WOOTTON PARK

'Ipsum quod faciendum est diutius'

Knowledge Maps
Year 10: Term 2

GCSE Subjects including

Separate Sciences

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Subject: English	Term: 2	Topic: An Inspector Calls

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Week 1 – Context

Context key term	Why is this significant?
Edwardian Period: The play is set in 1912 during the Edwardian period. This is the time between the end of the Victorian era and the start of the First World War in 1914. In this time period class divisions were still very clear with there being virtually no welfare state or benefits in place for the poorer sections of society.	By setting the play in this period, Priestley is able to remind his post-war audience what society was like only 30 years previously, when a small minority of rich aristocrats and middle-class business owners dominated the wealth in the country. At a turning point like 1945 when the play was written, Priestley wanted to encourage his audiences to push for social and political change in Britain.
The Post-War Period: The play was performed in 1945 (in the Soviet Union and in the UK in 1946). This was a time of significant social, economic and political upheaval after two World Wars that completely altered the make-up of British society.	Priestley was a noted socialist and wanted to bring about change in British society. By performing this play to the public in Post-War Britain, Priestley was able to influence the British people into supporting socialist reforms.
Socialism: A political philosophy that and theory that believes the means of production, distribution, and exchange should be owned or regulated by the community.	Britain pre-1945 had always been a capitalist or imperialist society and socialism was a relatively new political theory. The British Labour Party was formed several decades before advocating socialism in the country. In 1945 it won a famous General Election victory, ousting then Prime Minister Winston Churchill. New PM Clement Attlee brought in the British welfare state which included the National Health Service, where everyone in the country contributed to the NHS through National Insurance and everyone was able to use it without charge.
Capitalism: An economic and political system in trade and industry are controlled by private owners for profit, not the state.	Britain has – for most of its modern history – been a capitalist society. Priestley was frustrated at what he saw as economic inequality in society and wanted to use the Second World War as a catalyst for change. He therefore advocated socialism over capitalism.
The Titanic: A colossal passenger ship that sank on its maiden voyage from Britain to America in 1912.	Arthur Birling boasts of the tremendous power of the Titanic in one of his early speeches in the play. However, Priestley and the audience are aware the Titanic sank a few days after Birling makes his speech. Priestley therefore uses the Titanic as a symbol of greed and capitalism and shows that its power and control will inevitably sink. It also makes Birling look incredibly foolish.

Week 2 – Act 1

Act 1	
The Birlings are celebrating the engagement of Sheila Birling (the Birlings' daughter) to Gerald Croft, whose family own a rival business to that of Arthur Birling – Sheila's father. The family are celebrating with champagne, cigars and many other luxuries that only a wealthy middle or upper class family of the time could afford.	"We employers at last are coming together to see that our interests – and the interests of capital – are properly protected. And we're in for a time of steadily increasing prosperity." Arthur Birling
Mr Birling seems very keen to impress Gerald and even speaks to him in private away from the rest of his family; Sheila mentions about Gerald having not come near her the previous summer; and Eric appears very nervous and anxious around his family. Although the atmosphere is mostly positive, there are hints that there are problems hidden under the surface.	
Mrs Birling and Sheila leave the dining room to allow the men to speak on their own. Mr Birling gives Eric and Gerald advice about looking after yourself and not concerning yourself with others. As he is giving this speech, there is a ring at the door.	
Edna, the maid, brings in a man who is known as Inspector Goole. A detailed description is provided of Goole and he is said to be serious but also demanding respect. He tells the family that he is investigating the suicide of Eva Smith, who had died after drinking a large quantity of disinfectant.	"What happened to her then may have determined what happened to her afterwards, and what happened to her afterwards may have driven her to suicide. A chain of events." The Inspector
The Inspector shows Mr Birling a photo of Eva Smith (although makes sure no one else sees it) and Birling admits that Eva used to work at his factory. However, she was later fired for being one of the ring-leaders of uprising and strike action after Birling refused to give any of his workers even a small pay rise. Birling argues that he pays usual rates to his workers and he is not responsible for what happened to Eva after she left his employment.	
Sheila comes into the room and the Inspector wants to ask her some questions. It is revealed that Eva found work at a clothes shop after being fired by Birling. However, Eva was fired once more when the Inspector explains a customer complained about her. Sheila admits she was that customer and the reason she got Eva fired was because a dress that Sheila tried on did not suit her and when Eva tried it on, it did. Sheila also believes she caught Eva laughing at her.	
When Sheila finds out what happened to Eva, she immediately feels responsible for her death – in complete contrast to her father. The Inspector then reveals Eva, unemployed once more, changed her name to Daisy Renton. Gerald Croft, Sheila's fiancé, gives away that he knew Daisy by his reaction. Sheila sees this. The act ends and the audience are waiting to find out how Gerald is connected to Daisy.	

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Week 3 – Act 2

Act 2	
Sheila and Gerald are alone on stage and Gerald admits he did know Daisy, but Sheila explains to Gerald that the Inspector has already worked this out.	BIRLING "You'll apologize at once ... I'm a public man –" INSPECTOR [massively] "Public men, Mr. Birling, have responsibilities as well as privileges."
Gerald reveals to Mrs Birling that her son Eric drinks a lot – she initially refuses to believe him – and he admits that he once had a relationship with Daisy. Sheila works out that this was during the one summer when he wouldn't go near her. Gerald explains that he met Daisy at the Variety Theatre (which was known for prostitutes), and that he stopped Alderman Meggarty – an important man or 'dignitary' – getting involved with her.	
Gerald helped Daisy by letting her stay in a friend's flat but she eventually became his mistress, which meant he was having an affair with her behind Sheila's back. Gerald decided to later break off their relationship and gave her money to help her in the future. Mrs Birling says she believes this relationship was 'disgusting', although Gerald does argue back. However, Sheila appreciates Gerald's honesty and says she respects him more now than she did.	
Gerald asks to leave the room to get some fresh air after now realising Daisy has died. The Inspector allows him to do this, and during the time he is away the Inspector begins to interrogate Mrs Birling. Mrs Birling eventually admits that she saw Eva/Daisy before she died. Mrs Birling was the chair of a local charity: the Brumley Women's Charity Organisation and Daisy, calling herself Mrs Birling, asked for financial help. It is revealed that Daisy was pregnant at the time, and Mrs Birling used her power as chairwoman of the charity to deny her access to financial assistance.	
Mrs Birling found it impudent or insulting that Daisy took on the name 'Mrs Birling' and she also felt the money and responsibility should come from the baby's father. Mrs Birling seems to take pride from her decision, although Sheila quickly realises the missing link here: Eric is the father. This happens after Mrs Birling has said the father of the child should be made an example of. Mrs Birling realises, just as Eric enters at the end of the scene, that her son is the father and she has effectively killed her own grandchild.	

Week 4 – Act 3

Act 3	
Eric asks for a drink and his parents refuse, but the Inspector explains it would help Eric through and so they agree. Eric explains how he met Daisy at the same theatre bar as Gerald; they both got drunk and Eric accompanied Daisy back to her flat. There, Eric became very violent and Daisy reluctantly agreed to let him in where they slept together. They met again two weeks later and slept together once more.	Eric: (bursting out) What's the use of talking about behaving sensibly. You're beginning to pretend now that nothing's really happened at all. And I can't see it like that. This girl's still dead, isn't she? Nobody's brought her to life, have they?
Daisy revealed to Eric that she was pregnant with his baby, and he proposed to her. However, she refused stating he did not love her. Instead, she received gifts of money from him, but turned these down when she found out Eric was stealing the money from his father's business. Mr and Mrs Birling are incensed that Eric has stolen £50 from them (a lot of money in 1912, it would be thousands of pounds now).	
All of the family have been involved in her death, but a divide forms between the younger characters and the older family members. The Inspector then gives his famous 'fire and blood and anguish' speech, where he explains society must change or there will be violence. Goole says that everyone must feel responsible for everyone else.	
Gerald and Mr and Mrs Birling begin to question the role of the Inspector: was he a real inspector? Was this all a hoax? Did the Inspector show the same photo to everyone? Birling rings the local police station and finds out there is no Inspector Goole working there. Birling, Mrs Birling and Gerald begin to grow in confidence once more, knowing their reputations are in tact and believe they can go back to where they were. However, Sheila and Eric have changed and cannot ignore what has happened. A phone call comes from the police which Mr Birling answers: the police explain a young girl has committed suicide and a police inspector is coming over to ask them some questions.	

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Week 5 - Characters

	Character summary
Mr Arthur Birling	•Mr Birling is described as "a heavy-looking, rather portentous man in his middle fifties but rather provincial in his speech." •He represents middle class men who have made money via capitalism. •He refuses to accept responsibility for anyone else except himself, including the death of Eva Smith. •He represents capitalism and its ideals. •He also represents an older generation that is less likely to be influenced by ideas of socialism. •Despite his arrogance and confidence, Birling is no match for the wit, precision and intellect of The Inspector.
Mrs Sybil Birling	•She represents many of the upper and middle class attitudes from the time: arrogance, sanctimony, snobbishness and selfishness. •She is part of the older generation that refuses to change or accept new ideas. She is happy to live in the status quo. •She uses her influence to hurt other people rather than help them – it is difficult for the audience to do anything but dislike Mrs Birling, as is the case with her husband. •She seems to have some control over her husband, determining when he should or should not speak. Her role as matriarch in the family goes against the established patriarchal society of the Edwardian period.
Sheila Birling	•The daughter of Arthur and Sybil Birling and engaged to be married to Gerald Croft at the start of the play. •Sheila shows how gender roles are clearly defined at the start of the play: she is meant to be the sweet, innocent and naïve girl that gets married. •As the play progresses, her character changes and she becomes far more determined, confrontational and aware. •By the end of the play she represents a younger generation that is far more willing to take responsibility for the people around them.
Eric Birling	•The son of Arthur and Sybil Birling. •Eric represents the younger generation that are more socially responsible than their parents. •He drinks because he feels guilt about what he did: by violently forcing himself on Eva, he got her pregnant and helped to drive her towards suicide. •Eric sometimes has contrary opinions to his parents and it is he who brings up the idea of war and suggesting his father could have paid Eva more money. •Because he accepts responsibility by the end of the play, the audience come to respect Eric a lot more.
Gerald Croft	•Engaged to be married to Sheila Birling and the son of wealthy aristocrats who are also rivals in business to Arthur Birling. •He represents the upper classes in the play. •We – the audience – want him to change, after all, he did help Daisy with money, but he doesn't. •He represents how the old class system is hard to remove – aristocrats don't want to lose their power and their status.
The Inspector	•Inspector Goole is described as "an impression of massiveness, solidity and purposefulness." •Despite questioning a family of wealthy members of the upper middle classes, the Inspector appears calm and assertive throughout. He seems to have already pre-planned exactly who is going to speak to and when and how he will speak to them. •As Sheila comes to understand, the Inspector already knows how all the characters are connected to Eva. Because of this, it gives him a ghost-like or supernatural quality to him. •He seems to be operating on a different level of consciousness to the other characters and this has led to a number of theories about who or what Inspector Goole is.
Edna:	•Edna's role in the play is seemingly insignificant, but she is the character that introduces the Inspector to the Birlings and she is the only genuine working class presence in the whole play. Like Eva, Edna is ignored by the other characters for most of the play which is hugely symbolic in itself.

Week 6 - Devices

Dramatic device	Why is this significant?
Dramatic irony: When characters know less than the audience	At different points in the play the audience knows facts that some of the characters do not. For instance, Arthur Birling boasts about the Titanic, yet as an audience in Post-War Britain, we know that the ship sank. This then serves to make Biring's boasts look empty and foolish.
Foreshadowing: Hinting to the audience about what is going to happen later on in the play.	Clues about the Birlings' problems are hinted at from the very start of the play, for instance when Sheila mentions about the summer Gerald hardly came near her. It hints at what is going to be revealed later on in the play and keeps the audience eager to solve the mystery.
Stage directions: Used by the writer to indicate to the director and actors about how they should perform their roles.	Even though an audience can't see stage directions when a play is being performed, they are pivotal for helping to bring a play to life AND as students of literature we can analyse how they impact on the performance of a play. The stage directions at the very beginning of the play make clear to us about the status of the Birling family, for instance.
Cliff-hangers: Keeping the audience in suspense from one part of a text to another.	Priestley employs a cliff-hanger at the end of Act One and again at the end of Act Two. It means we as an audience are desperate to find out what happens in the subsequent scenes and so suspense and tension are built.

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Week 7 - Form

Form	Why is this significant?
Well-Made Play: A type of very structured play that was immensely popular in the 19th and early 20th centuries. The action often builds to a climax.	Priestley's play follows a traditional three act structure where he builds a problem before reaching a dramatic climax and then moving on to the resolution or solving the problem. However, the plot twist at the very end of the play moves away from this rigid structure and leads to the audience having to make their own judgments and conclusions.
Morality Play: An allegorical drama having personified abstract ideas as the main characters (such as Greed or Death) and presenting a lesson about good conduct and character to the audience. They were popular in the 15th and early 16th centuries.	An Inspector Calls is a kind of allegory, with different characters representing different sections of Edwardian society. It is also quite clear that Priestley wanted to educate or teach his audience about his own political viewpoints.
Crime and Mystery	An Inspector Calls uses a number of crime genre conventions, such as clues, a mystery to be solved, suspects, a dramatic climax before all is revealed, and so on.

Subject: Maths 10(DAB) Higher	Term: 2	Topic: Probability

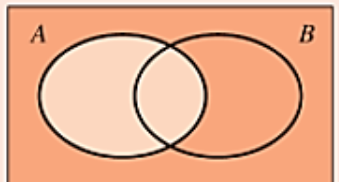
WOOTTON PARK

Week 1: Venn diagram – set notation

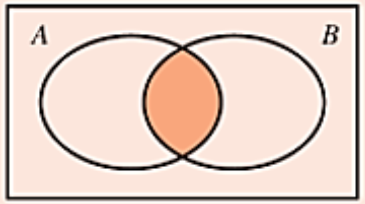
A **universal set** describes all of the elements that are being considered. We use this symbol, $\mathscr{E}$, to represent the universal set. An **element** is a member of a set and is shown by using the symbol: $\in$. To show the **set** of values we use curly brackets **{ }**

The **intersection** of a Venn diagram considers all of the elements that are in each set that that crosses over. The union considers all of the elements in each set being represented

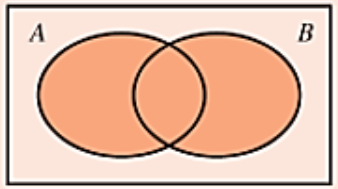
A' means the elements *not* in A.



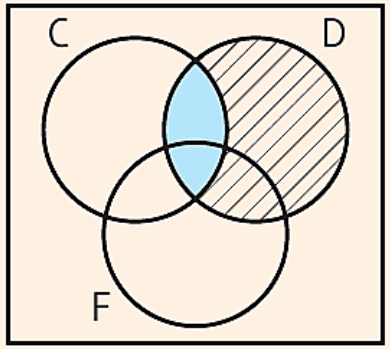
$A \cap B$ means "A intersection B".
This is all the elements that are in A *and* in B.



$A \cup B$ means "A union B".
This is all the elements that are in A *or* B *or* both.



$P(C \cap D \mid D)$
means the probability of a cat and dog owner given that pet owner owns a dog.



Week 2: Venn diagrams

To fill in a **Venn diagram**, we must consider the **elements** from the **universal set** that appear in each set which are then placed in the **intersection**.

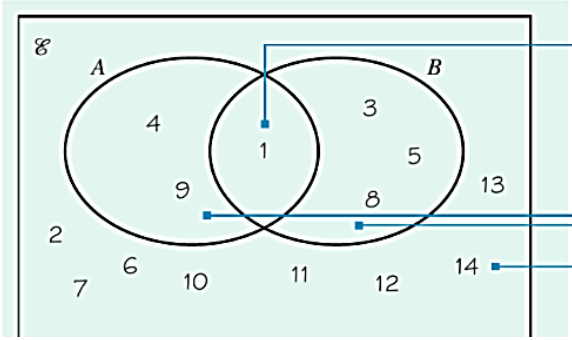
The remaining elements from each set are then populated in to the Venn diagram.

Any element from the universal set that does not appear in the stated sets must then be placed outside of the Venn diagram.

Example

$\mathscr{E}$ = {numbers less than 15}
A = {1, 4, 9}
B = {1, 3, 5, 8}
Draw a Venn diagram to represent this information.

1 Label $\mathscr{E}$ and the sets A and B.



2 Write in the elements in A **and** B.

3 Write in the elements in A but not in B.

4 Write in the elements in B but not in A.

5 Write in the elements of $\mathscr{E}$ but not in A or B.

Subject: Maths 10(DAB) Higher	Term: 2	Topic: Multiplicative reasoning

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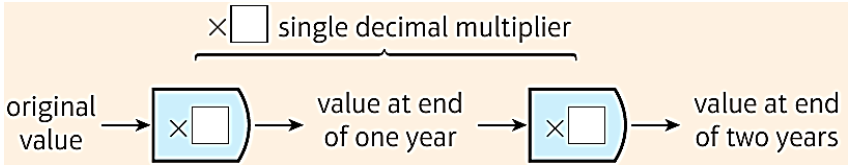
Week 3: Growth and decay

If a value increases by a **constant rate** then we describe it as a **growth**. If a value decreases by a **constant rate** then we describe it as a **decay**.

To calculate the rate of growth you should look to find the decimal multiplier.



If a value increases by a **percentage** based on the value at the end of each year we can calculate the **compound interest**. Most interest rates are compound interest.

We can calculate compound interest by using the formula:

$$New\ amount = initial\ amount \times \left(\frac{100 + interest\ amount}{100}\right)^n$$

Where **n** represents the number of years that we are calculating for.

We can use the formula below to calculate depreciation (the opposite of compound interest):

$$New\ amount = initial\ amount \times \left(\frac{100 - interest\ amount}{100}\right)^n$$

Where **n** represents the number of years that we are calculating for.

Week 4: Compound measures

DID YOU KNOW? Police Accident Investigators use compound measures (Kinematics formulae) to work out the speed cars were travelling at in a serious collision.

Compound measures combine measures of two different quantities. One example is **speed, distance and time**. The formula to calculate speed distance and time is shown below:

$$speed = \frac{distance}{time}$$

A man walks at an average speed of 5.4 km/h. What is his average speed in m/s?

5.4 km/h → Convert to km/h to m/h × 1000
5400 m/h → Convert m/h to m/min ÷ 60
90 m/min → Convert m/min to m/s ÷ 60
1.5 m/s

Kinematics formulae

a = constant acceleration u = initial velocity v = final velocity
s = displacement from position when t = 0 t = time taken

$v = u + at$

$s = ut + \frac{1}{2}at^2$

$v^2 = u^2 + 2as$

Velocity = speed in a given direction
Acceleration = rate of change of velocity

Subject: Maths 10(DAB) Higher	Term: 2	Topic: Probability

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Week 5: More compound measures

Other compound measures that you can have are listed below:

Mass, density and volume:

Hint: 1cm³ = 1000l

$$Density = \frac{mass}{volume}$$

Density is the **mass** of substance in *g* contained in a certain **volume** in cm³. Density is often measured in **grams per cubic centimetre (g/ cm³).**

Force, pressure and area:

$$Pressure = \frac{force}{area}$$

Pressure is the force in **newton's** applied over an **area** in cm² or m². It is usually measured in newton's (N) per square metre (N/m²) or per square centimetre (N/cm²)

Week 6: Ratio and proportion – direct proportion

When two things are in **direct proportion**, they will increase at the same rate.

For example, if x and y are in direct proportion to one another, we can represent this by:

$$y \propto x$$

$$y = kx, \text{ where k is a constant}$$

And where k is the **gradient** of the graph of y against x

Example 4

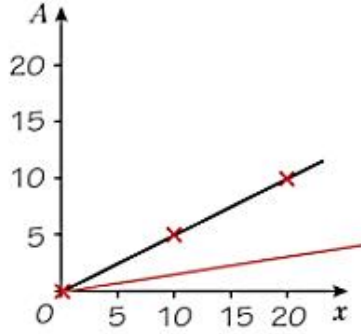
A is directly proportional to x. $A = 5$ when $x = 10$.

a Sketch a graph of A against x.

b Use your graph to work out a formula for A in terms of x.

c Use your formula to work out the value of A when $x = 100$

a



A sketch does not have to be drawn on graph paper. Graph of A against x means A is on the vertical axis. When A and x are in direct proportion, the graph must go through the origin and as A doubles so does x.

b $A = kx$, so $k = \frac{A}{x}$ $\quad k = \frac{5}{10} = \frac{1}{2}$ or 0.5

$A = 0.5x$

Substitute $A = 5$ and $x = 10$

c $A = 0.5 \times 100$ $\quad A = 50$

Substitute $x = 100$ into the formula $A = 0.5x$

Subject: Maths 10(DAB) Higher	Term: 2	Topic: Probability

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Week 7: Ratio and proportion – inverse proportion

Inverse proportion is when one value increase whilst the other decrease by the same rate. For example, if one variable doubles (x2) the other will half (÷2) over time.

Example 5

In 2012, visitor numbers to an ice rink increased by 20% compared to the previous year.
In 2013, visitor numbers decreased by 10% compared to the previous year.
In 2013, there were 21 762 visitors. How many visitors were there during 2011?

In 2012, visitor numbers increased by 20%. Draw an arrow and a multiplier of 1.2

In 2013, visitor numbers decreased by 10%. Draw an arrow and a multiplier of 0.9

Year	Number of visitors
2011	?
	× 1.2 ↓ ↑ ÷ 1.2
2012	
	× 0.9 ↓ ↑ ÷ 0.9
2013	21 762

Use ? to show that you don't know the number of visitors during 2011.

Draw arrows to work backwards, using the inverse operations: ÷ 0.9 , then ÷ 1.2

Number of visitors in 2011 = 21 762 ÷ 0.9 ÷ 1.2 = 20 150

Use the arrow diagram to calculate the number of visitors in 2011.

Check: 20 150 × 1.2 × 0.9 = 21 762

Check your answer.

Subject: Maths 10C Foundation	Term: 2	Topic: Transformations

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Week 1: Rotations

Rotations are useful for computer game programmers and film animators. They use rotations to make 3D animations more realistic.

To be able to rotate a shape, we need to be able to describe different directions.

Clockwise – is a movement towards the right going round in a circle

Anticlockwise – is a movement towards the left going round in a circle

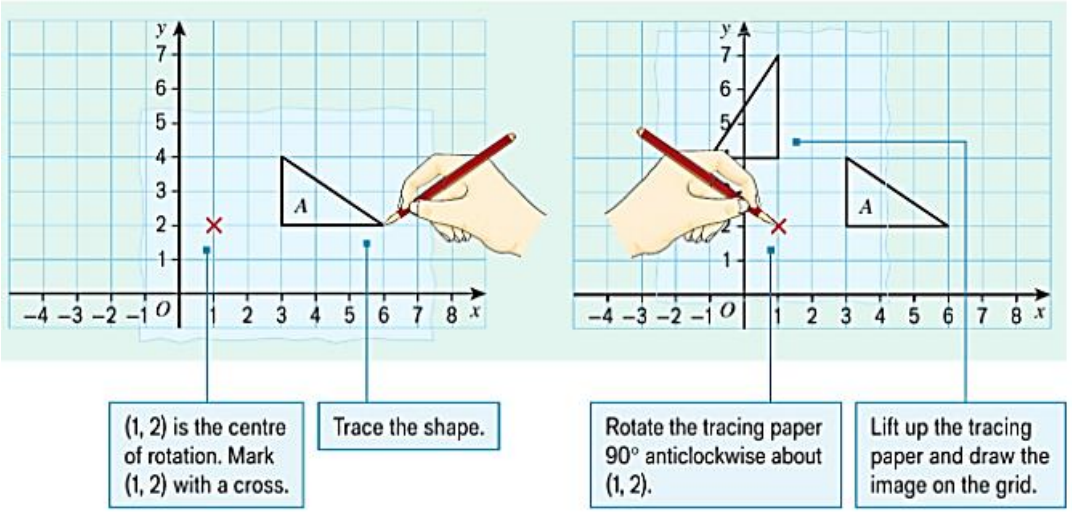
Top Tip: Rotating a shape 180º clockwise is the same as rotating a shape 180º anti-clockwise

Steps to success:

1. Identify the **centre of rotation**
2. Place tracing paper over the top of your page and **trace over the shape and centre of rotation**
3. Keeping your pencil pressed on the centre of rotation, move your tracing paper the amount of **degrees required and in the correct direct**
4. Lift your tracing paper off of the page and draw in image on the grid

Example

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



Subject: Maths 10C Foundation	Term: 2	Topic: Transformations

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Week 2: Enlargements

Graphic designers, architects and engineers all use enlargement to produce scale drawings of buildings, logos and machines.

To enlarge a shape you **multiply** all the side lengths by the same number. We call this number the **scale factor**.
We need to know the **centre of enlargement** when drawing an enlargement.

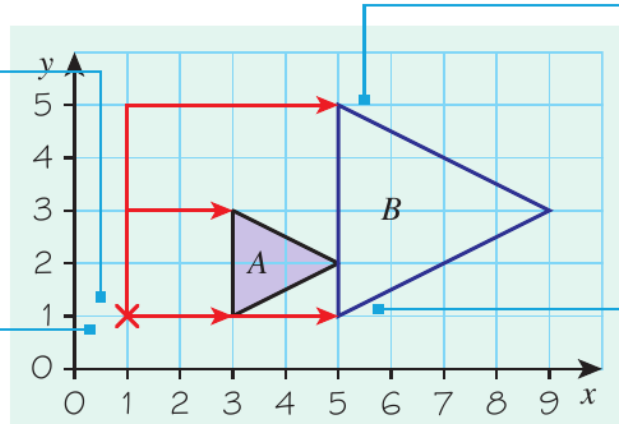
Steps to success:

1. Identify the **centre of enlargement**
2. Count the distance from the centre of enlargement to each of the vertices on the original shape
3. Multiply each of these distance by the scale factor
4. Now count the new distances from the centre of enlargement and make a mark on your grid
5. Finally, draw in the enlarged shape

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

Mark the centre of enlargement.

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



Subject: Maths 10C Foundation	Term2	Topic: Transformations

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Week 3: Describing transformations

Reflection:

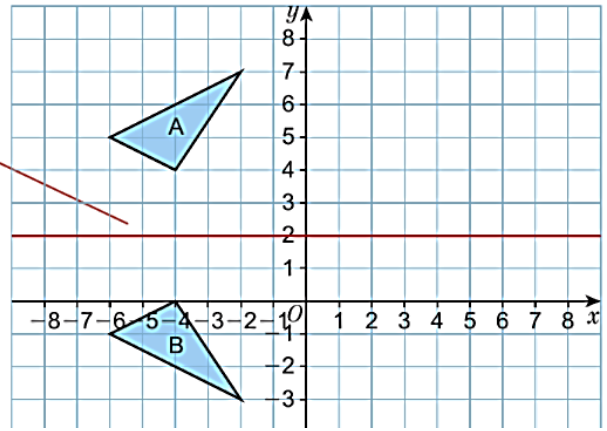
To describe a single transformation that involves a reflection, you must give the **equation of the mirror line** when it is on a coordinate grid.

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).

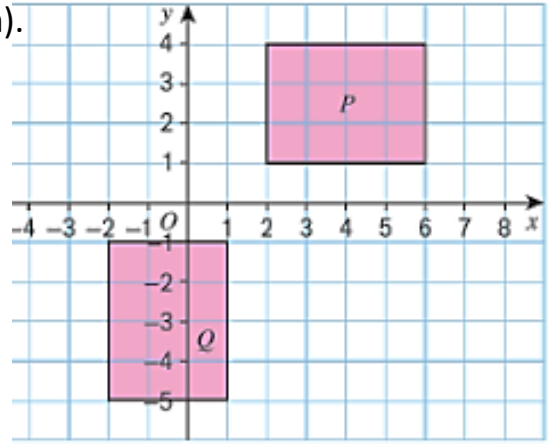
Write down the type of transformation (reflection) and the equation of the mirror line.

Reflection in the line $y = 2$.



Rotation

To describe a rotation, you need to identify the **centre of rotation**, the **direction of turn** (clockwise or anticlockwise) and the **degrees** (amount of turn).

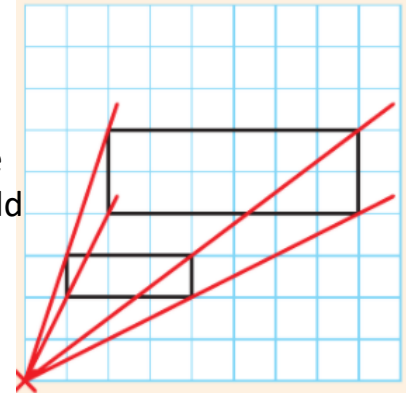


Q7b hint

Try holding the tracing paper at different centres of rotation.

Enlargement

To describe an enlargement you need to identify the **centre of enlargement** and the **scale factor**. If this is on a coordinate grid, your **centre of enlargement** should be given as a **coordinate**. You can find this by drawing straight lines between the corresponding vertices. They should all meet at a point, which is your centre of rotation.



Subject: Maths 10C Foundation	Term: 2	Topic: Transformations

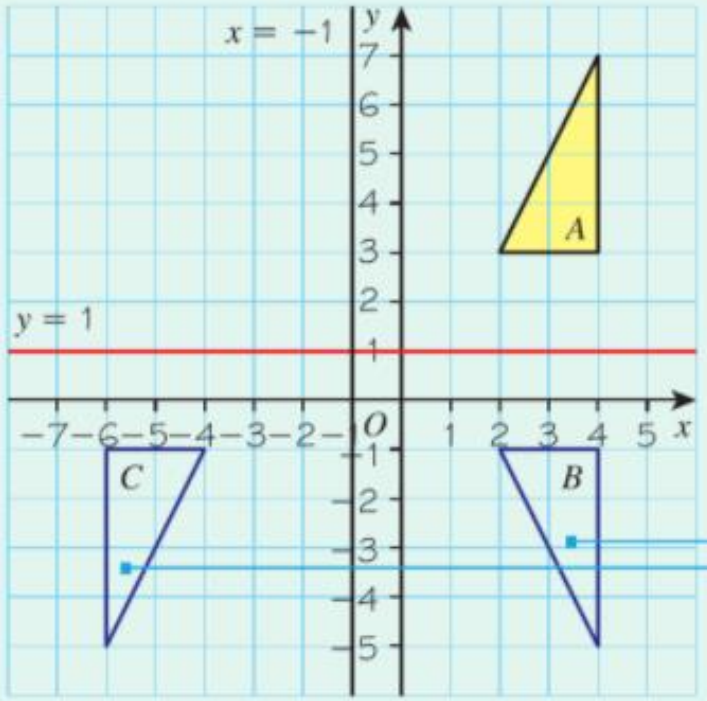
WOOTTON PARK

Week 4: Combining transformations

Hint: The **origin** is the point (0, 0).

Example

Triangle A is reflected in the line $y = 1$ to give triangle B.
Triangle B is reflected in the line $x = -1$ to give triangle C.
Describe fully the single transformation that maps triangle A to triangle C.



Triangle A is rotated 180° about (−1, 1).

Draw triangles B and C on the diagram.

State the type of transformation that maps A to C
Add *all* the information needed to 'describe fully that transformation.

Subject: Maths 10C Foundation	Term: 2	Topic: Ratio and Proportion

WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

Week 5: Writing ratios

A ratio is a way of **comparing** two or more quantities. You can **simplify** the ratios to make them as small as possible. To do this, you will need to find the **highest common factor (HCF)** of each quantity. We can also scale up a ratio by multiplying each side by the same amount.

Example 1: To make orange paint Maria mixes yellow paint with red paint in the ratio 3:1. She uses 4 tins of red paint. How many tins of yellow paint does she use? Write down the ratio.

Y : R

3 : 1

×4 ×4

12 : 4

Maria uses 12 tins of yellow paint

Example 2: Write the ratio in it's simplest form

1.5 : 8

×10 ×10

15 : 80

÷5 ÷5

3 : 16

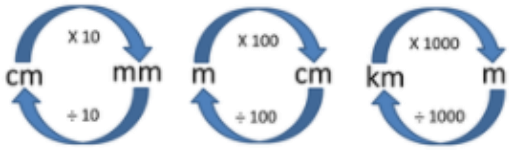
1.5 has one decimal place, so multiply both sides by 10 to get a whole number

5 is the HCF of 15 and 80

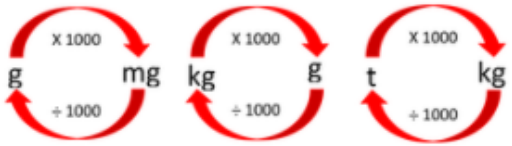
Week 6: Ratio and measures

We can use ratio to help us to **convert** between **units of measure.**

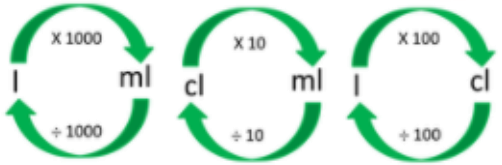
Length:



Mass:



Volume:



Example: Convert 8m to cm

The ratio of m : cm is 1 : 100.

1 m is 100 cm.

m : cm

1 : 100

×8 ×8

8 : 800

So 8 m is 800 cm.

We can also use ratio to help us to calculate exchanging currency.

£ : $

1 : 1.68

×500 ×500

500 : □

Subject: Maths 10C Foundation	Term: 2	Topic: Proportion

WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

Week 7: Using proportion

We can use the **unitary method** to help us compare ratios. When we use the unitary method we can compare **the best value for money of products** or work out how much of **each ingredient is needed**.

For example: Molly makes a blackcurrant drink by mixing 30 ml of blackcurrant with 450 ml of water.
Hope makes a blackcurrant drink by mixing 40 ml of blackcurrant with 540 ml of water.
Whose drink is the stronger? Explain your answer.

Molly

blackcurrant : water

30 : 450

÷30 ÷30

1 : 15

Hope

blackcurrant : water

40 : 540

÷40 ÷40

1 : 13.5

Simplify to a unit ratio.

Hope's drink is the stronger because it uses less water for every millilitre of blackcurrant.

Compare the quantity of water per ml of blackcurrant.

A **proportion** compares a part with a whole. When two things are in **direct proportion**, if one value is zero so is the other. When one value doubles, so does the other. The two values will always **increase or decrease** at the **same rate** (by multiplying or dividing). When two values are in **inverse proportion**, one **increases at the same rate as the other decrease**s. For example, as one doubles, the other will half.

For example: It takes 2 painters 7 days to paint a house. How many days does it take 1 painter to paint an identical house?

2 people take 7 days, so 1 person takes 2 × 7 = 14 days.

It takes 1 person twice (×2) as long as 2 people.

Subject: Maths 10E Foundation	Term: 2	Topic: Averages and range

WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

Week 1: Averages of listed data

There are 3 types of averages that you need to be aware of. They are:

Mode: The mode is the **most common value** that appears in a set of data. The best way to find the mode is to list the numbers in order to help you identify which value appears the most.

Median: The median is the **middle value** of a set of data. You **must list your data in order first** and then cross off from each end until you arrive at the middle.

HINT: If you have two numbers in the middle, you should add them together and then divide by 2 to find the middle value

Mean: The mean considers **all of the data**. To calculate the mean you need to **add** all of the data values together and **then divide** by how many data values you have.

Example:
Find the mode of the set of data below:
3, 6, 5, 1, 3, 2, 3, 3, 3
Listed in order → 1, 2, 3, 3, 3, 3, 3, 5, 6
Mode = 3

Example:
Find the median of the set of data below:
3, 6, 5, 1, 3, 2, 3, 3, 3
Listed in order → 1, 2, 3, 3, 3, 3, 3, 5, 6
Step 1
~~1~~, 2, 3, 3, 3, 3, 3, 5, ~~6~~
Step 1 continued
~~1~~, ~~2~~, ~~3~~, ~~3~~, 3, ~~3~~, ~~3~~, ~~5~~, ~~6~~
Median = 3

Example

Work out the mean of 0, 3, 6, 7 and 8.

$0+3+6+7+8=24$ — Add the values to find the total.

$\frac{24}{5}=4.8$ — There are 5 values, so divide the total by 5.

The mean is 4.8

We can also find the **range** of a set of data. This is a measure of spread. In other words, it gives us information on how spread out the data is. The bigger the answer for the range, the more spread out the data is.

Subject: Maths 10E Foundation	Term: 2	Topic: Averages and range

WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

Week 2: Averages from Frequency tables

To find the **median**:

Example

Tom rolled a dice 25 times. This table shows his scores.

Score	Frequency
1	4
2	4
3	6
4	4
5	2
6	5

Find the median score.

$\frac{25+1}{2} = 13$

The median is the 13th score.

Find the 13th score in the table.

Score	Frequency	
1	4	4
2	4	$4+4=8$
3	6	$4+4+6=14$
4	4	
5	2	
6	5	

The 13th score is 3.

The median score is 3.

To find the **mean**:

Example

The table shows some test scores.

a Work out an estimate for the mean.

b Explain why the mean is only an estimate.

Score	Frequency
1–5	5
6–10	6
11–15	9
16–20	10

Add a column to calculate the midpoint of each class. Use this as an estimate of the scores, because you don't know the exact values in each class.

a

Score	Frequency, f	Midpoint of class, m	$m \times f$
1–5	5	3	15
6–10	6	8	48
11–15	9	13	117
16–20	10	18	180
Total	30	Total	360

Add a column, $m \times f$ to calculate an estimate of the total score for each class.

Estimate of mean $= \frac{360}{30} = 12$

Divide the total of the $m \times f$ column by the total frequency.

b The mean is an estimate because we don't know the exact test scores.

To find the **mode** from a frequency table, you should look for the group that contains the **highest frequency**. We therefore identify the **modal class** when we are looking for the mode from a frequency table.

Week 3: Sampling

In a **survey**, a sample is taken to represent the **population**. The **population** is the **whole of the group** that you are interested in. In a **random sample**, each item or person has an **equal chance** of being selected.

If the sample is too small, it could cause **bias** in the results. If something is **bias** it means that it **favours one result or outcome over all other results**.

The population may be divided in to naturally occurring groups, such as age or gender. A **stratified sample** contains members of each group in the same **proportion** as the population.

Example

Seren asks a sample of 30 adults in her town where they do most of their shopping.
Each adult chooses one place.
The table shows information about her results.
There are 6000 adults in the town.

Place	Number of people
Retail Park	14
High Street shops	6
Online	10

a Work out how many adults you think do most of their shopping online.

b State any assumptions you have made.

a Sample: $\frac{10}{30} = \frac{1}{3}$ shop online

Find the proportion of the sample who shop online.

Sample: $\frac{1}{3}$ of 6000 = 2000

Find the same proportion of the population.

2000 people shop online.

b I have assumed that the sample represents the population.

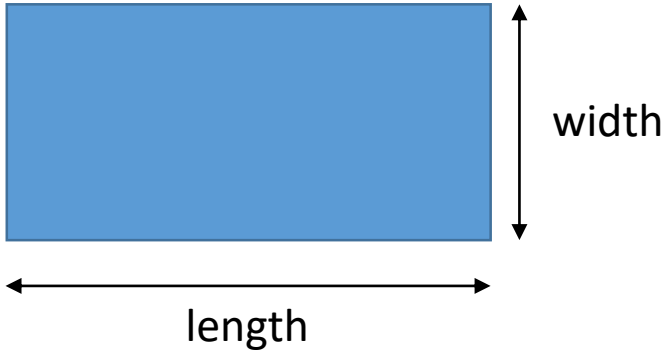
If the sample does not represent the population the answer to part **a** will be wrong.

Subject: Maths 10E Foundation	Term: 2	Topic: Perimeter, area and volume

WOOTTON PARK

Week 4: Rectangles, triangles and parallelograms

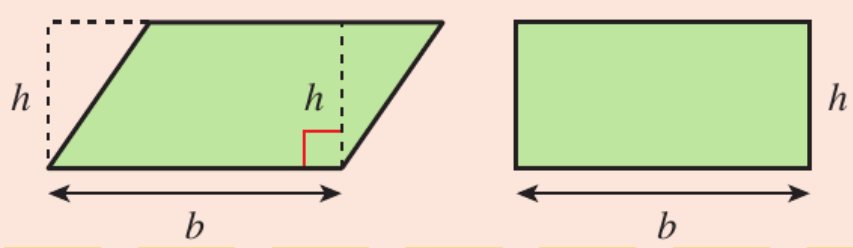
To find the area of **rectangle** you should multiply the length x width



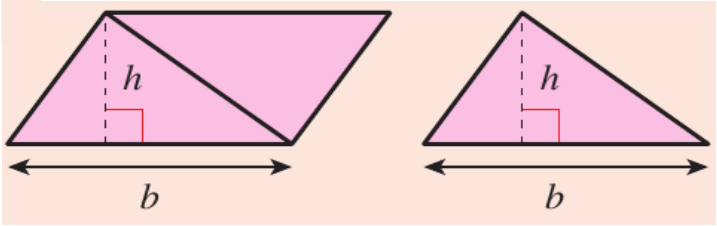
To find the area of **triangle**…

The base of a parallelogram is b and its **perpendicular height** is h.
Cutting a triangle from one end of a parallelogram and putting it on the other end makes a rectangle.
Area of parallelogram = base length × perpendicular height

$$A = bh$$



To find the area of **triangle**…



Area of 2 triangles $= b \times h$

Area of a triangle $= \frac{1}{2} \times b \times h$

Area of a triangle $= \frac{1}{2}bh$

To find the **perimeter** of a shape means to find the length **around the outside** of the shape.

To do this, you need to **add** together each of the lengths of the sides.

Subject: Maths 10E Foundation	Term: 2	Topic: Perimeter, area and volume

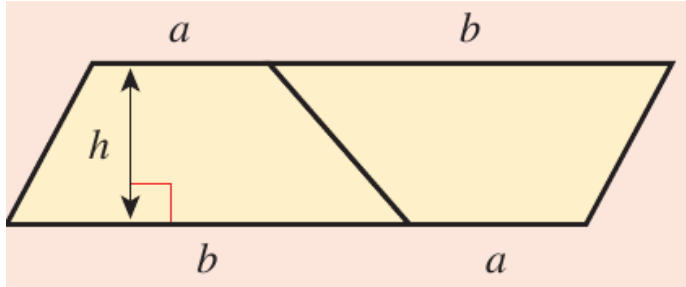
WOOTTON PARK

Week 5: Trapeziums

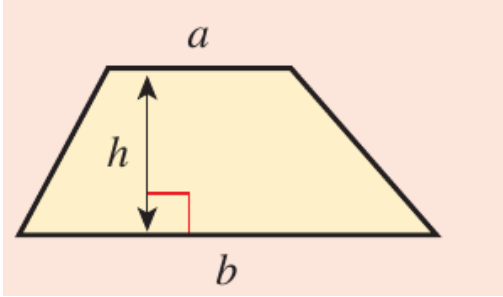
A **trapezium** has a pair of **parallel** sides, *a* and *b*, and a **perpendicular** height. When you put two **trapezia** together, you make a **parallelogram**. The base is equal to (a + b) and height, *h*.

Hint

Trapezia is the plural of trapezium.



Area of a trapezium = $\frac{1}{2}(a+b)h$

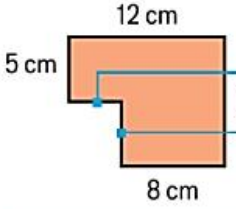


Week 6: Area of compound shapes

Finding the **area** of **compound shapes** is the process of finding the area of the overall shape when multiple shapes have been joined together.

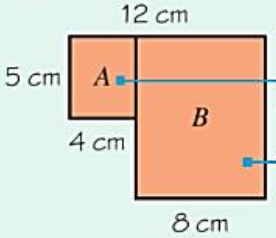
Example

Calculate the perimeter and area of this compound shape.



Work out the missing lengths.
12 cm – 8 cm = 4 cm
10 cm – 5 cm = 5 cm

Perimeter = 12 + 10 + 8 + 5 + 4 + 5 = 44 cm^2



Add all the lengths around the shape to work out the perimeter.

Sketch the shape and label the side lengths. Divide the shape into two rectangles *A* and *B*.

Area of *A* = 5 × 4 = 20 cm^2
Area of *B* = 8 × 10 = 80 cm^2
Total area = 100 cm^2

Work out the area of each.

Subject: Maths 10E Foundation	Term: 2	Topic: Perimeter, area and volume

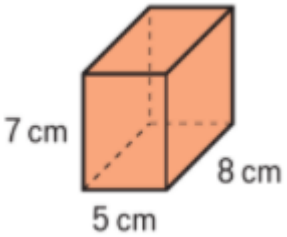
WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

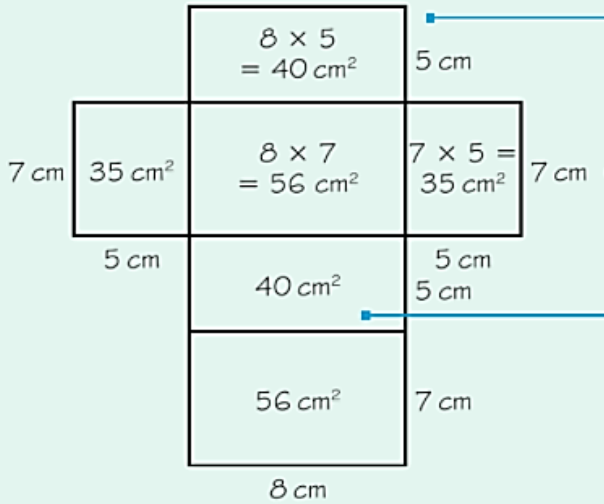
Week 7: Surface area and volume

The **surface area** of a shape is the total **area** of all of its faces.

Example

Work out the surface area of this cuboid.





Sketch the net.

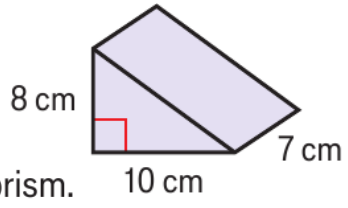
Label the lengths.

Work out the area of each face.

Total surface area $= 40 + 56 + 40 + 56 + 35 + 35$
$= 262\,cm^2$

A **prism** is a 3D shape that has the same **cross section** all the way through its **length**.

To find the **volume** of any prism, you can find the area of the **cross section** then multiply this by its **length**.



Work out the volume of this prism.

Volume = area of cross-section × length

Area of $= \frac{1}{2} \times 10 \times 8$ — Write down the formula.

$= 5 \times 8$ — Work out the area of the cross-section.

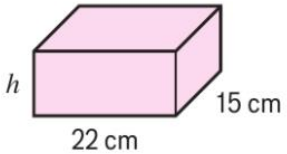
$= 40$

Volume $= 40 \times 7$ — Substitute the area of the cross-section and the length into the formula.

$= 280\,cm^3$ — Write the units.

Example

This cuboid has volume $2640\,cm^3$.



Work out its height.

Volume $= l \times w \times h$

$2640 = 22 \times 15 \times h$

$2640 = 330 \times h$

$h = \frac{2640}{330} = 8\,cm$

Subject: Biology	Term: 2	Topic: Homeostasis

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Week 1

Homeostasis: regulation of internal conditions to maintain the optimum conditions for a cell or organism
Homeostasis controls things like the temperature of the body, the blood glucose concentration and the water balance.

stimulus → receptor → coordinator (CNS) → effector

All control systems need:
Receptors = cells that detect internal or external stimuli
Coordination centers = area that receive and process information from receptors, like the brain and spinal chord.
Effectors = Muscles or glands that bring about a change

Structure and function of the nervous system

The nervous system uses electrical impulses to enable you to react quickly to your surroundings and coordinate behaviour.
Stimuli (changes in the environment) are detected by cells called receptors.
Impulses from the receptors pass along sensory neurones to the central nervous system.

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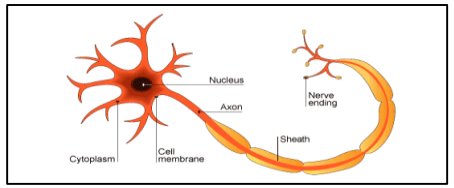
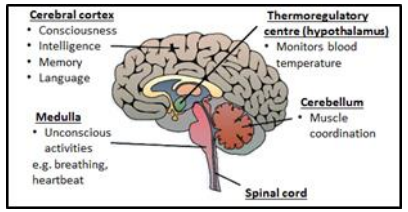
The central nervous system (CNS) is made up of the brain and spinal cord.
The brain coordinates the response and impulses are sent along motor neurones from the brain to effector organs.



Week 2

The Brain

The brain is made up of billions of interconnected neurones that control complex behaviour.
It has different regions which each have different functions.
Scientists map regions of the brain to their functions by studying patients with brain damage by electrically stimulating different areas of the brain and using MRI scanning techniques.



Reflex Arc

Reflex arcs bypass the conscious part of your brain. The impulse instead is passed to the spinal chord and the impulse is fast. There are many reflexes and they are unconscious and fast. An example is you touching a hot plate and jerking your arm away to stop yourself getting burned.

Area in the Brain

There are different areas in the brain control different things.
The cerebral cortex controls consciousness, intelligence, memory and language.
The cerebellum is concerned with coordinating balance and muscular activity.
The medulla controls unconscious things such as breathing, heartbeat and movement of the gut

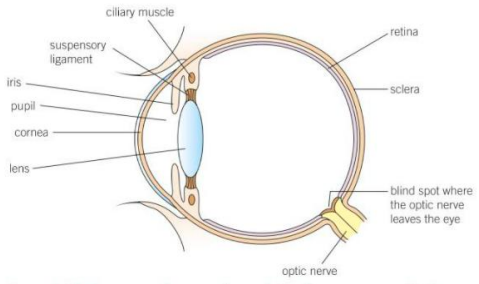
Subject: Biology	Term: 3	Topic: Homeostasis

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Week 3-4

The eye

The eye is a sense organ containing **photoreceptors** in the **retina** that are sensitive to light intensity and colour.
The tough outer **sclera** has a transparent region at the front called the **cornea** that lets light in and refracts light towards the retina.
The muscular **iris** controls the size of the pupil and the amount of light entering the eye.
The **ciliary muscles** and **suspensory ligaments** change the shape of the **lens** to fine focus light on the retina.
The **optic nerve** carries impulses to the brain.



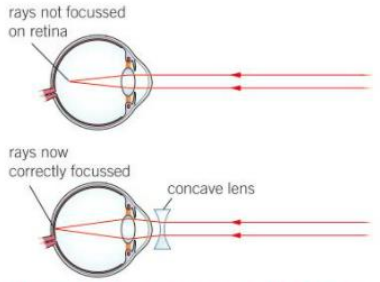
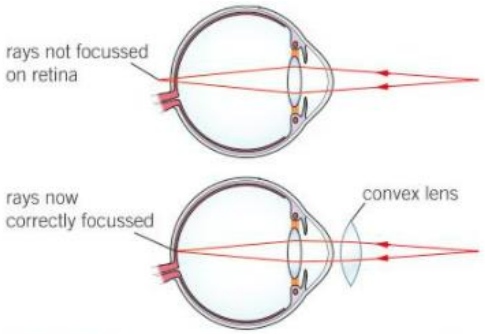


Figure 2 *The eyes of short-sighted people focus light from distant objects in front of the retina, making the objects difficult to see clearly. A simple concave lens can make all the difference*

Common eye problems

Hyperopia (long sighted) – Light focuses beyond the retina due to a short eye ball or a flat lens
Myopia (short sighted) – Light focuses in front of the retina due to a curved lens or a long eyeball.
Laser eye surgery can be used to thin the cornea or correct the curve of the lens.
Replacement lenses can also be used.
Contact lenses can be used to correct the lens.



Week 5

Endocrine System

Endocrine gland	Role of the hormones
Pituitary	Controls growth in children Stimulates the thyroid gland to make thyroxine to control the rate of metabolism In women – stimulates the ovaries to produce and release eggs and make the female sex hormone oestrogen In men – stimulates the testes to make sperm and the male sex hormone testosterone
Thyroid	Controls the metabolic rate of the body
Pancreas	Controls the levels of glucose in the blood
Adrenal	Prepares the body for stressful situations – 'fight or flight' response
Ovaries	Controls the development of the female secondary sexual characteristics and is involved in the menstrual cycle
Testes	Controls the development of the male secondary sexual characteristics and is involved in the production of sperm

The endocrine system is composed of glands that secrete chemicals called hormones into the blood stream. The blood carries the hormone to the target organ where it produces an effect as there are receptors on that organ.
The effects of hormones are slower and long lasting.
The pituitary gland is the master gland and secretes several hormones.

Negative Feedback

Negative feedback systems work to maintain a steady state. What ever the initial change is the response will work to oppose it.

Negative feedback and thyroxin

Thyroxin is a hormone that controls metabolic rate. It has a very important role in growth and development as a child.
If thyroxin levels falls THS is produced from the pituitary gland and causes more thyroxin to be released from the thyroid.

Adrenalin

Not all hormones work on a negative feedback loop. When you are stressed or angry or frightened the adrenal glands located near your kidneys release lots of adrenaline fast. This initiates fight or flight. Once the danger is gone your kidneys stop releasing adrenaline and the levels return to normal.

Subject: Biology	Term: 3	Topic: Homeostasis

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Week 6

Human Reproduction

During puberty reproductive hormones cause secondary sexual characteristics to develop.
Oestrogen is the main female reproductive hormone produced by the ovary. At puberty eggs begin to mature in the ovary and one is released every 28 days in ovulation.
Testosterone is the main male reproductive hormone produced by the testes and stimulates sperm production.
Hormones involved in the menstrual cycle of a woman include follicle stimulating hormone (FSH), luteinising hormone (LH), oestrogen and progesterone.

Females are born with all the eggs they will ever have. They will release them for 35-40 years through the process of menstruation. Once this finishes the woman will go through menopause. Males can carry on producing sperm throughout there lifetime.

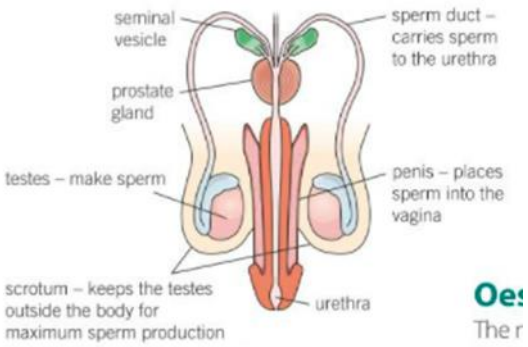


Figure 1 *Male reproductive organs*

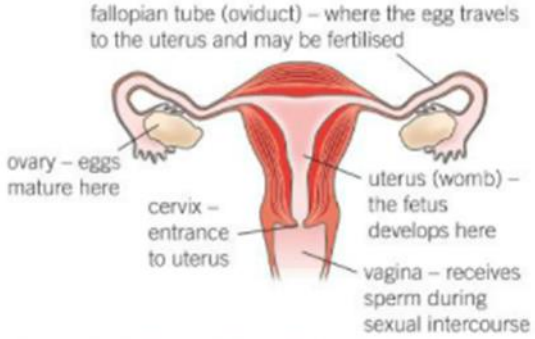


Figure 2 *The female reproductive system*

Key revision notes

Subject: Chemistry	Term: 2	Topic: Rates of reaction

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Week 1

Rate of reaction

The rate of a chemical reactions tells you how fast reactants turn into products. Chemical reactions occur in the human body and are also very important in the chemical industry. But, how can we find out the rate of reactions?

There are two ways you can work out the rate of a chemical reaction. You can find out how quickly:

- The reactants are used up as quickly as they make products, or
- The products of the reaction are made

Here are 3 techniques you can use to collect this type of data in experiments:

1) Measuring the decreasing mass of a reaction mixture
2) Measuring the increasing volume of a gas given off
3) Measuring the decreasing light passing through a solution

Collision theory and surface area

Reactions can only take place when the particles (atoms, ions, or molecules) of reactants come together. The reacting particles do not only have to collide with each other, but they need to do so with enough energy for a reaction to take place. This is known as **Collision theory**.

The minimum amount of energy that particles must have before they can react is called the **activation energy**.

Reactions are more likely to happen between reactant particles if you:

- Increase the frequency of reacting particles colliding with each other
- Increase the energy they have when they collide

A larger surface area results in a quicker reaction because there is a larger surface for particles to collide with.

The effect of temperature

Collision theory tells you why raising the temperature increases the rate of reaction.

1. Particles collide more often
2. Particles collide with more energy

Week 2-3

The effect of concentration and pressure

Higher

Worked example

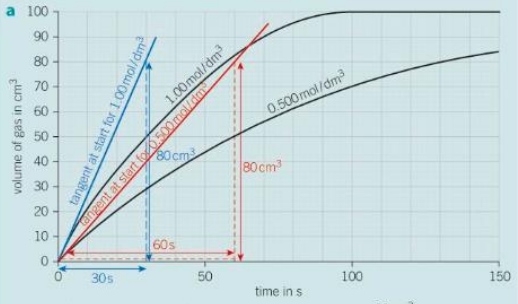
An investigation was carried out to find how the concentration of dilute hydrochloric acid affected the rate of its reaction with calcium metal. The volume of hydrogen gas given off was monitored over 150 seconds using a gas syringe. One test was carried out using 0.167 g of calcium with an excess of 1.00 mol/dm³ dilute hydrochloric acid, and this was repeated using the same volume of 0.500 mol/dm³ acid, also in excess. The results were plotted on a graph – see the two curves in the graph below.

a Use the results on the graph to find the initial rates of reaction, i.e. at the start when time = 0 seconds.

b Draw a conclusion from part **a**.

Solution

a

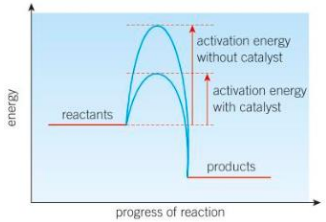


Initial rate for 1.00 mol/dm³ acid (gradient of tangent) at $t = 0$ s is: $\frac{80\,cm^3}{30\,s} = 2.67\,cm^3/s$

Initial rate for 0.500 mol/dm³ acid (gradient of tangent) at $t = 0$ s is: $\frac{80\,cm^3}{60\,s} = 1.33\,cm^3/s$

b The rate for 1.00 mol/dm³ dilute hydrochloric acid is twice the rate for the 0.500 mol/dm³ acid. So doubling the concentration doubles the rate of reaction. The rate is *directly proportional* to the concentration for this reaction. This could be because in any given volume of the acids, in the 1.00 mol/dm³ dilute hydrochloric acid there are twice as many $H^+(aq)$ ions as there are in the 0.500 mol/dm³ acid. This makes it twice as likely that collisions will occur between the acidic $H^+(aq)$ ions and the calcium. So in any given time there will be twice as many collisions, resulting in the reaction rate also doubling.

The effect of catalysts



Reversible reactions

In most chemical reactions, the reactants react completely to form the products. You show this by using an arrow pointing *from* the reactants *to* the products:

$$A + B \rightarrow C + D$$

However, in some reactions the products can react together to make the original reactants again. This is called **reversible reaction**.

A reversible reaction can go in both directions, so two 'half-arrows' are used in the equation. One arrow points in the forwards direction and one in the backwards direction:

$$A + B \rightleftharpoons C + D$$

Subject: Chemistry	Term: 2	Topic: Rates of reaction

WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

Week 4-5

Reversible reactions

In most chemical reactions, the reactants react completely to form the products. You show this by using an arrow pointing *from* the reactants *to* the products:

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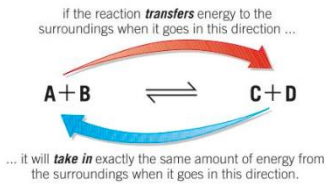
$$A + B \rightleftharpoons C + D$$

Energy and reversible reactions

In a reversible reaction between A and B below, energy is transferred to the surroundings and so is exothermic. This means that the reverse reaction must be endothermic and take energy in from the surroundings.



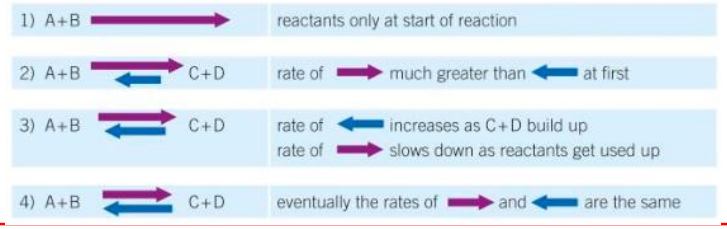
Dynamic equilibrium

Some reactions are reversible. The products formed can react together to make the original reactants again:

$$A + B \rightleftharpoons C + D$$

So what happens when you start with just the reactants in a reversible reaction in a **closed system**, in which no reactants or products can get in or out?

At equilibrium, the rate of the forward reaction equals the rate of the reverse reaction.



Week 6-7

Altering conditions

We have seen how changing concentration can affect a reversible reaction at equilibrium . In general, the position of equilibrium shifts as if trying to cancel out any change in conditions.

Think about increasing the concentration of a reactant. This will cause the position of equilibrium to shift to the right, in favour of the products, in order to reduce the concentration of that reactant.

By changing the pressure at which the reaction is carried out, you can change the amount of products that are made:

If the forward reaction produces *more* molecules of gas …	If the forward reaction produces *fewer* molecules of gas …
… an increase in pressure decreases the amount of products formed.	… an increase in pressure increases the amount of products formed.
… a decrease in pressure increases the amount of products formed.	… a decrease in pressure decreases the amount of products formed.

By changing the temperature, you can plan to get more of the products and less of the reactants:

If the forward reaction is exothermic …	If the forward reaction is endothermic …
… an increase in temperature decreases the amount of products formed.	… an increase in temperature increases the amount of products formed.
… a decrease in temperature increases the amount of products formed.	… a decrease in temperature decreases the amount of products formed.

Subject: Physics	Term: 2	Topic: Forces

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

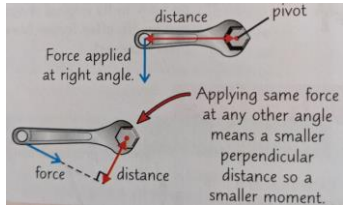
Week 1-3

Calculating moments

Moment – the turning effect of a force.

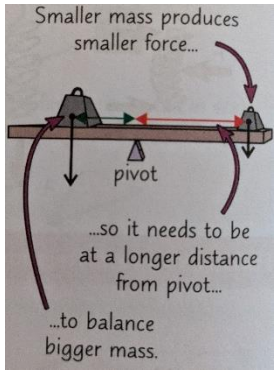
$M = Fd$

M = moment (Nm)
F = force (N)
d = distance (m)



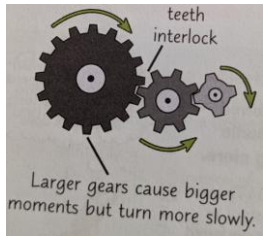
Balanced moments

If total clockwise moment equals total anticlockwise moment about a pivot, object is balanced.



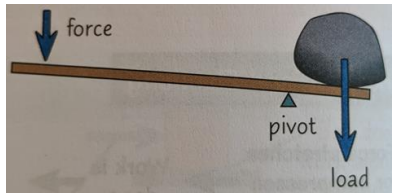
Gears

Gears – used to transmit the rotational effect of a force from on place to another.



Levers

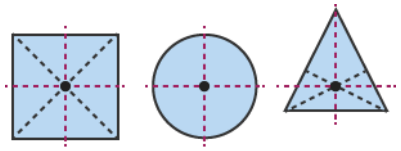
Levers – make it easier to do work e.g. lift a load



Increasing distance between pivot and applied force. → Less force required to get the same moment. → Easier to lift load.

Centre of mass

Centre of mass – point at which an object's weight appears to act.



Week 4-5

Distance and displacement

Distance (Scalar) – how far an object has moved

Displacement (Vector) – the distance and direction in a straight line from an object's starting point to its finishing point.

Speed

Speed (scalar) – how fast you're going, with no regard to direction.

	Typical speed (m/s)
Walking	1.5
Running	3
Cycling	6
A car	25
A train	30
A plane	250
Sound	330

Velocity and acceleration

Velocity (vector) – speed in a certain direction

Acceleration – the change in velocity in a certain amount of time.

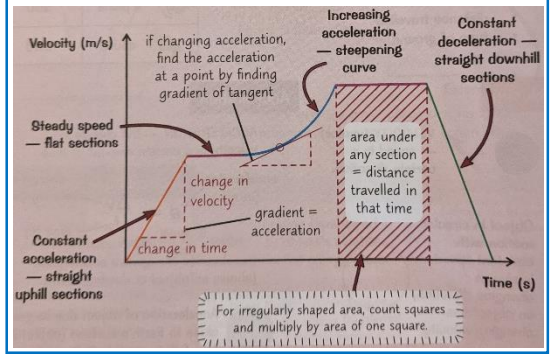
.

$$a = \frac{\Delta v}{t}$$

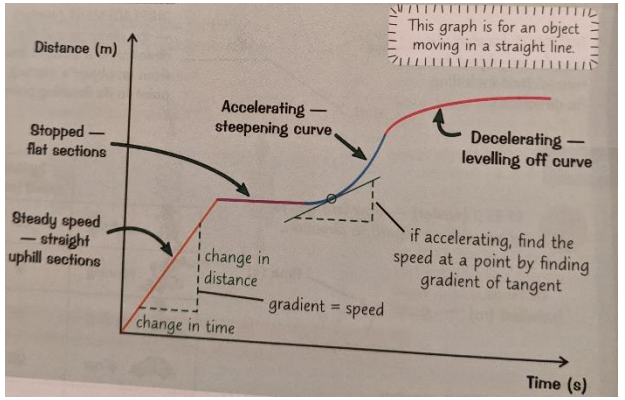
Where,

a = acceleration (m/s^2)
Δv = change in velocity (m/s)
t = time (s)

Distance-Time graphs



Distance-Time graphs



Subject: Physics	Term: 2	Topic: Forces

Week 6-7

Newton's first law

If zero resultant force acts on stationary object, object doesn't move.
If zero, resultant force acts on moving object, it continues moving at the same velocity.
If non0zero resultant force acts on object, object accelerates

Newton's second law

F = m x a

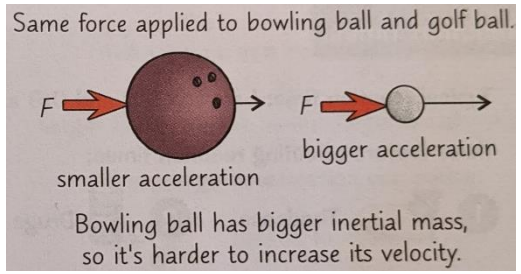
Where,

- F = resultant force (N)
- m = mass (kg)
- a = acceleration (m/s^2)

Acceleration is directly proportional to resultant force – F α a.
Acceleration is inversely proportional to mass

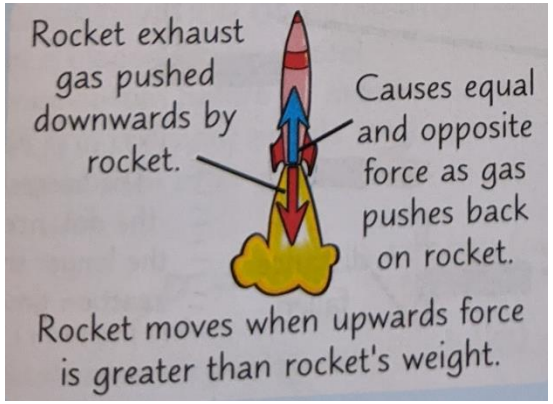
Inertial mass

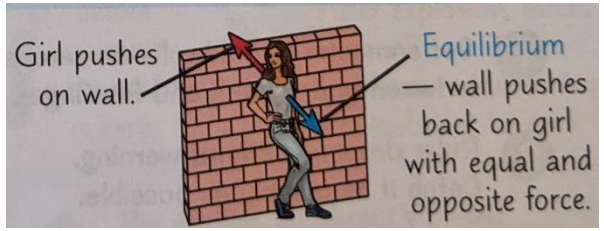
Inertial mass – measure of how hard it is to change an objects velocity. It is the ratio of force over acceleration: m = F ÷ a



Newton's third law

Two interacting objects exert equal and opposite forces on each other.





Additional notes

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Subject: GCSE Geography	Term: 2	Topic: Rivers Y10

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

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: GCSE Geography	Term: 2	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.

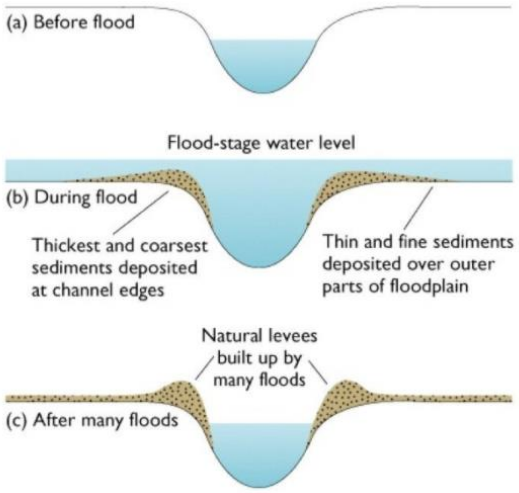
Flood Plain

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

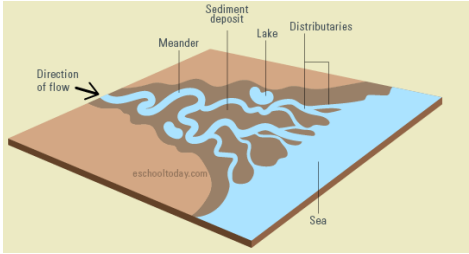
An estuary is a wide, sheltered body of water found at a river's mouth where it broadens into the sea. It is a combination of salt water from the sea and fresh water from a river. As the river meets the sea at high tide, it slows the flow of water leading to deposition. Mudflats and saltmarsh form in 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: GCSE Geography	Term: 2	Topic: Rivers Y10

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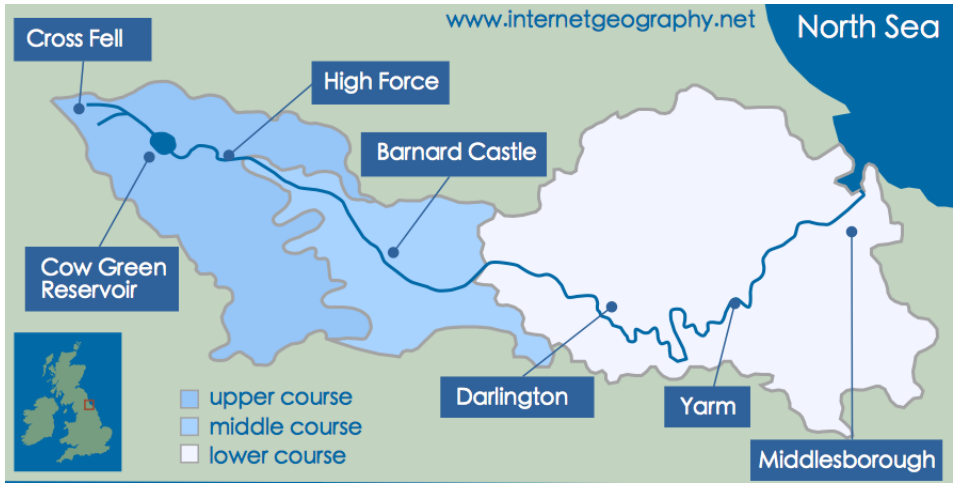
Week 3- The River Tees x=case study

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.



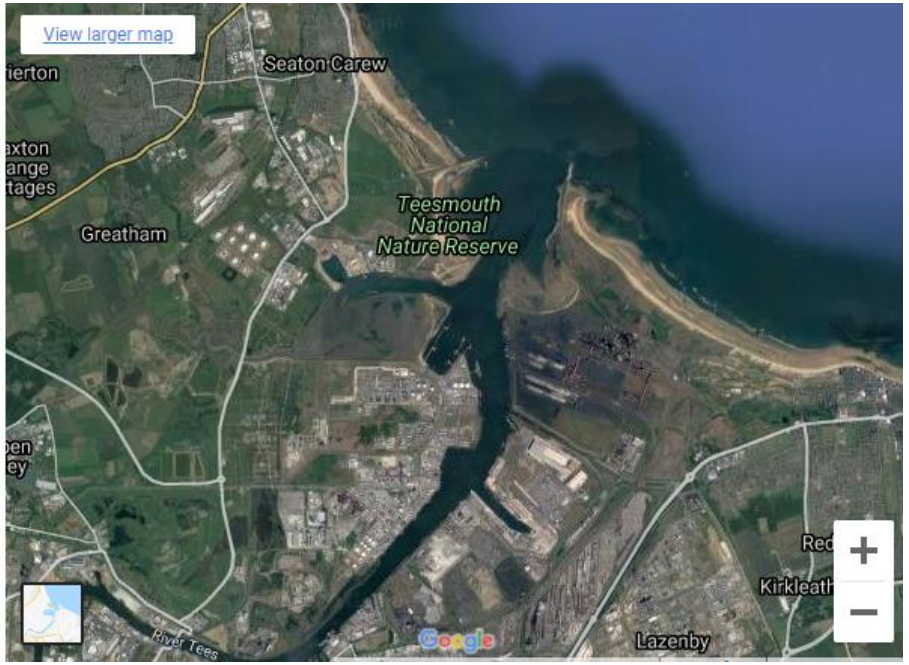
n its upper course, the River Tees flows over hard, impermeable rocks. Vertical erosion has formed classic V-shaped valleys. The image below shows interlocking spurs close to Cauldron Snout.

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: GCSE Geography	Term: 2	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: GCSE Geography	Term: 2	Topic: Rivers Y10

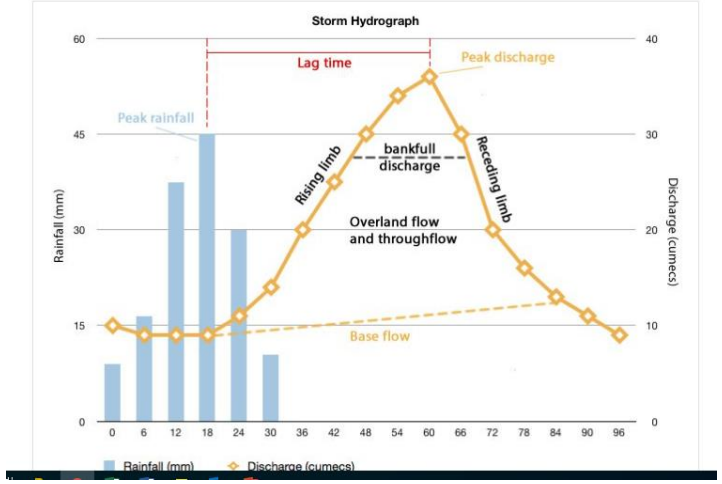
[redacted]

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

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'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: GCSE Geography	Term: 2	Topic: The urban world

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Week 1- The challenges of squatter settlements

Squatter camps

Hundreds of immigrants arrive in Rio each day. Many come looking for work and a better life than that available in rural Brazil. They often squat on unused, often unsafe land. Here new arrivals to the city build their own houses out of basic materials such as tarpaulin, scrap wood and corrugated iron. Squatter camps are located on areas of land which the population neither own nor rent. These settlements are illegal and are therefore not catered for by the government. Therefore there is no electricity, no rubbish collection, no schools and no hospitals.

The houses in these settlements have no basic amenities such as running water or toilets so there are high incidences of diseases such as cholera and dysentery.

Favelas

Favelas are found on the edges of Rio, close to industry where people look for work. Many are in the steep hills around the city as it is the only available land to build on within the city limits.

Rocinha is the largest favela in Brazil. It is located in the southern zone of the city. It is built on a steep hillside overlooking the city. It is home to between 60,000 to 150,000 people.

Favelas like Rocinha usually offer better standards of living than squatter camps as they have been improved over time. Standpipes provide running water. Unpaved roads are usually present and there may be some shared toilets available. Some residents may have used skills to earn money. Some use their homes as shops, or to provide services such as hairdressers. Although these favelas have been improved, they still have many of the same problems as the squatter camps such as overcrowding, disease and extreme poverty.

In Rio, more than 1.2 million people live in the favelas on less than £1 per day. The residents lack access to the most basic public services, such as health care, education, and space for recreation. Infant mortality rates are high in favelas, 50 per 1000 compared to a national rate of 15 per 1000.

There are high incidences of malnutrition, diarrhoea and other diseases. Organised crime and gang violence are also common. Unemployment rates are high and many people work in the informal, poorly paid sector.

Week- 1 -Managing the growth of squatter settlements

Sustainable strategies to improve the quality of life in the favelas

In the 1990s, the Favela Bairro Project was set up to help improve life in the favelas and upgrade them rather than demolish them, as has happened in other locations. This work has been carried out with government funding to provide facilities like electricity, sewage systems, rubbish collection and public transport.

Self-help schemes have also been supported. Here, local residents are provided with building materials like concrete blocks and cement in order to replace home-made shelters with permanent dwellings. These are often three or four storeys high, and with water, electricity and sewage systems installed.

Legal rights such as granting the favela residents rights to own their own properties. Low rents have also been offered.

Transport systems have been extended to include the favelas to give residents the opportunity to travel to work in the city centre and industrial areas.

Law and order has been improved in the favelas by trying to rid these areas of crime and drug abuse. Several large favelas have been improved in this way through federal 'Pacification Programmes'.

New towns like Barra da Tijuca, built 20 kilometres along the coastline, have been built to relocate some residents from city favelas.

Subject: GCSE Geography	Term: 2	Topic: The urban world

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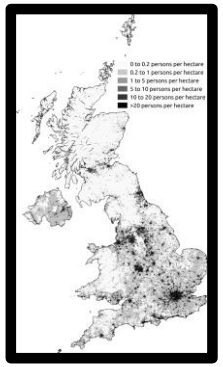
'Ipsum quod faciendum est diutius durant'

Week 2- Urban change in the UK

Distribution of population

If you know the physical geography of the UK you will have a good understanding of population distribution in the UK. The relief (shape of the land) has a significant impact on the distribution of the population. Low land areas tend to be densely populated whereas upland areas have a low population density. Most urban areas have developed in low land areas because they are easier to build on and have favourable climates e.g. Birmingham.



The physical geography of the UK can help to explain its population distribution

Upland areas, such as northern Scotland, tend to be sparsely populated because they are difficult to build on and the climate is often cold and wet. Also, these areas are difficult to farm and lack natural resources.

Some coastal locations have a high population density. This is particularly the case close to estuaries because harbours can be constructed. In the past, this enabled the fishing industry to develop along with ports being established to enable trading to occur.

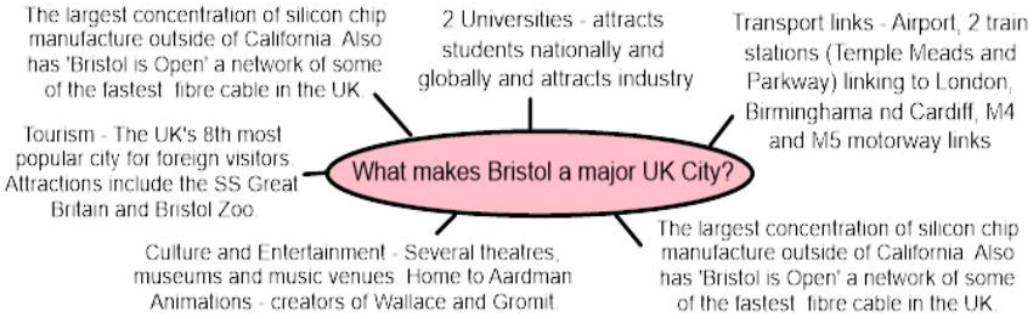
Urban areas have also developed where there are large reserves of natural resources. This includes iron ore and coal e.g. Newcastle and Leeds.

Population density is high in the south-east of England, due to the favourable climate and proximity to the capital city of the UK, London. The city has many industries and is a global financial centre.

Week 2- Bristol – A Major City in the UK

The Importance of Bristol in the UK

- Largest city in the South West
- Population 450,000
- Grew as a trading port in the 18th century
- Docks are now outside Bristol at Avonmouth and Portbury.
- Huge container ports where 700,000 cars are imported a year.



The Importance of Bristol in the wider world:

- Strategic position on the M4 corridor with good road and rail links to London and ferry services to Europe.
- Bristol airport links to major European centres and the USA. Good for business, study and tourism.
- Post industrial city based on global industries like financial and business services, defence, aerospace, Hi-tech, media.
- High levels of inward investment including FDI in manufacturing (Airbus, BMW) finance and hi-tech industries.
- Bristol University/UWE attract global students providing graduates for professional, managerial and knowledge based jobs.

Subject: GCSE Geography	Term: 2	Topic: The urban world

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Week 3- What impact did migration have on Bristol?

Impacts of national migration on the growth and character of the city

There are 50,000 students studying in Bristol across the two universities. 80% of these are UK students, the majority of which will have migrated from other parts of the UK.

40,000 extra young people alters the character of the city as students tend to live in certain parts of the city (such as White Ladies Road, and Clifton). This alters Bristol's demographic and the types of shops and services present. Many stay after graduating causing the city to grow.

Impacts of international migration on the growth and character of the city

Bristol has experienced influxes of economic migrants throughout its history. This has led to the population of Bristol being quite ethnically diverse compared to other cities in the UK, altering the character of the city.

It is not an even picture though as migrants from different origin countries tend to live and work in particular areas. Across all the different wards in Bristol, the average % of the population who belong to a black or ethnic minority (BME) group is 16%.

For an area of Bristol called Easton however, this figure rises to 37.9%. This alters the character of Easton as thing like the high street change as shops and services spring up to cater for the large Somali population there.

Many migrants from the Caribbean have settled in St Pauls, which has had an impact on the area's cultural identity. Their Carnival celebrates Bristol's large Afro-Caribbean population and attracts 40,000 people each year.

Easton	Bristol	
52.5 %	77.9 %	White British
37.9 %	16 %	Black and Minority Ethnic Group Total
9.5%	6.1%	Other White

D Main countries of birth for migrants to Bristol, 2011 census

Week 3- Urban change in Bristol

How has Bristol changed?

Bristol has is changing and this has brought some opportunities in a post-industrial economy such as the UK.

Historical background

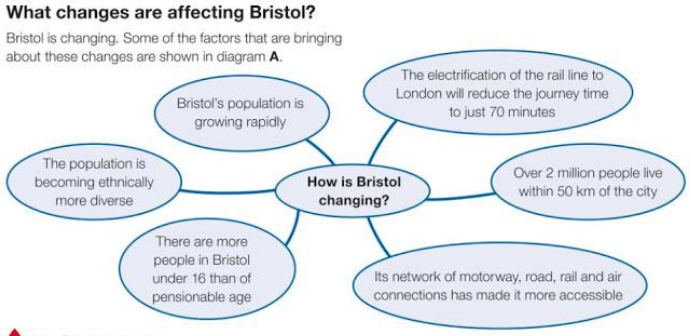
In the early 19th century the trade passing through Bristol started to outgrow the tidal docks on the River Avon in the town centre.

At low tide no ships could move in or out of Bristol. As a result Brunel built the 'new cut', essentially a new river channel that bypassed the town centre. This allowed a 'floating harbour' to be created in the town centre where the water level could be kept permanently at high tide.

Eventually the docks were too small and in 1977 they closed with operations moving to Avonmouth. The shift towards a post-industrial economy did create huge challenges for Bristol as many people were left unemployed.

Opportunities

Bristol lost its function as a port and its traditional industries closed, but it also created opportunities as empty cigarette, sherry and beer warehouses have been transformed in to waterside living, office space and recreation from the 1980s onwards.



A How Bristol is changing

Subject: GCSE Geography	Term: 2	Topic: The urban world

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Week 4- Social and economic opportunities in Bristol

Cultural Mix

Bristol's youthful population means there is a vibrant underground music scene with genres such as drum and bass and trip hop both emerging from Bristol through artists such as Roni Size and Massive Attack.

Due to in-migration, Bristol's population is also very ethnically diverse meaning there is a wide variety of food and drink on offer in the city that can not be found in more rural areas or cities less of a cultural mix.

This is visible somewhere like Wapping Wharf and Cargo or in areas like Easton or Stokes Croft. This cultural mix has also led to nationally recognized events such as the St Pauls Carnival attended by 40,000/year.

Recreation and Entertainment

Bristol has a range of music & entertainment venues ranging from the Thekla on the waterfront to the 02 Academy or Colston Hall. The Thekla is also visited as part of 'Banksy Graffiti tours'. His street art attracts many visitors to the city.

The harbourside contains museums such as the M-Shed, SS Great Britain and We the Curious (Bristol's science museum for children). It also boasts art galleries such as the Arnol Fini and independent cinemas such as the Watershed.

In the summer there is the 3 day Bristol Harbour festival which attracts 300,000 visitors per year. There are more festivals away from the water such as the annual Balloon Fiesta at Ashton Court. Also away from the waterfront, the Ashton gate stadium not only hosts Bristol City football club but is also an entertainment venue that can be hired out for private functions such as weddings.

Shopping is a growing leisure activity and Cabot Circus, a new Mall built in the centre of town in 2008 at a cost of £500million has a large sphere of influence, attracting people from far & wide. In winter, Broadmead hosts a Christmas market which attracts visitors from the whole region.

Week 4- Social and economic opportunities

Employment –

in a post-industrial city The majority of Bristol's population now work in tertiary and quaternary industries and in 2015 it's unemployment rate was below the national average. Hi-tech industries have a been a big growth area with 50 micro-electronic businesses in the city. It is home to global companies like Aardman Animations (Wallace &Gromit) & Toshiba.

Hi-tech businesses are attracted because: Bristol received a government grant of £100m to become a 'Super-connected City' with high speed broadband; it has a strategic location on the M4/M5 interchange; has close links to the two universities.

In Filton, the Defence Procurement Agency or DPA (an MOD site employing 10,000 people by supplying the army, navy and airforce with everything they need). The large number of people employed there has led to urban sprawl with new housing areas such as Bradley Stoke emerging with a population of 21,000. This shows how economic development leads to urban change.

Bristol is also the centre of the Aerospace industry with 14/15 of the main global aircraft companies found there such as Rolls Royce and Airbus. This has had a positive multiplier effect as supply chains grew in the region to supply these hi-tech firms.

Integrated Transport Systems

As people no longer need to live near where they work in a post-industrial city, more and more people commute to work. This leads to traffic congestion and in 2012, Bristol was the 2nd most congested city in the UK.

Today, Bristol has a higher % of people walking or cycling than any other city (57%) and it aims to double the number of cyclists by 2020. This is being achieved through an integrated transport system (ITS), linking different forms of public transport. The ITS has several elements to it, such as Metrobus; a Bus Rapid Transport Network linking the station with the city's Park n Ride sites. The idea is to Reduce congestion by making public transport more attractive, so more people choose to leave their cars at home. Bristol's Cycling Strategy aims to encourage cycling in the city and improve the safety of cyclists.

Subject: GCSE Geography	Term: 2	Topic: The urban world

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

[redacted]

Week 5- environmental opportunities

Environmental Opportunities

As Bristol transitioned to a post-industrial economy, there came opportunities to plan a more sustainable city. In 2015 Bristol became the first UK city to be awarded status as a European Green Capital. This involved the following:

Improved Energy Efficiency & Development of Renewables	Transport & Building Policy	Water and Air Pollution
• Plans to increase number of low carbon industries from 9000 to 17000 by 2030. • Reduce energy use by 30% and CO2 emissions by 40% by 2020.	• In addition to ITS, the UK's first 100 electric car charging points were located in Bristol. • Increase the use of **brownfield sites** (sites in a city that had previously already been built on) for new businesses and housing to protect **greenfield sites** (green areas in a city yet to be built on) and the **greenbelt** (protected ring of countryside surrounding a city).	• Reduce water pollution by improved monitoring and maintenance • Establish an air quality management plan to monitor air pollution.

Urban Greening:

The process of increasing and preserving open space in urban areas e.g. public parks and gardens

As part of Bristol becoming a European Green capital, every primary school pupil in the city planted a tree to improve the city's green coverage. This is urban greening in action. 1/3 of Bristol is open space and 90% of the population live within 350m of parkland or water ways.

Queens Square was once a dual carriageway but is now an open space with cycle routes. The idea is to protect this green space and add to it.

There are 8 nature reserves and 300 parks in Bristol. One way to increase the provision is by making it a planning requirement. For example a new housing development at Portbury Wharf was only allowed by the council on the condition that the neighbouring area was made in to a nature reserve. This provides habitat for wildlife, but is also good for people's health as access to green space is good for people's physical and mental well-being. Bristol has a target of having 30% of the city covered in trees

Week 6- What are the social challenges?

How urban change has created challenges:

We have already seen how Bristol's transition to a post-industrial economy has brought opportunities, but also brought challenges. When the docks closed in 1977, many people were left unemployed as Bristol lost its function as a port and its traditional industries closed. Many areas were left in a poor environmental state but it also created a stark social divide in the city with high levels of deprivation and inequality.

Social Deprivation = The extent to which an individual or area lacks services, decent housing, adequate income and employment

Like many cities, Bristol has a wide range of social issues and imbalances. Lack of investment in some areas leads to deprivation. Two contrasting areas are **Filwood,** (in the 10% most deprived wards of the UK according to the map on the first page of this case study) and **Stoke Bishop,** (in the 10% least deprived wards in the UK). These two contrasting wards of Bristol are only 4km apart yet the inequality is huge. Life Expectancy in Filwood is 78 and Stoke Bishop 83.

Essentially, the life chances of children born in Stoke Bishop are much higher with direct links between wealth, health, educational achievement and employability. For children in Filwood it is a different story. The challenge for the council is to not let children be disadvantaged because of where they are born.

Video: Filwood – an area of high levels of social deprivation:
https://www.youtube.com/watch?v=8O3QSbZAtJs
Stoke Bishop – an area with little deprivation:
https://www.youtube.com/watch?v=xWf2jNoEaPA

Subject: GCSE History	Term: 2	Topic: Migration, Empires and the People

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Week 1 – 4 Vikings and Anglo-Saxons

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 and Angevin Empire

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** were contenders to the throne. **Godwinson was elected by the Witan**.
- 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.**
- Henry's daughter Matilda agreed with Stephen that Henry II would be king when Stephen passed away. **1154, Henry II becomes king.** A series of marriages to powerful French women helps establish the Angevin Empire.
- By 1216, **King John loses** most of this empire and is forced to sign the **Magna Cater in 1215.**
- In **1337, the English try to reclaim the French throne and lands**, this starts the **Hundred Years War lasting until 1453.**

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?
-How was the Angevin Empire established and dismantled?
-What is the significance of the Magna Carter?

Subject: GCSE Spanish	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: GCSE Spanish	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: GCSE Spanish	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

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

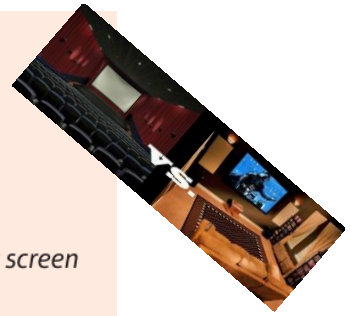
This is CORE vocabulary for this topic.

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: GCSE Spanish	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: GCSE Business Studies	Term: 2	Topic: Putting a Business Idea in to Practice

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Week 1 – 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

Week 2 – 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: GCSE Business Studies	Term: 2	Topic: Putting a Business Idea in to Practice

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Week 3 – 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

Week 4 – 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 Business Studies	Term: 2	Topic: Putting a Business Idea in to Practice

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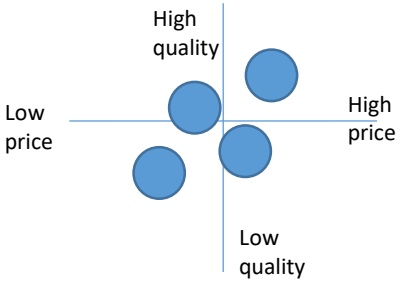
Week 5 – Market mapping

Market mapping is a process of reviewing competitors to find gaps in the market.

It is displayed as a graph which plots where competitors are in the market.
It will have two variables displayed on it on different axis.



Benefits of market mapping:
+ can identify gaps in the market
+can help view what is more important to the target market
+ can help a business to develop a distinct brand identity
+ can analyse rivals offerings

Drawbacks of market maps
- Can be perception based so may lack accuracy
- Only uses two variables (how has the company selected these? Does this make it reliable?

Remember!
A company may choose to exploit a gap that is already filled!
If they believe there are enough customers and that they can differentiate within the same gap they may be able to be successful

Week 6 – Competition

A business needs to understand its strengths and weaknesses in order to make itself stand out (differentiation).

A business can compete in the following ways:

- Better design
- Lower prices
- Stronger brand image
- Higher quality
- A wider product range
- More convenient location/delivery method
- Better service

Differentiation = standing out from rivals.

Differentiating is important in order to gain a competitive advantage. Competitive advantage is key to ensuring a business' success as this can lead to gaining customers. If customers are satisfied by their offering then this can lead to increased repeat purchases.

Sometimes the differentiation may be slight in competitive markets but it can still have a huge impact on gaining customer loyalty e.g. super markets

Subject: GCSE Business Studies	Term: 2	Topic: Putting a Business Idea in to Practice

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Week 7 – Competitive markets

A competitive market is when there are a lot of businesses in comparison to the number of customers or target market. It can also be competitive where there are limited range of products in a market or in industries where there is strict legislation.

Operating in a highly competitive environment can mean that businesses need to try to be:

- More efficient
- Spend more finance on developing a differentiated product or service (higher costs)
- Use promotions or lower prices
- Cut costs

Operating in a competitive industries can however cause a business to have lower prices which means lower profit margins. In order to negate this a company may try to cut expenditure which could impact quality so must be considered carefully.

Week 8 – Aims and Objectives

All businesses set objectives. These can be financial or non-financial:

Financial:

Survival

Sales and revenue

Profit

Market share

Financial security

Non-financial:

Personal satisfaction

Independence and control

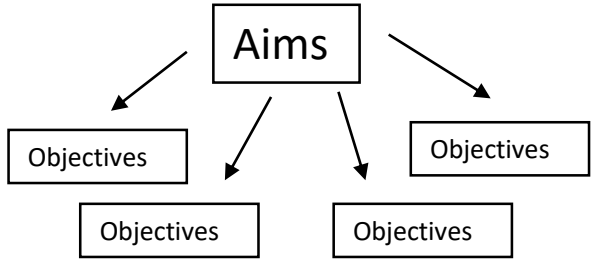
Challenge

Social benefits or goals

Customer satisfaction

Business awards and recognition

Aims = general goals
Objectives = more specific than aims – can be SMART



Specific
Measurable
Achievable
Realistic
Time-bound

Why are aims and important:

-Gives direction to the business - Provides measurement for progress

-Helps set targets for employees - Keeps motivation

Subject: GCSE D&T	Term:2	Topic: **Manufacturing Specification & Product Analysis**

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Video Links – What is a Product Analysis

What is a Product Analysis

Click on the links to learn more on Product Analysis:

https://www.youtube.com/watch?v=gIa079pY3JE&t=522s

https://www.youtube.com/watch?v=K-63trEEqng

https://www.youtube.com/watch?v=4vdxFVnHcy0

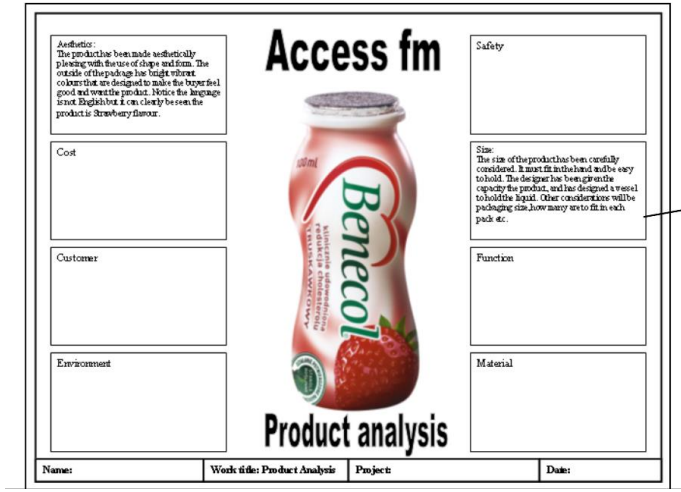
Video Support Link	Learning Outcomes
https://www.youtube.com/watch?v=2E7QtgTK798 https://www.youtube.com/watch?v=w_Y_9fNHwE4	**Understand how to produce a Market Research page**
https://www.youtube.com/watch?v=xVvkONMT3zs https://www.youtube.com/watch?v=rr87IxgXAk4	**How to create a client profile for your project**

Week 1-2

A manufacturing specification

A manufacturing specification is a more detailed list of criteria that the product must fulfil. There are a set list of headings that can be used to structure the specification. This list of requirements will be used to judge the success of designs later on in the design process.

- function
- performance criteria
- safety
- environments it may operate or be kept in
- measurement targets
- ergonomics
- aesthetics
- materials availability.



Size:

The size of the product has been carefully considered. It must fit in the hand and be easy to hold. The designer has been given the capacity the product, and has designed a vessel to hold the liquid. Other considerations will be packaging size, how many are to fit in each pack etc.

ACCESS FM

ACCESS FM is an acronym that stands for

- **Aesthetics** – how attractive the product looks – colour, pattern, shape, fonts, images etc.
- **Cost** – consider the retail cost; how have costs been kept to a minimum for manufacture?
- **Customer** – who is the product aimed at? How can you tell this?
- Environment – where is the product to be placed, stored and displayed for sale? How has this affected the design?
- **Safety** – does the product have any safety concerns? How are these communicated?
- **Size** – what size should the product be, and why? How does the size affect the use?
- **Function** – how does the product meet the required needs?
- **Materials** – why have materials been chosen for the different parts/components of the product?

ACCESS FM is used to analyse products in detail. The information can then be used to help design and develop new and creative products.

Design ideas and CAD/CAM options

You may want to start thinking about a range of ideas

https://www.youtube.com/watch?v=gMLvmQriku0

Subject: GCSE D&T	Term:2	Topic: **Production Techniques**

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Production Methods

Week 3-4

Computer aided design (CAD) allows designers to draw, design and model on screen.

Products can be designed in one location and made at a location in another part of the country or another part of the world.

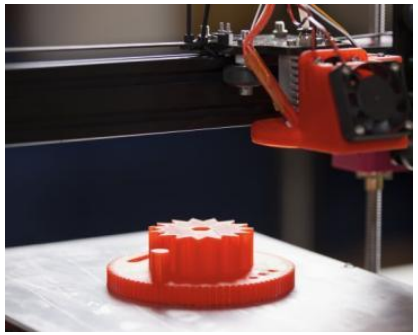
CAD can be linked to a compatible machine to produce products using **computer aided manufacturing (CAM)**.

CAM can create a faster production process and generally only uses the necessary amount of raw materials.

3D PRINTING

Small-scale car production is now being developed where all the exterior body parts are 3D printed and assembled.

Click here to watch the video.



Flexible manufacturing systems (FMS)

Production is organised into cells of machines performing different tasks. Each cell has a range of **computer numerically controlled (CNC)** machines.

- FMS are highly flexible because:
- they can produce different products at the same time
- they can be set up to produce new products quickly and easily, saving time and effort.

Just in Time (JiT)

JIT production is a method of organising a factory so that materials and components are ordered to arrive at the product assembly plant just in time for production. It helps to create **lean manufacturing**, which means it focuses on giving customers value for money by reducing waste.

Click here to watch a video about JiT manufacture.

The Nissan Factory in Sunderland operates JiT

Computer aided design (CAD): using computer software to draw, design and model on screen.

Computer aided manufacturing (CAM): manufacturing products designed by CAD.

Flexible manufacturing system (FMS): a system in which production is organised into cells of machines performing different tasks.

Computer numerically controlled (CNC): machine tools that are controlled by a computer.

Just in Time (JIT): a production method that means materials and components are ordered to arrive and the product assembly point just in time for production.

Lean manufacturing: focusing on reduction of waste when manufacturing.

Subject: GCSE D&T	Term:2	Topic: **Tools & Equipment**

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Design Process

Week 5-7

The Design Process	
Design Brief	
Task Analysis	A mindmap to explore all elements of the designing/making tasks ahead
Customer Profile	An outline of a typical user of the product being designed
Primary Research	Gathering new data that has not been collected before using surveys, questionnaires or interviews
Secondary Research	Gathering existing data that has already been published from sources like the internet and magazines
Research Analysis	A summary of important findings from each area of research
Specifications	
Initial ideas	A range of quick sketches in response to the design problem
Development	More detailed drawings which explore and refine better ideas
Modelling	Hand generated or CAD/CAM models to prove construction methods
Final idea	
Plan of Make	A flow chart or illustrated guide to how the product will be made
Manufacture	
Testing	Comparing outcomes to the original specification
Evaluation	
Modifications for Industry	Details of how the product/design would need to be modified to be produced in industry

Checklist

Identify the keywords associated with your making.

Understand about H&S

Reflect on the wider skills associated with your project

Understand the Design Process

Design and Technology
Product Design

A: Tools and equipment

Name of tool	Picture	What the tool is used for
Tenon saw		A hand saw with a stiff back used to cut straight lines in wood.
Coping saw		A hand saw used to cut curves and complex shapes in wood and plastic.
File		Used to shape or smooth the wood, metal or plastic.
Rasp		A coarse (rough) form of file used for coarsely shaping wood, metal or plastic.
Jig saw		A machine saw used to cut complex shapes in wood and plastic.
Bandfacer		A machine used to smooth the edges of materials.
Pillar drill		A machine used to make holes in materials.

B: Ergonomics

- The relationship between people and the products which they use.
- Ergonomics considers the comfort of the user.
- Ergonomics also considers the force a person can apply, for example when using a tin opener, or the pedals of a car.


Anthropometric data

- People are not all the same size
- Designers need to be aware of this when developing new products
- Designers use anthropometric data to make sure their designs are suitable for the intended user
- Anthropometric data is collected by studying human measurements


Analysing anthropometric data

Hey diddle diddle the **Median**'s the middle
You add then divide for the **Mean**
The **Mode** is the one you see the most
And the **Range** is the difference between

Sustainability

- Trying to control the reduction in the number or quantity of natural resources in order to maintain an ecological balance. (for nature to remain unchanged)
- It is important for designers to consider the sustainability of their designs, including the materials and manufacturing processes they use, in order to limit the negative impacts on the environment.
- Renewable materials are materials which can be replaced and will not run out e.g. trees to make wood and paper.
- Non-renewable materials are materials which cannot be replaced e.g. oil to make plastics.

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

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Section A

Theatre Roles and Responsibilities

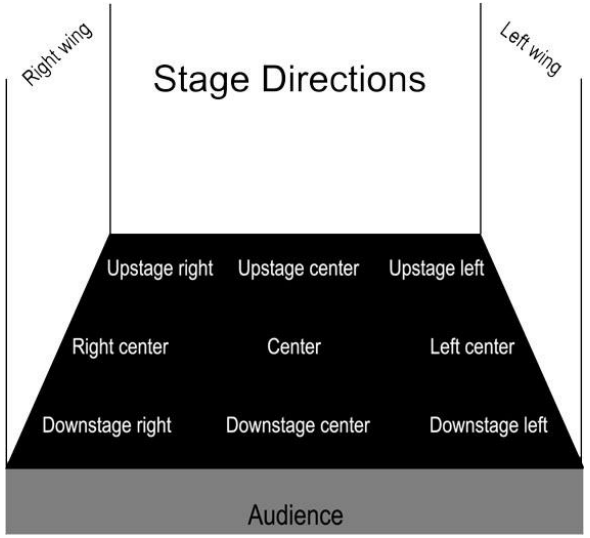
Technician - There are many different types of technicians involved in theatre. They may be involved in rigging the lighting, sound equipment and set. They may also operate technical equipment during a show, controlling lighting, sound or other aspects of the set, eg trucks.

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.

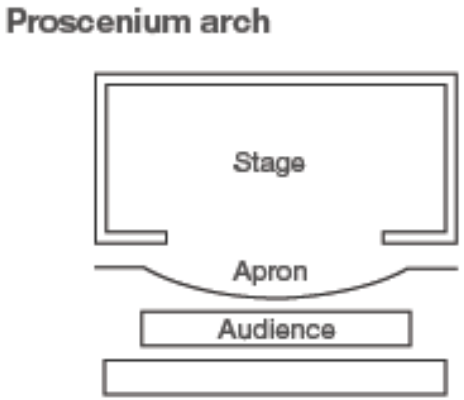
Stage Directions

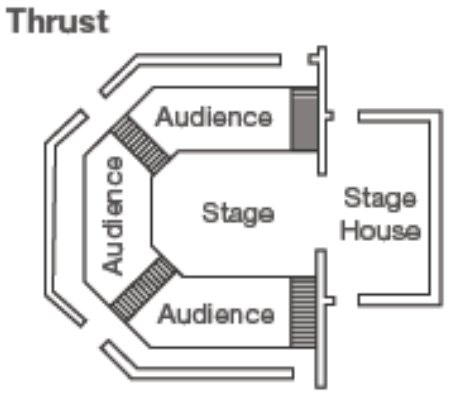
USR – Upstage Right
USL – Upstage Left
DSC – Downstage Centre
CS Centre Stage
CSR Centre Stage Right
CSL Centre Stage Left
DSR Down Stage Right
DSL Down Stage Left
DSC Down Stage Centre

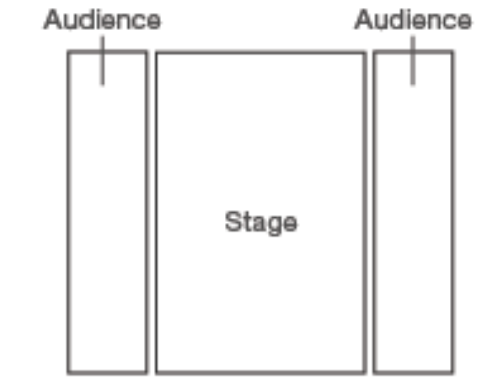


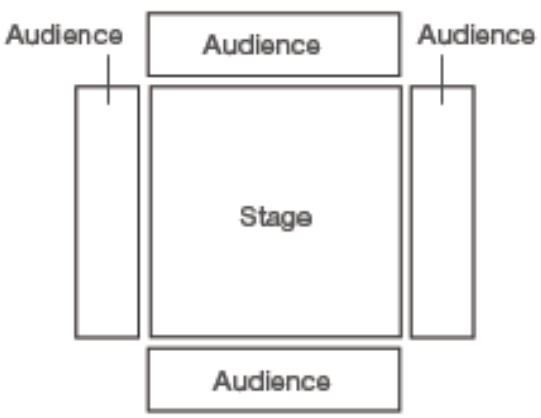
Section A

Types of Staging









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

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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: 2	Topic: Personal Investigation

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'Ipsum quod faciendum est diutius durant'

Week 1-2 – Review, Improve, Present & Annotate

For annotation refer to slide 7

Review, Improve, Present & Annotate

Review all work completed over Term 1. Make improvements to work, ensuring tasks are complete. Creatively present work using natural forms as a running theme throughout.

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%)

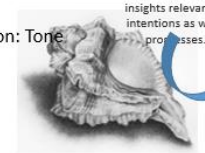
Topic Introduction – Patterns in Nature

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.

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.



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, PHOTOGRAPHY, WRITING, PHOTOGRAPY...
ANNOTATE
DIFFERENT MEDIA

WOOTTON PARK

Home learning Task
Creatively present an A4 collage of natural form images.

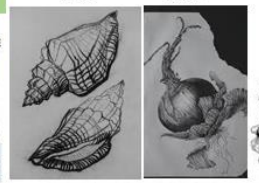
This will show your understanding of what a natural form is.

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*

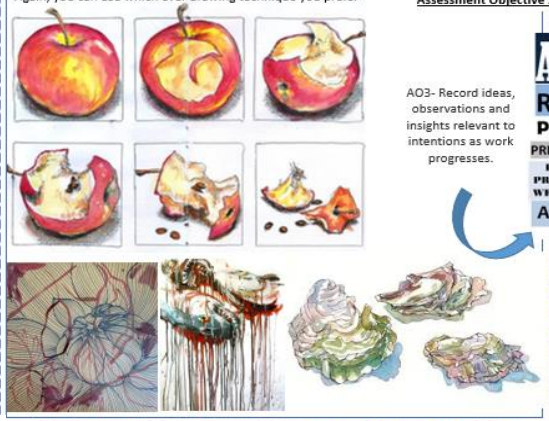


Tonal Value Scale

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)

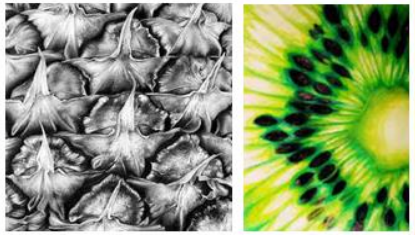
AO3- Record ideas, observations and insights relevant to intentions as work progresses.

AO3 EVIDENCE
RECORD
PRESENT IDEAS
PRIMARY OBSERVATION
DRAWING, PAINTING, PRINTING, PHOTOGRAPHY, WRITING, PHOTOGRAPY...
ANNOTATE
DIFFERENT MEDIA

Week 5 Enlargement

WOOTTON PARK

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

Week 6 Contextual Studies – Natural Forms Artist

WOOTTON PARK

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)

AO1 EXPLORE
DEVELOP
DEVELOP IDEAS
INVESTIGATE & RESEARCH
OTHER ARTISTS WORK
ANALYSE
ANNOTATE

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.

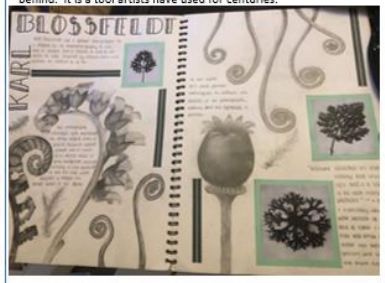
Short, simple notes using correct vocabulary can give a clear idea of your understanding and knowledge

Week 7 – Artist Transcription & Response

WOOTTON PARK

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.



Karl Blossfeldt Transcription

Develop ideas through investigations, demonstrating critical understanding of source

Assessment Objective 1 (AO1)

AO1 EXPLORE
DEVELOP
DEVELOP IDEAS
INVESTIGATE & RESEARCH
OTHER ARTISTS WORK
ANALYSE
ANNOTATE

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)

AO2 REVIEW
REFINE
EXPERIMENT
EXPLORE DIFFERENT IDEAS AND MEDIA
A RANGE OF TECHNIQUES & PROCESSESS
SELECT
IMPROVE

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

Monochromatic ; having or consisting of one colour or hue

Baseline Assessment **A03 – Recording** **Tone - Observational drawing of a shell**
A03 Recording **Collage – Collect and creatively present a Natural Forms Collage**
A03 – Recording **Mark making – Observational drawing of a shell**
A03 – Recording **Colour – Observational drawing of a natural form**
A03 – Recording **Photoshoot of natural forms.**
A03 – Recording **Scale & Proportion – Observational drawings of zoomed in sections**
A01 – Explore **Artist Research 1 Georgia O'Keeffe**
A01 – Explore **Artist Transcription (copy)**
AP1 A01 – Experiment **Artist Response – Monochromatic acrylic painting**

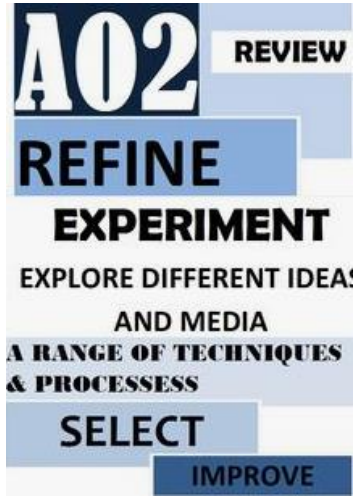
Subject: GCSE Fine Art	Term: 2	Topic: Patterns in Nature

Week 3 – Exploring Pattern Systems

AO2: Exploring Pattern Systems

What is a pattern?
Patterns are all around us, in nature as well as in art and design.
We see patterns where shapes, lines or colours are repeated. How complicated a pattern is depends on what is repeated and the way in which it is repeated.

Assessment Objective 2 (AO2)



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

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.

Motifs
Block Repeat
Half Drop
Mirrored
Rotational
Regular
Irregular

Patterns can be regular or irregular.
In regular patterns the motif (or motifs) is repeated in a way that is predictable.
It could be exactly the same each time, or it could change in a way that is regularly repeated.
There are many ways to arrange motifs to create a regular pattern.

Subject: GCSE Fine Art	Term: 2	Topic: Patterns in Nature

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

Week 4 Contextual Studies – Pattern 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.
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Damien Hirst
1965 to present

Hirst explores the uncertainty at the core of human experience; love, life, death, loyalty and betrayal through unexpected and unconventional media.

Psalm 27: Hirst's butterfly and enamel paint on canvas

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

Subject: GCSE Fine Art	Term: 2	Topic: Personal Investigation

Week 5 – Artist Transcription

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.

William Morris (1834-1898), a founder of the British Arts & Crafts Movement sought to restore the prestige and methods of hand-made crafts, including textiles, in opposition to the 19th century tendency toward factory-produced textiles. With this goal in mind, he created his own workshop and designed dozens of patterns for hand-produced woven and printed cloth, upholstery, and other textiles

Emile-Allain Séguy, professionally known as E.A. Séguy, was a French designer during the Art Deco and Art Nouveau movements of the 1920s. He primarily created patterns and textiles inspired by the natural world.

Angie Lewin is a British printmaker working in linocut, wood engraving, lithography and screen printing.

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Assessment Objective 1 (AO1)

Develop ideas through investigations, demonstrating critical understanding of source

Subject: GCSE Fine Art	Term: 2	Topic: Patterns in Nature

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'Ipsum quod faciendum est diutius durant'

Week 6-7 – Exploring Printing Process's

Assessment Objective 2 (AO2)

AO2: Exploring Printing Process's

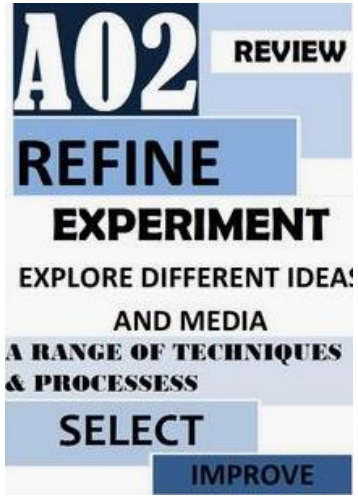
Printing allows an image to be accurately reproduced a number of times. This process developed to enable **mass production** of information and images (magazines, posters, fine art pictures), along with the ability to print repeated patterns for fabrics and wallpapers.

Printing techniques include:
- silkscreen printing
- block printing
- monoprinting
- Etching

- Always remember when you are printing you are working in positives and negatives
- Any letter and words need to start backwards so that they are the right way round in your final prints.

Etching is the process of printing produced by 'etching' patterns, shapes and designs into the surface of a metal or acrylic plastic plate.
Scratch your image or design into the surface of the plate
Apply colour by rolling ink onto the etched surface
Wipe the surface so that only the ink collected in the in the scratched areas is left
Carefully place paper on top of the inked sheet
Use a printing press to apply pressure and lift the image onto your paper
Historically another technique was to use acid to erode the metal plate. The acid cuts into the unprotected parts of a metal surface to create a design in intaglio (incised) in the metal.

Printing etchings over text, patterns and other backgrounds can add interest and variety to your work



Monoprinting is the process of making a print using 'mark making'.
Mark making is any mark made using any material on any surface, such as:
pencil on paper
photoshop brush mark on a screen
scratch in clay
paint on a canvas
A mark can be a line, a dot, a scratch, a curve, a thumbprint and so on. Using different tools can help create different thicknesses and types of marks.
The colour used to create monoprints is usually water-based ink. A roller is used to apply the ink evenly over the a printing sheet. This is usually an acrylic sheet or other washable flat surfaces.

Monoprinting is a good technique for creating spontaneous and expressive print work

Monochromatic = one colour with different variations of the same colour.

Block printing is **the process of printing patterns by means of engraved wooden blocks**. It is the earliest, simplest and slowest of all methods of textile printing. Block printing by hand is a slow process. It is, however, capable of yielding highly artistic results, some of which are unobtainable by any other method.

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

Subject: GCSE Fine Art	Term: 2	Topic: Patterns in Nature

WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

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#

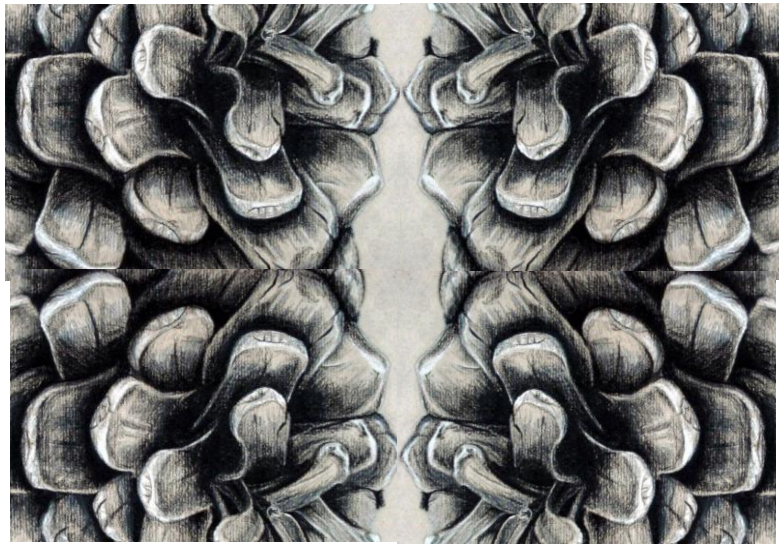
Annotations can be used for your own reference, eg to make a note of how you achieved a technique, or to record an idea you might like to try later.
They can also be used to communicate information to the examiner that will help explain your thoughts and decision-making processes.
Using annotations can 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: 2	Topic: Learning Aim A2: Factors That Affect Development

WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

Week 1-4-Factors That Affect Development- Coursework Writing

S.Hartnett

Part 1

For each life stage, you should describe the physical, intellectual, emotional and social development that your chosen individual has experienced.

Your report should show how the development in one area, for example physical, can lead to development in another, for example, intellectual.

Part 2

The second part of your report should focus on the different factors which have had an effect on your chosen individual throughout the three different life stages.

You must select at least two relevant factors for each area of development and explain how they have affected the individual at each life stage.

Part 3

For the third part of your report, you must assess how the impact of the factors you have selected has changed over the different life stages.

You will need to give examples and compare the effects of the factors on the individual at the different life stages

Level 1
I have outlines the ways that different factors have affected growth and development on my person (PIES)
Level 2
I have explained how different factors have affected growth and development on my person (PIES)
Merit
I have compared the different factors that have affected growth and development across three life stages for my person (PIES)
I have included a rank to compare which had the biggest to the least impact and why
Distinction
I have assessed how the impact of the factors has changed over my persons life

R.Lowdell

Part 1

For each life stage, you should describe the physical, intellectual, emotional and social development that your chosen individual has experienced.

Your report should show how the development in one area, for example physical, can lead to development in another, for example, intellectual.

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The second part of your report should focus on the different factors which have had an effect on your chosen individual throughout the three different life stages.

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I have assessed how the impact of the factors has changed over my persons life

Subject: Health and Social Care	Term: 2	Topic: Learning Aim B: Life Events

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'Ipsum quod faciendum est diutius durant'

Week 5 – Life Events

S.Hartnett

KEY TERMS
Life events – expected or unexpected events that can affect development.
Expected – a belief that something is likely to happen.
Unexpected – not thought of as likely to happen.
Life events – have an important impact on growth and development and can be expected or unexpected.
Physical events – make changes to your body, physical health or mobility.
Relationship changes - impact on formal and intimate relationships.
Life circumstances – impacts on day-to-day life and the choices you make.
Infancy – a time of rapid growth, so illness in the early years can affect the rate of growth and development of physical skills, such as delaying crawling and walking.
Childhood – chronic illness such as diabetes or asthma may require children to attend hospital regularly. This can have a serious impact on their learning. They miss out on social activities and their ability to take part in physical activities will be restricted.
Adolescence – a time when young people are already experiencing physical change, so illness may have a considerable effect on how they feel about themselves and how well they cope through puberty.
Adulthood – illness may result in time away from work, or not being able to work, play sport or attend social events. It is likely to effect a persons self esteem, their total income and lifestyle. Illness of parents can impact the whole family.
Later adulthood – illness affects a persons mobility and independence. Older people may need to leave their home and move to residential care which can be upsetting.
Accident and injury – can affect mobility, work, school.
Physical events – can affect diet, (causing a delay in growth), restrict mobility/motor control, cause negative self esteem, loss of independence, impact income, impact life chances, impact intellectual development, cause isolation and difficulties building relationships.

Week 5 – Relationship Changes

R.Lowdell

Relationships can impact emotional and social development.
Relationships may change by –marriage, divorce, bereavement, becoming a parent, starting a new relationship.
Bereavement – considerable impact on emotional development for some time.
New relationships – mutual understanding, trust, loyalty can result in positive self image and high self esteem.
Friends – share worries, help provide practical and emotional support.
Marriage – major change in life. It means adapting to life as a couple, changing lifestyle (to an extent). It can be positive and improve self esteem, provide a feeling of safety and security.
Divorce – can lead to insecurity, poor self image and can affect social development, as there is a loss of friendships and wider family networks.
Parenthood – generally brings positive emotions of joy and fulfilment. Parents change whole lifestyle and routines. It brings new responsibilities. Parents have less time for themselves to pursue their interests and meet friends. Added pressures if parents work. Lack of sleep can put pressure on a partnership or marriage.

Subject: Health and Social Care	Term: 2	Topic: Learning Aim A: Life Events

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Week 6 –Life circumstances

S.Hartnett

Life circumstances are often expected or unexpected.
The persons life style will change abruptly, which may affect their emotions. There are positive and negative effects of life circumstances.
Moving house – *positive* – excitement, new experiences, opportunities to meet new people and discover new areas. *Negative effects* – anxiety, stress at the physical and mental pressures of moving. Possible loss of close friends/neighbours.
Starting school – *positive* – opportunities to build new friendships and relationships and learn new things. *Negative* – anxiety about learning new routines and building relationships. May feel insecure when leaving parents for the first time.
Exclusion from school – *positive* – may remove the stress that caused the exclusion. Negative – can lower self image and self esteem. Missed schooling may affect learning and loss of friendships.
Redundancy – *positive* – opportunities to take on new/different challenges. *Negative* – lower self image and self esteem, loss of earning may impact on diet/lifestyle choices, ability to socialise.
Imprisonment – *positive* – may provide opportunities for learning, developing new skills, making different lifestyle choices. Negative – lower self image and self esteem, loss on independence, loss of social contact.
Retirement – *positive* – reduce stress, more time to spend with family, more time for hobbies and interests. *Negative* – loss of relationships with colleagues, loss of self image, fewer opportunities for intellectual challenge.
Life events can vary between individuals. The effects depend on how individuals deal with the loss of a previous routine or lifestyle and take on a new situation.
Factors that affect how people cope with life events: *age, resilience, support available, disposition, self esteem.*

Week 6 – Adapting to change

R.Lowdell

Adapt – to adjust to new conditions or circumstances.
Moving through change can mean that people need to adapt to new circumstances, lose old lifestyle, relationships or abilities, let go of the old life/circumstances.
Resilience – a persons ability to come to terms with events that happen in life. Resilience can help people to overcome the worst effects on their development. It is stronger in people who have a positive outlook on life, are able to accept that change will happen, belong to a close family and community network, plan for expected life events.

Subject: Creative iMedia	Term: 2	Topic: RO82 Creating a multipage website revision

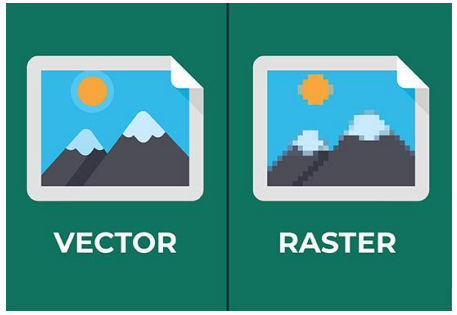
WOOTTON PARK

'Ipsum quod faciendum est diutius durant'

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;

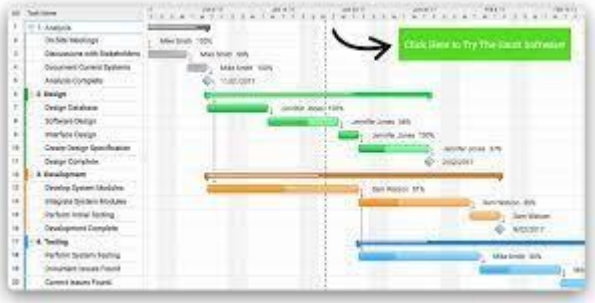
Interpreting client requirements: Before starting work on creating a digital graphic, you must cheque what the client wants. Read the client brief or specification carefully. Then think about how to satisfy the brief using your creative talents and ideas. Write a 250+ words assignment showing your understanding 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: Creative iMedia	Term: 2	Topic: RO82 Creating a multipage website revision

WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

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: 2	Topic: Experimentation

WOOTTON PARK

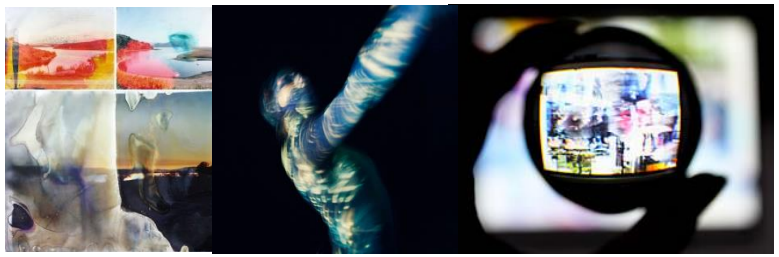
'Ipsum quod faciendum est diutius durant'

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: 2	Topic: Experimentation

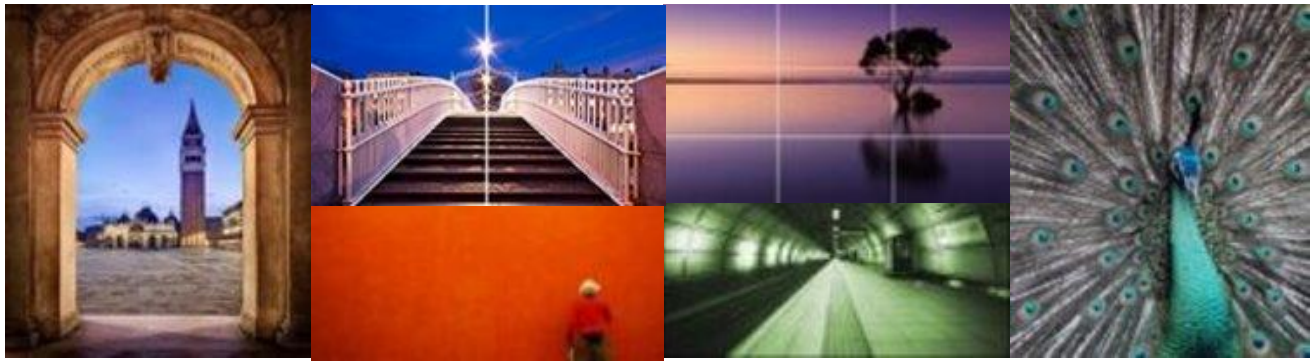
WOOTTON PARK
'Ipsum quod faciendum est diutius durant'

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: 2	Topic: Experimentation

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Week 3 - 4

Digital Manipulation

You will learn how to manipulate your photographs in the style of the below artists (left to right Camila Casullo, Nico Goodden, Brandon Kidwell, Barbara Kruger and Julie Cockburn). You will learn how to isolate colour, create a double exposure affect, add text and repeat and rotate to create patterns. You can find YouTube tutorials for all of these skills to practice using Photoshop prior to your lesson.

Subject: Photography	Term: 2	Topic: Experimentation

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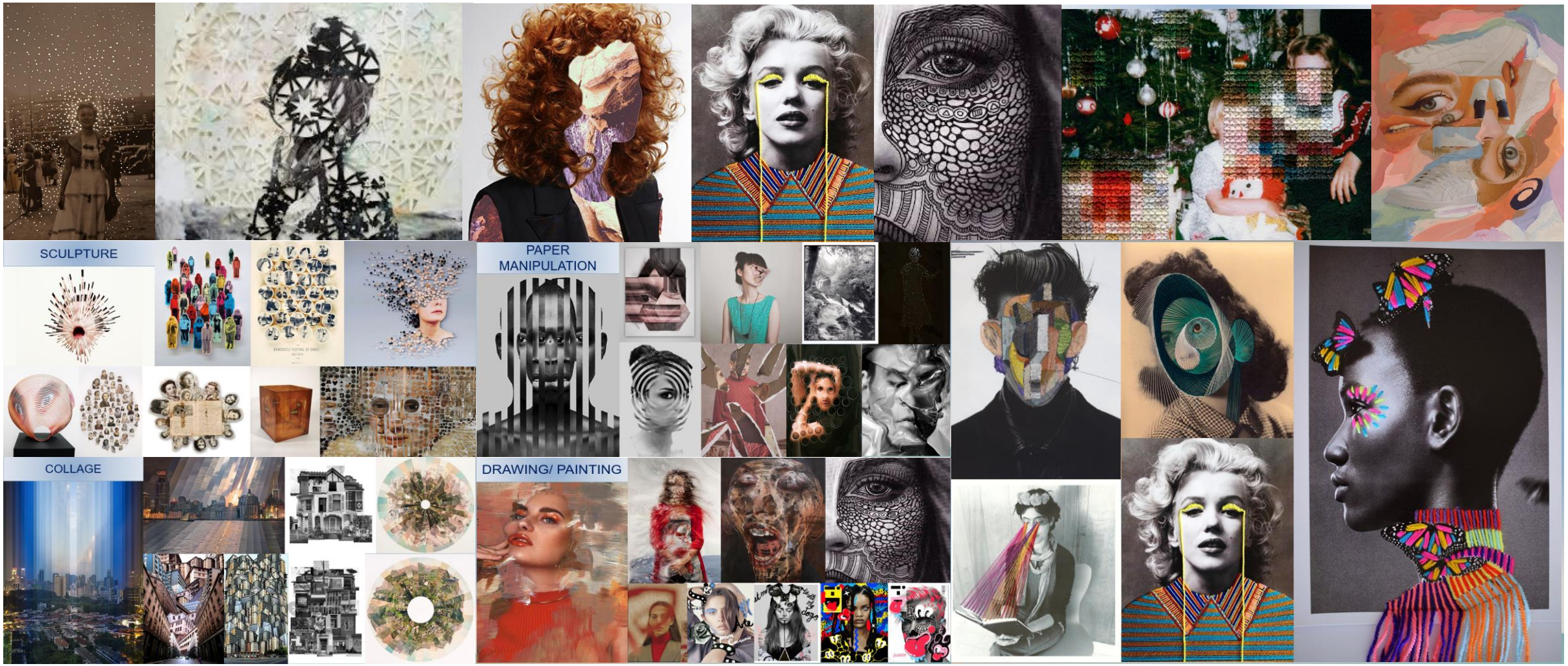
Week 5 - 6

Photographic Visual Elements

You will learn how to manipulate your photographs in the style of the below artists (left to right Amy Friend, Elise Wehle, Erin Case, Victoria Villasana, Alana Dee Haynes). You will learn how to create tessellation patterns, negative space effects, create a double exposure affect, add embroidery and add drawing/ etching to your photographs.



Subject: Photography	Term: 2	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 catagoriesed **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: 2	Topic: Criminal Psychology/Developmental Psychology

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Week 1 – The Effects of Punishment

According to the SLT criminal behaviour can be reinforced because it is rewarding. In contrast if it is punished this should reduce the chance of it happening again.
A01
Prisons= Take away freedom rights and privileges
Fines= loss of funds for things such as traffic offences
Community sentences= offenders pay back society by giving up time to contribute to the community. It is often made public to use shame and guilt as part of the process
Deterrents= Making punishments public such as using the media to report it make people avoid the negative consequences they see
A03
☹ Prison doesn't have a very good record in reducing reoffending
☹ Prison causes other problems such as suicide, finding it hard to cope in the outside world and learning new behaviours that are unacceptable in society

A01
Rehabilitation is the process of reintegrating a convicted person back into society with the aim they no longer want to commit crimes. It encourages pro-social behaviour.

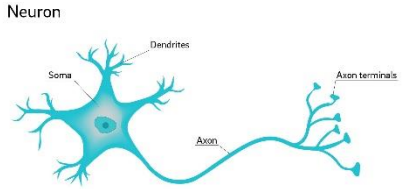
Behaviour modification e.g token economy= rewarding good behaviour and pairing convicts with someone else who is displaying good behaviour so they can learn through vicarious reinforcement

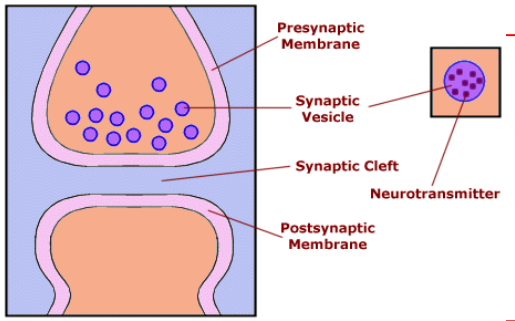
Restorative justice= usually involves a meeting between the victim and the offender to make the offender aware of the consequences of their actions.
A03
☹ Restorative justice seems to work well for first offences and some think it is too lenient
☹ Token economy often works in prison but behaviour doesn't always transfer to outside this setting

Week 2 – The Stages of Development

Pre-natal	The time from when the baby is conceived to when is it born
Childhood	From birth to the age of 12. They are reliant on parents who they bond with in order to gain self confidence and independence. As they move through the stage, they rapidly gain skills such as walking and talking and start to be more autonomous.
Adolescence	This stage runs from 13 to 19 years old and is the transitional stage from childhood to adulthood. The body undergoes significant changes during this period as it matures sexually. Individuals begin to think, act and feel differently.
Adulthood	From the age of twenty until death, an individual enters adulthood. This is a time of taking on new responsibilities such as intimate relationships, parenthood and careers.

Nervous system= The body's control centre
Central Nervous system= The brain and the spinal cord
Neurons= A cell that transmits nerve impulses to send messages between the brain and other parts of the body
Synapse= The gap between two neurons which triggers the release of neurotransmitters (chemical messengers)
Receptors= Neurotransmitters bind with these to pass the message along to the next neuron





Subject: Psychology	Term: 2	Topic: Developmental Psychology

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Week 3 – Stages of Development (2) IQ Tests

Pre-natal	childhood	Adolescence	Adulthood
First trimester: neural tube=brain and spinal cord	New neural connections (approx. 1,000 per second). In the visual cortex the number of synapses doubles up to the age of 4 months old.	In our teens the brain undergoes significant changes. The grey matter, reaches maximum density.	Our prefrontal cortex (the rational part of our brain) finally matures at the age of 25 years old. This helps up makes rational decisions and be able to focus on long term consequences of our actions and so reduces impulsiveness.
Cells are created 6-20 weeks At 8 weeks cells move to their correct location in the brain, become neurons and form the nervous system.	When a baby is born, its ability to see clearly is limited but by the time it is 5 months old, the new synapses allow it to see in 3d and in colour.	Areas of the brain, like the limbic system, mature. This area regulates emotion and helps to form new memories.	Neurodegenerative disorders such as Alzheimer's disease and Parkinson's disease may develop.
The cerebral cortex is formed around 2 months. This is part of the brain responsible for how we think and act, memories and intelligence	At the age of 3 months old, the density of synapses in the babies prefrontal cortex is at its peak – allowing the child to start to use their past experiences to understand their present.	The prefrontal cortex is the last part of the brain to mature in our teens. This regulates decision making and moderates social behaviour.	
Second trimester: 4-6 months. The brain becomes fully developed. 100 billion neurons have been formed	Child begins to understand cause and effect.	Frontal lobes continue to develop and reach maturity at the age of about 16 year old.	
FAS=fetal alcohol syndrome	During later childhood, connections made are 'pruned' meaning we get rid of neural connections that we do not use.		

Alfred Binet=1900s IQ testing
IQ test=measures memory, attention and problem-solving skills. Identifies low or high intelligence to support learners in school or pick up learning difficulties
A03
- ☹ Not used well in the First World War to recruit officers and leaders
- ☹ Cultural bias- questions reflect American culture
- ☹ Had a negative impact on immigration

Week 4 – Piaget's Theory of Cognitive Development

Key Features A01
Stages are invariant= don't change and go in order
Stages are universal= same for all children
Schemas= mental pictures of the world that help us to decide how to act
Assimilation= New information 'updates' existing schemas
Accommodation= New information changes existing schemas or makes new ones

1. Sensori-motor stage 0-2
- Learn through senses
- Object permanence- If a toy is hidden they don't search for it. Around one they will learn it still exists and look for it if it is hidden

2. Pre-operational stage 2-7
- Animism- They believe inanimate objects have feelings and treat their toys this way
- Egocentrism- think everyone sees the world how they do, lack empathy or understanding others feelings
- Reversibility- Can't think in reverse order. Don't understand you can change something and change it back (e.g play doh)

Three Mountain Problem

3. Concrete operational stage 7-11
- Conservation- They understand when things change e.g recognize the amount of water hasn't changed even if it is poured into different sized cups
- Decentration- Focus on more than one aspect of a situation (e.g put words in a sentence together)
- Seriation- Put things in rank order
- Linguistic humour- Tell jokes

4. Formal operational stage 11+
- Abstract thinking, think logically, and be able to debate or think hypothetically

A03
- ☹ Underestimated the age that children can achieve the different stages
- ☹ Reductionist-ignored the role of teachers and scaffolding
- ☹ The tasks/ways he measured the stages may be too complex

Subject: Psychology	Term: 2	Topic: Developmental Psychology

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Week 5 – Key Study-Piaget (1952) Conservation of Number

A01

Background= Conservation happens in cognitive development. It is the understanding that even if the appearance of an object or liquid changes the physical properties are the same. According to Piaget conservation of number happens and then mass and volume

Aim= To demonstrate children in concrete operational stage are more likely to be able to conserve than those in the pre-operational stage

Hypothesis= Children in COS will conserve whereas children in POS will not

Method= natural experiment, IV= age DV= ability to conserve number, independent measures, sample size unknown but small sample of Swiss children from Geneva

Procedure= Shown two rows of counters that were lined up both equally matched. They were asked 'is there the same amount of counters in each row?'. The rows were changed and the question asked again

Results= 3-4 year olds (POS) said there were more in the row that had be transformed. Children in COS could recognize they had the same amount

Conclusion=Supports Piagets hypothesis

A03

- ☹ Problems with the method- demand characteristics. Asking them the same Q twice might have confused them into thinking they had to say something different
- ☹ Artificial task- they might have thought something must have happened because the adult did it
- ☹ Culturally biased- Swiss children

Week 6 – Dweck's ideas on mindsets

A01

Fixed mindset

- Believe intelligence is innate and cannot be changed
- Less likely to see the need to practice or try to improve
- Concerned with looking intelligent and avoid things they may fail at
- Failure affects their self-esteem
- Don't like to make effort

Growth mindset

- Believe you can develop intelligence over time
- Know not everyone has the same potential but with dedication, practice and challenging you can improve
- See failure as a challenge
- Resilient

Teachers should teach the idea that being able to do things quickly is not always a good thing and that practice and effort is important.

Dweck recognizes you can have a fixed mindset for one thing and a growth for another

People with growth mindsets are also less likely to bully

Praising for intelligence= learners choose tasks that don't challenge them as they value performance and compare themselves to others

Praising for effort= more value for learning opportunities, leads to a growth mindset

A03

- ☹ Some critics argue teachers shouldn't use praise at all
- ☹ Failure is placed on the learner which could affect self-esteem
- ☹ Nurture argument- innate traits may have more of an impact

Subject: Psychology	Term: 2	Topic: Developmental Psychology

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Week 7- Willingham's Learning Theory

A01

Learning styles= The idea that learners have different learning styles and would learn better if taught in the style that suits them

Visual= reading a text book

Auditory= Listening to teachers/podcasts

Kinaesthetic= 'hands on' learning

Although learners might have a preference, in exam conditions it makes no difference. Learners will have different abilities but that doesn't mean they learn better in that way.

Confirmation bias= When we evaluate our beliefs we take notice of information that supports our views and ignore information that contradicts it.

Teachers should be more concerned whether the method of teaching best fits the content rather than adapting the lesson to the 'learning styles'

Why Don't Students Like School (2010)

- Knowledge must be meaningful, not just facts but making links between content. This will help long-term memory
- Drilling information is boring and makes them dislike school
- HWK should benefit learning
- There is no benefit in asking learners to 'think like scientists/historians etc.' and they shouldn't carry out experiments

A03

☹ Teachers would argue it is important to conduct experiments/research to learn how to do it

☹ Certain things may benefit from being drilled

☹ Nurture argument like Dweck ignoring innate factors that affect the learning of children

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

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- 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.