energy

The photovoltaic effect involves the conversion of solar energy into electrical energy. The solar panel capture the sun's rays and converts them into electrical energy.

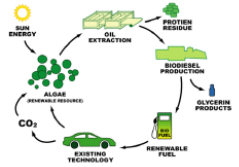


Fossil Fuels

Fossil fuels (coal, oil & gas) are considered finite as they can not be replaced. 55% of Britain's electricity is generated form coal and gas.

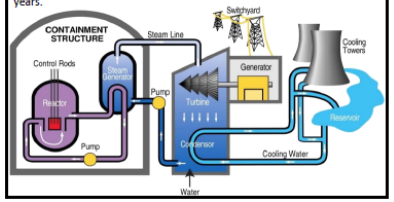
Biofuel

Biofuel is a way of producing energy for transportation & heating. Oli and starch producing crops are grown, harvested and refined into a number of products such as biodiesel. This process is known as biomass energy production. .



Nuclear power

The controversial method of energy, it is considered clean & efficient. The process takes place in the reactor vessel, control rods in and out of the reactors core to regulate the power generated. The reaction generates vast amounts of heat like other methods and generates power to the and generator. The downside to nuclear power is that the waste product produced from the reaction is radioactive and very dangerous to all forms of life. It must be contained and stored correctly so the radiation doesn't leak. This is usually underground and this waste will be radioactive for years.



Subject: Year 10 GCSE Drama	Term: 1 and 2	Topic: Understanding Drama

WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

Section A

Theatre Roles and Responsibilities

Performer - A performer might be an actor, singer or dancer, whose job is to perform within a production. They will usually audition in front of the director and a casting director to get their part. They begin their work in the rehearsal room with the director, before performing on stage in front of an audience. They must ensure to maintain a high-quality performance each night, during the run of the show.

Director - A director is responsible for the overall creative vision of the show. They have to bring the different elements of the production together to produce a cohesive final production, having meetings with the design team at various stages during a production. They will also direct the performers and help them develop their characters in rehearsals ahead of the final performance.

Playwright - A playwright is responsible for writing a play. Some are commissioned by theatre companies or producers and others write plays and submit them speculatively. Usually they will have written the play well in advance of rehearsals, but small changes can be made as the show develops. Occasionally, playwrights are present during the entire rehearsal process and they watch the performers work with the director to develop ideas, making notes and writing the script organically.

Understudy - An understudy is a performer who learns the lines and blocking of a regular performer in a production, so that if the regular performer is ever unable to perform, eg due to illness or injury, the understudy can cover their part. Sometimes, they may take a smaller role within a production, while covering one of the lead roles. When an understudy goes on to perform a lead role, a performer called a swing will cover the understudy's part.

Set Designer - Responsible for designing the set, working closely with the director and the design team to create the world of the show. They may begin by providing the director with a concept, before moving on to the technical drawing stage. Once the design is complete, the set is constructed and completed by various departments that specialise in materials such as metal, wood and paint.

Section A

Theatre Roles and Responsibilities

Lighting Designer - Responsible for designing the lighting within a production, working closely with the director and the design team to create lighting states for atmosphere and mood on stage. The lighting designer will often have an initial idea about how the lighting will look for a show and will then make adjustments during the rehearsal process. Once their design work is complete, technicians will rig and programme the lights.

Sound Designer - Responsible for designing the use of sound within a production, eg sound effects or music, working with the director to create and develop sound that enhances a production. They will also advise the director on whether the production requires microphones and other technical equipment.

Costume Designer - Responsible for designing the costume, hair and make-up for a production, working closely with the design team to ensure that the costumes match the style of the show. They will often create designs ahead of the production being cast and can then make changes once they have met the performers. The costume designer works closely with the costume department, who are responsible for making the outfits and wigs.

Puppet designer- Responsible for designing puppets within a production. They must ensure that puppets match the set and costume design and general aesthetic of the show. They must also ensure that the puppets work efficiently when operated.

Subject: Year 10 GCSE Drama	Term: 1 and 2	Topic: Understanding Drama

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Section A

Theatre Roles and Responsibilities

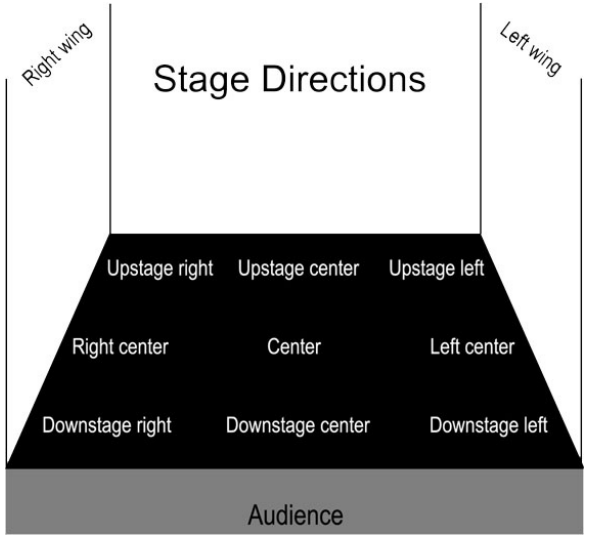
Technician - There are many different types of technicians involved in theatre. They may be involved in rigging the lighting, sound equipment and set. They may also operate technical equipment during a show, controlling lighting, sound or other aspects of the set, eg trucks.

Theatre manager - A theatre manager is responsible for the front of house team and is usually a permanent employee of a theatre building. They ensure the smooth running of a performance by looking after the audience.

Stage manager - A stage manager is responsible for backstage during a production. They usually lead a stage management team of a deputy stage manager, assistant stage managers and a company stage manager, and they are involved from before the first rehearsal until after the show has finished. They organise the rehearsal schedule and sit in the rehearsal room making notes that need to be passed onto the design team. During the run of a show, they are responsible for organisational aspects, such as setting props and calling the show.

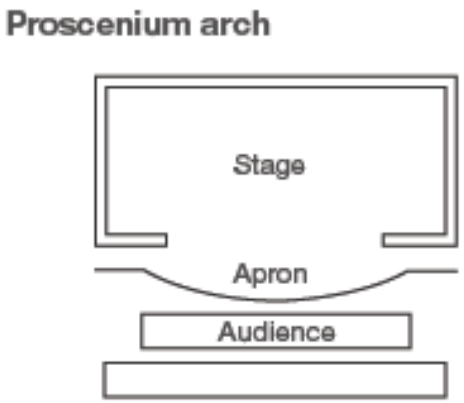
Stage Directions

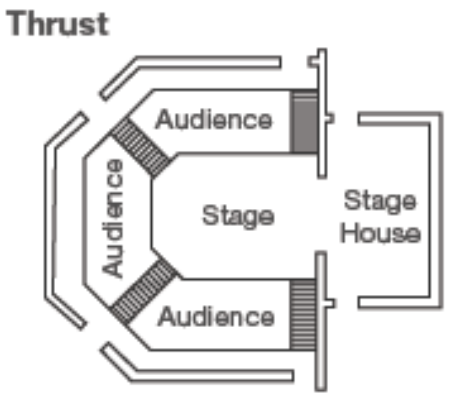
USR – Upstage Right
USL – Upstage Left
DSC – Downstage Centre
CS Centre Stage
CSR Centre Stage Right
CSL Centre Stage Left
DSR Down Stage Right
DSL Down Stage Left
DSC Down Stage Centre

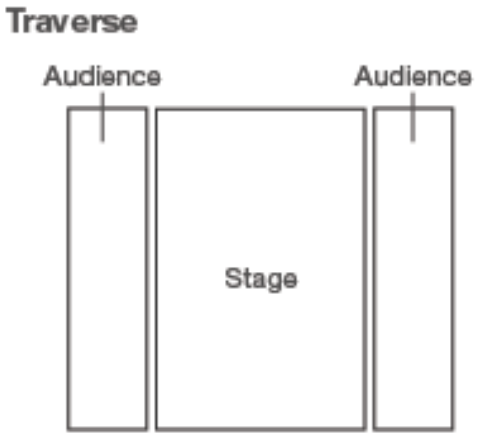


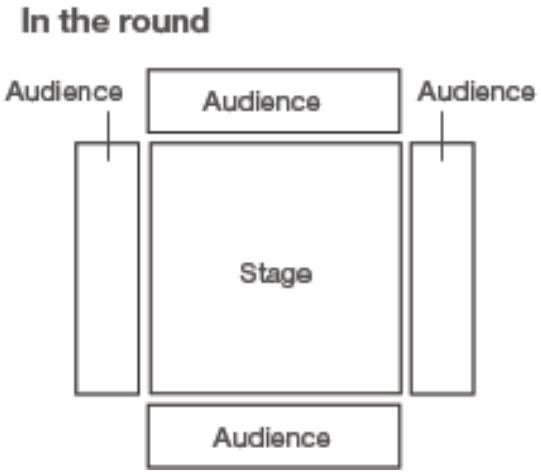
Section A

Types of Staging









Subject: Year 10 GCSE Drama	Term: 1 and 2	Topic: Understanding Drama

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Understanding Drama

Component 2 and 3 Practical Exploration

Creative Process – Getting to know your character
Character Status: The power difference between the characters
Role-on-the-wall: To visually map the relationship between characteristics (emotions) and actions (behaviors) onto a simple outline of a human figure.
Hot Seating: A strategy in which a character or characters are interviewed by the rest of the group. This activity invites students to recount a specific event, explore motivation and multiple experiences related to a theme, topic, event, or idea.

Creative Process – Group Work
Collaboration: working with others to produce a piece of work.
Practising: Is the process of developing a performance and repeating sections to improve and refine the skills used.
Rehearsal: Is the process of practicing your performance as a full performance.

Theatrical Skills
- Learn how to **commit dialogue to memory** for devised performances and/or learn text they are performing for text-based performances
- Develop **the ability to interpret and/or create and perform** a character as appropriate to the demands of the performance
- Develop **a range of vocal skills and techniques** eg clarity of diction, inflection, accent, intonation and phrasing; pace, pause and timing; projection, pitch; emotional range; song and/or choral speaking
- Develop **a range of physical skills and techniques** eg movement, body language, posture, gesture, gait, co-ordination, stillness, timing, control; facial expression; eye contact, listening, expression of mood; spatial awareness; interaction with other performers; dance and choral movement
- **Develop an appropriate performer/audience relationship and ensure sustained engagement throughout the performance**
- **Adopt the latest safe working practices**

Exploring a Stimulus

The Devising Process

What is a stimulus?
A stimulus OR stimuli can be defined as something that gives you an idea – an inspiration, a starting point. It is the beginning of the devising process.

How to use a stimulus for dramatic potential

What is Improvisation?
Improvised drama is work that hasn't been scripted but is made up as you go along. It's important not to block members of your group when improvising but accept and try out their ideas. This will encourage you all to run with an idea rather than try and direct or plan the improvisation.

Genre and Style of Theatre

Genres of Theatre
- Theatre in education (TiE)
- Physical theatre
- Epic theatre
- Political theatre
- Comedy
- Tragedy
- Melodrama
- Commedia dell'arte

Theatre Styles
Naturalistic – Stanislavski Method
Non Naturalistic – Brechtian Techniques
Physical Theatre – Frantic Assembly

Subject: GCSE Fine Art	Term: 1	Topic: Patterns in Nature

WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

Week 1 - 3

Course Introduction

What are my expectations of you

Complete all class and home learning activities to the best of your ability
Respect your own work and that of others in the class
Never screw up any of your work
If you don't understand don't be scared to ask
Do not leave seat without permission
Be prepared to try, don't give up

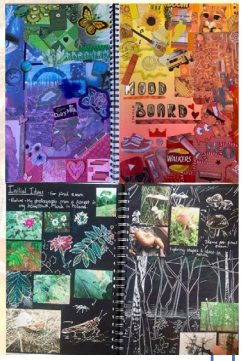
ART GCSE

1 GCSE (1 - 9)

3 Lessons a Week over 2 years

Component 1 Coursework Unit (60%)
3 Terms Patters in Nature
5 Personal Investigation

Component 1 Externally Set Exam Unit (40%)
January – April 12 School Weeks to prepare (30%)
10 Hour Exam (10%)



Topic Introduction – Patterns in Nature

AO3: Mood board – Home Learning

Patterns in nature are visible regularities of form found in the natural world. These patterns recur in different contexts and can sometimes be modelled mathematically. Natural patterns include symmetries, trees, spirals, meanders, waves, foams, tessellations, cracks and stripes.

Assessment Objective 3 (AO3)

AO3- Record ideas, observations and insights relevant to intentions as work progresses.

AO3 EVIDENCE

RECORD

PRESENT IDEAS

PRIMARY OBSERVATION

DRAWING, PAINTING, PRINTING, PHOTGRAPHY, WRITING, PHOTPGRAPY...

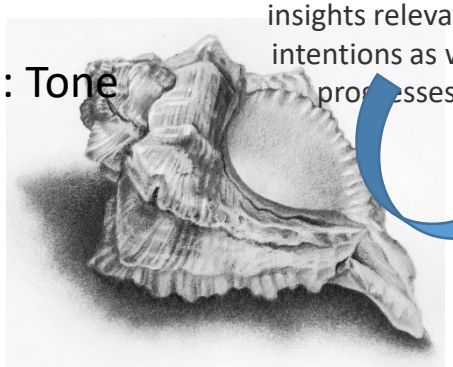
ANNOTATE

DIFFERENT MEDIA

Baseline Assessment - Shell

AO3: Drawing from observation: Tone

You will make a primary observational drawing to create tonal studies of a shell to ascertain your baseline grade. The focus will be on demonstrating your observational drawing skills with a focus on tone and tonal gradient.



Home learning Task

Creatively present an A4 collage of natural form images.

This will show your understanding of what a natural form is.

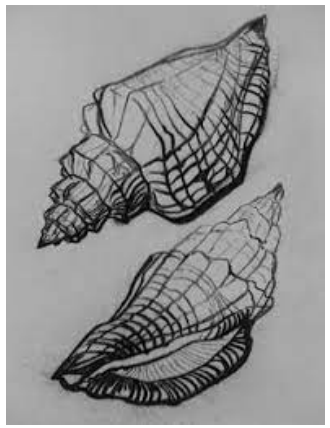
The natural form of an object which has not been altered or manipulated, but is in its' original form found in nature

Investigate natural forms, you must collect as many primary and secondary resources as you can. Display your secondary resources. This can have more than just images, it can have different paper, drawings, and annotation as well. Find images that will inspire your project, and make sure that they are good quality, as you will be drawing from them in the coming weeks.

Natural Form

AO3: Drawing from observation:

Line *Tone* *Mark Making*



Tonal Value Scale

Subject: GCSE Fine Art	Term: 5	Topic: Personal Investigation

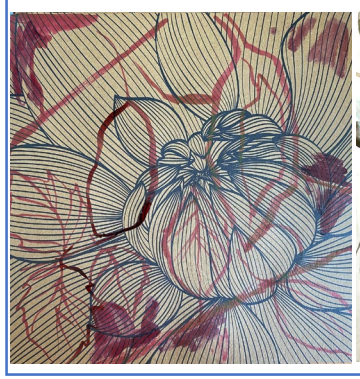
WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

Week 4 - Colour

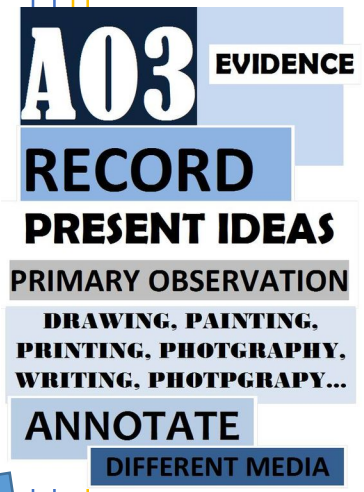
AO3: Drawing from observation: Colour

You will make use of primary or secondary resources to create colour studies using any materials which you feel are appropriate (colour pencil/ water colour/ acrylic paint/ ink/ oil pastel etc). Again, you can use which ever drawing technique you prefer



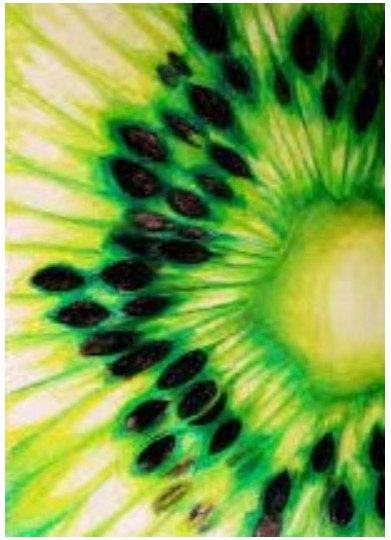
Assessment Objective 3 (AO3)

AO3- Record ideas, observations and insights relevant to intentions as work progresses.

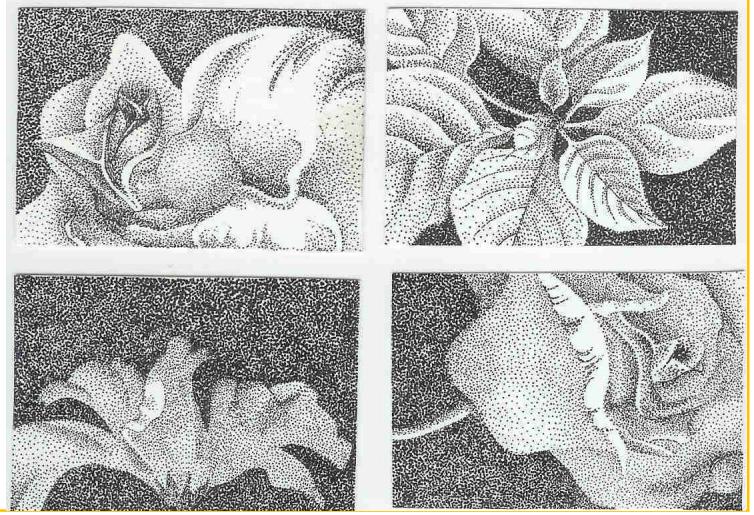


Week 5 Enlargement

AO3: Drawing from observation: Enlarged Sections



You will make use of primary or secondary resources to create cropped zoomed in studies of natural forms using a variety of materials



Subject: GCSE Fine Art	Term: 1	Topic: Patterns in Nature

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Week 6 Contextual Studies – Natural Forms Artist

AO1: Explore the work of artists, ideas and concepts: **Vocabulary**

Using the correct vocabulary in your annotation will show that you are developing your knowledge, understanding and skills. Think about using key terms, such as:

Subject –
- what is shown in the artwork?
- who is it a portrait of?
- what objects are in a still life?
- what is your natural or built environment?

Composition –
- how are the elements of the work arranged?
- are they close together or far apart?
- what is the overall shape of the composition?
- what viewpoint is it shown from?

Foreground and background –
- which elements appear close up or further away?

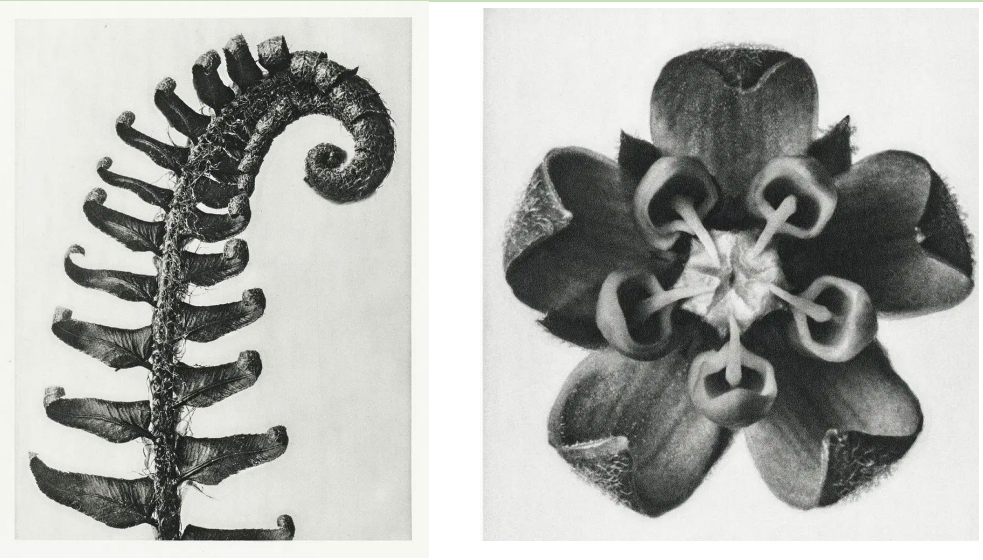
Visual elements –
- how are line, shape, colour, tone, form, texture and pattern used?

Assessment Objective 1 (AO1)

Develop ideas through investigations, demonstrating critical understanding of source

Think carefully about how your annotation looks. It should add to your work and not distract from it.
Make sure handwritten annotation is easy to read. If your handwriting is messy you might be better printing your notes.
If you want to print notes you should use a font that complements your images.
Don't feel you have to write in full sentences. Noting key words or phrases can be just as effective.

Karl Blossfeldt - A German photographer, sculptor, teacher, and artist. He is best known for his close-up photographs of plants and living things, published in 1929 as 'Urformen der Kunst'. He was inspired, as was his father, by nature and how plants grow. He made his own cameras that allowed him to photograph plant surfaces in magnified detail.



Short, simple notes using correct vocabulary can give a clear idea of your understanding and knowledge

Subject: GCSE Fine Art	Term: 5	Topic: Personal Investigation

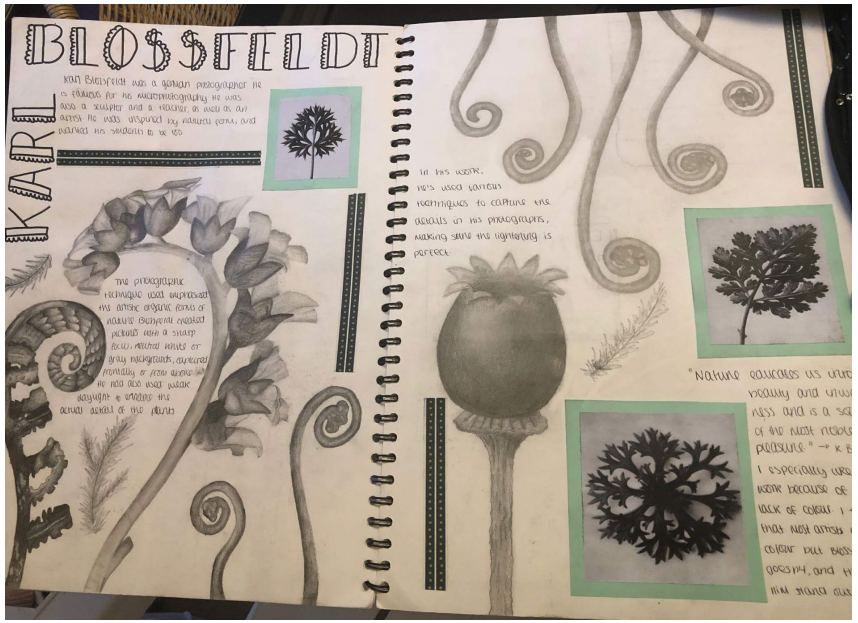
WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

Week 7 – Artist Transcription & Response

AO1: Transcription of artist explored

Make a transcription of explored artists work. A transcription is when you take a piece of art and draw from it to understand how it is made. It isn't copying because you are not replicating it exactly. Instead, you are distilling the image, taking from it what you want, and leaving the rest behind. It is a tool artists have used for centuries.



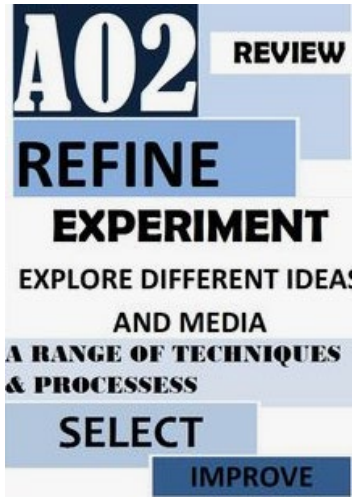
Assessment Objective 1 (AO1)

AP1 AO2: Artist Response – Monochromatic Acrylic Painting

You will create an acrylic painting that you have developed using the ideas of the artists work but also linking it to your previous work you have completed.

Karl Blossfeldt Response

Assessment Objective 2 (AO2)



Karl Blossfeldt Transcription

Develop ideas through investigations, demonstrating critical understanding of source

Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes.

Monochromatic ; having or consisting of one colour or hue

Subject: GCSE Fine Art	Term: 1	Topic: Patterns in Nature

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Week 1-7 Annotation

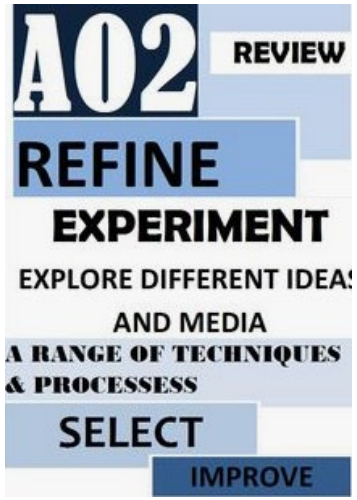
AO1: Annotating your work, ideas and concepts

Annotations are written explanations or critical comments added to art or design work that record and communicate your thoughts.

- analyse the work of an inspirational artist or designer
- record a technique
- record ideas
- explain the thinking behind an idea
- analyse the success of a technique, idea or composition
- explain how a particular artist or designer's style or technique has influenced your work#

Annotations can be used for your own reference, eg to make a note of how you achieved a technique, or to record an idea you might like to try later.
They can also be used to communicate information to the examiner that will help explain your thoughts and decision-making processes.
Using annotations can demonstrate evidence of planning, decision-making and problem-solving ability, which will all contribute towards your assessment.

Assessment Objective 2 (AO2)



Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes.

To annotate your work successfully, you should explain:

- what you have done and why you did it
- how you did it, such as the media and techniques used
- why you chose a particular medium or technique
- how an artwork or design fits in with your project
- what aspects you like
- how you could improve the work
- what you think you will do next

Carefully placed annotation can complement your visual work as well as explaining it

Subject: Health and Social Care	Term: 1	Topic: Human Lifespan Development

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Week 1 – Main Life Stages

J. Jeffery

Life Stages – distinct phases of life that each person passes through.
Characteristic – something that is typical of people at a particular life stage.
Growth – increased body size such as height/weight.
Classification – grouping similar things into a category
Development – involves gaining new skills and abilities such as riding a bike.

Life Stages

0-2 years – infancy: dependant on parents but growing and developing new skills
3-8 years – early childhood: increasingly independent , improving thought processes, developing friendships.
9-18 years – adolescence: experiencing puberty which brings physical and emotional changes.
19-45 years – early adulthood: leaving home, making lifestyle choices, may start a family.
46-65 years – middle adulthood: more time for hobbies and travel, beginning of the aging process.
65+ years – later adulthood: aging process continues, which may affect memory and mobility.

Physical development describes growth a patterns and changes in mobility of the large and small muscles.
Intellectual development (referred to as cognitive development) describes how people develop their skills, memory and language.
Emotional development describes how people develop their identity and cope with feelings,
Social development describes how people develop friendships and relationships.

Week 1 – Physical factors

R.Lowdell

Genetic inheritance is the genes a person inherits from their parents.
Genetic disorders are health conditions that are passed from parents to children through their genes.
Disease and illness can be long term conditions that have an effect on growth and development.
Physical development can affect the rate of growth in infancy and childhood and also impact on the process of puberty.
Emotional development can cause worry and stress, can cause a negative self esteem and result in a loss of independence.
Intellectual development can affect memory and concentration which may impact on decision making.
Social development can restrict opportunities to socialise with other and build wider relationships.

Subject: Health and Social Care	Term: 1	Topic: Human Lifespan Development

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Week 2 – Physical Development

J Jeffery

Physical development is classified into two types: gross motor development and fine motor development.
Gross motor development – the skills acquired to control and coordinate large muscles – legs, arms, torso
Fine motor development – the skills acquired to control and coordinate small muscles – hands, fingers, toes.
Skills and abilities described at each life stage are referred to as milestones.
Milestones have been developed by observing a large number of infants and children at different ages and identifying the stage of development most of the children have reached.
Puberty is a process towards sexual maturity, preparing adolescents for respiration. It starts when hormones are released from the pituitary gland. Hormones send chemical messages to the ovaries in girls and the testes in boys.
Primary sexual characteristics are essential for reproduction and include processes such as ovulation in girls and the production of sperm in boys.
Secondary sexual characteristics are physical and signs that indicate the change from childhood towards adulthood.
Menopause – when menstruation ends.

Week 2 – Lifestyle

R Lowdell

Lifestyle choices include the food you eat and how much exercise you do, drinking alcohol and taking illegal drugs.
A healthy diet leads to health skin, hair, positive self image, energy and stamina, overall good health.
An unhealthy diet leads to being overweight, lack of energy, ill health, negative self image.
Exercise is important for supporting physical development. It helps muscle development, balance and coordination.
As people get older is helps to retain dexterity (fine motor skills) and mobility.
Alcohol can affect judgements, lead to ill health and may affect relationships.
Illegal drugs affect memory loss, lower self esteem and could cause infertility.
Smoking can lead to respiratory problems and heart and lung disease.

Subject: Health and Social Care	Term: 1	Topic: Human Lifespan Development

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Week 3 – Intellectual Development

J Jefferey

Creative thinking/abstract thinking involves our imagination and the ability to think about and imagine things that have not been observed.
Memory involves storing information, connecting information to what we already know and recalling information to use at a later date.
Language development involves being able to think through and express ideas.
Problem solving involves using the brain to use logic to think and come up with new ideas and predict what might happen.
Language development is an aspect of intellectual development.
Theorists suggest that infants brains are pre-programmed to learn language; others suggest that language is learned through social interactions.

Week 3 – Social factors

R Lowdell

Gender role is the role and responsibilities determined by a persons gender.
Development can be influenced by a persons culture and religion because it affects their values and lifestyle choices.
Positive effects of a persons culture or religion include, a feeling of security from sharing the same values and beliefs with others, good self image through feeling accepted and valued by others.
Negative effects of a persons culture of religion may include feeling discriminated against by people who do not share their culture/religion and feeling excluded and isolated because their needs such as diet are not catered for.
Community involvement is important for people to meet and interact with each others.
Isolation can cause anxiety, negative lifestyle choices, feeling less secure and difficulty building relationships.

Subject: Health and Social Care	Term: 1	Topic: Human Lifespan Development

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J Jeffery

Week 4 – Emotional Development

Bonding and attachment describe the emotional ties an individual forms with others.
Security – being safe and forming attachments.
Contentment is an emotional state when infants and children feel happy in their environment and with the way they are being cared for.
Independence – reaching a stage of development that allows individuals to care for themselves.
Self esteem is how good or bad an individual feels about themselves and how much they value their abilities.
Self esteem can be affected by: self image, employment status, health status, events that happened earlier in life, having unrealistic expectations.
Low self esteem can lead to negative thoughts and problems in coping in difficult situations.

Week 4 – Relationships and Isolation

R Lowdell

A role model is someone who a person admires and strives to be like. Role models are important as individuals explore and develop their identity. They can influence how people see themselves compared to others and lifestyle choices.
Relationships are important and can affect self image – positively and negatively.
Family relationships start with attachments in infancy with parents/carers and extend to wider friends and family.
Relationships provide emotional security, contentment and positive self esteem.
Breakdowns in relationships could lead to mental health problems, lowering in self esteem, loss of confidence and stress.
Social isolation can happen when people live alone, are unemployed/retired, are discriminated against or have a disability or illness.

Subject: Health and Social Care	Term: 1	Topic: Human Lifespan Development

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Week 5 – Social Development

J Jeffery

Socialisation describes how infants learn to connect to others.
Solitary play – infants play alone but like to be close to their parent/carer.
Cooperative play – from three years upwards, children start to play with other children and develop social skills to help them share and talk together.
Parallel play – from 2-3 years, children enjoy playing next to each other but are absorbed in their own game.
Communication skills, showing respect for another persons views, listening skills and having trust in someone are all skills needed for social development.
Informal relationships are those formed between family members and provide unconditional love and acceptance. They are important for positive self image and self esteem.
Friendships involve the ability to communicate effectively and to adapt behaviour to match that of the other person.
Formal relationships develop between individuals who are not related or do not have friendships. For example; relationships with teachers and doctors.

Week 5 – Economic factors

R Lowdell

Economic factors relate to a persons wealth and include their income, wealth and their material possessions. Material possessions are things owned by an individual – not basic needs & may affect development positively and negatively.
Income is dependant on the type of work a person does. Income provides a feeling of contentment, security and independence.
Individuals on a low wage or unemployment may live in relative poverty – without enough income individuals struggle to provide those basic needs for themselves and for their family. This can also have an impact on the development of children.
Many older people rely on a state pension to buy the things they need. Some people may have private pensions. Without sufficient money, older people may have to cut down on fuel, shopping, travel and social activities that cost money. This may speed the ageing process and could lead to a decline in health.
Housing is affected by income and wealth – where an individual lives may impact their health and emotional development. Living in good housing with open spaces means individuals may have high self esteem, more likely to stay healthy, feel safe and secure. Poor housing with cramped/damp conditions may have low self esteem and self image, more likely to experience ill health, be more anxious and stressed.

Subject: Health and Social Care	Term: 1	Topic: Human Lifespan Development

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Week 6 – Coursework preparation

Recap and coursework preparation: Understand human growth and development across life stages and the factors that affect it.

A.2D1	Assess the changing impact of different factors in the growth and development across three life stages of a selected individual.
A.2M1	Compare the different factors that have affected growth and development across three life stages for a selected individual.
A.2P2	Explain how different factors have affected growth and development of a selected individual.
A.2P1	Describe growth and development across three life stages for a selected individual.
A.1M2	Outline the ways that different factors have affected growth and development of a selected individual.
A.1M1	Outline different aspects of growth and development across three life stages for a selected individual.
A.1P2	Identify factors that have had an effect on growth and development of a selected individual.
A.1P1	Identify aspects of growth and development for a selected individual.

Subject: Yr 10 Creative iMedia	Term: 1	Topic: RO82 Creating a multipage website revision

WOOTTON PARK

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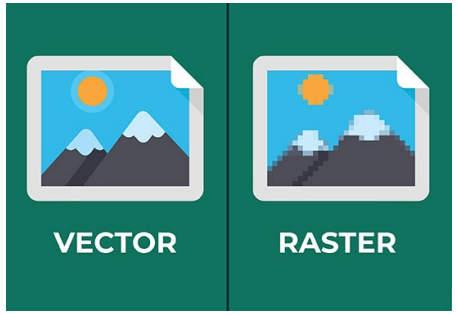
Week 1

Understanding the purpose and properties of digital graphics

Why digital graphics are used – Entertain, advertise, promote, inform, educate. How digital graphics are used; print publishing labelling and branding of products, advertising, website banners and buttons, presentations and games. Types of digital graphics – bitmap and raster graphics – what is the difference. Image file formats - .jpg .png .gif .tiff .eps .psd .spp .dpp .svg .psp .pdf .bmp .wdp .hdp .jxr.
Compression settings – lossy and lossless compression, and properties of digital graphics including pixel dimensions and DPI.
How different purposes and audiences influence the design and layout of digital graphics.
Extended learning: https://youtu.be/hbOGp51nYGI



Week 2

Be able to plan the creation of a digital graphic;

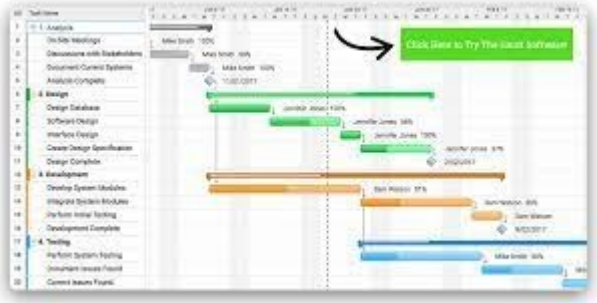
Interpreting client requirements: Before starting work on creating a digital graphic, you must cheque what the client wants. Read the client brief or specification carefully. Then think about how to satisfy the brief using your creative talents and ideas. Write a 250+ words assignment showing your understanding of the client requirements including your initial design ideas including content, layout, composition, house style and image properties.
Understanding the target audience: The expectations, needs and requirements of the target audience must be considered if your digital graphic is to be successful. This is helped by categorising the target audience before thinking about their needs. Once you have a clear idea about who your target audience is, you can consider what they want or need from the digital graphic. For example, do they want information or to be entertained?

Week 3

Producing a work plan for graphics creation;

Project plans are structured lists of all the tasks and associated activities needed to create the digital graphic, with a time scale for each activity and estimated completion date for the overall project. A work plan does not have to be in any set format but should include a range of activities that must be completed to create the digital graphic. When thinking about the effectiveness of the work plan consider 'could somebody else follow it'? Nearly all learners at WPS make a Gantt chart for this pat of the project...

Extended learning: How to make a Gantt chart: https://www.youtube.com/watch?v=un8j6QqpYa0



Subject: Yr 10 Creative iMedia	Term: 1	Topic: RO82 Creating a multipage website revision

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Week 4

Producing a visualisation diagram

A visualisation diagram is a drawing or sketch to illustrate your ideas of what the final graphic could look like. The visualisation diagram can be produced in one of two ways.
1. Hand drawn using paper and pencils or coloured markers. Sketch out what you want the graphic to look like. Annotate this with comments on colours, fonts and layouts.
2. Digitally produced: using a software application. This does not have to be image editing software: you could use desktop publishing applications such as Microsoft publisher / .ppt
Your visualisation diagram should have enough detail to be created by somebody else as well as giving your client a good idea of what you are intending to create. That might need some detailed annotations to illustrate your ideas.

Identifying assets needed to produce a digital graphic

You need ideas about what could potentially be used, but you will also need to comment on their suitability. Assets could be from: photographs, whether taken by yourself or by others and images, from any printed material (think about Copyright restrictions) , image libraries, from web based picture libraries (conditions and costs of used to be identified) graphics and logos, these might be supplied by the client in a vocational or commercial context. Internet images can be found using an image search, but the results do not always show images that would be suitable resolution for print, check the pixel dimensions of the image for suitability. Check the pixel dimensions and divide these by 300 to determine how large they could be (in inches). The second restriction is Copyright - most Internet images will be protected, even if it isn't clearly stated.

Week 5

Identifying resources needed to create a digital graphic

Peripherals for use in creating digital graphics: Mouse, keyboard, computer, monitor, printer, scanner, graphic tablet, using a stylus pen on the tablet is similar to using a brush on paper, so it is popular with creative artists and designers. Digital camera: You may have your own images if you study photography.

Choosing image editing software

Adobe Photoshop: a widely used industry standard application used with photographs and graphic design
Other applications can be used to edit graphics, such as Microsoft publisher, word, PowerPoint ET cetera but they are not considered good choices.
Keep in mind what will be needed and why when planning your digital graphics projects so that you can make informed choices.

Subject: Photography	Term: 1	Topic: Fundamentals of Photography

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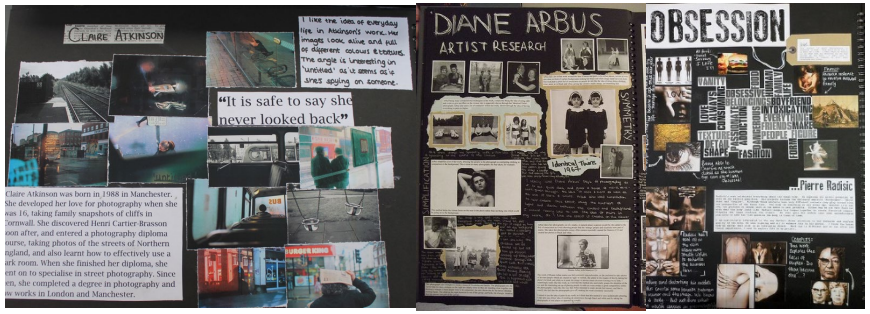
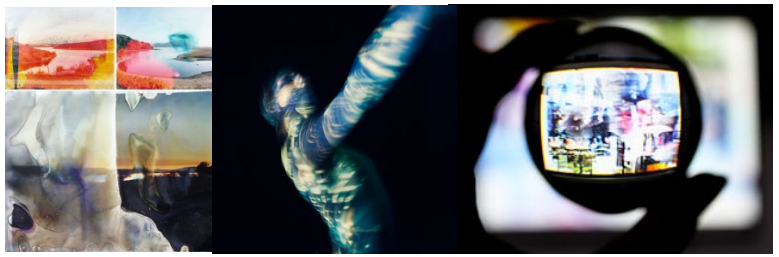
Week 1

GSCE Course Content

AO1- Research images and artists

Begin with a strong starting point. Research this starting point and photographers and techniques linked to your idea. Presentation and narrative is key. Examples: Mind Maps, Artist Research, Photograph Analysis, Analysis of Techniques.





AO2- Experimenting with materials and techniques

Reduce and refine your ideas and explore this in detail, analytically and aesthetically. Explore the visual elements such as colour, shape, texture etc. Start to experiment and develop these ideas further by choosing a photographer/ a photograph, analyse it and recreate it, and then reflect on it and it's influence on your own work! Photograph techniques, digital and manual manipulation.

AO3- Recording ideas

Recording your ideas, observations, analysis and reflection. Should include visual and written work. This is important as it documents your artist influence and experimentation which is essential to your mark. It is a cycle of influence, recreation, experimentation, reflection and refining. Examples – Photoshoot planning, Contact Sheets, Photographs and Annotations, Photograph Analysis

AO4- Final piece and evaluation

Your final piece must reflect everything you have analysed and explored throughout your project, and show a clear journey from starting point to final piece. If its not clear to you, it certainly won't be evident to the examiner, so make sure it is a coherent body of work. It should be influenced by the work of others but must not be a copy of others' work. It has to be unique.

Artist Essay

Write a minimum of 350 words analysing the photographic works of a chosen artist following the guidelines below.
You will describe a range of significant visual features. You will demonstrate a clear and detailed understanding of the artist's intentions.

Emerging: Introduction- 50 words (minimum)
Firstly, when writing about an artist you should always note the following:
- Name of artist / designer
- Title of artwork
- Date of artwork
- Medium used (ie: oil on canvas)
- Why did you select this artist to study?

Sentence Starters
The photographer I have chosen to study is…
The title of the artwork I will be analysing is… which was created on the…
The photographer used (digital photography, dark room photography etc.)
I chose this work because I was interested in the (technique, process, style, concept etc.)

Developing: Description- 100 words (minimum)
What is it?
Describe the artwork in as accurate and detailed a manner as you can. Imagine the reader has never seen this image.
- What does it look like?
- What is the subject?
- What is the focus of the work?

Comment on the way it has been composed. Discuss the way the artist has used the visual elements such as; colour, tone, form, shape, line, space, pattern, texture, etc…
Don't forget to mention your own responses to the artwork; how it makes you feel and anything it reminds you of.

Securing: Analysis- 150 words (minimum)
How was it made?
Try to analyse the processes and techniques the artist or designer has used. What materials have been used? Have you ever tried to create similar effects or used similar materials?
Why was it made in that style?
Think about why it was made in this particular way and not another. What do you think the artist's intentions were? How does this artwork compare to others made around the same time, or in the same area? What was life like at the time this artwork was made? How was it interpreted when it was made? Do we still think of it in the same way today?

Sentence Starters
The photograph achieved this effect using (name process, techniques used)…
I have tried/ not tried this technique before.
The materials in the image are… this is important because/ the reason this is used is…
I think the photographer uses this techniques/ materials/ concepts because…
I think the photograph was influenced by…
I think the viewer's interpretation has/may change over time because…

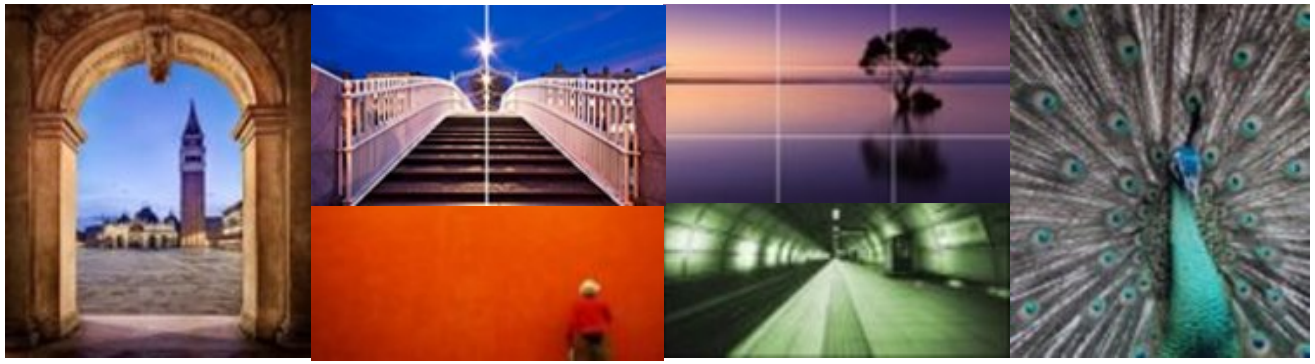
Subject: Photography	Term: 1	Topic: Fundamentals of Photography

Week 2

Photographic Visual Elements

The **viewpoint** refers to the position a photograph is taken from. There are three common view points, **worm's eye view**, **bird's eye view**, and **eye level**. Angles are the specific location of the camera and the direction a photograph is taken from. Both of these elements have an impact on the composition, interest and overall success of your image.

Lighting is a key factor in creating a successful image. it is necessary to control and manipulate light correctly in order to get the best texture, vibrancy of colour and luminosity on your subjects. Lighting can be **natural** or **artificia**l. It can be **harsh** or **soft**. The direction and intensity of the lighting not only affect the clarity of the image but the position of shadows. This in turn effects the **atmosphere** or **mood** of an image.



Composition is the arrangement or placement of object in an image to maximise **aesthetic value**. It is an extremely important skill in creating success photographs. This skill requires practice in order to "train your eye" to achieve your outcome.

Above are some examples of different styles of composition. **Rule of Thirds, Symmetry, Centred, Negative Space, Leading Lines, Framed** and **Filling the Frame** are some of the most common compositions used. Can you identify the type of composition shown in each example?

Subject: Photography	Term: 1	Topic: Fundamentals of Photography

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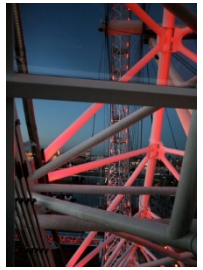
Week 3 - 6

Photographic Visual Elements

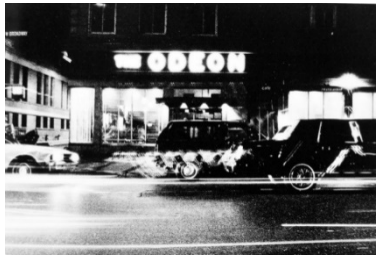
THE VISUAL ELEMENTS – Line
Lines are seen in photographs in many ways. We see lines as EDGES of things. We see 'outlines' to shapes. We notice that lines appear to lead our eye deep into the photograph. Lines seem to express tension, movement, direction and often create new shapes and patterns.






THE VISUAL ELEMENTS— Tone
In the photograph is there a range of TONES from light to dark? Squint your eyes. Where is the darkest value? The lightest? A good photograph should a balance of white areas and very dark/ black areas. Use levels to help add a tonal balance to your work.



THE VISUAL ELEMENTS—Texture
Texture is seen mostly on the surface objects. Rough, spikey, crumbly, knobbly, smooth, gritty, etc., are adjectives that we find to describe different surfaces around us. Texture can also be used to describe a lot of similar things grouped together, eg, crowds of people, leaves and branches, fields of grass, wheat, flowers. We like to have a variety of textures around us because they stimulate our senses.






Subject: Photography	Term: 1	Topic: Fundamentals of Photography

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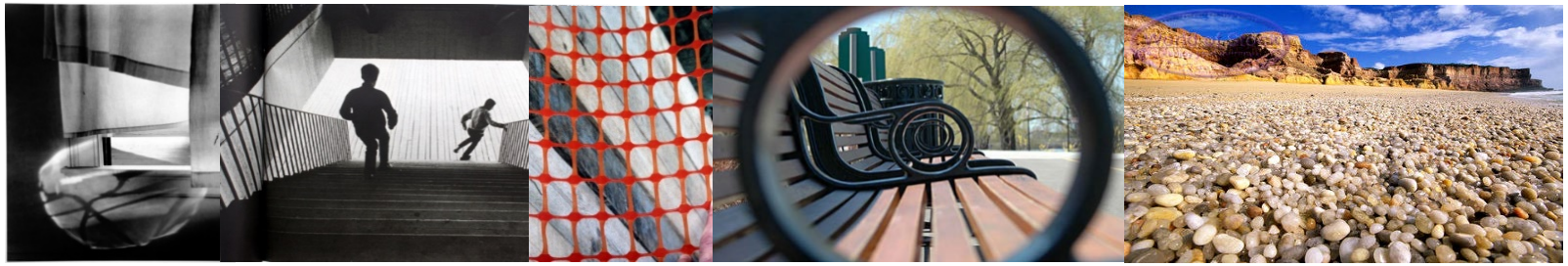
Week 3 - 6

Photographic Visual Elements

THE VISUAL ELEMENTS— Colour
Imagine a world without colour. We thrive on colour as visual food. It nourishes our senses and contributes to our sense of being truly alive. Photography is now largely colour photography. Colour photography communicates reality, emotions and stimulates our imagination. What colours does your photographer use to draw your attention?

THE VISUAL ELEMENTS— Shape
We are shapes. The world is a shape and everything in it has shape. We recognise our world by remembering shapes and shapes within shapes. Cameras record shapes very accurately. Shape is the basic building block of all photographs. What is the shape of the composition of the photograph?

THE VISUAL ELEMENTS— Focus
What parts of the image are clearly in focus? Are some parts out of focus? What effects can be achieved by varying the focus in different areas of a photograph?



Subject: Photography	Term: 1	Topic: Fundamentals of Photography

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Key Vocabulary and Definitions

Aesthetic Value - The positive attributes of a visual.

Composition - The artistic arrangement of the parts of a picture.
Rule of Thirds - The **rule of thirds** is applied by aligning a subject with the guide lines and their intersection points on a gird split into thirds
Symmetry - Symmetry is when both sides of an image are the same or hold equal weight
Centred - The subject of an image is centred in the photograph.
Negative Space - Is the area surrounding the main subject in a photograph which is left unoccupied.
Leading Lines - Lines that appear in a photograph that have been framed and positioned by the photographer to draw the viewer's eye towards a specific point of interest.
Framed - A frame within a frame occurs when you use a visual element in the image to frame the primary subject.
Filling the Frame - These means the subject(s) takes up a significant part of your image, filling up to the edge or the frame of your photograph.

Viewpoint - Refers to the position a photograph is taken from. There are three common view points, **worm's eye view**, **bird's eye view**, and **eye level**.
Lighting - Refers to the way a photograph is light this can be categorised **natural** ie sunlight or **artificia**l ie lamp, studio setting. It can also be **harsh** (bright and defined, casts strong contrast/shadows)or **soft** (glowing and evenly dispersed). Different effects are created using different lighting positions ie back lighting, side lighting.
Focus - Describes the part of a photograph that is sharpest or clearest. Can also refer to the most important part of a composition.
Depth of Field – Is the distance between the nearest and the furthest objects giving a focused image.

Narrative - The story which the photographer creates using the different visual elements.
Mood - The suggestion of a particular feeling or state of mind a photographer creates using the visual elements. Can also be known as atmosphere.

Subject: Psychology	Term: 1	Topic: Criminal Psychology

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Week 1 – Types of crime + social construct

Different types of crime:
Acquisitive: Crimes where capital or belonging are acquired through illegal means. Example: theft, fraud.
Anti-social: Criminal acts that cause harassment, alarm or distress to people who do not share a home with the perpetrator. Example: drunk and disorderly, graffiti.
Drug-related: Crimes involving trading in or using illegal substances. Example: Supplying or buying drugs.
Sexual: Crimes where a victim is forced to commit or submit to a sexual act against their will. Example: rape, use of child pornography.
Violent: Aggressive crimes resulting in physical harm or death to the victim. Example: physical assault, murder.

Criminal behavior as a social construct:
Crimes are any acts against the law, but who decides what is 'the law'? Laws differ based on the society, this is why crime is known as a social construct.
Laws vary depending on which culture or time period you are observing.

1. In some societies, it is acceptable to be married to more than one person at the same time, so this is not against the law. In British society however, this is a crime known as bigamy.
2. Laws change over time as society changes. Nowadays there are no laws against homosexuality in the UK. However about 50 years ago, it was illegal to engage in gay sex.

Society often decides on what is a crime based on the social norms of the culture. Behaviors that deviate from these social norms are often defined as a crime. At any point in time, crime is defined by the people that make up the culture, and the social norms that the culture abides to.

Research methods – Measuring crime

Self report:
One way of measuring crime is through self-report surveys which helps to find out about crimes that are not reported or detected.

Victim Surveys: these allow people to report crimes that they have experienced even if they didn't tell the police.
Offender Surveys: these ask convicted criminals about other crimes they have committed.

☹ People can lie or say what they think is desired of them
☹ Offenders may underestimate how serious their crime was/not believe it was bad enough to mention
☺ Surveys do help to gain the information on crimes that the official statistics miss

Official statistics:
Another way of measuring crime is to use official statistics. These are statistics produced by the Government's Home Office which are based on crimes recorded by the police force.

☹ Official statistics are limited in the range and in the type of crimes that are reported.
This is because:

- People don't trust the police
- Victims don't believe a crime has been committed
- Victims are scared of the consequences if they do report it
- Police can only report the crimes that are detected

☺ Can collect a large volume of data from all police forces across England quite quickly.

Subject: Psychology	Term: 1	Topic: Criminal Psychology

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Week 2 – Social Learning Theory

An explanation of why criminal and anti-social behaviour occurs

The Social Learning Theory: developed by Albert Bandura, he proposed that crime was learnt by observing crime committed by peers/family.

According to SLT: We identify with role models. These are people we look up to and admire. By identifying with them, we have decided that we want to be like them. We then pay attention to our role models through observing them, and then we try to imitate them. If the behaviour we have observed is rewarded, we are more likely to want to imitate that behaviour so we can get that reward, this is called vicarious reinforcement.
If we then do this behaviour and it does end in a reward for us, this is an example of direct reinforcement.
We may then have the motivation to repeat this behaviour again and again. Once a behavior becomes a part of us and is fully ingrained, this is known as internalisation. At this point the behavior happens regardless of the consequences, whether they are good or bad.

Evaluation

☹ The theory focuses too much on nurture and ignores the role of nature. It believes criminal behavior can be learned and therefore unlearned. It might, however, be something that was more innate

☹ If criminal behavior is imitated from others, from where did it originate in the first place? People also turn to crime without observing role models committing crime.

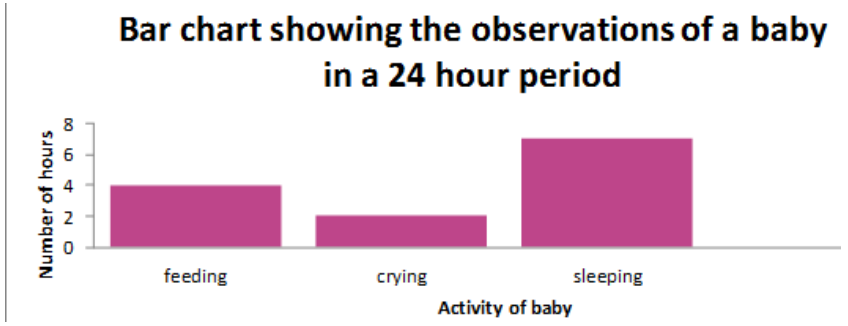
☹ If social learning theory is correct then we should be able to reduce crime more easily

Research methods: Bar charts

Frequency tables (tally charts)
Tally marks are used for counting things. These are used in content analyses and observations. They record the number of times something is seen.

Observation of baby…	Tally	Total
Feeding	IIII	4
Crying	II	2
Sleeping	~~IIII~~ II	7

Bar charts: can be used to represent the data from frequency tables, mean scores or the total. The bars are kept separate from each other, for example using the data from the frequency table.



Success criteria when drawing a bar chart:
- ✓ Use a pencil and a ruler
- ✓ Label the bars
- ✓ Label both axis
- ✓ Do not draw the bars touching
- ✓ Title the graph

Subject: Psychology	Term: 1	Topic: Criminal Psychology

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Week 3 – Cooper & Mackie (1986)

Background: researchers were interested in seeing if the emergence of video games encouraged aggressive behavior in children.
Hypothesis: Playing an aggressive video games compared would lead to increased aggression in children compared to playing other video games.
Method: Design – laboratory experiment. IV – type of game played/observed, DV – aggression levels after playing/observing the game. Sample: 84 9-11 year olds from Schools in New Jersey. Materials – Missile command or Pac man video game, star wars or Tron paper and pen games, warrior figure, basketball set, pinball machine, building blocks, buzzer, two questionnaires.
Procedure: participants randomly allocated to a condition. Condition 1: children played/observed an aggressive video game. Condition 2: non-aggressive video game. Condition 3: the control condition. After playing the game, participants were taken to a play room where there was an aggressive toy, an active toy and a quiet toy, . An experimenter in the room secretly recorded which toys children played with. Participants were then tested on interpersonal aggression.
Results: Girls in the aggressive game condition spent more time playing with the aggressive toy than girls in the other 2 conditions. Boys spent more time overall playing with the aggressive toy than girls in the other conditions. Overall boys behaviour was hardly influenced by the video game.
Conclusion: Playing or watching an aggressive video game had an impact on the aggressive behaviour of girls because girls were less experienced with violent video games and less exposed to violence in general, they reacted to the aggressive video game with greater arousal than boys. This led them to imitate the behaviour they witnessed. Overall, study showed some evidence of children's play imitating the kinds of behaviour they observed in the computer game, supporting the SLT.

AO3

☹ The sample was biased, therefore it's difficult to make generalisations
☹ The study was in an artificial setting leading to low levels of ecological validity.
☹ The study had uncontrolled extraneous variables making it difficult to establish cause and effect.
☺ More control over extraneous variables than field experiments

Research methods: Hypotheses & Variables

Hypotheses are predications psychologists make about their results before carrying out the research. For example, a psychologist may predict loud noise is a cause of stress.
Alternative hypothesis: predicts a pattern in results. This could be a difference or a correlation. E.g.

✓ 'There will be a significant difference between the test scores of participants when tested under noisy conditions compared to when tested under silent conditions'

Null hypothesis: the opposite of an alternative hypothesis – it predicts no pattern (difference or correlation) in results. E.g.

✓ 'There will be no correlation between how loud music is played and how high participant score on a test'.

Variables are anything that can change – making changes or testing for changes is how psychologists work out the cause of something, such as the cause of stress. variables are 'things' that can vary (eg. different tasks, measurements etc) and we manipulate, control or measure them in an experiment.
There are 3 experimental variables:

1. **Independent variable (IV):** something the researcher changes or manipulates
2. **Dependent variable (DV):** something that is measured to see if it has changed (after an IV has been manipulated)
3. **Extraneous variable**: a variable, apart from the independent variable, that can affect the dependent variable unless it is controlled.

Cause and effect is the process of one variable affecting another. This can be established if all other variables are controlled. Therefore we cannot get a cause and effect relationship when researchers predict a correlation; instead of IV's and DV's we have two co-variables to see if there is a relationship between them.

Subject: Psychology	Term: 1	Topic: Criminal Psychology

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Week 4 – Eysenck's Criminal personality theory

Eysenck suggests that the impulse to behave in a criminal manner is something people are born with, and therefore do not learn. The theory outlines three personality traits:
Extroversion: high scores present as outgoing, sociable and confident. The opposite is introversion.
Neuroticism: high scores present as angry, anxious and prone to feeling guilt. The opposite is stability.
Psychoticism: high scores present as impulsive, aggressive and selfish. The opposite is high impulse control.
Everyone is born with these traits, but to varying degrees based on genetic inheritance.
According to the theory, individuals with a criminal personality will score highly on each of his three scales. E.g. criminals are often extroverts as people with this trait need a lot of stimulation from their environment and this excitement can be found in criminal activity.
Biological basis of personality: Eysenck believed these personality types are caused by individual differences in brain activity. He suggest that criminality can be linked to under arousal in the Central Nervous System (CNS)

- The reticular activation system (RAS) regulates stimuli sent to the cerebral cortex.
- Eysenck argues in extroverts the cerebral cortex is under aroused because the stimuli is restricted by the RAS and extroverts have a stronger dopamine reward system. Thus their cerebral cortex is hungry for stimulation which can be acquired from illegal behavior which is then rewarded more.
- Neuroticism is linked to an over-aroused autonomic nervous system (activated during emotional situations and regulates the limbic system) resulting in higher levels of violence.
- Psychoticism is the result of an excess of dopaminergic neurons, which cause over production of dopamine by the nervous system which leads to less inhibition of impulses.

Criticisms:

1. Ignores individual differences – the theory puts people into 3 categories.
2. Too deterministic – suggesting crime is out of a persons control due to their genes.
3. There us not enough of an emphasis on nurture

Research methods: hypotheses and experiments

An hypothesis is a clear, testable statement which predicts outcome of the research

Lab experiments: Experiments conducted in artificial environments.
A lab is any controlled environment where the researcher can keep the conditions the same across all conditions and for all participants.
Still manipulating one variable (IV) and measuring another (DV).

Labs give us more control of the environment. This makes it easier to:

- Use sophisticated equipment.
- Replicate the study.
- Control extraneous variables.
- Establish cause and effect.

However they are also artificial which means:

- Less **ecological validity.**
- More **demand characteristics.**
- Chances for **experimenter bias.**

(see last week for definitions of key terms)

Rating scales: a way of answering a closed question that required the respondent to select a number to represent their response.
Closed question: questions with a fixed set of responses.
e.g.
1. I know how to get people have fun
Very inaccurate ◦ ◦ ◦ ◦ ◦ Very accurate
(this is the first question on Eysenck's personality questionnaire).

Subject: Psychology	Term: 1	Topic: Criminal Psychology

WOOTTON PARK
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Week 5 – Heaven's (1996) study

Background: Heaven challenged some of Eysenck's theory because official offenders tended to score highly on neuroticism but not on extroversion, whilst those who scored highly on extroversion but not neuroticism, tended to score highly on self-report measures. Self-esteem was chosen instead of neuroticism.

Hypothesis: Measures of psychoticism, extroversion and self-esteem would be significant predictors for self-report delinquency.

Method – Design: A longitudinal study investigated whether psychoticism, extroversion and self-esteem at the start of the study were significant predictors of delinquency 2 years later.

Sample: 282 adolescents (146 females, 136 males) from two catholic independent schools in New South Wales, Australia. Age range: 13-15 years old at the start of the study. No students withdrew.

Materials: Eysenck's personality test for psychoticism and extraversion. A 10-item questionnaire to measure self-esteem. A self-reported delinquency questionnaire assessing two forms of delinquency: interpersonal violence and vandalism/theft.

Procedure: Participants completed 3 questionnaires which were checked for internal reliability. Participants were followed up after 2 years, with 80% responding the second time. Questionnaires were completed anonymously and confidentiality was maintained.

Results: Scores showed males were more likely to engage in delinquency at time 1 and time 2. a positive correlation was also found between psychoticism and delinquency at time 1 and time 2, whereas extroversion correlated with delinquency only at time 2.

Conclusions: Heaven's research supported previous studies finding a strong association with psychoticism and self-reported delinquency. However psychoticism, self-esteem and extroversion only explained a modest percentage of delinquency, and other factors such as peer pressure could also influence criminal behavior engagement.

Evaluation: The sample used was culturally biased, only using children from catholic schools in one area of Australia.

The use of self-report can lead to invalid data due to social desirability bias. Can we trust that children will report the truth in a questionnaire?

The 20% of participants who dropped out by time 2 may have biased the result.

Research methods: questionnaires

Questionnaires:

- Type of self-report method that consist of a set of pre-set questions that are often written down. The questions are the same for everyone.
- Closed or open questions can be used in questionnaires
  - Closed questions: questions which have set responses to choose from, e.g. using a rating scale or multiple choice answers.
  - Open questions: no fixed responses so participants can respond how they wish.

A strength of a closed question is that they give quantitative data so that patterns can be more easily seen, however it can lack construct validity.

A strength of open questions is that they give more qualitative data which allows for more in-depth responses, which increases validity. However, data is difficult to analyses for trends.

Qualitative data: non-numerical data rich in detail, usually textual or verbal.

Quantitative data: numerical data, measurements of quantity/amount or how often something has occurred.

Strengths:

1. Can be used to access people's thoughts and feelings
2. Compared to interviews, questionnaires make it easy to survey a large sample quickly because they can be administered at the same time.
3. It is possible to compare answers and look for reliable patters and trends because all respondents are asked the same set of questions.

Weaknesses:

1. Respondents may misunderstand a question as they often complete them alone.
2. The options of a closed question may not give them the answer they want to give.
3. They do not consider individuals as by asking everyone the same questions, researchers cannot explore more personal responses.

Subject: Psychology	Term: 1	Topic: Criminal Psychology

WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

Week 6 – Application – punishment

The effects of punishment and deterrents in reducing criminal/anti-social behaviour.

If psychologists can find out the true cause of crime (whether it is more nature or nurture) then there is a chance of reducing it. When we look at society's way of controlling crime, it looks as though the nurture argument is supported.

In support of social learning theory, If criminal behaviour is punished, then this should reduce the chance of it happening again as people generally want to avoid negative outcomes.

Prison: a place where people are confined as a punishment. Used for centuries as a tool to take away peoples freedom, rights and privileges.

Fines: another form of punishment in which a monetary charge is imposed on an individual who has committed an offence. Loss of funds is a disincentive.

Community sentences: more recent form of punishment. Offenders make a payment back to society, often by given up their time to do unpaid work. It's often made obvious they are doing community service and so the psychological punishment of shame and guilt are part of the process.

A deterrent is something that reduces the likelihood of a crime being committed.

The role of rehabilitation in reducing criminal/anti-social behavior and increasing pro-social behaviour.

Psychologists realised that punishing offenders is not enough; offenders may need to unlearn their criminal ways and learn pro-social behaviour (caring, helping, sharing)

Rehabilitation: the process of reintegrating a convicted person back into society, with the aim that they will no longer want to commit crime.

Restorative justice is one way of rehabilitating offenders by giving them the choice to be aware of the consequences of their actions. Often this involves the offender meeting the victim of their crime, encouraging offenders to take responsibility, see the harm they have done and repair it. Positive role models may also be used in rehabilitation, so that they can observe others behaving in a pro-social way. They are often mentors that are matched with offenders to encourage identification and imitation.

Research methods: Correlations & Scatter graphs.

Correlations measure two co-variables to see if there is a relationship between them. The usually involve using other methods to collect data like questionnaires and observations. Correlations use quantitative data.

Positive Correlation: as one variable increases, so does the other.

Negative Correlation: as one variable increases, the other decreases.

No Correlation: there is no relationship between the variables.

Perfect positive correlation
Coefficient: 1.

No correlation
Coefficient: 0

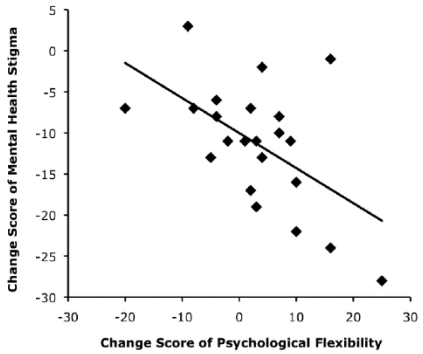
Perfect negative correlation
Coefficient: -1

Correlation Coefficient: a number between -1 and 1 that tells us how strong the relationship is.

Strengths: can research variables that would be unethical to manipulate and can understand the relationship between 2 variables.

Weaknesses: correlations do no show causation, they have the same weaknesses as the method used to collect data.

never use the words CAUSE, EFFECT OR DIFFERENCE when describing correlations



Scatter diagrams: We can display correlation data in scatter diagrams. One variable (amount of revision done) along one axis and another variable (final grade) along the other. Each 'point' on the scatter diagram represents one participant: how much revision they put in and what their final grade was.

Subject: Psychology	Term: 1	Topic: Criminal Psychology

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Week 7 – experimental design

Experimental design:
•How the researcher organises the participants
•Not to be confused with Experimental Method

Three types of Experimental Design:
Independent Group Design (aka. Between Group) Looks for 'mean' differences between groups .So each participant only takes part in one of the trials/conditions, meaning the participants in one condition are independent from participants in another. Sometimes random allocation of participants is used.

Strengths: No order effects (boredom/fatigue effect, practice effect, demand characteristics). The same task can be used in both conditions as participant won't be familiar with it.
Weaknesses: differences between conditions could be due to participant variables. More participants may need to be recruited as they cannot be used more than once per condition.

Repeated Measures Design (aka. Within Group) Tests all participants across all conditions and looks for changes within a person. Each participant takes part in all the trials.

Strengths: Differences in conditions less likely to be due to participant differences as you compare 'like with like'. Fewer participants need to be recruited saving time and money.
Weaknesses: Participants may perform worse on the second condition due to boredom/fatigue effect or may perform better on the second condition due to practice effect. Participants may work out the aim of the study and alter their behavior (demand characteristics). The task may need to be changed between conditions making it an extraneous variable.

Matched Pairs Design: The internal make-up of two groups are matched across (participant to participant eg, gender, age etc)
Calculate differences between the pairs and then mean difference between the groups

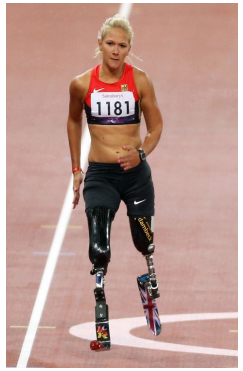
Lab experiments key definitions:
Ecological Validity: How similar to real life the research is.
Demand Characteristics: Participant trying to work out purpose of study and behaving differently.
Cause and Effect: Ability to tell that one variable is having an effect on another.
Experimenter Bias: Experimenter accidentally or on purpose changes behaviour to get results they want, or misinterprets data to get results they want.

Subject: Sports Studies Y10	Term: 1 – Learning Outcome 1	Topic: Unit RO51 Contemporary Issues in Sport

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Different user groups who may participate in sport

- ethnic minorities
- retired people/people over 50
- families with young children
- single parents
- children
- teenagers
- disabled
- unemployed/economically disadvantaged
- working singles and couples



Factors that can impact on the popularity of Sport

participation (e.g. football has wide-spread mass participation due to strong infrastructure being in place)
provision (e.g. tennis lacks easily accessible courts impacting on base level participation)
environment/climate (e.g. regular involvement in snow sports as participant or spectator either requires frequent trips abroad or the use of artificial slopes as most parts of UK do not have appropriate terrain/ weather)
spectatorship (e.g. live professional rugby matches readily accessible) media coverage (e.g. BBC1 has sole coverage of Wimbledon, therefore, avid tennis fans will watch this, The Ashes not on free to air TV)
success for both teams and individuals (e.g. Sir Chris Hoy's success at the Olympics has increased participation in cycling)
role models (e.g. lack of role models for particular groups in particular sports, such as British Asian footballers)
acceptability (e.g. boxing still has vocal opposition who feel that the aim of the sport is to 'hurt the opponent' and that it is, therefore, not appropriate, especially for younger people, opposition to horse racing due to perceived animal cruelty by use of whip)

Barriers affecting participation

- employment/time (e.g. not much free time available)
- work restrictions and family commitments (e.g. women still seen as bringing up the family and not being involved in sport)
- disposable income (e.g. cannot afford cost of participation)
- accessibility of facilities/equipment (e.g. transport not available, no disabled access)
- lack of role models (e.g. few ethnic role models, few female role models)
- provision of activities (e.g. limited activities on offer which do not meet the requirements of the prospective participant)
- awareness of activity provision (e.g. what is currently available)
- portrayal of gender issues by

Solutions to barriers affecting Participation

- **provision**, i.e. – programming sessions for use by different user groups (e.g. sessions for wheelchair sports) – providing appropriate activity options for the demands of specific user groups (e.g. different age groups want different options) – planning of times to suit different user groups (e.g. for parents with young children, mid-morning after the school run)
- **promotion**, i.e. – targeted promotion (e.g. by advertising in appropriate places to increase visibility to different user groups) – using role models to encourage participation among different user groups – initiatives aimed at promoting participation and inclusion (e.g. free swimming for under-16s and over-60s)
- **access**, i.e. – access to facilities (e.g. provision of transport in rural areas, ramps for wheelchair access to buildings) – access to equipment (e.g. a hoist for swimming pool access) – sensible pricing/concessions (e.g. reduction of charges for unemployed people or young children)

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Subject: Sports Studies Y10	Term: 2 – Learning Outcome 2	Topic: Unit R051 Contemporary Issues in Sport

WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

- Values which can be promoted through sport, i.e.

o **team spirit** (e.g. learning how to work together and support others by playing as part of a team)
o **fair play** (e.g. learning the importance of adhering to rules and being fair to others through playing sport)
o **citizenship** (e.g. get involved in your local community through sport)
o **tolerance and respect** (e.g. developing understanding of different countries and cultures through sport)
o **inclusion** (e.g. initiatives to get under-represented social groups involved in sport)
o **national pride** (e.g. supporters and performers unite behind country in international events)
o **excellence** (e.g. striving to be the best that you can in your favourite sport)

- the Olympic and Paralympic movement, i.e.

o **the creed**, i.e. "The most important thing is not to win but to take part, just as the most important thing in life is not the triumph but the struggle. The essential thing is not to have conquered, but to have fought well." Pierre De Coubertin

o **the symbol**, i.e. five interlocking rings represent the union of the five continents

o **the Olympic and Paralympic values**, i.e. Respect, Excellence, Friendship, Courage, Determination, Inspiration and Equality

- the importance of etiquette and sporting behaviour of both performers and spectators, i.e.

o **reasons for observing etiquette and sporting behaviour** (e.g. fairness, promoting values, safety of participants etc.)

o **sportsmanship** (e.g. football giving the ball to the opposition when they have kicked it out when an injury occurs to your team)

o **gamesmanship** (e.g. time wasting)

o **spectator etiquette** (e.g. quiet during rallies at Wimbledon, quiet during play in snooker, quiet during the playing of national anthems)

o **sports initiatives** to break down barriers (e.g. Kick Racism Out of Football)

- the use of performance-enhancing drugs in sport, i.e.

o reasons why they are used (e.g. pressure to succeed as an individual, pressure to succeed as a nation)

o reasons against use (e.g. long term ill health, consequences when found guilty, unfair advantage)

o World Anti-Doping Agency (WADA), i.e.

- whereabouts rule

- testing methods, i.e. blood sample collection, urine sample collection, hair sample collection, nail sample collection

o current initiatives (e.g. sanctions)

o drug offences by elite performers (e.g. Dwain Chambers, David Millar)

o impact of drug taking on the reputation of sport (e.g. mistrust of results/events such as Tour de France as a result of so many scandals)

o ethical issues related to drug taking (e.g. should there be a distinction between use of performance enhancing drugs and recreational drugs?)

TOKYO 2020

TOKYO 2020 PARALYMPIC GAMES

Cambridge NATIONALS

Key Words

Team Spirit – learning how to work together and support others by playing as part of a team.

Tolerance and respect – developing understanding of different countries and cultures through sport.

Excellence – striving to be the best that you can in your favourite sport.

Sportsmanship – fair and generous behaviour or treatment of others, especially in a sporting contest.

Gamesmanship – the art of winning games by using various ploys and tactics to gain a psychological advantage.

Subject: Sport	Term: 1-6	Topic: Unit RO52 Developing Sports Skills

WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

LO1 - **Be able to use skills, techniques and tactics/strategies/compositional ideas as an individual performer in a sporting activity (Year 11)**

the key components of performance for an individual performer in a sporting activity, i.e.
○ performance of skills and techniques (e.g. a front somersault in trampolining)
○ creativity (e.g. communicating a theme to the audience through performance of a ballet dance)
○ appropriate use of tactics/strategies/compositional ideas (e.g. using a drop-shot against a baseline player in tennis)
○ decision-making during performance (e.g. shot selection from different lies in golf)
○ ability to manage/maintain own performance (e.g. staying composed after two illegal jumps in triple-jump).

LO2 - **Be able to use skills, techniques and tactics/strategies/compositional ideas as a team performer in sporting activity. (Year 10)**
the key components of performance for a team performer in a sporting activity, i.e.
○ performance of skills and techniques (e.g. a chest pass in netball) ○ creativity (e.g. feint to pass and then dribble in basketball)
○ appropriate use of tactics/strategies/compositional ideas (e.g. when to bowl a bouncer in cricket)
○ decision-making during performance (e.g. choice of pass in rugby union)
○ awareness of role within/contribution to the team (e.g. covering for a team mate who is out of position in football).

LO3 - **Be able to officiate in a sporting activity (Year 10)**

- how to apply rules and regulations relevant to the activity (e.g. reference to NGB rule books)
- the importance of consistency (e.g. making sure rules are applied consistently in a variety of situations)
- the importance of accuracy (e.g. applying rules correctly) ⍰ the use of signals (e.g. whistles/flags/gestures – how, when, why)
- how to communicate decisions (e.g. with other officials, performers and the audience)
- the importance of positioning (e.g. to gain the best view to make decisions, not obstruct activity).

LO4 - **Be able to apply practice methods to support improvement in a sporting activity (Year 10/11)**

how to identify areas of improvement in their own performance in a sporting activity, i.e.
○ what are the key skills in the activity?
○ which key skills are strengths?
○ which key skills are weaknesses?
types of skills, i.e.
○ simple skill (e.g. transferable between a number of sports such as running)
○ complex skill (e.g. tend to be specific to a sport (non-transferable) such as a tennis serve)
○ open skill (e.g. adaptable depending on the environment such as a pass in football)
○ closed skill (e.g. performed in a stable environment such as a free throw in basketball)
types of practice, i.e.
○ whole i.e. the whole skill is performed at once (e.g. a triple jump)
○ part i.e. the skill is broken down into parts which are practised separately (e.g. just the 'hop' phase in the triple jump)
○ variable i.e. the skill is practised in the range of different situations that could be experienced in a performance
○ fixed i.e. a specific skill or technique is repeatedly practised in the same way
methods to improve own performance, i.e.
○ different types of practice
○ altering context of performance (e.g. playing with and against better players can improve performance)
○ use of tools to aid evaluation (e.g. match analysis, video analysis, etc.)
how to measure improvement in skills, techniques and strategies developed, i.e.
○ completion of proficiency awards
○ keeping individual logs of performance
○ keeping video diaries
○ peer observation
○ monitoring competition results over time.