



"Knowledge is
of no value
unless you put
it into
practice"

Anton Chekov

YEAR 11

KNOWLEDGE ORGANISER

EDITION 1
2025-2026

Name:



Kofi Annan

Nobel Peace Prize laureate, Former Secretary-General of the United Nations (1997-2006)



Knowledge is power.
Information is liberating.
Education is the premise
of progress, in every
society, in every family.



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How to use your Knowledge Organiser

What is a Knowledge Organiser and how will it help me ?

It is an organised collection of knowledge that you need to know and learn for every topic you study in every subject. It will help you to be successful in your tests and exams.

Your teacher will use the knowledge organiser in your lessons. They will ask you to refer to various sections - they might talk this through and/or ask you to make key notes in your books or to highlight certain sections on your knowledge organiser.

Your teacher will set homework, where you will be asked to learn key knowledge from your knowledge organiser - you will then be tested in lessons regularly via short quizzes.

Do I have to bring my Knowledge Organiser every day ?

Yes, you do. It is one of our key expectations that you bring your knowledge organiser to every lesson, every day in your special Knowledge Organiser bag. Your Form Tutor will check this every morning.

Is there anything I could use to support me when using my knowledge organiser ?


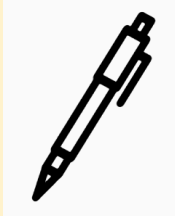


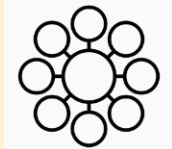









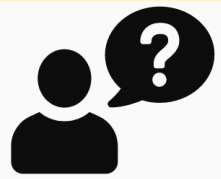



Some people find post-it's handy to stick onto their knowledge organiser pages - these are useful for extra notes.

Small white revision/flash cards are helpful so you can write key facts down. These can then be placed up around the house to help your revision.

How should I use my Knowledge Organiser to help me learn ?

There are lots of ways to use your knowledge organiser - the key to success is to find what works for you. The table below shows you some different ways to use them.

How to use a knowledge organiser – A step by step guide

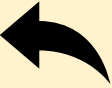


	Look, Cover, Write, Check	Definitions to key words	Flash Cards	Self Quizzing	Mind Maps	Paired Retrieval
Step 1	<p>Look at and study a specific area of your knowledge organiser.</p> 	<p>Write down the key words and definitions.</p> 	<p>Use your knowledge organiser to condense and write down key facts and information on your flash cards</p> 	<p>Use your knowledge organiser to create a new quiz. Write down questions using your knowledge organiser.</p> 	<p>Create a mind map with all the information you can remember from your knowledge organiser.</p> 	<p>Ask a partner or family member to have the knowledge organiser or flash cards in their hands</p> 
Step 2	<p>Cover or flip the knowledge organiser over and write down everything you remember.</p> 	<p>Try not to use your knowledge organiser to help you.</p> 	<p>Add pictures to help support. Then self quiz yourself using the flash cards. You can write questions on one side and answers on the other.</p> 	<p>Answer the questions and remember to use full sentences.</p> 	<p>Check your knowledge organiser to see if there were any mistakes with the information you have made.</p> 	<p>They can then test you by asking you questions on different sections of your knowledge organiser</p> 
Step 3	<p>Check what you have written down. Correct any mistakes in green pen and add anything you missed. Repeat.</p> 	<p>Use your green pen to check your work.</p> 	<p>Use a parent/carer or friend to help quiz you on the knowledge.</p> 	<p>You can also use family to help quiz you. Keep self-quizzing until you get all questions correct.</p> 	<p>Try to make connections that links information together.</p> 	<p>Write down your answers.</p> 



Literacy is defined as the ability to read, write, speak and listen, in a way that lets us communicate effectively and make sense of the world.

KS4 – Literacy

<u>Sentence Type</u>	<u>Definition</u>	<u>Example</u>
Declarative sentence	This sentence makes a statement.	My friend is a skilful footballer.
Exclamative sentence	An exclamatory sentence expresses strong feelings.	What an exquisite dress!
Imperative sentence	An imperative sentence gives a command or makes a request.	“Charge, for the guns”, he said
Interrogative sentence	An interrogative sentence is one that asks a question.	Did you know the girl- Eva Smith?

	<u>Verb Tenses</u>	<u>Example</u>	<u>Memory Clue</u>
Past Tense	Used to talk about past actions, states of being, or events.	Lisa went to the supermarket yesterday.	
Present Tense	Refers to the action or event that takes place or is taking place in the present.	James goes to the gym every day.	
Future Tense	A verb tense which indicates that something has not happened yet but will happen in the future.	I am going to learn to ski.	

<u>Analytical verbs</u>		
Infers	Exposes	Emphasises
Implies	Establishes	Reinforces
Suggests	Signifies	Highlights
Demonstrates	Alludes to	Illuminates

<u>Punctuation</u>	<u>Definition</u>
... Ellipses	To make the reader wonder what will happen next: She wondered what was behind the door... Or use to show a flashback in time: It had all started 5 years ago...
— Dash	Not to be confused with a hyphen. Dashes can be used to add extra information within a longer sentence, so are a way of showing parenthesis () .
Brackets [] Parenthesis ()	Parenthesis, () , are used to add extra information in text. Brackets, [] , are used mainly in quotations to add extra information that wasn't in the original quote.



Literacy is defined as the ability to read, write, speak and listen, in a way that lets us communicate effectively and make sense of the world.

QUALIFYING CONNECTIVES

- except
- unless, apart from
- as long as
- if, yet
- although
- However



Use these when you want to **explain why something changes** because of something else.

CONTRASTING CONNECTIVES

- where as
- on the other hand
- instead of
- alternatively
- otherwise
- unlike



These are to be used in sentences when you want to **contrast two ideas**.

CAUSE & EFFECT CONNECTIVES

- therefore
- so
- because
- consequently
- thus



These are to be used in sentences when you want to **explain why** something happens

COMPARING CONNECTIVES

- equally
- similarly
- as with
- in the same way
- likewise
- like



These are to be used in sentences when you want to **compare two ideas** with each other.

KS4 – Literacy

Exam Command Words

Analyse	Examine methodically and in detail, to explain and interpret it.
Annotate	Add notes to (a text or diagram) giving explanation or comment.
Assess	To judge or decide the amount, value, quality, or importance of something.
Calculate	Work out the value of something.
Critically	Strengths and weaknesses of what is being expressed.
Define	State the precise meaning of an idea or concept.
Describe	Give a detailed account in words.
Evaluate	To judge or calculate the quality, importance, amount, or value of something.
Examine	Inspect (someone or something) thoroughly to determine their nature or condition.
Explain	Make (an idea or situation) clear to someone by describing it in more detail or revealing relevant facts.
Interpret	Explain the meaning of (information or actions).
Justify	Show or prove to be right or reasonable.
Summarise	Give a brief statement of the main points of (something).



Times tables:

x	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Rounding:

Example 1:

1st decimal place

Check the digit to the right of the number of decimal places needed

3.8742

3.8742 = 3.9(1dp)

Example 2:

more than 5 so round up

27.6273

2nd decimal

27.63 to 2dp

Types of Number:

Square numbers are made by multiplying a number by itself.
1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, ...

Cube numbers are made by multiplying a number by itself 3 times.
1, 8, 27, 64, 125, 216, 343, ...

Prime Numbers only have two factors
2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, ...
They are **only** in the 1 times table and their own times table.

Order of Operations

Percentages

BIDMAS

() x^y \div or \times + or -
Brackets Indices Divide & Multiply Add & Subtract



To find...	You do...
50%	$\div 2$
10%	$\div 10$
1%	$\div 100$
20%	$\div 5$
25%	$\div 4$

Multiplying with negatives:

+ x + = +
- x - = +
+ x - = -
- x + = -

Dividing with negatives:

+ \div + = +
- \div - = +
+ \div - = -
- \div + = -

Adding/Subtracting with negatives:

+ + \Rightarrow +
- - \Rightarrow +
+ - \Rightarrow -
- + \Rightarrow -



Equation of a Line

$$y = mx + c$$

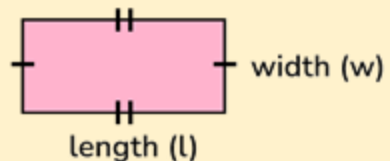
m = Gradient, c = y intercept

Year 11 - Maths – Formula Sheet

$$\text{Percentage change} = \left(\frac{\text{Difference}}{\text{Original}} \right) \times 100$$

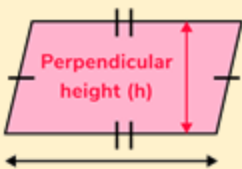
Rectangle

Area = length x width

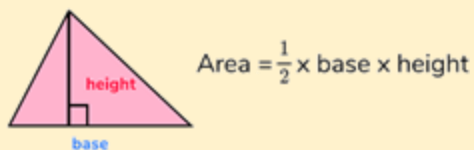


Parallelogram

Area = base x perpendicular height



Triangle



Trapezium

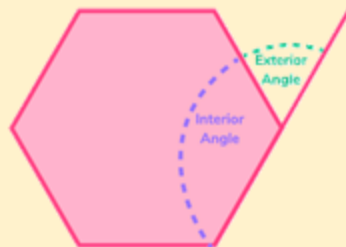


$$\text{Exterior angle} = \frac{360}{n}$$

n = number of sides

Interior angle + Exterior angle = 180°

Sum of interior angles = $(n - 2) \times 180$

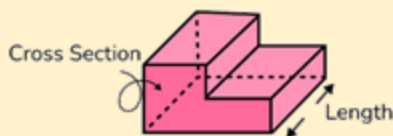


r = radius, d = diameter

$$\text{Area} = \pi r^2$$

Circumference = πd or $2\pi r$

Volume = area of cross section x length



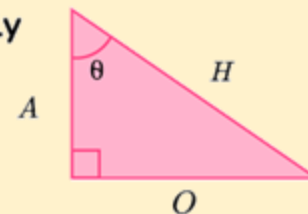
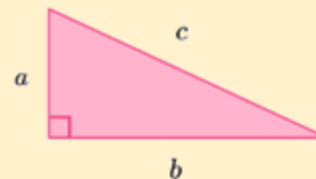
Note: Right angled triangles only

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

c is the hypotenuse

(The longest side)

a and b are the shorter sides.



$$\sin \theta = \frac{\text{Opposite}}{\text{Hypotenuse}}$$

$$\cos \theta = \frac{\text{Adjacent}}{\text{Hypotenuse}}$$

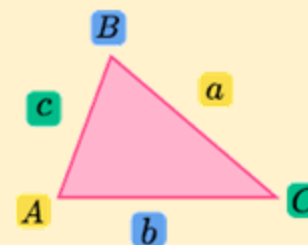
$$\tan \theta = \frac{\text{Opposite}}{\text{Adjacent}}$$

Quadratic equation

$$ax^2 + bx + c$$

Quadratic Formula

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



Area of a triangle

$$\text{Area} = \frac{1}{2} ab \sin(C)$$

Sine Rule

To find a side:

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

To find an angle:

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

Cosine Rule

To find a side:

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

To find an angle:

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



“Hey diddle diddle, the median's the middle, add and divide for the mean. The mode is the one you see the most and the range is the difference between.”

Averages from grouped data

Length (L cm)	Frequency (f)	Midpoint (x)	fx
$0 < L \leq 10$	10	5	$10 \times 5 = 50$
$10 < L \leq 20$	15	15	$15 \times 15 = 225$
$20 < L \leq 30$	23	25	$25 \times 25 = 575$
$30 < L \leq 40$	7	35	$7 \times 35 = 245$
Total	55		1095

Estimate of the mean:

Step 1: Calculate the total frequency

Step 2: Find the midpoint of each group

Step 3: Calculate $f \times x$

Step 4: Calculate the mean by dividing fx by the frequency

$$\frac{\text{Total } fx}{\text{Total } f} = \frac{1095}{55} = 19.9\text{cm}$$

The modal class: The class with the highest frequency

Modal Class is $20 < L \leq 30$

The median: This is the middle piece of data and would be the

$$\frac{\text{Total frequency} + 1}{2}$$

$$\frac{55+1}{2} = 28\text{th value}$$

add the frequency column until you reach the 28th value

Median is in the group $20 < x \leq 30$

Finding the averages

The average tells us about the ‘expected’ value for a set of data. This could be the average height of a group of people, we could calculate the mean, mode, or median :

$$\text{Mean} = \frac{\text{sum of all values}}{\text{total number of values}}$$

Example :

Find the mean of: 10, 12, 18, 20

$$\text{Mean} = \frac{10 + 12 + 18 + 20}{4} = \frac{40}{4} = 10$$

$$\text{Mode} = \text{most common value}$$

Example 1 :

Find the mode of: 10, **12, 12**, 18, 20

Mode = 12

Example 2 :

Find the mode of: **10, 10, 12, 12**, 18, 20

Mode = 10 and 12 (two modes = bimodal)

Example 3 :

Find the mode of: 10, 12, 18, 20

Mode = no mode (no value shows up more than any other)

You cannot have **three modes**.

Year 11 – Maths - Averages

Median = middle value when the data is in order

Example 1 :

Find the median of: 10, 12, 16, 18, 20

Find the median of: 10, 12, **16**, 18, 20
Median is 16

Example 2 :

Find the median of: 10, 12, 18, 20

Find the median of: 10, 12, 18, **20**

If there are two middle values, the

Median is halfway between the two middle values :

$$\frac{12 + 18}{2} = \frac{30}{2} = 15$$

Finding the range

The range isn't an average. The range measures how **spread out** the data is. This is more useful when comparing sets of data. A **smaller range** means the data is **more consistent**.

The difference between **Range** = the highest value and the smallest value

Example 1 :

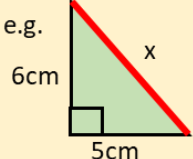
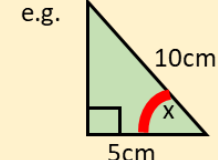
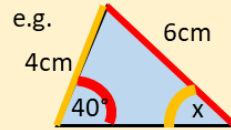
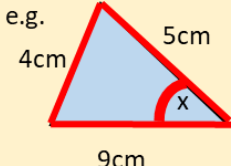
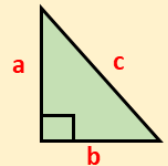
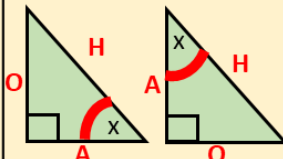
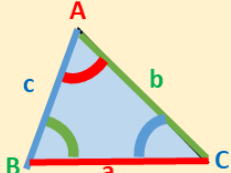
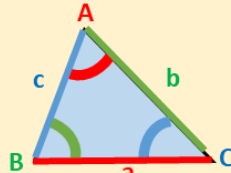
Find the range of: 10, 12, 16, 18

Range is $18 - 10 = 8$

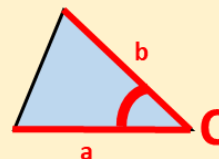
KEY VOCABULARY

Word	Definition
Mean	The average of the numbers. Add up the values you are given and divide by the number of values you have.
Median	The median is the middle value, when your data is in order.
Mode	The value or item there is the most of.
Range	The difference between the largest and smallest values.
Continuous Data	Data which can take any values e.g. weight, height



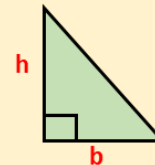
	Pythagoras	Trigonometry	Sine Rule	Cosine Rule
Foundation Tier or Higher Tier	F and H	F and H	H	H
What does it help me find?	Missing sides	Missing sides or angles	Missing sides or angles	Missing sides or angles
How can I decide which one to use?	Used when you are given two sides and need to find a 3 rd side. e.g. 	Used when you are given two sides and need to find an angle, or you are given a side and an angle and need to find a 2 nd side. e.g. 	Used if you have two pairs of angles and their matching side, where one of these is an unknown. e.g. 	Used if you have 3 sides and an angle, where one of these is an unknown. e.g. 
How do I label the triangle?				
Which formula shall I use?	If you want the 'c': $a^2 + b^2 = c^2$ If you have the 'c': $c^2 - a^2 = b^2$ or $c^2 - b^2 = a^2$ <u>REMEMBER TO SQUARE ROOT</u>	$\sin \theta = \frac{O}{H}$ $\cos \theta = \frac{A}{H}$ $\tan \theta = \frac{O}{A}$ <u>REMEMBER TO Sin⁻¹/Cos⁻¹/Tan⁻¹ FOR AN ANGLE</u>	To find a side: $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$ To find an angle: $\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$ <u>REMEMBER YOU ONLY NEED 2 OUT OF 3 PAIRS</u>	To find a side: $a^2 = b^2 + c^2 - 2bc \cos A$ To find an angle: $A = \cos^{-1} \left(\frac{a^2 - b^2 - c^2}{-2bc} \right)$ <u>REMEMBER YOU CAN LABEL ANY ANGLE 'A', JUST CHANGE THE SIDES ACCORDINGLY!</u>

(Higher Tier)
To find the area of a **non right-angled** triangle:



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

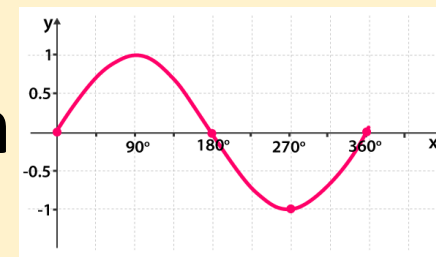
To find the area of a **right-angled** triangle:



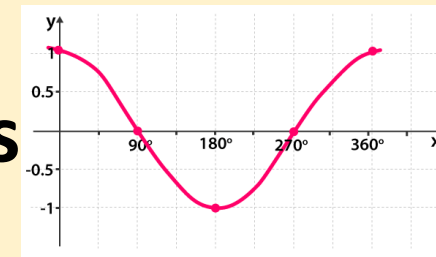
$$A = \frac{b \times h}{2}$$

Trig Graphs

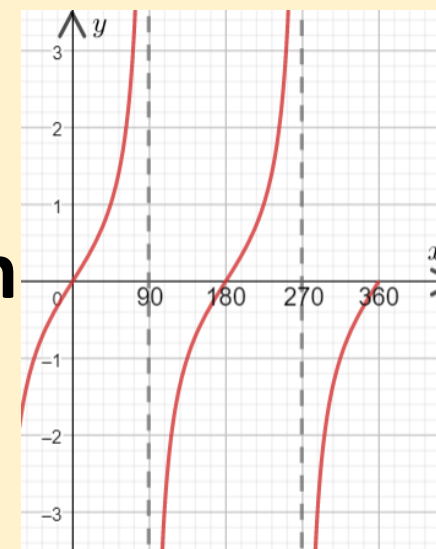
Sin



Cos



Tan





Volume

The **volume** of a shape is the amount of space it takes up. Think of the water in a swimming pool or sand in a sand box.

Converting units of volume

Do the length conversion 3 times, once for each dimension.

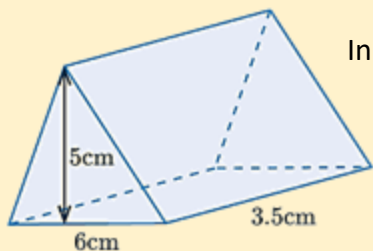
$$1 \text{ m}^3 = 1\text{m} \times 1\text{m} \times 1\text{m} = 100\text{cm} \times 100\text{cm} \times 100\text{cm} = 1,000,000 \text{ cm}^3$$

$$1 \text{ cm}^3 = 1\text{cm} \times 1\text{cm} \times 1\text{cm} = 10\text{mm} \times 10\text{mm} \times 10\text{mm} = 1,000 \text{ mm}^3$$

$$1000 \text{ cm}^3 = 1 \text{ litre so } 1 \text{ m}^3 = 1000 \text{ litres}$$

$$\text{Volume of any prism} = \text{Area of cross section} \times \text{Depth}$$

Example 1: Calculate the volume of the triangular prism



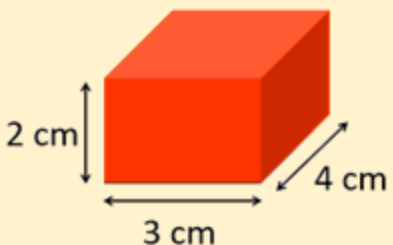
In this case, the cross section is the triangular face.

$$\text{Area of triangle} = \frac{5 \times 6}{2} = 15 \text{ cm}^2$$

$$\text{Volume} = 15 \times 3.5 = 52.5 \text{ cm}^3$$

The units of volume are *units*³

Example 2: Calculate the volume of the cuboid



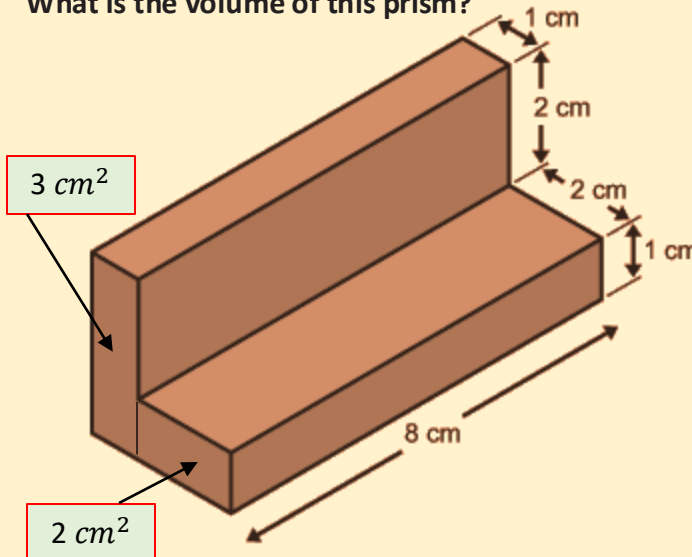
In this case, the cross section is the rectangle face.

$$\text{Area of rectangle} = 2 \times 3 = 6 \text{ cm}^2$$

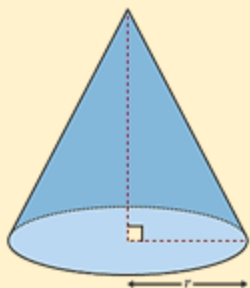
$$\text{Volume} = 6 \times 4 = 24 \text{ cm}^3$$

Example 3:

What is the volume of this prism?

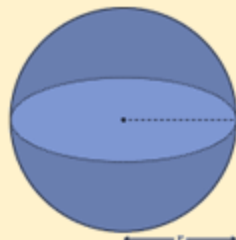


The area of the cross section is 5 cm^2 and the length is 8 cm , so the volume is $5 \text{ cm}^2 \times 8 \text{ cm} = 40 \text{ cm}^3$.



Cone

$$V = \frac{1}{3} \pi r^2 h$$

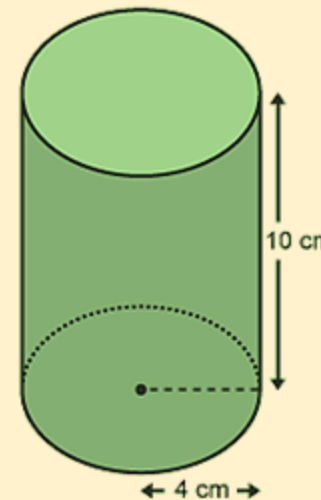


Sphere

$$V = \frac{4}{3} \pi r^3$$

$$\text{Volume of a cylinder} = \pi \times \text{radius squared} \times \text{height} \\ = \pi r^2 h$$

Example: Calculate the volume of the cylinder shown.



Give your answer correct to 1 significant figure.

$$V = \pi r^2 h \\ = \pi \times 4^2 \times 10 \\ = 502.654... \\ = 500 \text{ cm}^3 \text{ (to 1 s. f.)}$$

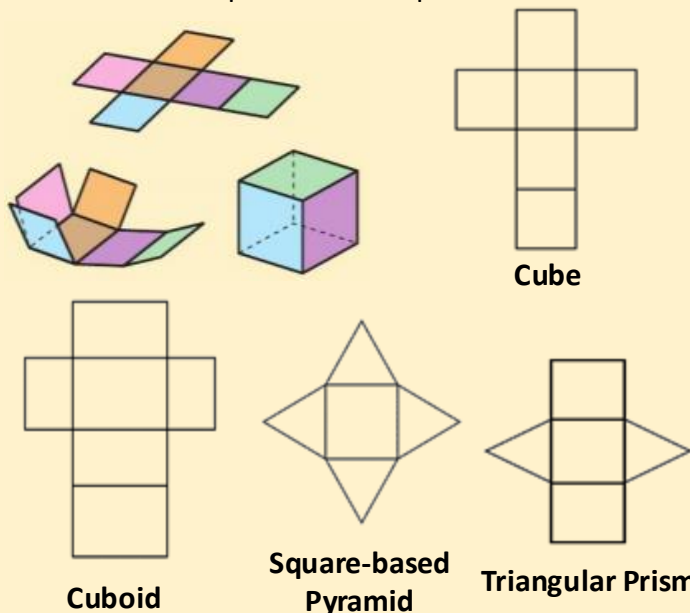
KEY VOCABULARY

Word	Definition
Volume	Space inside a 3D shape
Prism	3D shape which has a constant cross section
Composite solid	A 3D shape created by combining other 3D shapes together.
Cross Section	The face of a prism repeated throughout the shape
Face	The flat surfaces that make up a 3D shape



Nets

A net is a 2D shape that folds up to make a 3D solid.



Surface area

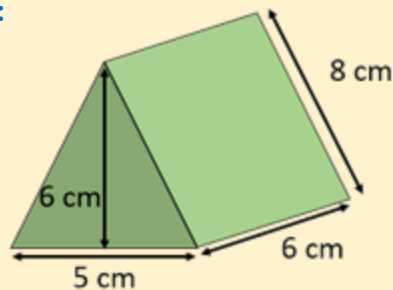
We do not have to use nets to find out surface area and sometimes it is easier to do it without. To work out the **surface area** of any 3D shape, we calculate the **area of each face** and add them together.

Example 1:

Front & Back $2(3 \times 4) = 24 \text{ cm}^2$
 Right & Left Side $2(3 \times 9) = 54 \text{ cm}^2$
 Top & Bottom $2(9 \times 4) = 72 \text{ cm}^2$
Total Surface Area = 150 cm²

Remember, some faces are the same so we can calculate one face and then double it.

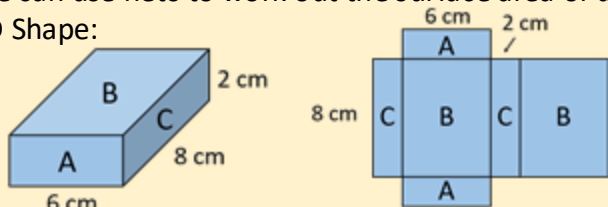
Example 2:



Front & Back = $(\frac{6 \times 5}{2}) \times 2 = 30 \text{ cm}^2$
 Sides = $(8 \times 6) \times 2 = 96 \text{ cm}^2$
 Base = $5 \times 6 = 30 \text{ cm}^2$
Total surface area = 30 + 30 + 96 = 156 cm²

Surface Area using Nets

We can use nets to work out the surface area of a 3D Shape:



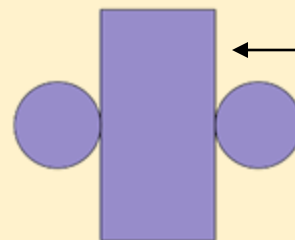
Calculate the area of all the faces (some are the same)

Area of A: $6 \times 2 = 12$
 $\times 2 = 24$
 Area of B: $6 \times 8 = 48$
 $\times 2 = 96$
 Area of C: $2 \times 8 = 16$
 $\times 2 = 32$
Total surface area = 24 + 32 + 96 = 152 cm²

Example 3:

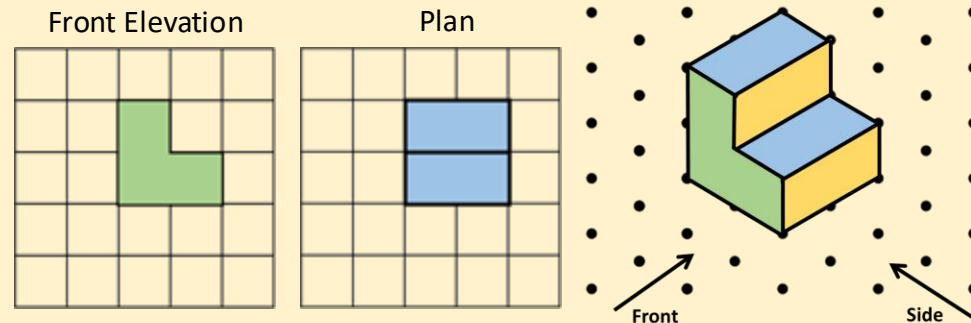
Surface area of a cylinder

Top + bottom: Area of circle $\times 2$ Curved surface area = area of rectangle
 Total surface area is both added together. $S.A = 2\pi r^2 + 2\pi rh$



The curved surface area is the rectangular part of the net of a cylinder. It has a length equal to the circumference of the circle at the top of the cylinder and a height equal to that of the cylinder.

Plans and elevations



Plans and elevations are 2D drawings of a 3D shape. A plan is a scale drawing showing a 3D shape when it is looked at from above.

KEY VOCABULARY

Word	Definition
Prism	3D shape which has a constant cross section
Surface Area	Area of faces
Cross Section	The face of a prism repeated throughout the shape
Face	The flat surfaces that make up a 3D shape



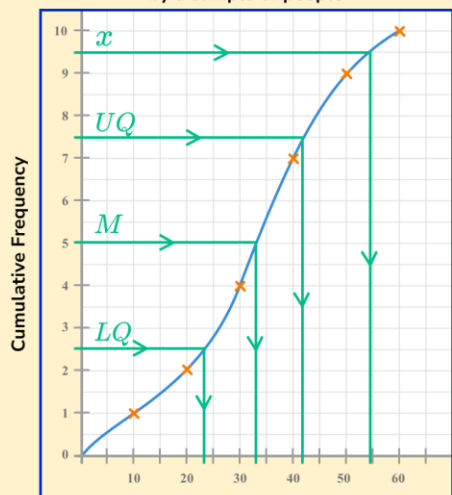
Cumulative Frequency Graph

H

Cumulative frequency is the running total of frequencies in a frequency distribution. Data points are plotted on the upper-class boundary.

Value	Percentage of data below this value
Lower Quartile (LQ)	25%
Median (M)	50%
Upper Quartile (UQ)	75%

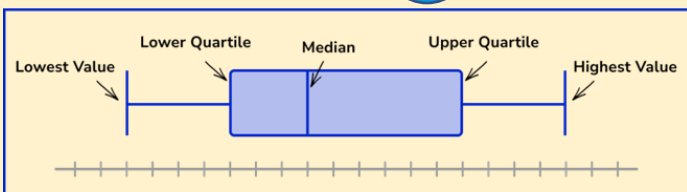
Number of minutes of exercise by a sample of people



Time (minutes)

Box Plot

H



Interquartile range: subtract the Lower quartile from the Upper quartile

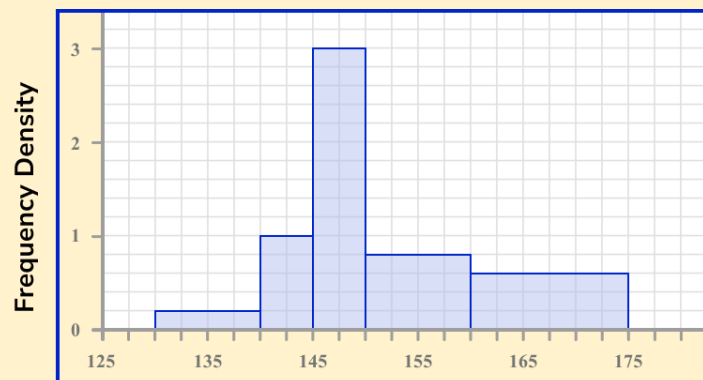
Histogram

H

A histogram is used to display quantitative continuous data. The area of each bar represents the frequencies

$$\text{Frequency density} = \frac{\text{frequency}}{\text{class width}}$$

Height, cm	Frequency	Frequency Density
$130 \leq x < 140$	2	0.2
$140 \leq x < 145$	5	1
$145 \leq x < 150$	15	3
$150 \leq x < 160$	8	0.8
$160 \leq x < 175$	9	0.6

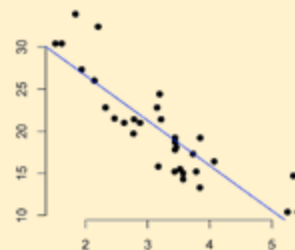
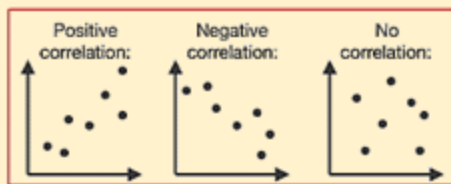


Height, x cm

Scatter Graphs

F H

A **line of best fit** is a straight line drawn as close to as many points as possible on a scatter graph, they are used to make predictions.

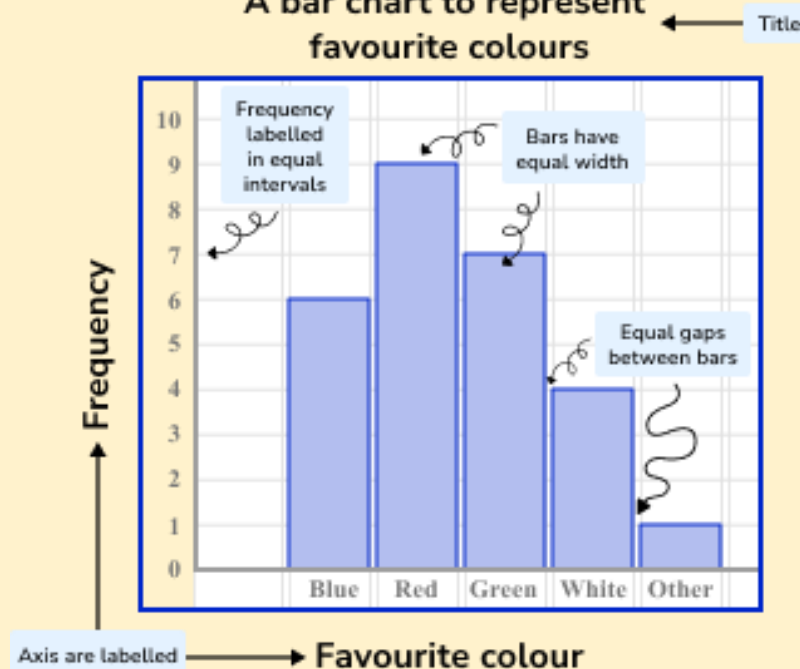


Year 11 – Maths – Statistical Diagrams

Bar Charts

F H

A bar chart to represent favourite colours



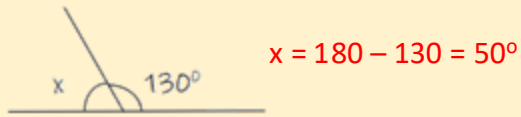
KEY VOCABULARY

Word	Definition
Median	The middle value when data is in order.
Frequency	How often something happens (usually during a period of time).
Continuous data	Data that can take any value (within a range).
Quantitative data	Data that can be counted or measured.

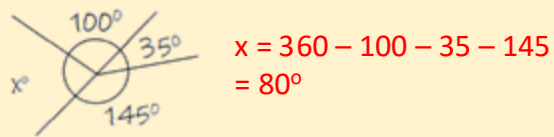


Angle Facts

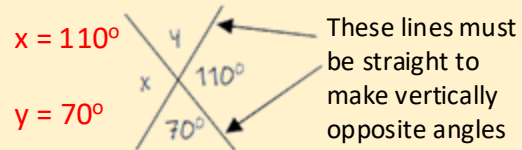
Angles at a point on a straight line add up to 180°



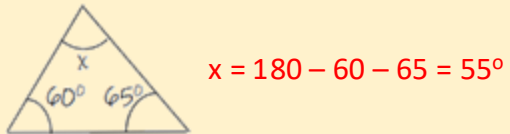
Angles around a point sum to 360°



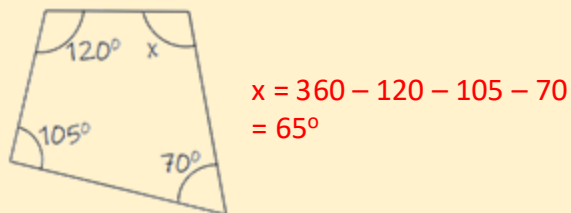
Vertically opposite angles are equal



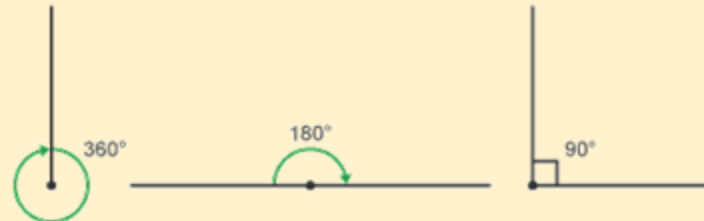
Angles inside a triangle sum to 180°



Angles inside any quadrilateral sum to 360°



There are 360° in a full turn, 180° in a half turn and 90° in a quarter turn. A quarter turn is called a **right angle**.

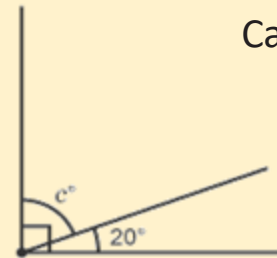


A right angle is shown by a small square. This fact can be used to calculate unknown angles.

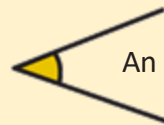
Example

Calculate angle c.

A right angle is shown.



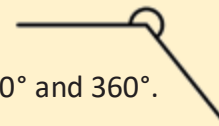
There are three different types of angle.



An **acute angle** is an angle less than 90° .



An **obtuse angle** is an angle between 90° and 180° .



A **reflex angle** is an angle between 180° and 360° .

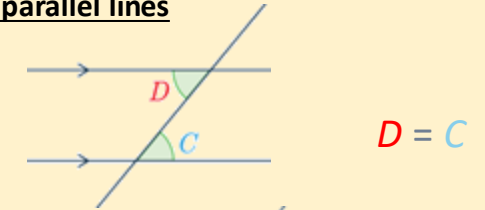
Year 11 – Maths - Angles

Angles in parallel lines

Alternate angles

They are found in a **Z-shape**.

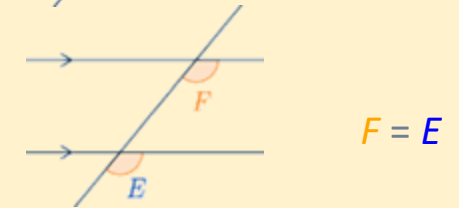
Alternate angles are the same.



Corresponding angles

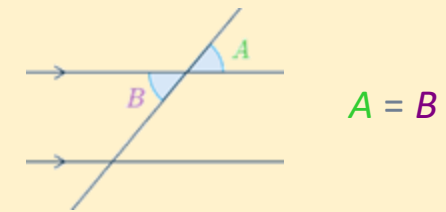
They are found in an **F-shape**

Corresponding angles are the same.



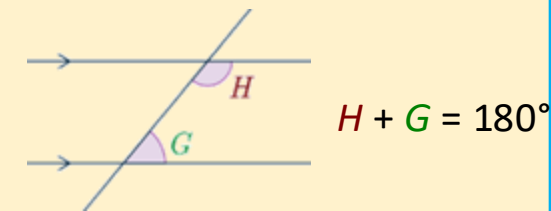
Vertically opposite angles

Vertically opposite angles are the same



Co-interior angles

Co-interior angles add up to 180°



KEY VOCABULARY

Word	Definition
Quadrilateral	a closed shape and a type of polygon that has four sides, four vertices and four angles.
Polygon	A closed 2D shape with straight sides.
Protractor	used to construct and measure plane angles



Simplifying linear algebraic fractions

Algebraic fractions can be simplified the same as normal fractions, by finding common factors in the numerator and denominator.

Example:

$$\frac{55x^4y^3}{15x^2y}$$

Using our knowledge of simplifying numbers and index laws, this fraction would simplify to:

$$\frac{11x^2y^2}{3}$$

Simplifying quadratic algebraic fractions

Algebraic fractions containing quadratics may not have obvious factors, but if we factorise, we can compare factors to find common ones:

Example:

$$\frac{x^2 + x - 6}{3x + 9}$$

Step 1: Factorise the numerator and denominator (we are looking for common factors):

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

Step 2: Cancel the common factors

$$\frac{\cancel{(x + 3)}(x - 2)}{3\cancel{(x + 3)}}$$

Answer: $\frac{x-2}{3}$

Adding and subtracting algebraic fractions

We add and subtract algebraic fractions the same as we do normal fractions. We first need to find a common denominator:

Example 1:

$$\frac{x + 4}{3} + \frac{x + 1}{2}$$

Step 1: find equivalent fractions with common denominators:

$$\frac{2(x + 4)}{6} + \frac{3(x + 1)}{6}$$

Step 2: Combine as 1 fraction, expand and simplify:

$$\frac{2x + 8 + 3x + 3}{6}$$

$$\frac{5x + 11}{6}$$

Example 2:

$$\frac{2}{x + 5} + \frac{3}{x + 1}$$

Step 1: find equivalent fractions with common denominators:

$$\frac{2(x + 1)}{(x + 5)(x + 1)} + \frac{3(x + 5)}{(x + 5)(x + 1)}$$

Step 2: Combine as a single fraction, expand and simplify:

$$\frac{2(x + 1) + 3(x + 5)}{(x + 5)(x + 1)}$$

$$\frac{2x + 2 + 3x + 15}{(x + 5)(x + 1)}$$

$$\frac{5x + 17}{(x + 5)(x + 1)}$$

Note: If the denominator is already factorised, unless told, we don't need to expand.

Multiplying and Dividing algebraic fractions

Example 1:

$$\frac{x + 5}{7} \times \frac{5}{2x + 3}$$

Multiply the numerators and denominators and combine a single fraction

$$\frac{5(x + 5)}{7(2x + 3)} = \frac{5x + 25}{14x + 21}$$

Note: On some occasions you may need to simplify if they have common factors.

Example 2:

$$\frac{3x + 1}{x - 1} \div \frac{2x}{x - 1}$$

Step 1: Use Keep Flip Change (K.C.F) like with normal fractions:

$$\frac{3x + 1}{x - 1} \times \frac{x - 1}{2x}$$

Step 2: Multiply and combine as a single fraction:

$$\frac{(3x + 1)(x - 1)}{2x(x - 1)}$$

Step 3: Cancel down any common factors:

$$\frac{\cancel{(3x + 1)}\cancel{(x - 1)}}{2x\cancel{(x - 1)}} = \frac{3x + 1}{2x}$$

KEY VOCABULARY

Word	Definition
Numerator	The number on the top of a fraction
Denominator	The number on the bottom of a fraction
Equivalent	Fractions that are the same in value but with different numerators and denominators

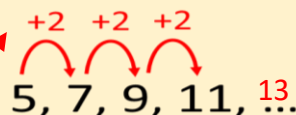


Linear/ Arithmetic Sequences

Finding the next term

When you need to find the next term in the sequence you need to work out what the general rule for the sequence is.

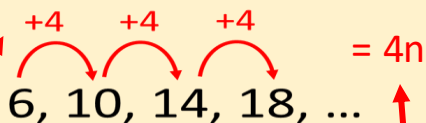
The rule is add 2 because the difference between each number is 2.



13 is the next number because $11 + 2 = 13$.

Finding the nth term

The nth term is the general rule for a sequence. We can use the nth term to then calculate any term in the sequence.



1) Find the difference between numbers

2) This means that the nth term starts with 4n and we need to look at the 4 times table.

3) Remember to calculate how we get from the times table to the original sequence.

4, 8, 12, 16

6, 10, 14, 18

The nth term is $4n + 2$

Generating a sequence

$$\text{Nth term} = 2n + 3$$

n	$2n + 3$	Term
n = 1	$2 \times 1 + 3$	5
n = 2	$2 \times 2 + 3$	7
n = 3	$2 \times 3 + 3$	9

Substitute 1, 2 & 3 where n is in the nth term to get the first 3 numbers in the sequence.

Sequence = 5, 7, 9, ...

Special sequences

Triangular numbers

1, 3, 6, 10, 15, 21, 28, ...

The difference increases by 1 each time

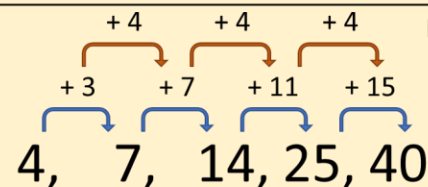
Fibonacci Sequence

1, 1, 2, 3, 5, 8, 13, 21, 34, ...

Add the previous two numbers each time

Quadratic nth term – Higher tier only

- 1) Find the 2nd difference & halve it to find the n^2 coefficient
- 2) Subtract the quadratic from the original sequence to find the remainder
- 3) Express the remainder as a linear sequence
- 4) Join the quadratic with the linear sequence



n	1	2	3	4	5
Original	4	7	14	25	40
Quadratic: $2n^2$	2	8	18	32	50
Remainder	2	-1	-4	-7	-10

$$2n^2 - 3n + 5$$

KEY VOCABULARY

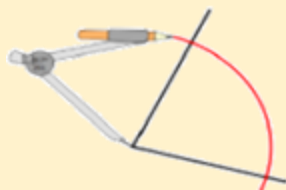
Word	Definition
Linear/Arithmetic sequence	Add or subtract the same number each time
Geometric Sequence	Multiply or divide by the same number each time
Term	Each value in a sequence is called a term
Rule	The value that a sequence increases or decreases by.



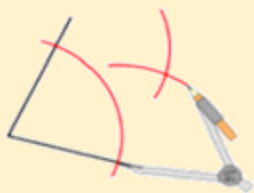
Constructions: Angle Bisector

An **angle bisector** cuts an angle in half. It also shows us a line in which any point on that line is exactly halfway between each of the two lines that form the angle.

Step 1: Draw an arc from the point of the angle that cuts both lines.



Step 2: Place the compass on the two points where it crosses the line and draw an arc from both sides that cross.



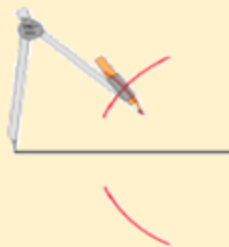
Step 3: Using a ruler, draw a line that goes through the two joining arcs and the point of the angle.



Constructions: Perpendicular Bisector

A **perpendicular bisector** cuts a line exactly in half and at a right angle. It also shows us a line in which any point on that line is exactly halfway between the two end points.

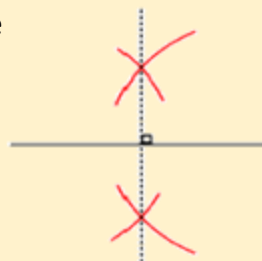
Step 1: Join the two points with a straight line. Draw an arc from one end point that is over halfway (doesn't matter how much more than half).



Step 2: Without changing the length of the compass, draw an arc from the other end point. The two arcs should cross twice (once above the line and once below).

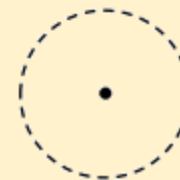


Step 3: Using a ruler, draw a line through each intersection of the arcs. This line can continue further than the arcs. This line will meet the first line at 90° (a right angle).

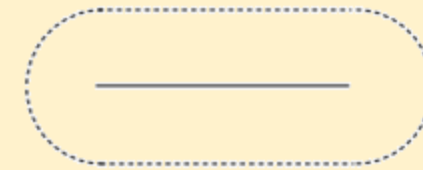


Loci

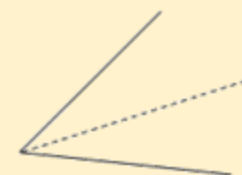
A locus (**loci** is the plural) is a collection of points which share a rule.



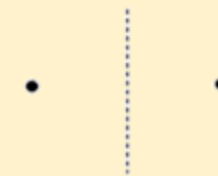
A circle is the locus of all points **equidistance** from a single point.



This locus shows all points that are **equidistance** from a line.



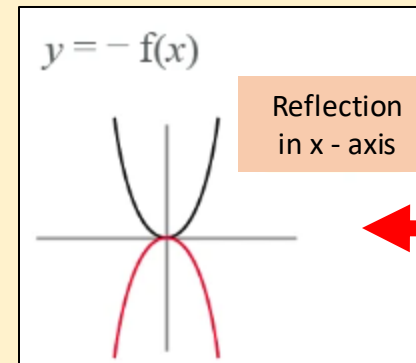
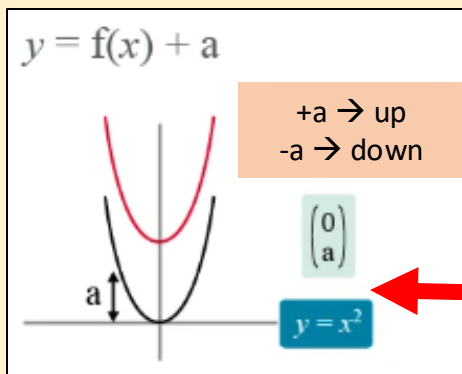
An angle bisector shows us a locus of points halfway between two lines.



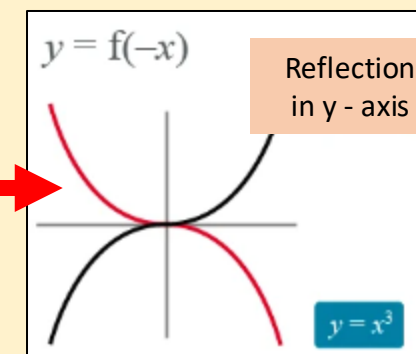
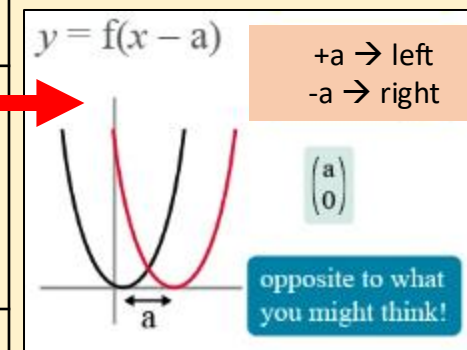
A perpendicular bisector shows us a locus of points halfway between two points.

KEY VOCABULARY

Word	Definition
Bisect	Cut in half
Perpendicular	At right angles
Equidistance	Equal distance
Perpendicular Bisector	The line that cuts another in half at right angles
Angle Bisector	The line that cuts an angle exactly in half
Loci	All the positions of points following a rule



$y = f(x)$	What's happening...	$(4, 3)$	Result...
$y = f(x + 1)$	<ul style="list-style-type: none"> • Translation • Inside the function • Affects x- values • Opposite to what's expected 	$(3,3)$	Graph moves left 1
$y = f(x) - 1$	<ul style="list-style-type: none"> • Translation • Outside the function • Affects y- values • Does what's expected 	$(4,2)$	Graph moves down 1
$y = f(-x)$	<ul style="list-style-type: none"> • Reflection • Inside the function • Negative of x- value 	$(-4,3)$	Reflection in the y - axis
$y = -f(x)$	<ul style="list-style-type: none"> • Reflection • Outside the function • Negative of y- value 	$(4, -3)$	Reflection in the x - axis



KEY VOCABULARY

Word	Definition
Translation	"Sliding": moving a shape without rotating or flipping it. The shape still looks exactly the same, just in a different place.
Reflection	An image or shape as it would be seen in a mirror.
Function	A special relationship where each input has a single output. It is often written as "f(x)" where x is the input value.



Useful Powers and Roots

$\sqrt{4} = 2 \quad \sqrt{9} = 3 \quad \sqrt{16} = 4 \quad \sqrt{25} = 5$

$\sqrt[3]{8} = 2 \quad \sqrt[3]{27} = 3 \quad \sqrt[3]{64} = 4 \quad \sqrt[3]{125} = 5$

$\sqrt[4]{16} = 2 \quad \sqrt[4]{81} = 3$

$\sqrt[5]{32} = 2$

Laws of Indices

Multiplying

$$a^x \times a^y = a^{x+y}$$

Fractional (Unit)

$$a^{\frac{1}{x}} = \sqrt[x]{a}$$

Dividing

$$\frac{a^x}{a^y} = a^{x-y}$$

Fractional (Non-Unit)

$$a^{\frac{y}{x}} = (\sqrt[x]{a})^y$$

$$(a^x)^y = a^{xy}$$

Brackets

$$\left(\frac{a}{b}\right)^x = \frac{a^x}{b^x}$$

$$\left(\frac{a}{b}\right)^{\frac{y}{x}} = \left(\frac{\sqrt[x]{a}}{\sqrt[x]{b}}\right)^y$$

Negative

$$a^{-x} = \frac{1}{a^x}$$

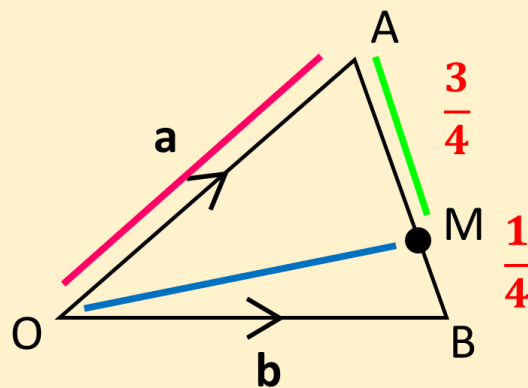
Negative Fractional

$$\left(\frac{a}{b}\right)^{-\frac{y}{x}} = \left(\frac{\sqrt[x]{b}}{\sqrt[x]{a}}\right)^y$$

Vector Geometry

The arrows are used to describe the direction.
e.g. $\vec{OA} = \mathbf{a}$, so going backwards, $\vec{AO} = -\mathbf{a}$

$$AM:MB = 3:1$$



Prove $\vec{OM} = \frac{1}{4}\mathbf{a} + \frac{3}{4}\mathbf{b}$

$$\vec{OM} = \vec{OA} + \vec{AM}$$

$$\vec{OM} = \vec{OA} + \frac{3}{4}\vec{AB}$$

$$\vec{AB} = -\mathbf{a} + \mathbf{b}$$

$$\vec{OM} = \mathbf{a} + \frac{3}{4}(-\mathbf{a} + \mathbf{b})$$

$$= \mathbf{a} + \left(-\frac{3}{4}\mathbf{a} + \frac{3}{4}\mathbf{b}\right)$$

$$= \frac{1}{4}\mathbf{a} + \frac{3}{4}\mathbf{b}$$

Word	Definition
Power/Index	how many times to use the number in a multiplication. It is written as a small number to the right and above the base number.
Square root	a value that, when multiplied by itself, gives the number.
Cube root	the number which produces a given number when multiplied by itself three times.

Word	Definition
Vector	describes a movement from one point to another. It has both direction and magnitude
Ratio	shows the relative sizes of two or more values.
Magnitude	The magnitude of a vector is its length



When working with surds, you will need to know your square numbers:

1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225

Year 11H – Maths - Surds

Simplify:

$$\begin{aligned} &\sqrt{32} \\ &\downarrow \\ &\sqrt{16 \times 2} \\ &\downarrow \\ &\sqrt{16} \times \sqrt{2} \\ &\downarrow \\ &4 \times \sqrt{2} = 4\sqrt{2} \end{aligned}$$

Combine

Simplify

Multiply:

$$\begin{aligned} &\sqrt{2} \times \sqrt{10} \\ &\sqrt{2 \times 10} \\ &\sqrt{20} \\ &\sqrt{4 \times 5} \\ &\sqrt{4} \times \sqrt{5} \\ &2\sqrt{5} \end{aligned}$$

Divide:

$$\begin{aligned} &9\sqrt{24} \div 3\sqrt{3} \\ &9 \sqrt{\frac{24}{3}} \\ &3\sqrt{8} = \underline{6\sqrt{2}} \end{aligned}$$

Add/Subtract:

$$\begin{aligned} &\sqrt{8} + \sqrt{18} \\ &\sqrt{4 \times 2} \quad \quad \quad \sqrt{9 \times 2} \\ &2\sqrt{2} + 3\sqrt{2} \\ &\underline{5\sqrt{2}} \end{aligned}$$

We can only collect terms with the same radicands.

Expand Brackets:

$$\begin{aligned} &(2 + \sqrt{3})(4 + \sqrt{3}) \\ &\begin{array}{c|c|c} & 2 & +\sqrt{3} \\ \hline 4 & 8 & 4\sqrt{3} \\ \hline +\sqrt{3} & 2\sqrt{3} & 3 \end{array} \\ &8 + 4\sqrt{3} + 2\sqrt{3} + 3 \\ &\underline{11 + 6\sqrt{3}} \end{aligned}$$

Rationalising the Denominator:

$$\frac{2}{\sqrt{5}} = \frac{2 \times \sqrt{5}}{\sqrt{5} \times \sqrt{5}} = \frac{2\sqrt{5}}{5}$$

(Note: 'irrational' is written below the denominator and 'rational' below the final denominator '5'. Arrows indicate the multiplication of numerator and denominator by $\sqrt{5}$.)

To rationalise a denominator with two terms, we must multiply by the term's **conjugate**.

$$\frac{1}{(3 + \sqrt{3})} \times \frac{(3 - \sqrt{3})}{(3 - \sqrt{3})} = \frac{3 - \sqrt{3}}{9 + 3\sqrt{3} - 3\sqrt{3} - 3} = \frac{3 - \sqrt{3}}{6}$$

(Note: The denominator terms $9 + 3\sqrt{3} - 3\sqrt{3} - 3$ are circled in red in the original image.)

Word	Definition
Surd	A root of the whole number that has an irrational value
Radicand	The value you want to take the root of

Word	Definition
Rational	A number that can be written as a fraction, where both the numerator and denominator are integers, and the denominator is not equal to zero
Irrational	A real number that cannot be written as a simple fraction



<u>Characters.</u>	
Scrooge – miser, apathetic, greedy, redeemed “solitary as an oyster” “I am quite a baby”	
Marley – greedy, business-driven, cold “I wear the chain I forged in life”	
Bob Cratchit – generous, warm, caring “dismal little cell”	
Tiny Tim - positive, well-loved, symbolic “God Bless us, everyone!”	
Ghost of Christmas Past – young/old, bright “strange figure” “Your lip is trembling!”	
Ghost of Christmas Present – open, welcoming “jolly giant” "If he be like to die, he had better do it and decrease the surplus population”	
Ghost of Christmas Yet to Come – silent, frightening, unrelenting “The Spirit neither spoke nor move.”	

Beginning

<u>Big ideas:</u>
<p>Christmas</p> <ul style="list-style-type: none"> • The title and structure • Scrooge's nephew, Fred, as someone who embodies the spirit of Christmas • Tiny Tim as someone who is generous and kind
<p>Redemption</p> <ul style="list-style-type: none"> • Scrooge beginning as miserable and miserly • Scrooge seeing the error of his ways • Scrooge redeeming himself
<p>Social justice</p> <ul style="list-style-type: none"> • Scrooge refusing to give money to the poor • The characters of Ignorance and Want • Thieves dividing up Scrooge's belongings

Middle

<u>Key vocabulary</u>	<u>Definition</u>	<u>Memory clue</u>
Industrialisation	The development of industries in a country.	
Social responsibility	Contributing to the welfare of others.	
Misanthropic	Having or showing a dislike of other people.	
Miser	A person who hoards wealth.	£
Cautionary	Serving as a warning.	
Penance	An act showing sorrow or regret for sin.	
Poverty	The state of being extremely poor.	
Redemption	The act of making something better.	

End



Visit from Marley’s Ghost



The three Christmas Spirits

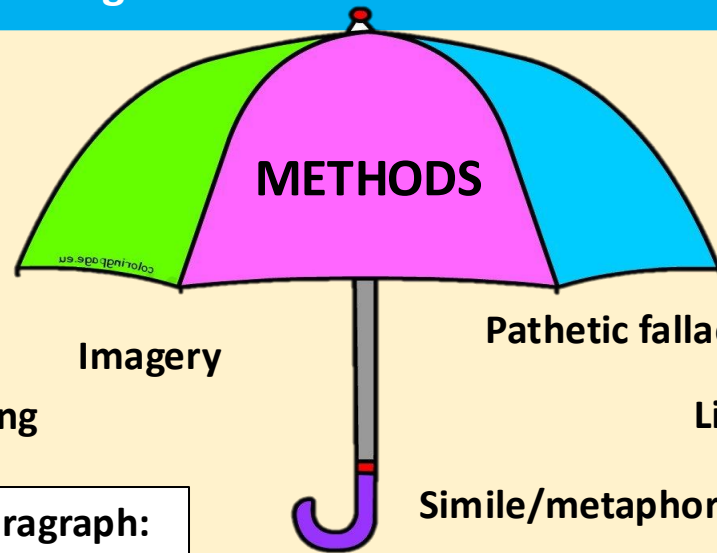
Scrooge’s transformation





How can I be successful in my writing?		
Authorial intent AO1	Critical, exploratory, conceptualised response to task and whole text.	
Evidence AO1	Judicious use of precise references to support interpretation(s).	
Inference(s) AO2	Exploration of effects of writer's methods to create meanings.	
Zoom in AO2	Analysis of writer's methods with subject terminology used judiciously.	
Zoom out/effect AO1/AO3	Exploration of ideas/contextual factors shown by specific, detailed links between context/text/task.	

Analytical verbs		
Infers	Exposes	Emphasises
Implies	Establishes	Reinforces
Suggests	Signifies	Highlights
Demonstrates	Alludes to	Illuminates



Example SEIZZE Paragraph:

How does Dickens present the redeemed character of Scrooge?
Write about:

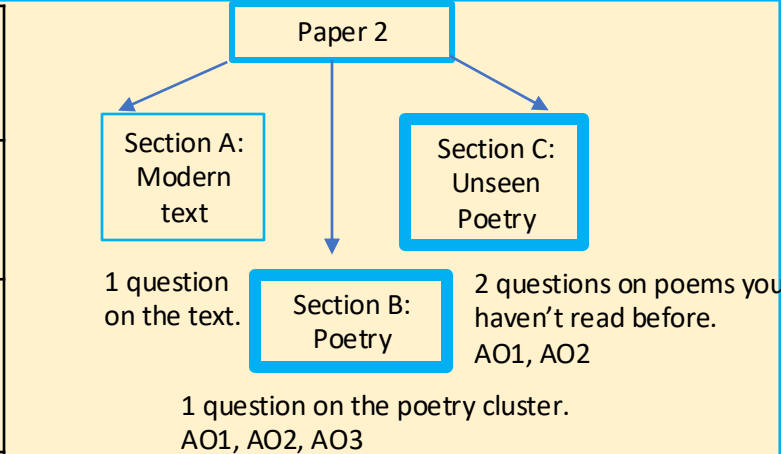
- how Dickens presents Scrooge in this extract
- how Dickens presents Scrooge at the start of the novella

At the beginning of the novella, Dickens presents Scrooge as a cold-hearted miser. This is evident when it says, "Oh! ...covetous, old sinner!" The narrative "oh", could suggest that even the narrator is overwhelmed by how unpleasant he is. The adjectives are all linked semantically by a link with the hand - this reinforces how tightly he held onto things. In his single-minded focus on acquiring wealth, Scrooge represents the opposite of generosity in every way imaginable. The negative verbs all have an onomatopoeic feel associated with lacking liberty; they have a guttural quality and are harsh and unpleasant in their sound - like Scrooge. Dickens has done this to highlight to the reader that Scrooge is in desperate need for a transformation in order to stop him from being condemned in the afterlife.



<p>My Last Duchess ‘That’s my last Duchess painted on the wall’ ‘all smiles stopped’</p>	
<p>Ozymandias ‘King of Kings’ ‘half sunk, a shattered visage lies’</p>	
<p>London ‘marks of weakness , marks of woe’ ‘mind forged manacles’</p>	
<p>Storm on The Island ‘we are prepared; we build our houses squat’ ‘spits like a tame cat turned savage’</p>	
<p>Prelude ‘(led by her)’ ‘a huge peak, black and huge’</p>	
<p>Emigree ‘my memory is sunlight clear’ ‘I have no passport ‘</p>	
<p>Checking out My History ‘Bandage up me eye to me own history’ ‘Blind me to me own identity’</p>	

<p>Exposure ‘The iced east winds that knife us’ ‘But nothing happens’</p>	
<p>Bayonet Charge ‘Suddenly he awoke and was running’ ‘Bullets smacking the belly out of the air’</p>	
<p>Poppies ‘Before you left, I pinned one on your lapel’ ‘I walked with you to the front door, threw it open, the world overflowing’</p>	
<p>War Photographer ‘A hundred agonies in black and white’ ‘spools of suffering set out in ordered rows’</p>	
<p>Kamikaze ‘A one-way journey into history’ ‘A shaven head full of powerful incantations’</p>	
<p>Charge of the Light Brigade ‘Into the jaws of death, into the mouth of hell’ ‘Honour the light brigade’</p>	
<p>Tissue "This is what could alter things’ ‘Fine slips...might fly our lives like paper kites’</p>	
<p>Remains ‘The drink and the drugs won’t flush him out’ ‘he’s here in my head...dug in behind enemy lines’</p>	



<p>Big ideas:</p>
<p>Power of Identity: Emigree, Checking out my history, Tissue</p>
<p>Family: Poppies, Kamikaze</p>
<p>Inner conflict: War photographer, Remains, Poppies</p>
<p>Power of Nature: Storm on the Island, The Prelude</p>
<p>Conflict: Exposure, Bayonet Charge, Charge of the Light Brigade</p>
<p>Power of humans: Ozymandias, My Last Duchess, London</p>

Title

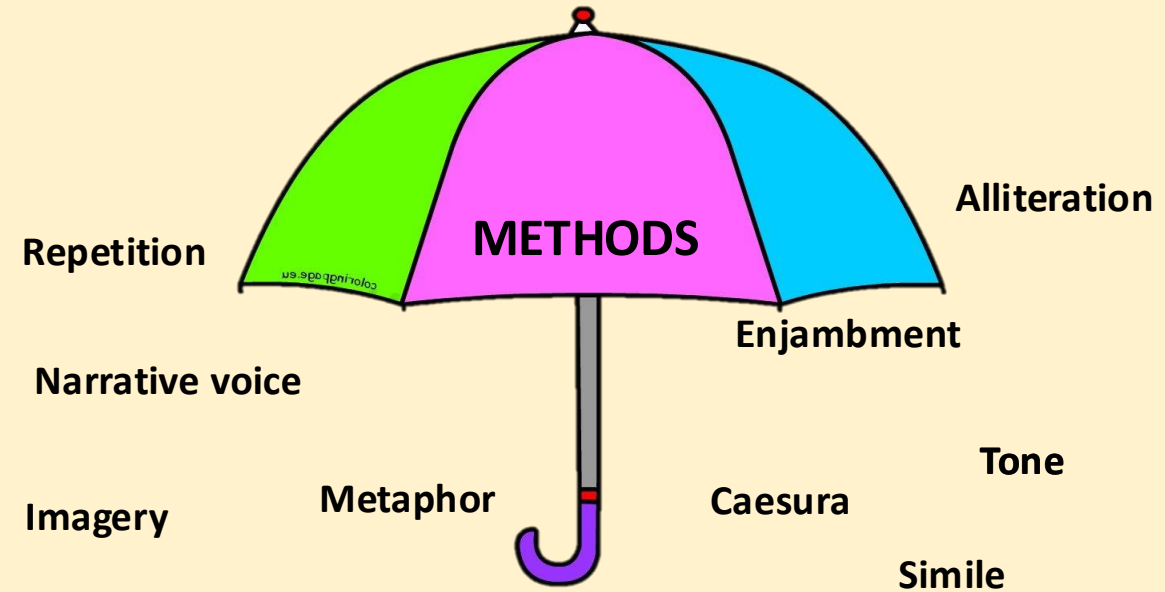
First Line

Last Line



How can I be successful in my writing?		
Authorial Intent AO1	Clear response to the question/task.	
Evidence AO1	Use of quotations to support interpretation.	
Inference(s) AO2	Exploration of writers meaning.	
Zoom in AO2	Analysis of writer’s methods with subject terminology used judiciously.	
Zoom out AO3	Exploration of ideas/contextual factors shown by specific, detailed links between context/text/task.	
Effect AO3	Exploration of writer's purpose.	

Comparative language – Joining words used to compare your poems	
Whereas	Whereas, in Storm on The island, the poet...
However	However, in The Prelude readers might feel...
Likewise	Likewise, in Charge of the Light Brigade, the poet uses...



Example SEIZE Paragraph:













Compare how poets present ideas about power in ‘Ozymandias’ and one other poem from ‘Power and conflict’

Shelley presents the king in Ozymandias as a controlling tyrant, as shown by the reference ‘shattered visage’, implying that his ideals have been broken and his tyranny has ‘sunk’. The verb could imply he has been washed away by time and the King no longer exerts ‘cold command’ over his people - perhaps suggesting power is transient. Likewise, in ‘My Last Duchess’, the Duke is presented as controlling and the tone almost sinister.



The Reading Section – Section A

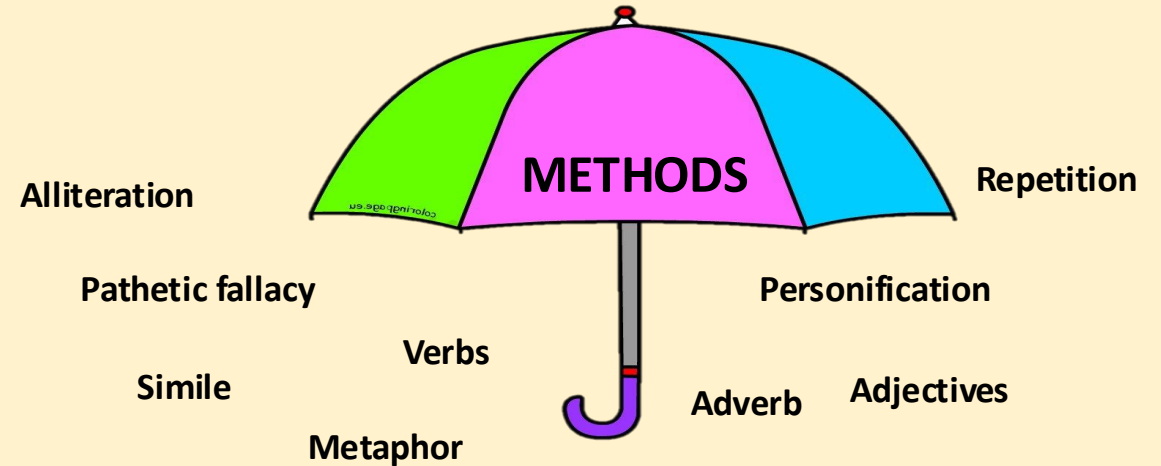
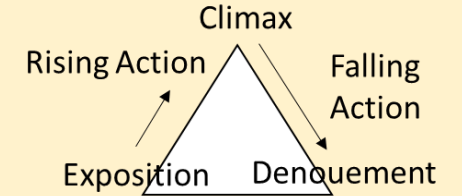
- Question 1: Multiple choice questions (4 Marks) 5 minutes
- Question 2: Language Analysis (8 Marks) 10 minutes
- Question 3: Structure Analysis (8 Marks) 10 minutes
- Question 4: Evaluation (20 Marks) 25 minutes

<p>Question Two Language Analysis 2 X S-E-Zi-Zi</p>	<p>Statement – It is clear that the writer uses _____ to...</p> <p>Evidence – My evidence is...</p> <p>Zoom in- The word _____ makes me think of.... Which tells me that...</p> <p>Zoom in- It also suggests ideas of... which implies...</p>				
<p>Question Three Structure Analysis 3 X S-E-I</p>	<p>Statement – The focus at the start is on...</p> <p>Evidence – My evidence is...</p> <p>Inference- This is an effective opening because...</p> <table border="1" data-bbox="417 851 1243 939"> <tr> <td data-bbox="417 851 621 939">Focus is on... </td> <td data-bbox="629 851 823 939">Pace is ... </td> <td data-bbox="830 851 1024 939">Mood is.. </td> <td data-bbox="1031 851 1243 939">Tension levels are... </td> </tr> </table>	Focus is on... 	Pace is ... 	Mood is.. 	Tension levels are... 
Focus is on... 	Pace is ... 	Mood is.. 	Tension levels are... 		
<p>Question Four Evaluation Analysis 2 X S-E-I-Zi-E-I-Zi-Ef</p>	<p>Statement – I agree with the statement because...</p> <p>Evidence – My evidence is...</p> <p>Inference- This suggests...</p> <p>Zoom in- The word _____ makes me think of.... Which tells me that...</p> <p>Evidence – This is further reinforced with the quote...</p> <p>Inference- This suggests...</p> <p>Zoom in- The word _____ conjures up images of.... which tells me that...</p> <p>Effect on the Reader: This would make the reader think/feel...</p>				

Year 11 – English – Language Paper 1

The Writing Section – Section B

There will be a choice of two questions.
It will be marked out of 40.
24 marks for content and organisation.
16 marks for technical accuracy (SPAG).
You will have to write either a description based on an image or a narrative.



Sentence Forms			
Exclamative	Declarative	Interrogative	Imperative

Punctuation									
.	,	?	!	...	;	:	()	-	/



How can I be successful in my creative writing?		
A05 - Content	<ul style="list-style-type: none"> ✓ Register is convincing and compelling for audience ✓ Assuredly matched to purpose ✓ Extensive and ambitious vocabulary with sustained crafting of linguistic devices 	
A05 - Organisation	<ul style="list-style-type: none"> ✓ Varied and inventive use of structural features ✓ Writing is compelling, incorporating a range of convincing and complex ideas ✓ Fluently linked paragraphs with seamlessly integrated discourse markers 	
A06 – Technical accuracy	<ul style="list-style-type: none"> ✓ High level of accuracy in spelling, including ambitious vocabulary ✓ Extensive and ambitious use of vocabulary ✓ Wide range of punctuation 	

Analytical verbs

Infers	Exposes	Emphasises
Implies	Establishes	Reinforces
Suggests	Signifies	Highlights
Demonstrates	Alludes to	Illuminates

Example narrative paragraph:

Throbbing, my back awoke from its slumber; a small trail of saliva crusted on my cheek and down my chin. My sweater clung to my skinny body. I **groggily** massaged my eyes, hoping to banish the blur that was cast over them. However, when I removed my clammy hands away from my eyes, reality slapped me in the face full force. I was still in the library, and I had been now for, I frantically looked for the clock, **4 HOURS!** Shocked by my recent discovery, **as fast as lightning**, I ransacked through my school bag in desperate search of my phone, but it was nowhere to be found...

Example descriptive paragraph:

The air was filled with the loud clanging sounds of people pulling their suitcases. They zoomed around rapidly, **like a swarm of wasps**, vanishing as quickly as they appeared. A small cluster of boys laughed merrily; their faces filthy with soot and dust, hurling stones at the passing trains. The floor had been covered in a heavy blanket of filth. **Warped** cans of coke spilled musky brown liquid onto **decaying** apple cores, the pungent odour assaulting the nostrils of the crowd. It was another busy morning at the station. **Nothing out of the ordinary.**



The Reading Section – Section A

- Question 1: True or False questions (4 Marks) 5 minutes
- Question 2: Summary (8 Marks) 10 minutes
- Question 3: Language Analysis (12 Marks) 15 minutes
- Question 4: Compare writer's perspectives (16 Marks) 20 minutes

Question Two Summary question 2 X S-E-I	<p>Statement – In source A the child enjoys activities involving adult interactions whereas the child in Source B enjoys playing with physical toys.</p> <p>Evidence – “twang his lips like a ruler” ...</p> <p>Inference – This evokes the idea that ... It further infers that ...</p>
Question Three Language Analysis 3 X S-E-I – Zi - Ef	<p>Statement – The writer uses language to describe the destruction and devastation of the train crash.</p> <p>Evidence – “cannonaded down”</p> <p>Inference - This infers that ...</p> <p>Zoom in – The use of the aggressive verb ‘cannonaded’ creates the image of ... suggesting that</p> <p>Ef – This makes us ...</p>
Question Four Comparison of writer's perspectives (thoughts/feelings) 4 X S-E-I-Zi-E-I-Zi-Ef	<p>Statement – In source A the writer has a negative experience of their train journey whereas the writer in source B has a positive experience.</p> <p>Evidence – “wonderful” “brave”</p> <p>Inference - This suggests...</p> <p>Zoom in - These adjectives suggest that ...</p> <p>Evidence – “terrifying” “unpredictable”</p> <p>Inference - This suggests...</p> <p>Zoom in - The word _____ conjures up images of.... Which tells me that...</p> <p>Effect on the Reader: This would make the reader think/feel...</p>

Year 11 – English – Language Paper 2

The Writing Section – Section B

‘Young people have the energy, enthusiasm and ideas to change our world for the better in so many ways. However, they are powerless because adults do not really listen to them or take them seriously.’

Write a **speech** to be given at a meeting with the **leaders** of your country in which you **argue** your point of view on this statement.

Form

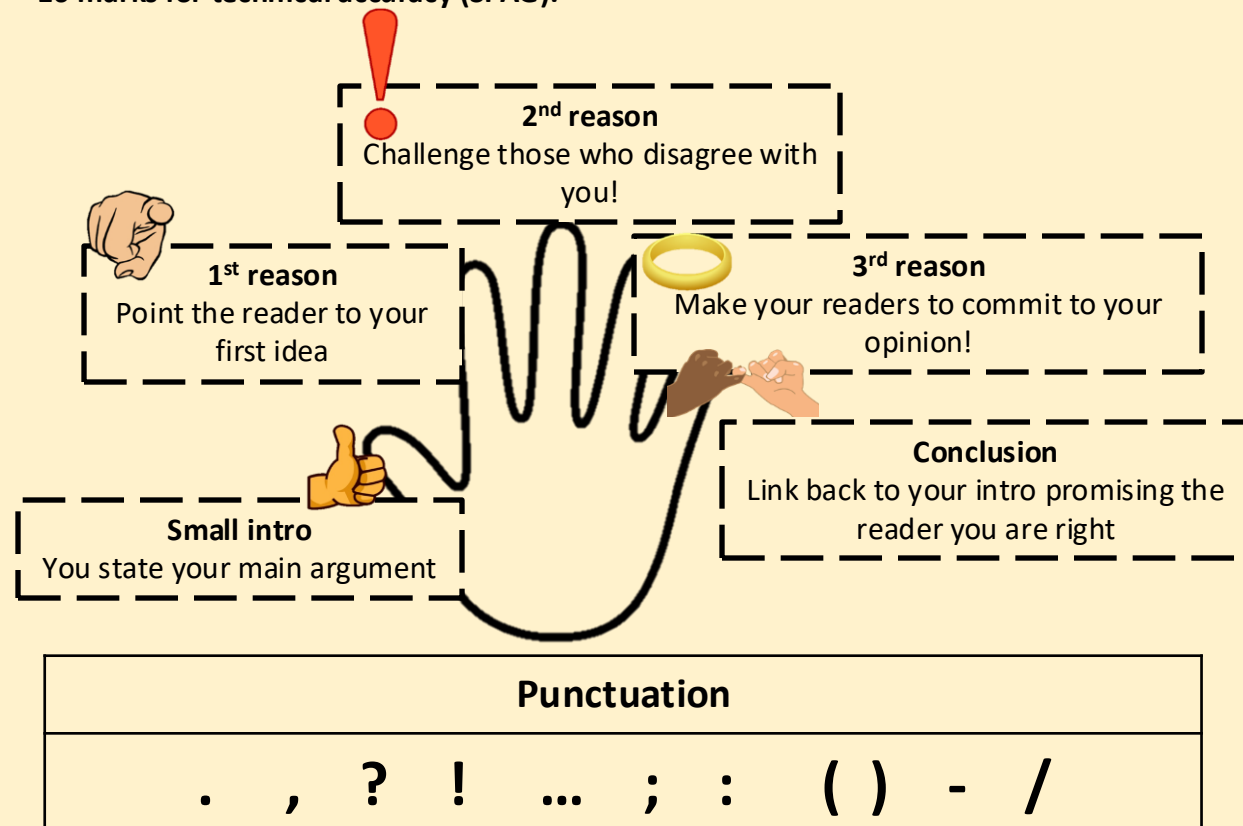
Audience

Purpose

It will be marked out of 40.

24 marks for content and organisation.

16 marks for technical accuracy (SPAG).

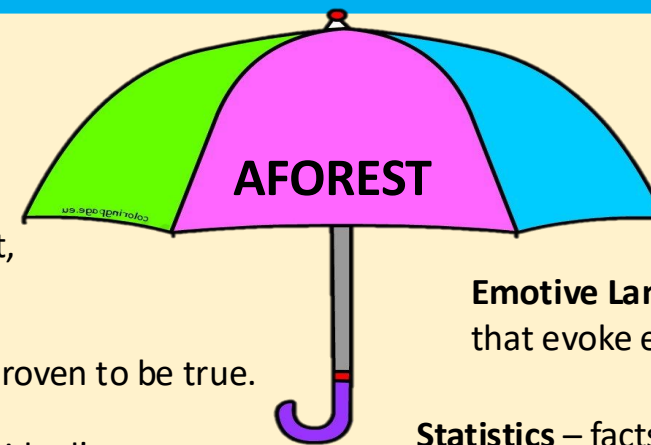




How can I be successful in my creative writing?		
A05 - Content	<ul style="list-style-type: none"> ✓ Register is convincing and compelling for audience ✓ Assuredly matched to purpose ✓ Extensive and ambitious vocabulary with sustained crafting of linguistic devices 	
A05 - Organisation	<ul style="list-style-type: none"> ✓ Varied and inventive use of structural features ✓ Writing is compelling, incorporating a range of convincing and complex ideas ✓ Fluently linked paragraphs with seamlessly integrated discourse markers 	
A06 – Technical accuracy	<ul style="list-style-type: none"> ✓ High level of accuracy in spelling, including ambitious vocabulary ✓ Extensive and ambitious use of vocabulary ✓ Wide range of punctuation 	

Analytical verbs

Infers	Exposes	Emphasises
Implies	Establishes	Reinforces
Suggests	Signifies	Highlights
Demonstrates	Alludes to	Illuminates



Anecdote – short, personal story.

Facts – proven to be true.

Opinions – individual’s viewpoints

Example speech:

Emotive Language – words that evoke emotions.

Statistics – facts based on data.

Rhetorical question – question that doesn’t require an answer.

Triple – list of 3.

Young people today are coming to age in a world beset by crises. Even before the COVID-19 pandemic **devastated** lives and livelihoods around the world, the socio-economic systems of the past had put the liveability of the planet at risk and eroded the pathway to **healthy, happy, fulfilled lives for too many.**

The same prosperity that enabled global progress and democracy after the Second World War is now creating the inequality, social discord and climate change we see today **along with a widening generational wealth gap and youth debt burden, too.** For Millennials, **the 2008 financial crisis and the Great Recession** resulted in significant unemployment, huge student debt and a lack of meaningful jobs. Now, for Generation Z, COVID-19 has caused school shutdowns, worsening unemployment, and mass protests.

Young people are right to be deeply concerned and angry, seeing these challenges as a betrayal of their future.

But we can’t let these converging crises stifle us. We must remain optimistic **and we must act.**



- Ecosystems are complex communities of animals and plants.
- Scientists can sample the population numbers and distributions of organisms using quadrats and transects.
- Organisms in a habitat are interdependent.

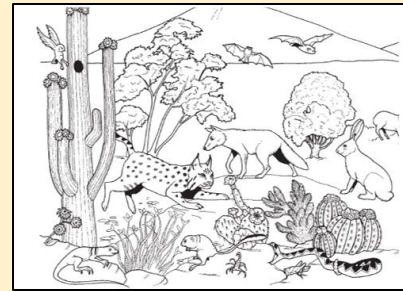
Classification → Ecosystems → Sampling → Feeding Relationships

1. Communities:

- **Ecosystem** = the interaction between the living and non-living components in an area.
- All the organisms are the **community**.
- The area an organism lives is the **habitat**.
- Organisms are **interdependent**.

Organisms **compete** for resources.

- **Plants** compete for **light, space, water & minerals**.
- **Animals** compete for **food, territory & mates**.



2. Biotic factors: living factors in the ecosystem:

Availability of food.
New pathogens.
New predators.
Competition.

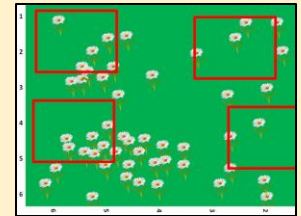
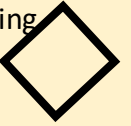
Abiotic factors: non-living factors in the ecosystem:

Light intensity
Temperature
Moisture levels
Soil pH
Mineral content
Wind intensity
Wind direction
Carbon dioxide
Oxygen levels

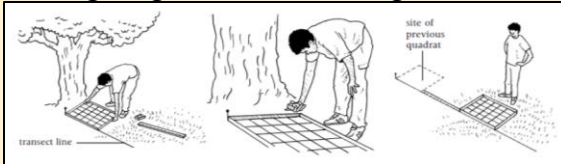
Both factors **interact** in the ecosystem.

3. Sampling required practical: estimating population sizes using a quadrat:

- A quadrat is a square frame used to count a sample of organisms in an area.
- Randomly place the quadrat in the habitat (use a random number generator to locate it).
- Count the numbers of organisms in the quadrat
- Repeat as many times as possible in other areas.
- Work out the mean number of organisms.
- Multiply this number by the total area of the habitat.
- This gives your population estimate for the habitat.



4. Sampling required practical: investigating distribution using a transect



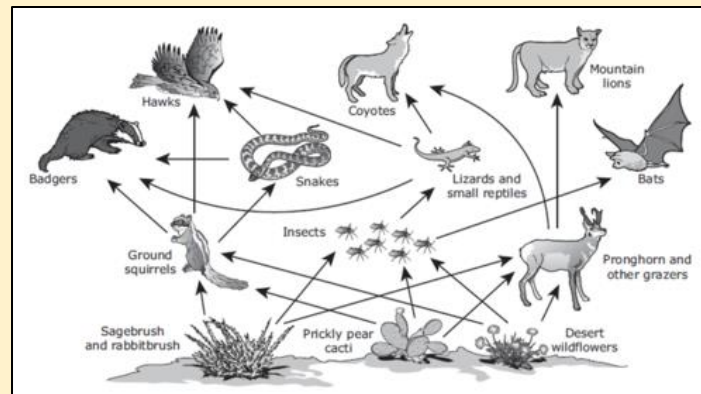
- Lay tape **measure** along the habitat.
- Place a **quadrat** at 0m on the tape.
- **Count** the number of organisms.
- **Record** the results.
- **Repeat** along the transect line.

5. Feeding relationships: food chains and webs: show the flow of energy:

producer → primary consumer → secondary consumer → top consumer.

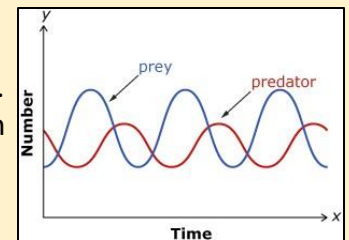
Producers make food using sunlight.
Consumers eat organisms for their food.

Producers are not always plants - **algae** can also **photosynthesise**.



6. Predator-prey graph: shows the slight fluctuations of numbers in a stable ecosystem.

- The population of predators is limited by the prey numbers.
- If the prey numbers increase, the predators numbers will shortly after. This causes the number of prey to decrease. This causes the number of predators to decrease. This causes the number of prey to increase and so on...





- Animals and plants are adapted to their habitats.
- Materials are recycled in a stable ecosystem.
- Biodiversity is the variety of all the different species on Earth.
- The rise in the human population has caused pollution.

Year 11 - Science - Ecology (B7)

Adaptations → Material Cycling → Pollution → Maintaining Biodiversity

7. **Adaptations: features and characteristics** organisms have to allow them to **survive and compete**:

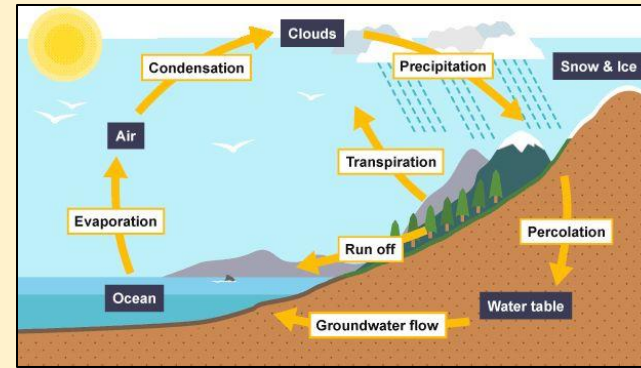
Structural	Behavioural	Functional
Physical features which allow them to compete.	Behaviours which give them an advantage.	Processes which allow them to compete.
Sharp claws Camouflage Eye position	Working as a pack Using tools Mating rituals	Venom production Hibernation & Migration Less urine in heat

Extremophiles live in extreme conditions such as at high **temperatures, pressures** or **salt concentrations**.



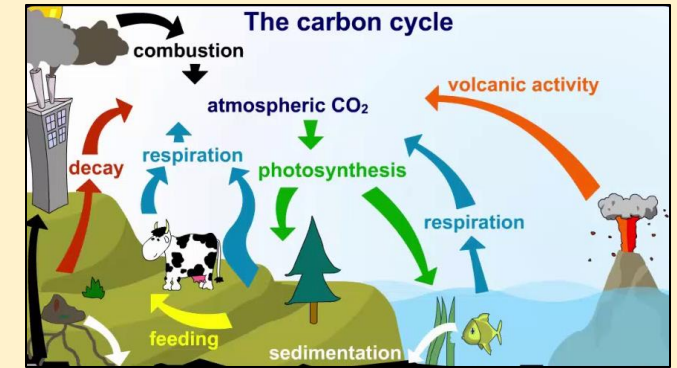
8. The **water cycle**: provides fresh water for plants and animals:

KW: evaporation, precipitation, transpiration, run off, condensation, percolation.



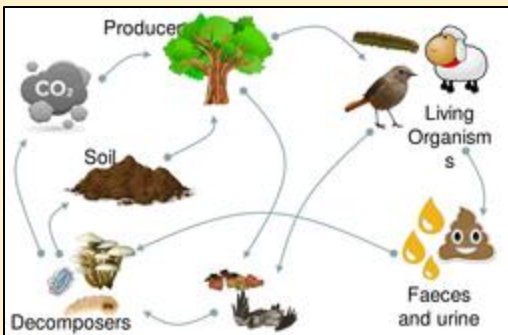
9. The **carbon cycle**: returns carbon from organisms to the atmosphere for photosynthesis:

KW: photosynthesis, respiration, combustion, feeding, decay, sedimentation.



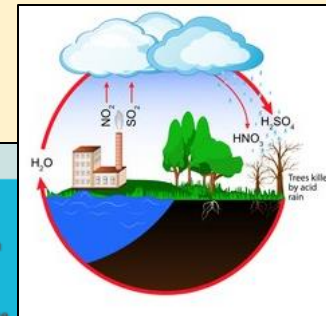
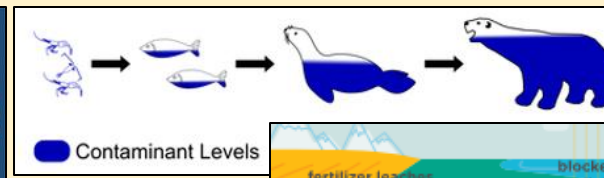
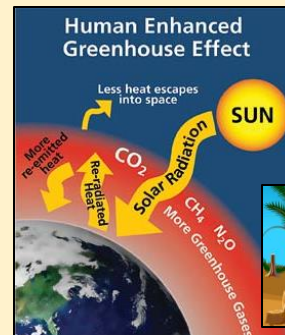
10. The cycle of **decay**: **microorganisms** recycle materials between the atmosphere, organisms and the soil:

KW: decomposers, faeces and urine, microbes.



11. The effects of humans on the planet: human population has increased exponentially.

- Increased **greenhouse gas** (CO₂ and methane) emissions causes **global warming** and **climate change**.
- Increased use of **pesticides** leads to the **bioaccumulation** of **toxins** in food chains.
- Increased use of **fertilisers** causes **eutrophication** in waterways.
- Deforestation** and **peat bog** destruction leads to **habitat** loss and loss of carbon stores.
- Burning of **fuels** releases sulphur dioxide and nitrogen oxides which cause **acid rain**.



12. Maintaining biodiversity:

- Breeding programmes for endangered species
- Protection and regeneration of rare habitats
- Reintroduction of field margins and hedgerows
- Reduction of deforestation and pollution
- Recycling rather than landfill

13. Farming and food: threats to world food production include:

- Exponential increase in human population
- Changing demands in diets
- New pests and pathogens
- Environmental changes affecting crops

Future of farming and food:

- Sustainable fisheries
- Biotechnology and GM crops.

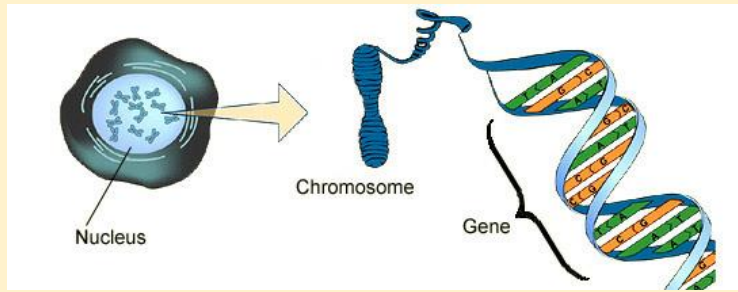


- Genes are inherited from both mother and father.
- Genes are arranged as long strands of DNA, organised into 23 pairs of chromosomes.

Nucleus → Chromosome → Punnet Square → Genes → Alleles → DNA Base Pairs

1. Nucleus

The **nucleus** of a cell contains the **46 chromosomes**. The chromosomes are made up of strands of **DNA**. A small sections of DNA are called **genes**.



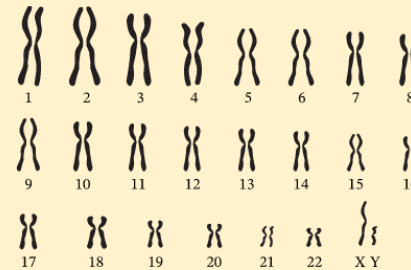
2. Chromosomes

Humans have 23 pairs of **chromosomes** (46 overall). Half of these **chromosomes** are from the mother, half from the father. They are made of DNA.

The 23rd pair determines the sex of the person.

XX = female

XY = male



3. Punnet Square

A **genetic diagram**, like a Punnett square, shows how alleles may combine in **zygotes**. They can be used to understand how traits are inherited from mother and father.

50% of offspring are male
50% of offspring are female

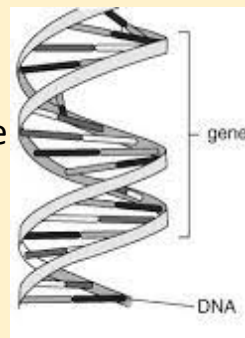
You must also indicate the **phenotype** of each of the offspring on your diagram.
e.g. XX = female

		Mother	
		X	X
Father	X	XX	XX
	Y	XY	XY

4. Genes

- A **gene** is a length of **DNA**.
- Genes contain a **code** that are instructions for the **proteins** that are made in the body.
- Each chromosome contains **hundreds of genes**.

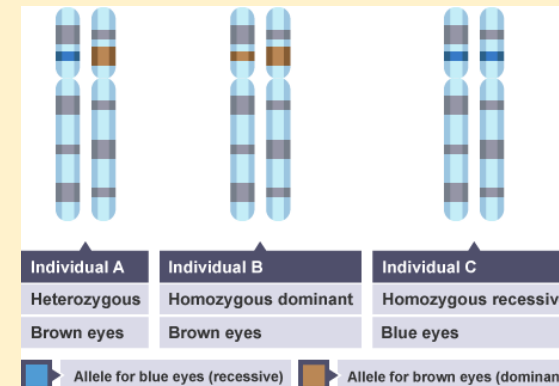
Understanding the human genome is important for studying **diseases** and **disorders**.



5. Alleles

Alleles are **different versions** of the same gene.

A **dominant allele** is always expressed, even if one copy is present. A **recessive allele** is only expressed if the individual has two copies and does not have the dominant allele of that gene.



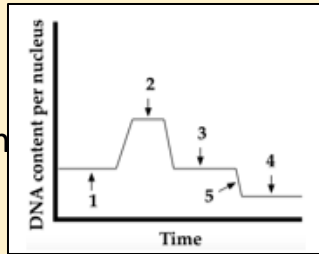


- Gametes (sperm and eggs) are produced by meiosis.
- Organisms reproduce sexually or asexually or both.
- Our phenotype is determined by our genotype - the combination of genes we inherit from our parents.

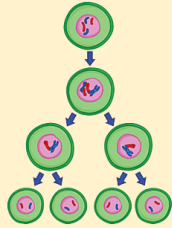
Cell Division → Reproduction → DNA → Inheritance → Genetic Disorders

6. Meiosis

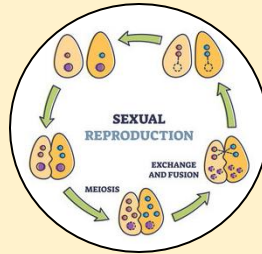
Meiosis halves the number of **chromosomes** in gametes (**23**). When a cell divides copies of the **chromosomes** are made.



The cell divides twice to form 4 **genetically non-identical gametes** (sperm/eggs).



7. Sexual & Asexual Reproduction

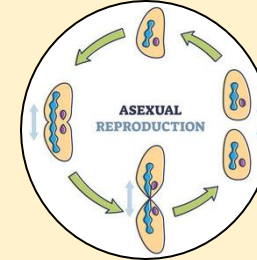


Sexual reproduction:

- Two parents
- Fusion of a female & male cells (gametes)
- Parent & offspring are not identical

Asexual reproduction:

- One parent only
- No gametes are produced
- Parent and offspring are identical



8. Sex Determination

In females the sex **chromosomes** are the same (XX).

In males the **chromosomes** are different (XY).

PUNNETT square:

Chance of a:
Boy = 50%
Girl = 50%

XX	XX
XY	XY



9. DNA and the Genome



DNA is a 2 stranded structure formed into a **double helix**. It is contained in long strands called **chromosomes** which consist of sections called **genes**. Each gene codes for an **amino acid** which join to form **proteins**. The **genome** is the entire sequence of an organisms DNA.

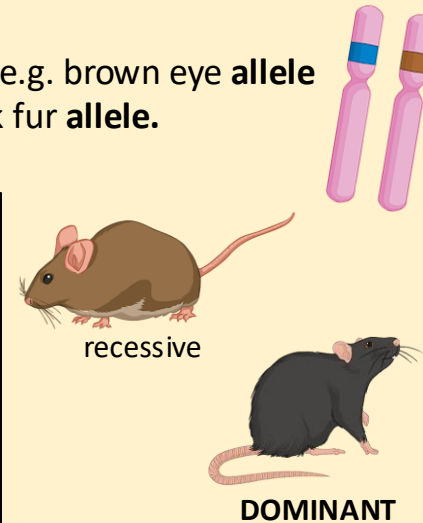
10. Inheritance

Alleles are different versions of the same **gene**, e.g. brown eye **allele** and blue eye **allele** or brown fur allele and black fur **allele**.

Parental phenotypes: brown x black
 Parental genotypes: bb BB
 Parental gametes: (b) (b) (B) (B)

Punnett Square:

	B	B
(b)	Bb	Bb
(b)	Bb	Bb



11. Genetic Disorders

Some **disorders** are inherited. These disorders are caused by certain alleles.

- **Polydactyly** (having extra fingers or toes) is caused by a **dominant allele**.
- **Cystic fibrosis** (a disorder of cell membranes) is caused by a **recessive allele**.





- Variation is caused by genetics and environment
- Mutations can lead to a new phenotype
- Evolution occurs as a result of natural selection

Variation → Evolution → Selective Breeding → Genetic Engineering

12. Variation

Variation and may be due to differences in:

- the **genes** they have **inherited** (genetic causes)
- the conditions in which they have developed (environmental causes)
- a combination of **genes** and the **environment**.

13. Variation within a population

- Most **mutations** have no effect on the **phenotype**
- **Mutations** occur continuously.
- Very rarely a **mutation** will lead to a new phenotype.
- If the new **phenotype** is suited to an environmental change it can lead to a relatively rapid change in the species.

14. Evolution

- Occurs through **natural selection** of variants that give rise to **phenotypes** best suited to their environment.
- If two populations of one species become so different that they can no longer interbreed to produce fertile offspring they have formed two new species.

15. Selective Breeding

Involves breeding parents with the desired characteristic. Offspring with desired characteristics are bred together. This continues over many generations until all the offspring show the desired characteristic.

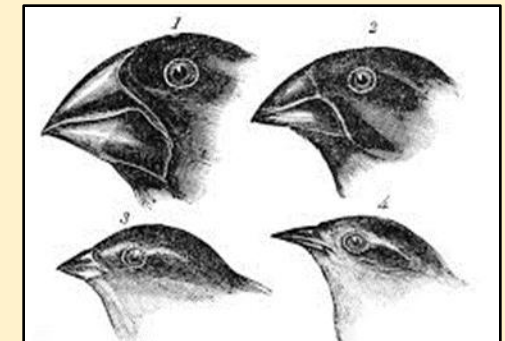
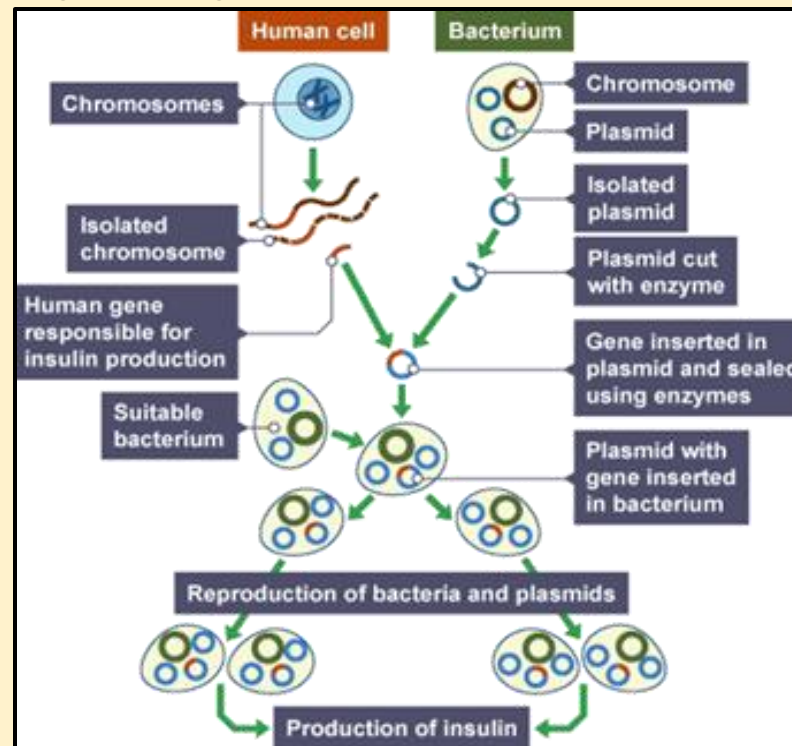


Examples:

- Disease resistance in food crops.
 - Animals which produce more meat or milk.
 - Domestic dogs with a gentle nature.
 - Large or unusual flowers.
- Can lead to 'inbreeding' where some breeds are particularly prone to disease or inherited defects.

16. Genetic Engineering

Modifying the **genome** of an **organism** by introducing a **gene** from another organism to give a desired **characteristic**.



Example: Finches evolved to have different beaks in order to exploit different food sources. Creating new species of finch.



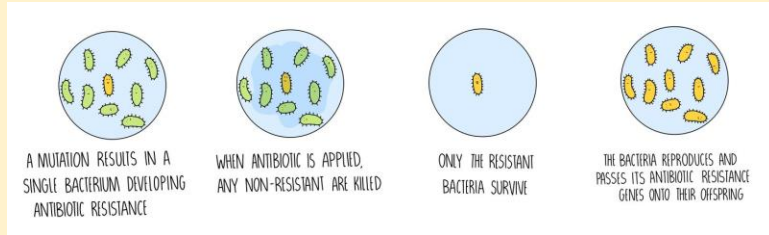
- Fossils and antibiotic resistance show evidence for evolution
- Linnaeus classified organisms based on physical characteristics
- Woese used developments in microscopes and DNA to classify organisms into three domains

Year 11 – Science - Inheritance, Variation & Evolution (B6)

Evidence for evolution → extinction → Classification

18. Evolution of antibiotic resistance

Development of antibiotic resistance provides evidence of evolution



To slow down the development of **antibiotic-resistant** strains, we should:

- Restrict the use of antibiotics in agriculture
- Only prescribe antibiotics to people when necessary and avoid using them to treat non-serious or viral infections
- Complete the course of antibiotics so that all bacteria are killed and none survive to mutate into resistant strains

19. Fossils

Fossils are the remains of organisms from millions of years ago, which are found in rocks. Fossils may be formed:

- from parts of organisms that have not decayed because one or more of the conditions needed for decay are absent
- when parts of the organism are replaced by minerals as they decay
- as preserved traces of organisms, such as footprints, burrows and rootlet traces.



20. Extinction

No more individuals of that species left alive.

Causes:

- Change in environment
- New diseases
- New predators
- New competitors
- Catastrophic events



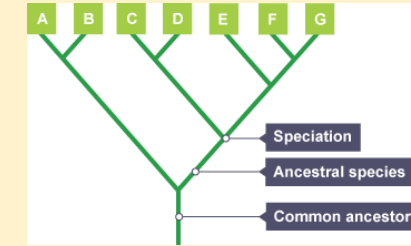
21. Classification Systems: Linnaeus

Organisms are named by the **binomial** system of **genus** and **species**:

Pond bat = *Myotis dasycneme*



22. Evolutionary trees

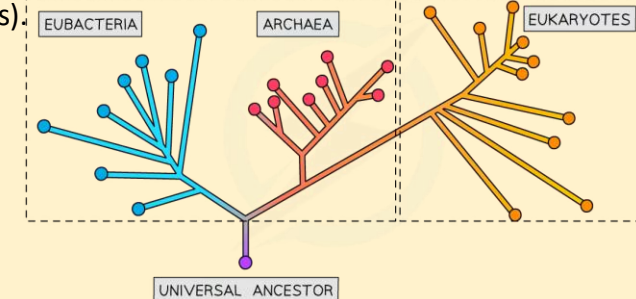


In this evolutionary tree, species A and B share a recent common ancestor. Species A is therefore most similar to species B

23. Carl Woese: Three Domain System

Developed due to improvements in microscopes, and the understanding of biochemical processes and DNA.

- **Archaea** (primitive bacteria usually living in extreme environments)
- **Bacteria** (true bacteria)
- **Eukaryota** (which includes protists, fungi, plants and animals)



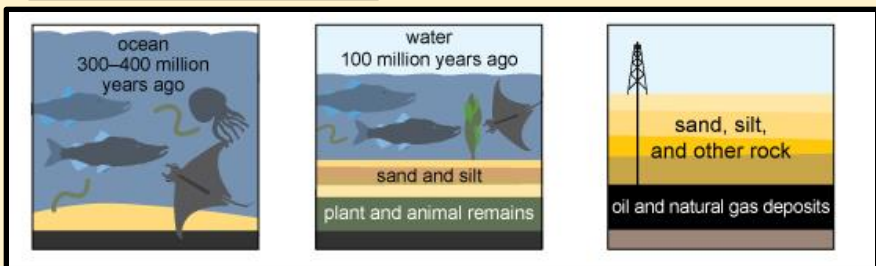


- Crude oil is a finite resource made from dead organisms, mainly plankton.
- Crude oil is separated using fractional distillation which produces short and long chain alkanes.

Year 11 - Science - Organic Chemistry (C7)

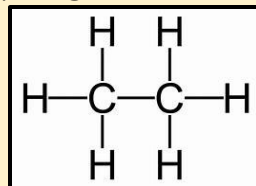
Crude oil → fractional distillation → Hydrocarbons → Alkanes → Alkenes → Cracking

1. How is crude oil formed



2. Hydrocarbons

Hydrocarbons are made up of hydrogen and carbon only

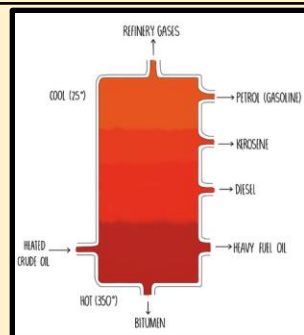


3. Properties of hydrocarbons

- Boiling point increases with chain length – more intermolecular bonds which require more energy to break
- Short chains are more flammable
- Long chains are more viscous

Fractional distillation of crude oil

- Crude oil is heated
- Evaporates/ vaporises
- Vapours travel up the fractionating column
- Until they reach a temperature matching their b.p
- Vapours condense
- Collected as a liquid
- Separated according to boiling point



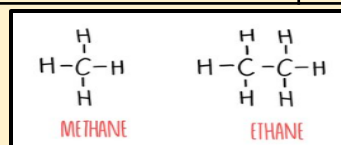
4. Alkanes

Saturated

Single bonds C-C

General formula: C_nH_{2n+2}

Used as fuels

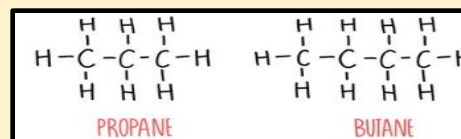
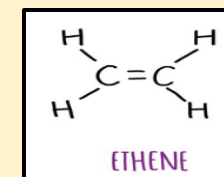


Alkenes

Unsaturated

Double bond C=C

Formula: C_nH_{2n}



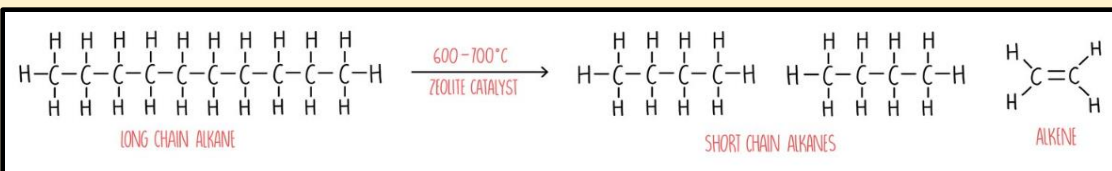
5. Cracking

Catalytic cracking requirements:

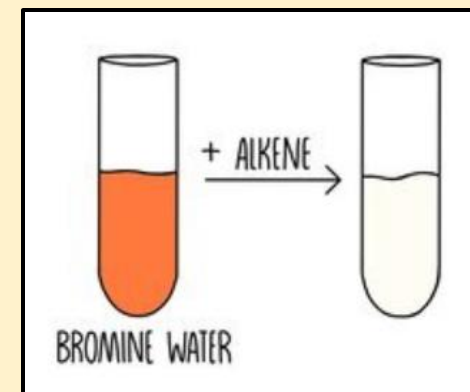
- catalyst
- high temperatures (550°C)

Steam cracking:

-Temperature of 850°C



6. Testing for Alkenes





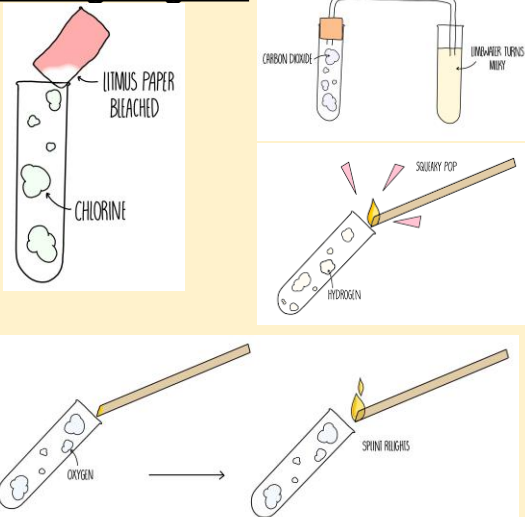
- Chromatography is a separating technique.
- Flame tests are used to identify metal ions
- Flame emission spectroscopy identify metal ions.

Pure and impure → Chromatography → Testing for ions

1. Pure substances

- Single element or compound, not mixed with any other substance
- **Pure** substances melt or boil at specific temperatures
- E.g. pure water will boil at 100°C
- Salt water will boil above 100°C as it contains an impurity .
- A **formulation** is a mixture that has been designed to be a useful product. It is mixed in carefully measured quantities

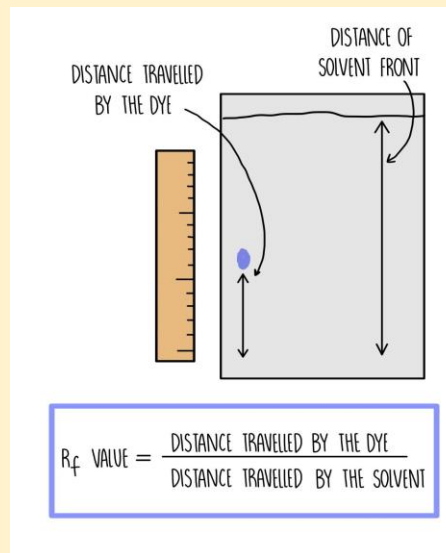
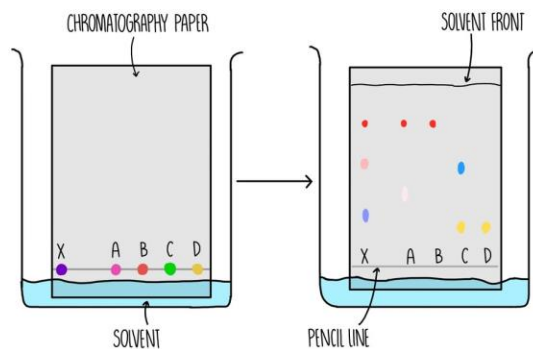
3. Testing for gases



2. Chromatography (Required Practical)

- **Chromatography** is used to separate mixtures based on their **solubility**
- **Stationary** phase = filter paper
- Mobile phase = Solvent (e.g. water)
- R_f is the ratio of how far the dissolved substance has travelled
- **R_f value must be less than 1**

$$R_f = \frac{\text{distance moved by substance}}{\text{distance moved by solvent}}$$



Chromatography basics:

- Baseline **must** be drawn in pencil – ink will run
- **Solvent** line must be below the baseline – or it will dissolve the **solute** (pigments)
- Used for identifying unknown substances against known samples
- R_f values compared – same R_f value means it is the same substance



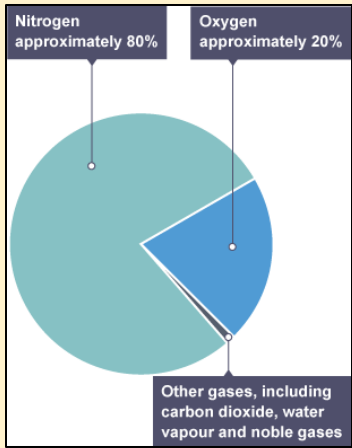
- The Earth's atmosphere has evolved.
- Greenhouse gases cause the greenhouse effect.
- Atmospheric pollutants can cause smog and acid rain.

Year 11 - Science - Earth's Atmosphere (C9)

Earth's atmosphere → Today's atmosphere → Pollutants → Climate change

1. Earth's early atmosphere

(4.6-2.7 billion years ago)

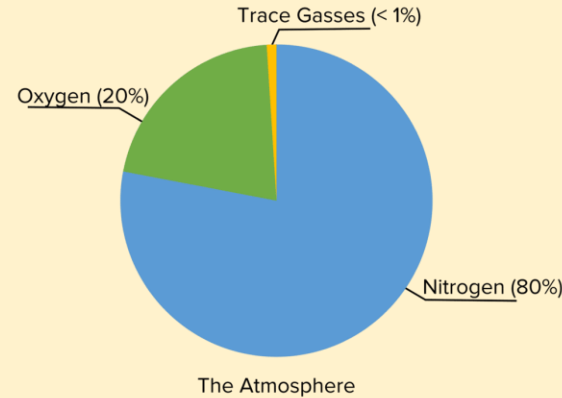


2. Changing atmosphere

(2.7 billion – 200 million years ago)

- Earth cooled down – water vapour **condensed** to form oceans so **water vapour decreased**.
- **Carbon dioxide decreased** as it dissolved into oceans.
- Blue-green algae formed meaning photosynthesis occurred. **Carbon dioxide decreased** and **Oxygen increased**.
- **Nitrogen increases** because volcanic activity and bacteria are both producing nitrogen

3. Today's atmosphere



4. Pollutants

Pollutant	Cause	Effect
Nitrogen Oxides (No _x)	Nitrogen and Oxygen from the air react in the high temperatures of the car engine.	<ul style="list-style-type: none"> • Dissolve in water vapour to form acid rain • Acid rain damages buildings and crops
Sulphur Dioxide	Sulphur from coal reacts with oxygen when it combusts.	<ul style="list-style-type: none"> • Acid rain damages buildings and crops
Particulates (soot)	Incomplete combustion of fuels.	<ul style="list-style-type: none"> • Global dimming • Respiratory problems

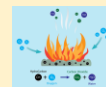
5. Greenhouse gas effect

1. **Short wavelength radiation** emitted by the Sun enters the Earth's **atmosphere**.
2. The earth **absorbs** this radiation and increases in temperature
3. Earth then **re-emits** the radiation as a **longer wavelength radiation**
4. Some longer wavelength radiation is then **absorbed by the greenhouse gases** in the atmosphere causing the lower atmosphere to warm up, **leading to global warming**.



6. Human impact

Increasing carbon dioxide:



Deforestation
Combustion of fuels

Adding Methane:



Cattle farming

7. Climate change



Flooding, extreme weather, change in rainfall, loss of habitat.



- The Earth's atmosphere has evolved.
- Greenhouse gases cause the greenhouse effect.
- Atmospheric pollutants can cause smog and acid rain.

Year 11 - Science - Using resources (C10)

Sustainable development → Potable water → Water treatment → LCA's → Reducing resource use

1. Sustainable development

Finite resource –in limited supply and will run out.

Renewable resource –will not run out in the foreseeable future

Unsustainable – can't be continued for a long period of time

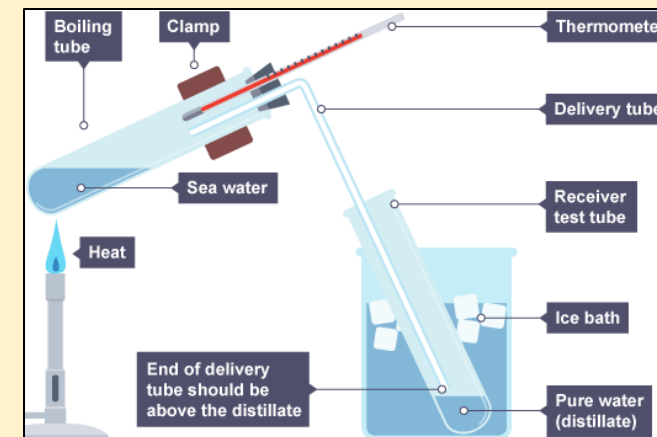
Sustainable – can be continued for a long period of time

2. Potable water

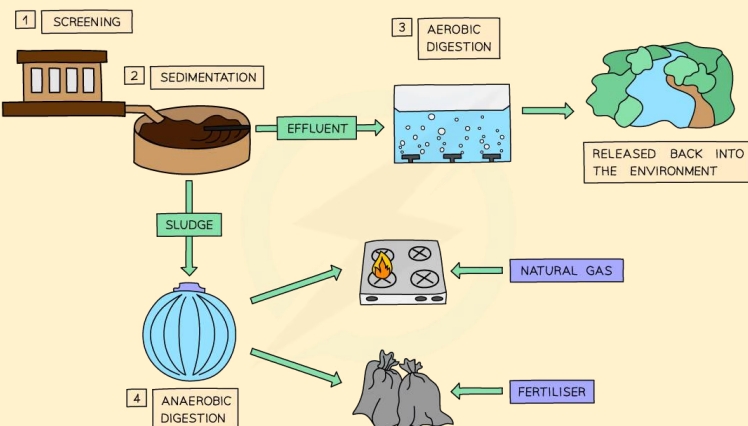
Potable water – water that is safe for humans to drink. It is not pure and contains some dissolved impurities

Rainwater	Seawater	
	Option 1 - Distillation	Option 2 – Reverse Osmosis
Stage 1 – Get water from source	- Heat salty water until it boils.	- Put salty water under high pressure
Stage 2 – Filtration	- Salt remains in liquid.	- Pass through a membrane that allows water to pass but prevents most ions.
Stage 3 – Sterilisation	- Steam is pure water- cool, condense and collect.	

3. Analysis and purification of water samples – Required practical



4. Waste water treatment



5. Alternative methods of extracting metals (Higher tier only)

Phyto mining:

- Grow plants to absorb metal compounds.
- Plants harvested then burned.
- Ash dissolved in acid to produce a solution of copper compound
- Copper is obtained by displacement / electrolysis



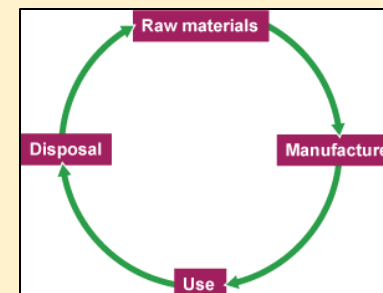
Bioleaching:

- uses bacteria to produce (leachate) solutions that contain metal compounds
- copper is obtained by displacement / electrolysis



6. Life cycle assessments

A life-cycle assessment (LCA) is an analysis of the **impact** a manufactured product has on the **environment throughout its entire life ('cradle to grave')**



7. Reducing the use of resources



The **reduction** in use, **reuse** and **recycling** of materials by people reduces the use of limited resources, use of energy sources, waste and environmental impacts.



- A force is a push or pull that acts on an object.
- When a force causes an object to move through a distance work is done on the object.
- Acceleration is a measurement of the rate in which an objects velocity changes.

Scalars & Vectors → Forces → Elasticity → Acceleration

1. Scalar and Vector Quantities

- Scalar quantities → magnitude only
- Vector quantities → magnitude and direction
- Scalars include time and speed while vectors include velocity.
- A vector quantity may be represented by an arrow, the length represents the magnitude, and the direction of the arrow the direction of the vector.

2. Contact and non-contact forces

- A force is a push or pull that acts on an object.
- Contact forces – the objects are physically touching, i.e. friction, or air resistance.
- Non-contact forces – the objects are physically separated, i.e. gravitational force or electrostatic force.
- Force is a vector quantity

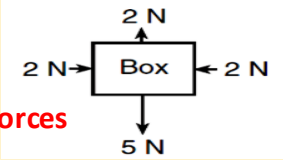
4. Work done and energy transfer

- When a force causes an object to move through a distance work is done on the object.

Work done (J) = Force (N) x Distance (m)

5. Resultant Force

- A number of forces acting on an object may be replaced by a single force that has the same effect as all the original forces acting together.
- This single force is called the resultant force.



Resultant forces = 5-2= 3N

9. Distance and Displacement

- Distance is how far an object moves.
- Distance does not involve direction, it's a scalar quantity.
- Displacement includes both the distance an object moves and the direction of that straight line, it's a vector quantity.

7. Forces and Elasticity

- The extension of an elastic object, such as a spring, is directly proportional to the force applied, provided that the limit of proportionality is not exceeded.

Force Applied = Spring Constant x Extension

- A force that stretches (or compresses) a spring does work and elastic potential energy is stored in the spring.
- Provided the spring is not inelastically deformed, the work done on the spring and the elastic potential energy stored are equal.

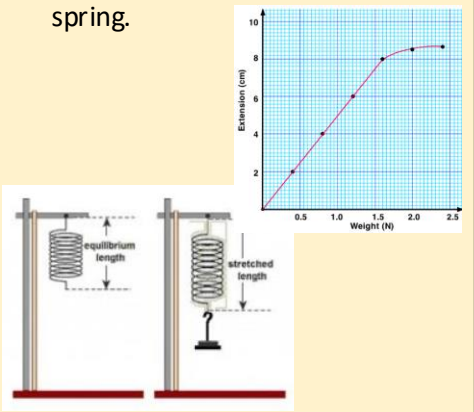
Elastic potential energy = 0.5 x spring constant x (extension)²

3. Gravity

- Weight is a force acting on an object due to gravity.
- weight = mass x gravitational field strength

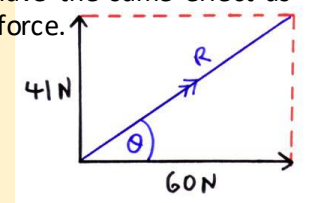
8. Hooke's law Required practical

- Investigate the relationship between force and extension for a spring.



6. Resolution of Forces (HT only)

- A single force can be resolved into two components acting at right angles to each other.
- The two component forces together have the same effect as the single force.



10. Speed and Velocity

- Speed is a scalar quantity as it does not involve direction.
- The speed of a moving object is normally changing and so is rarely constant.
- The formula to calculate the speed of an object is:

Speed = Distance / Time

- The velocity of an object is its speed in a particular direction, velocity is a vector quantity.
- If you are travelling around a roundabout (in a circle) your speed may be constant, but the velocity will be changing as you are constantly changing direction.

11. Acceleration

- This is a measurement of the rate in which an objects velocity changes.
- If an object is slowing down than it is said to be decelerating. It can be calculated using the equation:

Acceleration = change in velocity / time taken

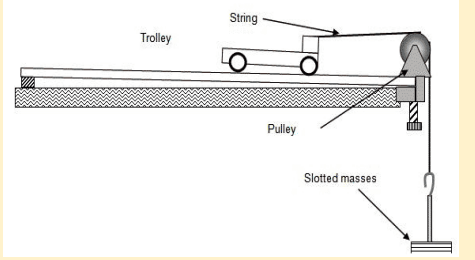
12. Uniform Acceleration

- The following equation applies to uniform acceleration (you are given this one on your data sheet):

(final velocity)² – (initial velocity)² = 2 x acceleration x distance

13. Effect of force on acceleration - Required practical

- Investigate the effect of varying the force on the acceleration of an object of constant mass.



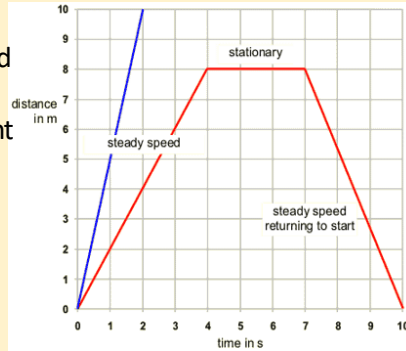


- An object will not change its motion unless a force acts on it.
- The force on an object is equal to its mass times its acceleration.
- When two objects interact, they apply forces to each other of equal magnitude and opposite direction

Graphs → Stopping Distance → Newtons Laws

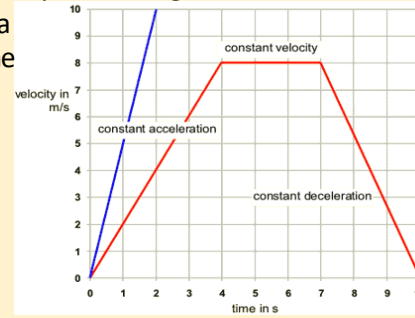
14. Distance Time Graphs

- The speed can be calculated from the gradient of its distance–time graph.
- If an object is accelerating, its speed at any particular time can be determined by drawing a tangent and measuring the gradient of the distance–time graph at that time.



15. Velocity Time Graphs

- The acceleration of an object can be calculated from the gradient of a velocity–time graph.
- The distance travelled by the object can be calculated by measuring the area underneath the line of a velocity time graph.



16. Stopping Distance

- The stopping distance of a vehicle is the sum of the distance the vehicle travels during the driver's reaction time (thinking distance) and the distance it travels under the braking force (braking distance).
- For a given braking force the greater the speed of the vehicle, the greater the stopping distance.

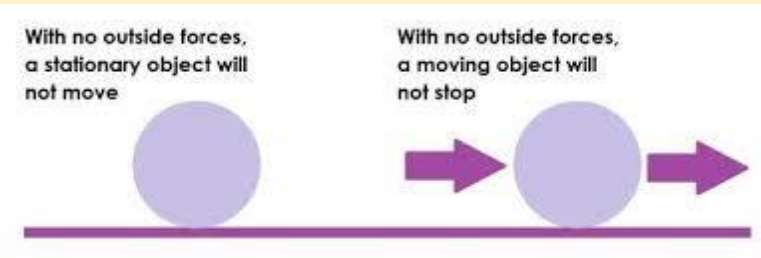
$$\text{Thinking distance} + \text{Braking distance} = \text{Stopping distance}$$

17. Braking distance

- Is affected by the road and weather conditions, e.g. wet or icy conditions.
- The greater the speed of a vehicle the greater the braking force needed to stop the vehicle in a certain distance.
- The greater the braking force the greater the deceleration of the vehicle.
- Large decelerations may lead to brakes overheating and/or loss of control

18. Newtons First Law

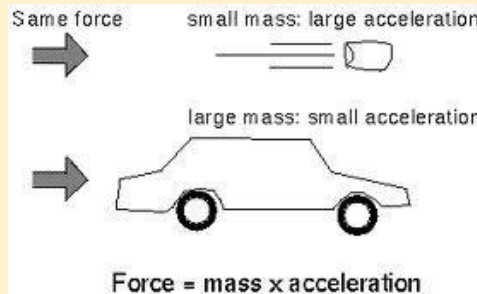
- If the resultant force acting on an object is zero and the object is stationary, the object will stay stationary.
- If the object is moving, the object continues to move at the same speed and in the same direction.
- This means the object continues to move at the same velocity.



19. Newtons Second Law

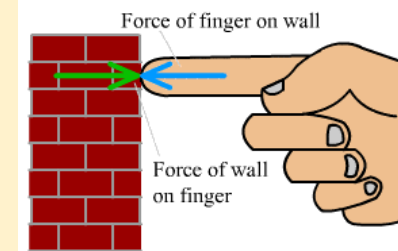
- This is the rule that the acceleration of an object is proportional to the resultant force acting on an object, and inversely proportional to the mass of the object.
- The equation for this is:

$$\text{Resultant Force} = \text{Mass} \times \text{Acceleration}$$



20. Newtons Third Law

- Whenever two objects interact, the forces they exert on each other are equal and opposite.
- For example a man pushes on a wall with 100N and experiences a force of 100N in the opposite direction from the wall.



21. Momentum (HT only)

- Momentum can be calculated using the equation:

$$\text{Momentum} = \text{Mass} \times \text{Velocity}$$

- In a closed system, the total momentum before an event is equal to the total momentum after the event. This is called conservation of momentum.



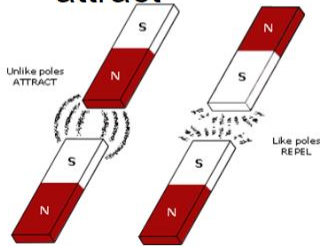
- Magnets have two poles, North and South.
- Like poles repel each other.
- Unlike poles attract each other.

Magnets → Plotting fields → Motors → Solenoids & Electromagnets

1. Poles of a Magnet

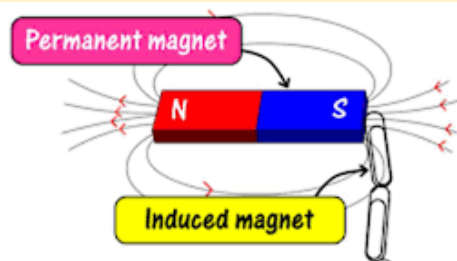
Like poles repel

Unlike poles attract



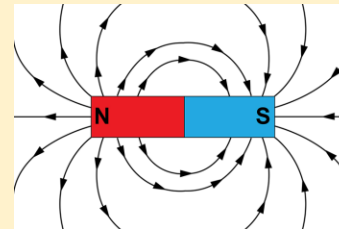
2. Induced Magnets

- An **induced** magnet is a material that becomes a magnet when it is placed in a magnetic field.
- When removed from the **magnetic field** an induced magnet loses most/all of its **magnetism** quickly.



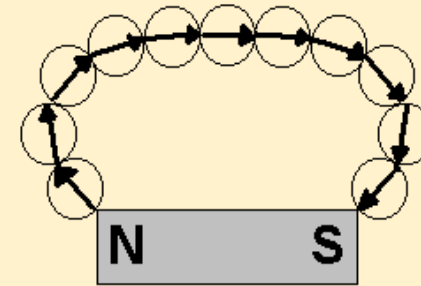
3. Magnetic Fields

- The region around a magnet where a force acts on another magnet or on a magnetic material (iron, steel, cobalt and nickel) is called the magnetic field. It is strongest at the poles.
- The direction of a magnetic field line is from north to south.



4. Plotting a Magnetic Field

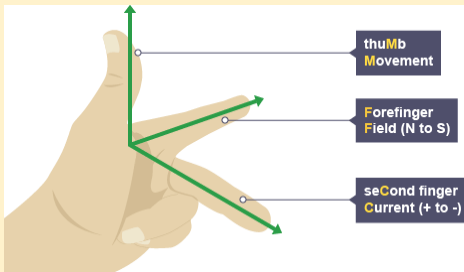
- Mark a dot near the north pole of a bar magnet and place the tail of the compass needle above the dot and mark a second dot at the tip of the needle.



5. Motors

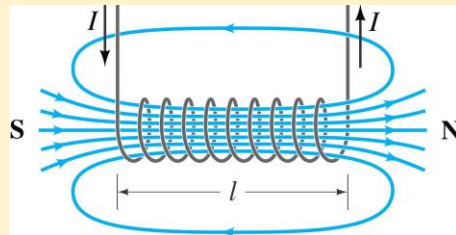
- A **coil** of wire carrying a current in a magnetic field tends to rotate. This is the basis of an electric motor.
- The size of the force can be increased by increasing the current or using a stronger magnet.
- The size of the force depends on the angle between the wire and the magnetic field.
- The force is greatest when the wire is **perpendicular** to the magnetic field and zero when the wire is parallel.

6. Fleming's Left Hand Rule (HT)



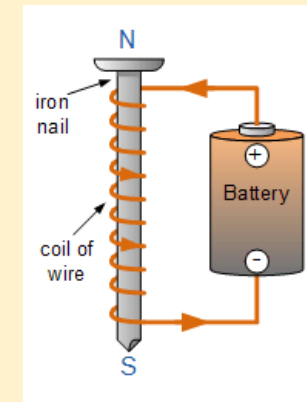
7. Solenoids

- A **solenoid** is a long coil of insulating wire, and they are used in lots of electrical devices where a strong magnetic field is needed.



8. Electromagnetism

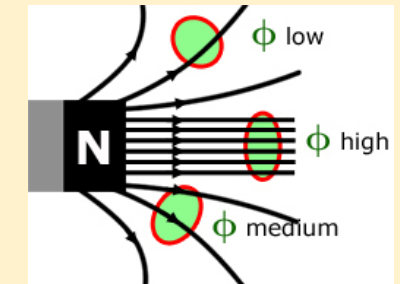
- When a current flows through a conducting wire a magnetic field is produced around the wire.
- The strength of the magnetic field depends on the current through the wire and the distance from the wire.
- Shaping a wire to form a solenoid increases the strength of the magnetic field created by a current through the wire.
- Adding an iron core increases the strength of the magnetic field of a solenoid.
- An electromagnet is a solenoid with an iron core.



9. Magnetic Flux Density (HT)

- For a **conductor** at right angles to a magnetic field and carrying a current:

$$\text{Force} = \text{Magnetic Flux Density} \times \text{Current} \times \text{Length}$$





Episode 1: What is the global pattern of urban change?

Pattern

- HIC – slower rate of growth as already urbanised.
- LIC – faster rate of growth as higher natural increase & more rural to urban migration.

Factors affecting urbanisation

- Rural to urban migration – moving from countryside to city.
- Natural increase – birth rate higher than death rate.

Megacities

- City with a population that exceeds 10 million.



Episode 2: Why is Mumbai important?

Location

- West coast of India.
- In the state of Maharashtra.



National Importance

- Financial capital of India.

International importance

- Bollywood.
- Large sea port – trade goods.

Episode 3: What opportunities has urban growth created in Mumbai?

Social



- Literacy rates are 89.7%, due to improved access to schools.
- Access to healthcare is better than in surrounding areas, meaning people can be treated quicker.
- Slums have a good community spirit, meaning people get along with each other.

Economic



- The city has a busy port and airport, where goods are imported and exported. This also creates many jobs.
- 16,000 small factories found in Dharavi slum.
- Government receives an increase in tax from industry, spent on improving infrastructure and services.
- Incomes are more reliable than in rural areas
- Many people are employed in the informal sector including breaking up and recycling old products.

Environmental



- 80% of waste is recycled, meaning less waste will go to landfill sites.

Year 11 – Geography – Urban Issues & Challenges

Episode 4: What challenges has urban growth created in Mumbai?

Social



- Many people live in illegal slums.
- People live in overcrowded conditions.
- Many houses in the slums lack basic services including clean water, sanitation and electricity.
- Poor living conditions in the slums leads to a spread of disease e.g. cholera.

Economic



- Work in the informal economy has no minimum wage.
- Workers in the informal economy do not pay tax.
- Workers in some small factories work in unsafe conditions.

Environmental

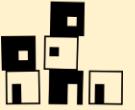


- Water pollution from chemicals in factories.
- Lack of sanitation means sewage is disposed of in rivers or streams.
- Air pollution from older cars and increasing number of factories, as India is a NEE.

Episode 5: How has urban planning improved the life of the urban poor in Mumbai?

Name of project

- Slum Rehabilitation Authority.



What the project involved?

- To demolish the Dharavi slum and replace it with high rise apartments.

How did it improve the lives of the urban poor?



- New apartments have their own water supply, reducing waterborne disease.
- Paved roads means waste disposal trucks can collect rubbish, leading to fewer rats meaning less disease will spread.
- Industry away from housing improving air quality and ensuring they are away from hazardous waste.

Any issues?



- Industry is further from housing, so people must travel further to work, increasing travel costs.
- Cramped living conditions as the new flats are very small.
- Official waste collection occurs, will lead to a loss of informal jobs recycling waste.
- Loss of community spirit as families are split up and there is less outside communal space.

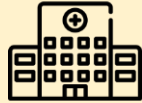


Episode 6: Why is Nottingham important?

Location - East Midlands.

National importance

- QMC – famous for medical research.



International importance

- Invented the MRI scanner and ibuprofen.



Episode 7: How has migration affected Nottingham?

National migration



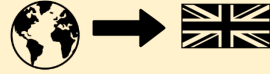
Growth

- People move from other parts of the UK to go to university. 1 in 8 people in Nottingham is a student.

Changing character

- University buildings located across the city e.g. lecture halls or accommodation.
- Increase in bars, restaurants and entertainment facilities aimed at students.

International migration



Growth

22% of Nottingham's population was born outside the UK, compared to the national average of 13%.

Changing character

- Hyson Green has a large international community, which makes the area diverse.
- Radford Road has Asian supermarkets and a range of takeaways and restaurants from different cultures.
- Hyson Green also has many religious buildings to support the different faiths.

Episode 8: What opportunities & challenges has urban growth created in Nottingham?

Social Opportunities



- Cultural mix e.g. Hyson Green.
- Cornerhouse – entertainment centre.
- Integrated transport system improves access to the city.



Economic opportunities

- Cornerhouse – 19 businesses, offering a wide range of jobs.
- Jobs on the public transport system.

Environmental opportunities



- 25% of Nottingham is green space.
- Public transport system – tram, biogas buses.



Social & economic challenges

- Inequality across the city. North west of the city (Bulwell) has higher levels of deprivation than the south east (West Bridgford)
- Deprivation leads to 57% of Bulwell being obese as people can't afford healthier lifestyles.
- 30% of residents in Bulwell are on unemployment benefits.
- Deprivation has led to poorer performance in GCSEs.
- Housing in Bulwell is on average £200,000 cheaper than in West Bridgford.

Environmental challenges



The main environmental challenges link to urban sprawl. This is the unplanned growth of a city. Issues include:

- An increase in traffic congestion as people commute to work.
- An increase in air pollution from the increase in traffic.
- Building on greenfield sites for new housing means habitats are ruined.

Other impacts of urban sprawl

- Increased amenities e.g. shops.
- Increase in house prices.
- Pressure on schools and doctors.

Episode 9: How has regeneration affected Nottingham?

- Regeneration is when an old area that has gone into decline is improved.

Name of project: Broadmarsh

Why was it needed?

- It gives a negative image.
- The shopping centre and car park was old and run down as it was built in the 1970s.

Features of the project

- Total cost: £250 million.
- Redevelop the shopping centre.
- Range of cafes and a new cinema.
- Pedestrianised area.

Episode 10: How can cities be sustainable?

- Sustainable means to preserve an area, creating minimal environmental damage.

Features

- Reduced water use.
- Use of renewable energy.
- Energy conservation.
- Creating green space.
- Recycling.

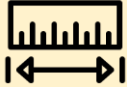


Transport strategies to reduce congestion

- Use of public transport.
- Park and ride.
- Low emission zones.



Episode 1: How can development be measured?



Measures

- **Life expectancy:** average age people live.
- **Infant mortality:** number of babies who die before 1 per 1000 people.
- **Birth rate:** number of babies born per 1000.
- **Death rate:** number of deaths per 1000.
- **Literacy rate:** % adults who can read & write.
- **GNI per capita:** income per person.
- **Human Development Index:** is a combined measure.

Limitations of measures

Economic: GNI per capita is inaccurate as it is an average figure.

Social: These measures are hard to measure during a war, so are inaccurate.

Link to the demographic transition model

- The model shows how population changes over time.
- Stage 2: LICs
- Stage 3: NEEs
- Stage 4 & 5: HICs



Episode 2: Is world development uneven?

Uneven development means the level of development in all countries is not the same.

Causes of uneven development

a) **Physical:** poor climate, lots of natural hazards.



b) **Economic:** being in debt, poor trade links.



c) **Historical:** war, colonialism.



Consequences of uneven development

Wealth

- Africa has the least wealth with many people in poverty.
- Europe & North America are the wealthiest.



Health

People in LICs die from curable diseases, but HICs would vaccinate.



Migration

- People will move for job opportunities or to escape war zones.



Episode 3: How can we reduce the development gap?

- The development gap is the gap between HICs and LICs.
- The aim of the strategies is to make the gap between HICs and LICs smaller.

Strategies

- **Debt relief** – involves cancelling debt.
- **Aid** – help given by one country to another
- **Fair trade** – guaranteed price given to the farmer.
- **Microfinance loans** – small loans given to people in LICs.
- **Intermediate technology** – simple, cheap and easy to maintain.
- **Investment** – TNCs invest in factories & infrastructure.
- **Industrial development** – country moves from agriculture to manufacturing.

How can tourism reduce the development gap?

Location: Maldives are in the Indian Ocean.
Attractions: sandy beaches, coral reef and clear blue seas.

How has it helped development?

- Accounts for 90% tax revenue.
- 11% population employed in tourism.
- Makes \$600 million a year.
- Life expectancy increased to 78 years.



Issues

- Anchors from boats damage coral reef.
- One island is a landfill site and is known as rubbish island.
- Foreign companies own many of the resorts, which means that a lot of money leaves the country.



Episode 4: Why is Nigeria important?

Location: West Africa



Importance

- National – largest population in Africa.
- International, large oil producer and one of the fastest growing economies.

Context

- Social: 3 tribes, Muslim in the north and Christian in the south.
- Environmental: rainforest in the south and savanna in the north.
- Political; democracy but at threat from extremist groups.

Episode 5: How is Nigeria's economy changing?

Industrial structure

- Primary jobs in agriculture decreased.
- Secondary and tertiary jobs have increased.



How can manufacturing stimulate development?

- People get jobs.
- Government gets more tax.
- Tax money used to develop infrastructure.
- New infrastructure attracts more manufacturing industry.
- Growth in manufacturing leads to the multiplier effect e.g. to supply parts.
- People have a more secure income, so increase spending in local businesses.



Advantages & disadvantages of TNCs

- A TNC is a transnational corporation. This is a company that operates in more than one country.
- Shell located in Nigeria.



Advantages

- Employs 65,000 people.
- Employs 250,000 in linked industries.
- Pays tax to the government.

Disadvantages

- Oil spills affected habitats, reduced soil quality leading to lower crop yields and affected the fishing industry.
- Profits can go back to the host country where the TNC came from.

Episode 6: How do trade and aid affect Nigeria?

Changes in trade

- Used to trade with the UK.
- Now it imports goods from China and exports to the USA & Europe.



UK aid to Nigeria

- Money used to improve education & water supply.

International aid

- Insecticidal bed nets given to reduce malaria.

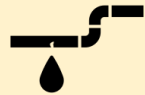
Episode 7: What are the impacts of economic development?

Which TNC has helped Nigeria develop?

- Shell located in Nigeria.
- The company extracted oil.

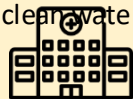
Impact on the environment

- 80% forest destroyed to build industries.
- 10,000 illegal industries – chemicals pollute water, air pollution
- Bodo oil spill 2008 happened when a ruptured pipeline leaked 600,000 barrels of oil into the area. This polluted rivers affecting habitats and the food chain.



Impact on quality of life

- Life expectancy increased by 13 years
- Literacy rate improved by 7%.
- More reliable income than farming.
- More disposable income.
- Improved infrastructure.
- Better access to clean water, sanitation and healthcare.



Episode 8: What has happened to the UK economy?

What changes have taken place?

- Primary industry & secondary industry have decreased.
- Tertiary & quaternary industry have increased.



Why have the changes taken place?

- Deindustrialisation – factories moved abroad for cheaper labour.
- Containerisation and globalisation – high volumes of goods can be shipped across the worlds- increasing imports.
- Changing government policy – for example between 1979 – 2010 the government sold off state run industries e.g. British Steel.

What is a post-industrial society?

- This is when secondary industry declines, to be replaced by growth in tertiary and quaternary industry.
- In a post-industrial society, the IT industry develops, many people are employed in finance, science parks develop near universities to develop research and business parks develop at the edge of cities.

Episode 9: How has UK industry affected the environment?



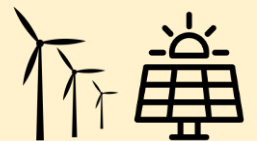
Impact of traditional industry

- **Air pollution** from burning fossil fuels and lorries transporting raw materials or goods.
- **Water pollution** – chemicals from wastewater from the production process.
- **Landfill** - Waste products taken from factories.
- **Visual pollution** - Quarries scar the landscape

Can modern industry be environmentally sustainable?

Nissan Cars is an example of a modern industry that is environmentally sustainable.

- Uses 10 wind turbines and 19,000 solar panels to generate 7% of its energy needs.
- CO2 levels have reduced by 22% since 2005, due to changing energy and the less energy intensive production process.
- More parts of the car can be recycled, therefore less parts that are replaced will go to landfill.





Episode 10: What social and economic changes happen in rural areas?

Positive Impacts on an area of growth

- Increased supply of housing.
- Increase demand in local shops.
- Farmers can make profit from selling land.



Negative impacts on an area of growth

- House prices can rise forcing out local people.
- Schools and doctors' surgeries are overcrowded.



Negative impacts on an area of decline

- Shops may close.
- Schools close.
- Bus services may reduce.
- Buildings can become derelict.



Episode 11: How has improved transport infrastructure benefitted the UK?

Road

- £15 billion invested –new lanes on motorways and 100 new roads.
- Increasing the capacity of roads, meaning less congestion.



Rail

- The Crossrail link built in 2022 links east and west London.
- The link will reduce travel time. The journey from Liverpool Street to Heathrow has been reduced from 1 hour to 35 minutes.
- It will enable an extra 1.5 million people to commute to work in Central London within 45m minutes.
- It will increase rail journeys in London by 10%.



Airports

- The proposed new runway at Heathrow will support an increase in goods being sent abroad.
- It will generate around 70,000 new jobs.



Ports

- Liverpool 2 cost £400 million to build.
- The expansion has doubled the capacity of the port to over 1.5 million containers per year and increases global trade.
- It created 5,000 jobs boosting the northwest economy.



Episode 12: How can we reduce the north – south divide?

What is the north – south divide?

- The north – south divide looks at the economic differences between the south of the UK and north of the UK.
- The south of the UK has a better quality of life with higher wages, lower unemployment and a higher life expectancy than the north.

Why does the north – south divide exist?

- In the north of the UK many factories have moved abroad and there has been the closure of coal mines.
- The south of the UK has a growing service sector.

What strategies can be used to reduce the regional differences?

Improve transport infrastructure

- The HS2 rail link will – reduced travel time making the north of England more attractive for industry. However, there is concern they may not be able to fund the build.

Enterprise zones

- In the zones they will reduce costs for businesses by lowering business rates or offering tax reductions, However, these zones also exist in the south, meaning there is no advantage.

Episode 13: How does the UK fit into the wider world?

The UK has many links to the world, although they are changing. For example, Britain left the EU in January 2020.

Transport – Eurostar train, many international airports and ports.

Electronic communication –Trans-Atlantic cables with phone and internet connections link us with Europe.

Trade – the UK trades with USA and Asia, its overseas exports are worth over £160 billion per year.

Culture – the UK is small but have a significant impact on global culture in sport, music, books and TV.

Commonwealth – The King is Head of the Commonwealth. The Commonwealth promotes co-operation between member countries e.g. through sport or trade opportunities.





Episode 1: What resources are fundamental to development?

Distribution of resources

- HICs access the most resources.
- LICs access the least resources.

Social well – being



- Looks at the health and happiness of people
- A lack of food will cause malnourishment and starvation.
- A lack of clean water can lead to disease and will lead to sanitation issues.
- A lack of energy, means people have limited access to lighting.

Economic well – being



- Looks at the ability to make money.
- A lack of food mean people will not have the energy to work productively.
- A lack of water will reduce the ability to grow crops and will spend time fetching water rather than working.
- A lack of energy means machines can not be powered to make goods.

Episode 2: How is the demand for food changing in the UK?



The UK now imports 40% of its food because:

- Cheaper food is available from abroad.
- Our climate is unsuitable for some food, for example, bananas.
- There is a demand for seasonal produce all year round.

Why does the UK food needs create a large carbon footprint?

Imported food have larger food miles. This is the distance the food travels from production to consumer.

This increase the carbon footprint, which is the amount of CO₂ released into the atmosphere by an activity.

This is because the planes burn more fuel to transport the goods.

How has the demand changed?

Increased demand for locally sourced foods, reducing food miles.

Increased demand for organic produce. This is where food is grown without using chemicals.

What is agribusiness?

- This is when business skills are applied to farming.
- This means large farms have taken over smaller ones, meaning they can reduce costs when using machinery.

Year 11 – Geography – Resource Management

Episode 3: How is the demand for water changing in the UK?



Why has the demand for water increased?

- The demand for water has increased due to an increasing population and an increased use of water in appliances in the home.

How can the UK match the supply and demand of water?

- In the UK, there is a water surplus in the northwest of the UK, meaning supply is greater than demand due to higher rainfall levels and lower populations.
- In the UK, there is a water deficit in the southeast of the UK, meaning demand is greater than supply due to lower rainfall levels and a higher population.
- To solve this problem water transfer schemes can be used, people can install water meters and rainwater can be collected to use in gardens or toilets.

How does the UK control water quality?

- Water in the UK is polluted from fertilisers, chemicals and oil from industrial waste and pollution from vehicles entering the water via surface run off.
- Stricter laws meaning farmers and industry can be fined if they pollute the water.

Episode 4: How is the energy mix in the UK changing?



- We have reduced our use of fossil fuels to reduce levels of CO₂ in the air. However, this can lead to increased unemployment in coalmining areas and as we import these it can reduce our energy security.
- The UK is now using more renewable energy. These produce less greenhouse gases and jobs are available in the manufacture and maintenance of the technology. However, set up costs can be high and some people think wind turbines are ugly and create noise pollution.

Episode 5: Why is the demand for food changing globally?

Pattern of food consumption

- HICs have a higher calorie intake than LICs.
- Africa is the continent where there is more food shortages.
- HIC have greater food security as they can buy or import more food.

Why has the demand for food increased?

- The demand for food is increasing due to a rising global population.
- Today the population is over 8 billion.



Episode 6: What factors affect food supply?

- Climate –drought or flooding can affect the amount of crops grown.
- Conflict – food supplies can be seized or destroyed during war.
- Poverty – the poorest people cannot afford to buy tools or fertilisers.
- Water stress– drier environment can lead to desertification so crops can not be grown.
- Pests and diseases – spreading due to rising global temperatures.
- Technology– can overcome temperature, water and nutrient deficiencies.

Episode 7: What are the impacts of food insecurity?

Food insecurity is when people do not have access to nutritious food.

Social & economic impacts

- Malnutrition & undernutrition.
- Famine.
- Rising prices.
- Social unrest and food riots.

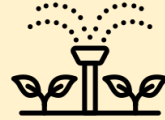


Environmental impacts

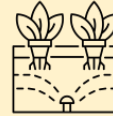
- Increase in soil erosion.

Episode 8: What strategies are used to increase food supply?

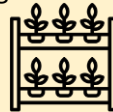
- Irrigation – artificial watering of the land.



- Aeroponics –plants are sprayed with a fine mist of water containing nutrients.



- Hydroponics – plants are grown in mineral rich water.



- Biotechnology – Genetically modified crops, to grow crops which are drought or disease resistant.



- Appropriate technology – using skills or materials that are appropriate to the community.

- Green revolution – Use rainwater harvesting, crop rotation & biotechnology to increase yields in Africa.

Episode 9: How successful is the large-scale agricultural development in Almeria?



Where is Almeria?

- Almeria is located in southern Spain.
- It is an area with low rainfall levels.

Features of the scheme

- It has the world's largest concentration of greenhouses, which protect the crops from the wind and help ripen the crops.
- Hydroponics are used in the greenhouses.
- Main crop is tomatoes.
- Have 2 harvests per year.



Advantages

- Produces 40% of Almeria's income
- Makes over US\$1.5 billion a year
- Increase jobs - employs 15,000 farmers
- Use of drip irrigation in hydroponics, reduces water usage.



Disadvantages

- Produces 45,000 tonnes of waste plastic per year, which is burnt. This is toxic and hazardous to human health
- Habitats and ecosystems destroyed by the construction of the greenhouses.
- Large scale water use - puts a strain on the local water source.

Episode 10: How can we increase food supplies in a sustainable way?



- **Seasonal food:** Buy seasonal products from local food sources to reduce food miles.
- **Organic farming:** Growing crops/ rearing animals without use of chemicals.
- **Urban farming:** Growing food in and around cities. This can be on balconies, green roof spaces or allotments.
- **Reducing waste and losses:** consume food in order of expiry date, love food hate waste campaign, improved storage e.g. climate-controlled warehouses.
- **Permaculture:** encourages farming in harmony with the environment. Uses natural systems rather than artificial pesticides
- **Sustainable fishing:** conserves fish stocks by using quotas.
- **Sustainable meat supplies:** free range or organic.

In Makueni county in Kenya they have built sand dams which is a cost-effective way to increase water supplies to help grow crops.



Episode 1 – Why did the Weimar Republic face problems between 1918 and 1923?

Year 11 – History - Weimar and Nazi Germany (1918-39)

1 - Legacy of World War I

- War debt = 150bn marks (1918)
- 750,000 died from starvation due to British Naval Blockade.
- **November 1918** = Uprising in Bavaria by Kurt Eisner, **Kiel Mutiny** (navy rebels) and the **Kaiser abdicates**, Armistice agreed 11th November – Unpopular as people refused to believe that Germany had lost the war and had been betrayed- **DOLSCHTOSS**

2 - Weimar Constitution

- All men and women over 20 could vote.
- Elect **president** every 7 years and **Reichstag** every 5 years.
- Proportional Representation = **9 coalitions** between 1919 and 1923 as there were too many parties (29). Instability - 376 Political murders between 1919 and 1923.
- **Article 48** = President rules without the Reichstag in an emergency - BUT – never defined an emergency,



3 - The Treaty of Versailles (1919) - B.L.A.M.E

- **Blame – Article 231**: Germany must accept responsibility for the war.
- **Land** - Germany lost **11 colonies**, 13% of European land (Alsace and Lorraine to France), 15% of coal reserves and 50% of iron reserves. **Rhineland DEMILITARISED** – bordered France.
- **Army** – **100,000 soldiers**, 6 battleships, no air force
- **Money** - £6.6bn in REPARATIONS
- Extremely Annoyed – Diktat (dictated truth) and **Dolschtoss** (stabbed in the back).



4 – Political Uprisings

Spartacist Uprising (1919)

- **Left Wing** (Communist)– Led by Liebknecht and Luxemburg
- Retaliation for Berlin Police chief being sacked.
- **100,000 march on Berlin** – take over telegraphs and printing presses.
- Put down by the **Freikorps** – demobilised soldiers

The Kapp Putsch (1920)

- **.Freikorps march on Berlin** - fear being disbanded and want to bring back the Kaiser.
- Army refuse to stop them - **"Reichswehr will not fire on Reichswehr"** - Government flee Berlin – replaced by Wolfgang Kapp.
- **General Strike** forces Kapp to stand down – Putsch fails



5 – Economic Problems

- Dec 1922 – Germany **stops paying Reparations**.
- Jan 1923 France invades the Ruhr – takes over factories.
- **Workers go on strike** – refuse to work for the French - Germany prints more money to pay striking workers = **HYPERINFLATION**.
- **Nov 1923 – Bread = 200bn marks**
- POSITIVES - Debts wiped out
- NEGATIVE - Pensions and savings are now worthless. Other countries won't trade with Germany.

Episode 2 – How did the Nazi Party change between 1919 and 1923?

- Founded **1919** as DAP by Anton Drexler.
- **1920** - Drexler and Hitler wrote **25 Point Programme** – Get rid of Treaty of Versailles, Jews to lose citizenship.
- **Hitler = Great speaker** - spoke at **31/ 46 party meetings between 1919 and 20**.
- **1920** - Bought newspaper (**People Observer**).
- 1921 - Hitler made leader and the SA were set up.
- **Membership grew from 2000 in 1921 to 50,000 in 1923**.



Episode 3 – Was the Munich Putsch a success or failure?

- The Nazis had grown to 50,000, Hitler was inspired by Mussolini. Stressemann was starting to get a handle on hyperinflation - it was now or never.
- Hitler and SA burst in on a meeting of the Bavarian leaders – leaders agree to support Hitler's rebellion, but later contact the police/ army.
- SA march on Munich and are put down by the army. 14 supporters killed.
- **SHORT TERM FAILURE** - **Hitler arrested and imprisoned for 9 months, Nazi Party banned (but weakly enforced and lifted in 1925)**.
- **LONG TERM SUCCESS** - **Trial gives Hitler national publicity, Hitler writes Mein Kampf, the Nazis change direction and try and get elected**.



Episode 4 – How far did the Weimar Republic recover between 1923 and 29? The Golden Years/ Stresemann

- Introduced new currency the **Rentenmark**. It was based on property/ gold and therefore kept its value.
- **1924: Dawes Plan - Reduced** amount Germany needed to pay in Reparations **each year** to £50million. America would loan Germany \$25bn.
- **1929: Young Plan - Reduced total reparations bill** to £2bn. Gave Germany longer to pay reparations – 59 years (1988).
- **"RECOVERY BUILT ON QUICKSAND FOUNDATIONS"**
- **1925: Locarno Pact** - Agreement with Italy, France, Britain and Belgium to respect 1919 borders.
- **1926: Joined the League of Nations** – International Recognition.
- **1928: Kellogg-Briand Pact** - 62 countries agree to **settle international disputes without going to war.**



Life during the Golden Years

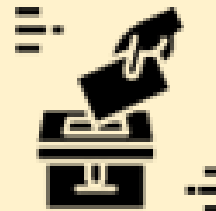
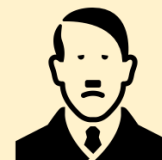
- Real **wages increased by 10%** by 1928 – but savings were still lost from HYPERINFLATION.
- **200,000 homes** were built and homelessness was **reduced by 60%**.
- 1927 = National Insurance.
- **By 1926 = 32 Women in the Reichstag, by 1933 = 3000 women drs. and 100,000 women teachers.**
- Art = New Objectivity
- Architecture = Bauhaus
- Cinema = Metropolis.



Year 11 – History - Weimar and Nazi Germany (1918-39)

Episode 5 – Why are the Years 1923-28 called the Lean Years of the Nazi Party?

- Ban lifted in 1925
- Create regional branches of the party called Gau – each lead by a Gauleiter
- 1926 – SS set up.
- Bamberg Conference (1926) - Nazis = Nationalist and Hitler in charge of everything (Führerprinzip).
- **Vote decreased from 32 seats (1924) - 12 (1928), but membership increased to 100,000 by 1928.**



Episode 6 – Why did support for the Nazis increase after 1929? - C.H.O.P.P.O.W'D – The Nazi's went from 12 seats in 1928 to 230 in July 1932/ 197 in Nov 32.

- **Communism (Fear)** - Communists increased vote (17% in Nov 1932) - **Farmers and Factory owners were scared** of this.
- **Hitler** - gave amazing speeches. The Nazis bought a plane (with **donations from industrialists**) so Hitler could be flown around the country to give speeches.
- **Opposition (weak) - Brüning** used **Article 48 110 times** between 1931 and 32 to reduce government spending on unemployment.
- **Propaganda** – Goebbels produced propaganda to show that only Hitler could solve Germany's problems.
- **Promises** – Nazi's promised work and bread – popular amongst the unemployed.
- **Organisation** – The SA were used to run soup kitchens.
- **Wall Street Crash (1929)** - American Stock market collapsed. Resulting in America recalling loans - **6million unemployed by 1932.**
- **Deal** - Von Papen and Hindenburg agree a deal which made Hitler Chancellor in **Jan 1933**. They did this because they thought they could control him.

Episode 7 – How was Hitler able to become a Dictator by 1934? R.E.E.O.N.A

- **Reichstag Fire (Feb 1933)** - Dutch Communist accused of burning down the Reichstag. Nazis able to say this was a Communist plot. Hitler given emergency powers to imprison leaders, ban their newspapers and meetings.
- **Elections (March 33)** - Nazi gain 288 seats.
- **Enabling Act (March 33)** - Passed by 444 votes to 94 thanks to SA intimidation and promises made to the Centre Party. Hitler can now make laws without the Reichstag = **DICTATOR**
- **Opposition Removed** - May 33: Trade Unions banned, July 33 – All other political parties banned, Jan 34 – Lander abolished so **all decision can be made by Hitler.**
- **Night of the Long Knives (July 34)** - SA were loyal to Rohm not Hitler and numbered 3million. **Hitler used the SS to kill 400 political opponent including Rohm** and other SA leaders. This ensured all were loyal to him.
- **Army** – Following the death of Hindenburg in August 34 Hitler combined the roles of Chancellor and President (Führer). The army sworn an oath of loyalty to him.





Episode 8 – How effectively did the Nazi's control Germany?

1 - The Police State - Terror

- SS : 250,000 by 1939 – responsible for the removal of all opposition with the party and country.
- SD : Intelligence – Discover actual and potential enemies of the Nazi Party.
- Gestapo: Secret Police. Arrest and imprison enemies. Never more than 30,000 as could hide in plain site.
- **Concentration Camps = By 1939 150,000 people were in these. First was opened at Dachau in 1933.**

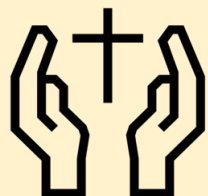


2 – Legal System

- All judges had to be members of the Nazi Party.
- Trial by jury abolished
- Use of the death penalty increased: 1930-31 = 8, 1934-38 = 534

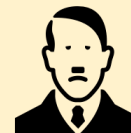
3– Church

- **Catholic Church:** Signed **Concordat (1933)** with pope, promised not to interfere with Catholic church, schools or youth groups. Hitler ignored this
- **Protestant Church:** Established Reich Church which hung swastikas. Some opposed this and set up the Paster Emergency League and Confessional Church.



4 - Propaganda

- 1600 newspapers shut by 1935 – Censorship
- **70% of Germans owned a radio by 1939 – Could only get German radio stations.**
- Annual rallies held in Nuremburg – 1934 = 200,000 supporters attended.
- All Film scripts had to be approved and all films started with a broadcast from the Nazis.
- In 1936, 12,000 paintings and sculptures were removed from galleries.
- 2500 writers were officially banned in Germany by the Reich Chamber of Culture.
- Millions of books were burnt including 20,000 in Berlin in May 1933.
- Berlin Olympics (1936) - Germany won 33 medals (more than any other country).



Episode 9 – How much of a Threat was opposition to the Nazi Party?

- Army: 1938 – Plot to remove Hitler. Hitler removed 16 generals.
- **Church:** Catholics = Hitler **criticised by the Pope (With Burning Anxiety)**. **Protestants = Niemoller** led Pastors Emergency League. Membership grew to 7000 by 1937.
- **Youth: Swing Youth and Edelweiss Pirates.** Edelweiss Pirates had 2000 members by 1939. Listened to forbidden music, wore makeup and produced anti-Nazi graffiti. Also attacked members of the Hitler Youth.

Episode 10 – How did life change under the Nazis?

1 – Women: 3Cs (Cooking, Children and Church).

- Given loans of 1000 mark to get married. Each child wrote off 25% of the loan.
- Mothers Cross - 8 children = gold.
- 1934 = 360,000 women had given up work.
- 1939 = 7million women working (increased from 5 million in 1933).

Year 11 – History - Weimar and Nazi Germany (1918-39)

2 – Children: Loyal Nazis and future roles as soldiers or mothers.

- **100,000 children were members of Nazi Youth groups in 1932. Increased to 9 million by 1939 as was compulsory.**
- Boys trained as soldiers (weapons, camping, marching) Girls trained to be mothers.
- Teachers had to swear an oath of loyalty to Hitler and join the Nazi Teachers' League (97% joined).
- Textbooks = Nazi Ideology
- Curriculum = New lessons such as Race Studies.

3 – Workers

- Unemployment only 300,000 by 1939. Due to Reich Labour Service, Job Creation Schemes, Rearmament (1.4million soldiers by 1939) and invisible unemployment (women and jews not counted).
- Wages increased, but so did working hours and prices.
- Campaigns such as Strength Through Joy and the Volkswagon scheme benefitted very few – **Volkswagon's never delivered**

4 – Minorities and Jews - UNTERMENSCHEN

- Forced sterilisation of those with disabilities, Roma were arrested.
- 1935: Nuremburg Laws – Jews lost citizenship and were banned from marrying German.
- Kristallnacht (9th Nov 1938) – 814 shops, 171 homes, 191 synagogues destroyed. About 100 Jews killed. Aftermath = Jews were fined 1bn marks to pay for the damage. 12th November 20,000 Jews rounded up and sent to concentration camps.



Episode 1 – How did the Indigenous People live on the Plains?

- **Nomadic** - followed the **buffalo**. Practiced exposure (leaving old people behind)
- No-one could own, farm or mine **land as it was sacred**.
- Believed in **Wakan Tanka** - communicated with him through music and dance. Also used sweat lodges to have visions
- **Tribes were made up of different bands** - come together on spiritual occasions and each summer.
- **Tribes were governed by a council**. After 1885 the US government set up Federal Courts and sent Children to Christian schools to reduce the power of the Council.
- Plains Indians practiced **polygamy** (more than one wife).

Importance of horses

- **Horses** were essential to the **nomadic lifestyle**, hunting the Buffalo and in warfare.
- Indigenous people **measured their wealth** in horses.

Importance of the buffalo

- Crucial to the way of life of the Indigenous People- **they used every part of it. Tongue = Hairbrush**
- After 1883 the number of Buffalo was reduced from **25 million to 200**. This was partly because the hides could be turned into leather and the bones into Fertiliser.
- **1874 – President Grant failed to sign a bill which would protect the Buffalo.**

Warfare

- Tribes often fought over horses and **NEVER** in Winter
- Aim was not to kill enemies, but to get close enough to touch them (**Counting Coup**).
- If enemies did die during war they would be **scalped** as it was believed this would stop them entering the **“Happy-Hunting Ground.”**

Year 11 – History - The American West (1835-95)

Episode 2 - Why was there Conflict between the Plains Indians and US government?

- **1830 Indian Removal Act: Removed 46,000 Indigenous People** from the East. Established the **Permanent Indian Frontier** (border – closed in 1890). **Trail of Tears** (1838) – 15,000 forcibly marched west. 5000 died.
- **1851 Indian Appropriations Act: Set aside reservations**. Hunting land allocated.
- **1851 First Fort Laramie Treaty:** agreed
 1. The government would give the Indigenous people **\$50,000 per year** and **protect** them from migrants on the Oregon Trail.
 2. The Indigenous People would allow safe travel (if migrants **stuck to the Oregon Trail**) and the government would be allowed to build roads and army forts.
- **Little Crow’s War 1861-62:** Agreed to move to reservations for \$80,000 per year (not paid). Land was not suitable for farming.
- Indigenous People attacked and killed 700 settlers. Army called in and Indians forced to move to smaller reservation – 400 Indians died in the first winter.
- **Cheyenne Wars 1862-1864:** Gold discovered in Colorado(1858) - miners moved in **breaking the Fort Laramie Treaty (1851)**. Clashes between Indigenous People and prospectors – Army called in.
- Colonel Chivington massacred 150 men, women and children at Sand Creek (1864) and Custer held women and children hostage at Washita (Winter, 1864). Cheyenne move to smaller reservations.
- **Red Cloud’s War 1866-68: Gold was discovered in Montana (1862)**. Miners rushed to it along a new route called the **Bozeman Trail**. Broke Fort Laramie Treaty 1851 = Conflict. Captain Fetterman and 82 men were killed and scalped by 1000 Indigenous People. Led to 2nd Fort Laramie Treaty.
- **1868 –Second Fort Laramie Treaty: Bozeman Trail closed. The Great Sioux Reservation was established.**
- **1868- Grants Peace Policy:** Indigenous People could have **peace in the reservation, but war without** and **1871 Appropriations Act:** Made it easier for the government to take land from the Indigenous People. I.P.P now treated as **WARDS OF THE STATE**.

Battle of the Little Bighorn 1876: Gold discovered in Black Hills (sacred land) – Indigenous People refuse to sell for \$6million and left the reservation – **REFUSED to return – Against President Grant’s Peace Policy**
Custer’s and 200 men attacked 2000 Indigenous People (rather than waiting for reinforcements) and were **killed and scalped**. The Indigenous People won in the short term but were forced onto reservations by the army becoming dependent on the government for food. **All old treaties were ended** and the Sioux were forced to give up the Black Hills. US government started the policy of “Kill the Indian, save the man”.

Episode 3 - How was the Indigenous People’s way of life destroyed?

Reservations made smaller– Government agents appointed to run the reservations. These were often corrupt and withheld rations. Churches and Court Houses built on Indigenous People’s land – weakening authority of the council. Rations given to head of the family, not the chief.

1887 Dawes Act – Split the reservations by giving Indigenous families 160 acres.

Those who accepted became American citizens. Land was poor quality and Indians lacked knowledge to farm so many sold. Therefore Indigenous People’s land reduced by 50% between 1887 and 1890.

Worsening conditions on reservations led to GhostDance movement (WOVOKO's vision about resetting the world). Suppressed in **Wounded Knee Massacre where 146 Indigenous People killed by the US army.**



Episode 4 – Why did people move west?

Push Factors:

- **1837 Economic crash** – 25% lost jobs.
- **Immigration from Europe** – Irish potato famine (1845-49) led to an increased population – Overcrowding meant the cost of land increased significantly.

Pull Factors:

- **The Oregon Trail** - Used by 400,000 between 1846-69). Over **2000miles of MAPPED trails**.
- **Mountain men** - Told stories of "**Paradise in the West**".
- **Manifest Destiny** - It was the destiny or "**God-Given right**" of all US citizens to take over the whole of North America.
- **The Gold Rush** - Gold was discovered in California (1848). Over **25,000 people moved to California by 1849**. By 1852 the population had reached **250,000**.
- **Indian Appropriations Act** and **Fort Laramie Treaty (1851)** - made the journey safer.

The Donner Party (1846/47):

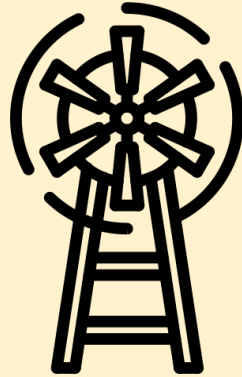
- Took "**Hasting's Cutoff**" which they thought was a shortcut – Added 100miles.
- Trapped in Sierra Nevada Mountains for the Winter.
- **Only 45 of the original 81 survived** – some resorted to cannibalism.

Mormons Migration (1846/47):

- Persecuted in the East due to practicing polygamy.
- **Brigham Young let the group** to Salt Lake City. Journey was well planned (sent groups ahead to create rest-stops)- kept out of the way of travellers, had rest stops and **created a winter quarters in Nebraska – harsh and many died**.
- **Made a success of Salt Lake City through irrigation and teamwork – 2000 arrived by 1847**.



- **Pacific Railroad Act (1862)** granted the job of **building a railroad to two companies**.
- In the West **Central Pacific** (Chinese labourers)
- East = **the Union Railroad** (Irish and ex-soldiers).
- Both were given **6,400 acres of land** alongside the tracks for every mile of track built. This land could be advertised and sold to settlers.
- The track was completed in 1869, with losses of 12,000 people. Now much quicker to cross the country.



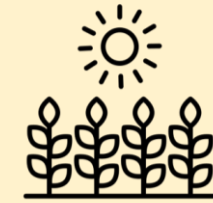
Episode 5 – How successfully did the Homesteaders adapt to living on the Plains

- **Homestead Act (1862):** Claim 160 acres – Needed to farmed it for five years. 60% of claims not "proven up."

Problems and solutions Homesteaders:

- **Water shortages** – Built well (300meters deep) and used Windmills (Halliday) to bring water to the surface.

- **Lack of building materials – Built Sod Houses** (hard earth used as bricks) – later railway brought wood to the Plains.
- **Weather extremes – Dry Farming** – plough immediately after rain to trap the water.
- **Difficulty growing crops and ploughing – Sod Buster Plough, Seed Drills and Turkey Red Wheat**.
- Joseph Glidden introduced Barbed Wire which allowed Homesteaders to fence off their claims.
- **Timber Culture Act (1873):** 160 acres of land if planted 40 acres of trees. Failed as the Plains soil and rainfall was simply not suitable to grow trees.



Episode 6 – How did the Cattle Industry change?

- After Civil War ended in 1865, beef was in great demand in the big industrial cities of the North – Cows cost **\$5** in Texas due to over population, but **\$40** in Chicago. Solution – "**Moooooove the Cows to the North/ East**".

The Goodnight Loving Trail (1866):

- Opportunity **to sell cattle directly to the government**.
- Opened a trail through the West to Fort Sumner, New Mexico and sold cattle to the government in order to feed the army and Indigenous people. **Made \$12,000**.

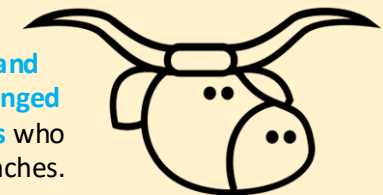
Abilene:

- Cattle transported easily using the railway.
- **Joseph McCoy created the cow town of Abilene** in 1867 – at the end of Chisholm Trail. **35,000** cattle were driven along the **Chisholm Trail** to Abilene by the end of 1867 where they were transported East using 100 railway carriages. **Later they developed refrigerated rail carriages**.

The 'open range' :

- **John Illiff** discovered that cattle could survive the winter on the Plains – **reduced the need for Cattle Drives**.

BUT: Winter of 1886/7 led to **15%** of Open Range cows dying. Result = **smaller farms and selective breeding. Changed the role of the cowboys** who now maintained the ranches.





Episode 7 – How did the end of enslavement impact westward migration?

The Exoduster Movement, 1879 :

- Freed Slaves who moved West. 1880s: 56,000 (Oklahoma), 43,000 (Kansas). **Thought the land would be free (it wasn't).**
- Conflict with the white homesteaders who had already settled there.
- Land claimed was **poor quality so difficult to make a living from.**

Episode 8 – How did the California Gold Rush impact the West?

1848 – Gold discovered in Sierra Nevada mountains.

- 1849, - The population of California grew from **15000 in 1848 to 250,000 in 1852 (10% from China).** Attracted crooks, bandits, gamblers and outlaws who migrated West to live in all male communities which were full of violence, alcoholism and prostitution
- Chinese miners came to escape rebellion. Most arrived under the Credit Ticket System- companies paid for their ticket. Racism towards Chinese immigrants was a serious problem.
- **Claim jumping'** - miners would steal other miners claims to land.



Episode 9 – Why was the West so lawless?

- Distance – **hard to cover such large areas**
- Poverty – after much of the initial gold was claimed many struggled to earn money
- Land claims and conflict between groups. For example, the population of Abilene would increase from 500 to 7,000 during the peak season for the cattle trade leading to lawlessness
- Ineffective court system and corruption - led to miners setting up their own "Miners Courts".
- Vigilantes – people taking law in their own hands, rarely working out.
- Guns – The Sheriff of Abilene banned cowboys from the town as a result of gun violence.
- **Gangs** – The Reno gang are a good example of the lawlessness – managing to steal \$96,000 in one bank robbery in 1868. They were eventually caught and rather than being put on trial, a vigilante committee took charge and lynched them

Episode 10 – How successfully were issues of lawlessness addressed?

- **Vigilante groups** began as a way to deal with a crime wave in San Francisco in 1851. They quickly spread out to Gold Rush mining camps and other settlements across the west as a way of responding to serious crimes.

Year 11 – History - The American West (1835-95)



Case Study 1: Lincoln County War (1878):

Cause: The town of Lincoln was **dominated by House** (a store run by Murphy), who controlled law enforcement and was able to make money by rustling and selling cows to the government. In **1876 a rival store was set up by Tunstall.**
Event: In **1878 Tunstall was murdered** by House gunmen. Tunstall's cowboys (including Billy the Kid) set about taking revenge. As a result, **30 people were killed over the next 5 days**, whilst **Tunstall's business was burnt down.**
Consequence: Murphy was charged with Tunstall's murder but later acquitted. Billy the Kid went on the run and became an outlaw. **House continued to dominate Lincoln.**

Case Study 2: The Gunfight at the OK Corral (1881)

Cause: Virgil Earp and his brothers hired as lawmen in Tombstone. **They had a rivalry with local cowboys.** One day Virgil Earp **pistol-whipped** one of the cowboys whilst disarming him.
Event: **Cowboys returned with guns** and reinforcements– a gunfight started which led to **3 of the cowboys being killed.**
Consequence – Earp charged with murder but acquitted. Led to a series of **tit-for-tat killings** whilst ultimately led to the Earp's leaving Tombstone.

Case Study 3: The Johnson County War (1892):

Causes: 1 - Ranchers (WSGA) unhappy that the homesteaders had claimed land that they wanted to graze their cattle, concerned about rustling and the falling price of beef.
 2 - **Local juries wouldn't convict those accused of rustling.**
 3 - The conflict in Wyoming followed the lynching of two homesteaders (**Jim Averill and Ella Watson**) who had been critical of the Ranchers. This showed they'd got away with violence before.
Event: WSGA hired 24 gunmen to kill suspected cattle rustlers (about 70 were on the list the WSGA made. The invasion failed as they got involved in a shoot out with rancher Nate Champion who was killed. This shoot out delayed the invaders meaning a local posse of 300 could surround the invaders. The invaders were arrested.
Consequences 1 - The invaders were set free
 2 - The cattle barons continued their dominance but the WSGA agreed to let small ranchers join
 3 - It showed that vigilantism continued throughout the west but showed people would not accept it and fought back.
 4 – The WSGA lost any political influence due to negative publicity.

- **County Sheriff-** elected official responsible for law enforcement. Ran the county jail and employed his own deputies. Town constable/city marshal-elected official-appointed own officers or policemen. Low paid so it was often done by **criminals.**
- **The militia-** During the Civil War western towns raised militia units to replace the regular army- **In Aurora there were 2 militia- The Esmeralda Rangers and the Hooker Light Infantry-** until the end of the Civil War in 1865.
- **The courts-** There was a Justice Court, a District Court and a Coroners court to record any deaths. The Grand Jury- investigated public offences and handed down indictments, which would go to trial. Members were drawn from registered voters in the country
- **Often the justice system was ineffective and often bribed by local gangs**



"No one can enter the kingdom of God unless they are born of water and the Spirit." (John)

Forms of Worship



There are four main types of worship that Christians can engage in:

- Liturgical worship
- Non-liturgical worship
- Informal worship
- Private worship



Christians can be involved in all four of these forms of worship.

Examples of activities that may take place at some or all of these forms of worship are readings from the **Holy Bible**, prayers and the **Eucharist**.



Sunday is regarded by Christians as the **Sabbath** because Jesus' resurrection happened on a Sunday. It is also a reminder to Christians that God rested on the seventh day of creation. Most churches have their main service on a Sunday morning

Liturgical worship

Liturgical worship is a church service that follows a set pattern of prayers and readings, usually found in a printed book.

Christians who participate in liturgical services may feel connected to other worshippers as they are following the same traditions.

As a **congregation**, Christians often participate together, repeating key information and singing hymns.

Non-liturgical worship

Non-liturgical worship is more informal and has less structure, and the elements can be tailored to different types of services. For example, the **sermon** could be on a topical theme, and prayers could be in the service leader's own words rather than those written in a book.

Informal worship

Informal worship focuses on the adoration of God and is not always carried out in a church. Often, large **auditoriums** are used.

Frequently the music used during informal worship is popular and modern in style, and instruments are commonly used.

Charismatic worship is a kind of informal worship. Although Charismatic services have recognisable Christian features, such as prayers and readings, they are very free-flowing services.

Prayer

Prayer is how Christians communicate with God, through both talking and listening and being open to the guidance of the **Holy Spirit**. It is a two-way method of communication that gives Christians comfort as they feel that God is listening and may send messages back.

Jesus spoke often about the importance of prayer, as he felt it deepened a person's relationship with God. Similarly, many Christians believe that prayer can bring them closer to God.

Christians often use formal written prayers, which are often memorised in order to be recited both publicly and privately. An example of this is the **Lord's Prayer**, which was the prayer that Jesus taught his followers when they asked him to pray. This can be found in the Anglican Book of Common Prayer.

Christians also use informal prayers, which are personal and allow individuals to connect with God.

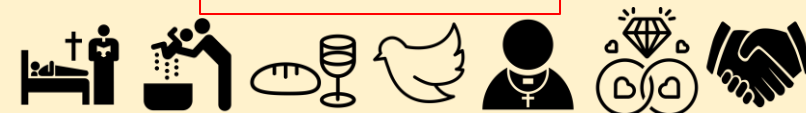
- Adoration** - Praising God, eg "Dear God, I know that you are all-loving..."
 - Confession** - Saying sorry, eg "Please forgive me for the horrible things I have said about..."
 - Thanksgiving** - Thanking God, eg "Thank you for the amazing weather this week..."
 - Supplication** - Asking for something, eg "Give me strength to..."
- A fifth common component is intercession:
- Intercession** - Praying for someone who may be ill, eg "Please remember my cousin, who is ill, and help them to heal after their operation."

The Lord's Prayer

"Our Father, which art in heaven, Hallowed be thy Name. Thy Kingdom come. Thy will be done in earth, As it is in heaven. Give us this day our daily bread. And forgive us our trespasses, As we forgive them that trespass against us. And lead us not into temptation, But deliver us from evil. For thine is the kingdom, The power, and the glory, For ever and ever. Amen."

Year 11 – RSMS – Christian Practices

The Sacraments



Anointing, Baptism, Communion, Confirmation, Holy Orders, Marriage, Reconciliation

Infant Baptism



Some Christians believe baptism makes a Christian a member of God's family. In many denominations babies are baptised, and this is known as infant baptism.

For **Orthodox Christians**, infant baptism involves **total immersion**. However, other denominations make the sign of the cross on the baby's head using oil and use **holy water** on the forehead.

"Jesus' instructions were to "baptise in the name of the Father, Son and Holy Spirit", so these words are said during a baptism." (Matthew)



Believers Baptism



Baptists and **Pentecostals** believe baptism should only occur once somebody is an adult, as it is then that the individual can accept Christianity for themselves. This type of baptism is called believers' baptism.

It is done using total immersion, where the person being baptised walks down into a pool and is fully submerged three times before walking out into their new life.

Some Christians prefer believers' baptism because Jesus was baptised as an adult and because, as an adult, you are able to make decisions for yourself.

Evangelism involves converting people to Christianity. It often goes hand in hand with the activities of missionaries. Some Christians feel that they should take on this role as they believe that they can help people to discover their real purpose in life. While some evangelists tell people directly about God, others try to show God's love through their actions. For example, Gideons International, an association of evangelical Christians, donates copies of the Bible to hotels and hospitals in the UK and around the world.



Eucharist



The **Eucharist**, also known as **Holy Communion**, is a sacrament that commemorates the **Last Supper**. Not all Christians celebrate this sacrament. The most important element of the Eucharist is the bread and the wine, but there are varying beliefs about the roles of these items.

- **Belief 1 - Catholics** believe that the bread and the wine become the actual flesh and blood of Jesus Christ. This belief is known as **transubstantiation**.
- **Belief 2** - Some Christians believe that the Holy Communion is a re-enactment or commemoration of the Last Supper. The bread and wine are seen as symbolic of Jesus' death.
- **Belief 3 - Baptists** believe the bread and wine are symbols that can be used to bring people together as a community. They use non-alcoholic wine and the bread is offered from person to person.
- **Belief 4 - Orthodox Christians** believe that Jesus is mystically present in the bread and wine.
- **Belief 5 - Church of England** Christians believe that the bread and wine hold the spiritual presence of the body and blood of Jesus but do not become it.

Pilgrimage



A pilgrimage is a journey that has religious or spiritual significance. The journey is usually taken to an important religious place. There are many sites of Christian pilgrimage, several of which are mentioned in Bible stories about the life of Jesus, including **Jerusalem**.

Lourdes

- Lourdes is a famous pilgrimage site in France where the waters are believed to have healing powers.
- In 1858, Bernadette Soubirous, a young local girl, was said to have seen the **Virgin Mary** at Lourdes and her friend was said to have been healed in the waters. Bernadette was made a saint by Pope Pius XI in 1933.
- Often the water is taken home by pilgrims, and there have been many more stories of healings.

Iona

- Iona is a quiet island in Scotland where a **monastery** was built by Columba, a **monk**. It is often visited by pilgrims.
- Christians go there to study the Bible and pray, which may lead to spiritual growth. People often feel that they benefit from having their lives redirected or feel that they learn something about themselves while in Iona. This can allow Christians to face the challenges of life back at home in a different way.



Christmas

Christmas celebrates the birth of Jesus, as told in the **Gospel** of Matthew and the Gospel of Luke. The festival of Christmas does not fall on Jesus' actual birthday, and different **denominations** celebrate it on different dates. **Protestant** and **Catholic** Christians celebrate Christmas on 25 December, while **Orthodox Christians** celebrate it on 6 January.



Easter



Easter begins with Lent, which is the name given to a period of 40 days leading up to the day of **resurrection**.

The week leading up to the resurrection is known as **Holy Week** and there are special services held in Christian churches across the week:

- **Palm Sunday** - On this day, the four gospels state that Jesus entered Jerusalem on a donkey. The people were overjoyed to see him, and they showed their love for him by waving palm branches as he passed by. Palm crosses are given out during Christian services as a symbol of this event.
- **Maundy Thursday** - On this day, Jesus hosted the **Last Supper**, which was followed by his arrest in the **Garden of Gethsemane**. This day marks the beginning of a time of sadness and reflection for Christians.
- **Good Friday** - Jesus' **crucifixion** and death. Traditionally, some Christians commemorated this with a day of fasting or by ending the Lent fast and eating **hot cross buns**. Today, many churches hold services during the afternoon at a similar time to when Jesus died (3pm). Some Catholics may hold a procession called the Stations of the Cross, which re-enacts the final journey of Jesus when he carried his cross to his crucifixion. There is a series of 14 stops, all of which remind Catholics of the events that happened during Jesus' final day.
- **Easter Sunday** - Jesus' resurrection. Some churches hold a **vigil** on the Saturday evening before a service on the Sunday. For Christians, Easter Sunday is a day of joy to celebrate what God has done for humanity. Cards are swapped and in the UK, chocolate Easter eggs are given and eaten by Christians. The eggs symbolise new life and, for some Christians, they remind people of the shape of the boulder that rolled away from the entrance of Jesus' tomb. People of other faiths and those who do not hold religious beliefs may also enjoy exchanging chocolate eggs because they are freely available in shops.

Year 11 – RSMS – Christian Practices

Role of the Church

Charity

The following charities are three examples of Christian organisations that spread Christianity's key messages through international action. They provide both emergency short-term and long-term aid locally and globally. These charities each fundraise within the UK and internationally, and use the media to highlight their campaigns. There are many other Christian charities around the world.

CAFOD

The **Catholic Agency for Overseas Development** (CAFOD) works to fight poverty and injustice around the world. It works through churches in places that have suffered natural disasters, aiming to give people the skills to help themselves.

Christian Aid

Christian Aid was set up after **World War Two** to help refugees in Europe. It now works in disaster zones around the world. Every year, during Christian Aid Week, the organisation asks each household in the UK to give money to help continue its work to end poverty throughout the world. Christian Aid projects often use the skills of local people to improve life for the community.

Tearfund

Tearfund is an **evangelical** organisation that aims to help to end hunger all over the world. It cares for **refugees** in particular. Often young people from within the congregation are encouraged to spend time overseas helping on projects. Various kinds of aid are supplied, but there is a large focus on spiritual need, not just physical, and Tearfund has set up over 67,000 churches.

Mission

According to the **Gospel** of Matthew, Jesus told his disciples that they should spread his message throughout the world and should try to **convert** people to Christianity.

Missionaries spread the Christian message abroad, not necessarily only through **preaching**, but through their actions too - for example, helping with development projects. This is how Christianity as it is known today has spread across the globe.

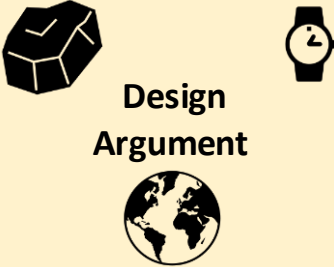

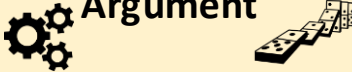
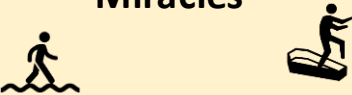
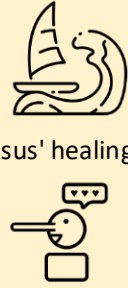





Christianity	Islam	Hinduism
<p>Monotheism - Christians believe that there is only one God. They are monotheists.</p> <p>Trinity - most Christians believe that there are three distinct parts (usually referred to as Persons) to this one God and that these three aspects form a unity. This belief is called the doctrine of the Trinity:</p> <p>God the Father - the creator and sustainer of all things.</p> <p>God the Son - the incarnation of God as a human being, Jesus Christ, on Earth.</p> <p>God the Holy Spirit - the aspect of God which is active in the world, drawing people towards God.</p>	<p>Muslims believe that Allah:</p> <ul style="list-style-type: none"> is the one true God - all worship and praise is directed towards him should be treated with respect as he is the supreme being is the creator, designer and sustainer of the world <p>The word Tawhid is used to describe the oneness of Allah, which is the fundamental belief of Islam. It means believing in Allah, believing that he is the one and only God. It helps Muslims to think of Allah as the centre point of life.</p>	<p>Many Hindus believe in Brahman as the ultimate reality – one 'Supreme Spirit' in many forms. Brahman is male, female and even animal.</p> <p>Brahman is also commonly understood as the Trimurti - three gods with three key functions:</p> <p>Brahma - the source of all creation.</p> <p>Vishnu - responsible for keeping all good things on Earth and bringing harmony when needed.</p> <p>Shiva – assists in the creation of new things – some things have to end for others to begin. However many Hindus believe in Vishnu or Shiva as the one Supreme Deity.</p>

Key Words			
Atheist	Someone who does not believe a God exists	Omnipotent	God's nature as all-powerful
Benevolent	God's nature as all-loving and all-good	Omniscient	God's nature as all-knowing and aware of all that has happened past, present, future
Faith	A commitment to God and religion that goes beyond proof	Personal	God's nature as merciful, compassionate and something humans can relate to
General Revelation	God making themselves known through ordinary experiences open to all	Proof	Evidence that shows something is true or existent
Immanent	God's nature as present in and involved in the world	Special Revelation	God making themselves known through extraordinary experiences
Impersonal	God's nature as non-human, unknowable and mysterious	Theist	Someone who believes in a God or Gods
Miracle	A remarkable event that cannot be explained by science alone	Transcendent	God's nature as beyond our understanding, existing outside the universe

<p>Nature of God</p>	<p><u>Omnipotent, Omniscient, Benevolent</u></p> <p>According to the Bible and Christian teachings, God is omnipotent (all-powerful), omniscient (all-knowing) and benevolent (all-loving).</p>	<p><u>Problem of Suffering</u></p> <p>This however leads to the Problem of Suffering. If God is all-powerful and all-loving why does so much suffering exist in the world? Some people see this as an argument against God's existence.</p>
	<p><u>Personal vs Impersonal</u></p> <p>Different Christians have different views on God with some seeing them as personal and some as impersonal.</p> <p>A personal God has human characteristics and Christians can form a relationship with them through prayer.</p> <p>An impersonal God is mysterious and unknowable and has no human characteristics. More like an idea or a force than a human being.</p>	<p><u>Transcendent vs Immanent</u></p> <p>They also disagree about God's place in the world.</p> <p>A transcendent God exists beyond and outside of life on earth and is not limited by the laws of physics or the rules of time and space.</p> <p>An immanent God is active and involved in life on earth and can play a role in events that happen here. This could be through the Holy Spirit answering prayers for example.</p>



 <p>Design Argument</p>	<p>The Design Argument argues that God must exist because the world around us is so intricate and well-designed that there must be an intelligent creator behind it. William Paley puts this forward in his Watchmaker's Argument that says if you found a watch in the grass you would not assume its intricate mechanism had come about by accident, you would assume someone had created it. The same applies for the world around us.</p> <p>Atheists argue that nature and science are responsible for the world around us and that much of the so-called design is the result of chance and natural selection. Also, maybe God did once exist and designed the world but has since died. Just because something looks designed doesn't mean it is! Penicillin is a very important medicine which was created by accident. The post it note is also a great design, but it was created by accident and not designed.</p> 	
 <p>First Cause Argument</p>	<p>The First Cause Argument was put forward by Thomas Aquinas and it argues that there has to be an uncaused cause that made everything else happen and that must be God. It argues that nothing moves without first being pushed and that God is the only possible being that can exist with no cause as God is eternal (never beginning, never ending). Gods existence is necessary to have created the movement in the first place that caused the Big Bang.</p> <p>Atheists argue that by this logic God must have a cause or that if God is eternal then the universe itself could be eternal as well. Aquinas may have been rather biased and lacking in quality evidence back in the 13th Century though. He clearly had not spoken to everyone or seen everything to ensure his theories were true. He also does not consider the God could have created an imperfect world and not be able to fix it.</p>	
 <p>Argument from Miracles</p>	<p>The Argument from Miracles argues that miracles (a remarkable event seemingly only explained by God's actions) prove that God exists. They argue that these events (like Jesus walking on water or people coming back from the dead) cannot be explained by science and that they must be the result of God's intervention. An act of God.</p> <p>Aquinas' 3 Types of Miracles</p> <ol style="list-style-type: none"> 1. Those things which only God can do and which nature can not do (these are supernatural events, such as the creation of something from nothing) 2. Those things which nature can do, but which are not in the usual order (for example, nature can give sight but not, in its normal operation, after blindness. Jesus' healing of Blind Bartimaeus is an example of this kind of miracle). 3. Those things which nature can do, but which are without the usual principles (for example, a crop that grows without seed). <p>Atheists argue that miracles are not more than happy coincidences and that they can be explained either by science or people being delusional or lying.</p> 	
<p>Special and General Revelation</p> 	<p style="text-align: center;"><u>Special Revelation</u></p> <p>This is a form of revelation where God reveals themselves through remarkable experiences usually only open to one or a small group of people. These could be visions (seeing Mary, God or Jesus), dreams, miracles or hearing God's call directly. In the Bible Saul experiences a vision of Jesus on the Road to Damascus and this causes him to believe in God, change his name, and preach the Gospel</p> 	<p style="text-align: center;"><u>General Revelation</u></p> <p>This is a form of revelation where God reveals themselves through ordinary experiences which are open to all people to experience. This could be through nature where God's creation is revealed in the intricacy of the human eye or the beauty of the Grand Canyon. It could be through scripture, God reveals much information about themselves in the Bible.</p> 



The Five Pillars of Sunni Islam

- Shahadah Statement of faith – “There is one God and Allah is the messenger of God”.
- Salah Prayer 5 times a day using special rak’ahs (prayer positions)
- Zakah Giving 2.5% of your savings to charity
- Sawm Fasting during daylight hours during the month of Ramadan.
- Hajj Going to Makkah on a religious pilgrimage at least once in your life

Greater Jihad - “to strive”

The daily struggle to live as a good Muslim. - Muhammad said that that the supreme jihad was against oneself. It is: - To practice the 5 pillars - To follow the Sunnah (the way of) the Prophet Muhammad - To seek justice for all - To rise above greed and selfishness

Lesser Jihad - The use of violence in self-defence, or to defend Islam/Allah - It was set out by Muhammad when people were trying to wipe out Islam and its followers. - It cannot be used aggressively and should never be used to kill civilians (non-soldiers) - The Crusades were an example of a true Jihad. - Terrorism is NOT jihad!

Laylat al-Qadr, or *the Night of Power*, is the name given to the night that the Angel Jibril first appeared to Muhammad and began **revealing the Qur’an**. It is celebrated during Ramadan as it is seen as a time of thanksgiving for the Qur’an.

Jummah refers to communal prayers held on a **Friday** just after noon at a mosque. Getting together is meant to develop the feeling of unity among the Muslim community. The gives two sermons and a series of is performed. Men are obliged to go to Jummah unless they are ill or too old to attend. Women do not have to go to Jummah and instead may choose to pray at home.

The Ten Obligatory Acts of Shi’a Islam

Shahadah	Statement of faith
Salah (prayer)	5 prayers 3 x a day
Hajj	Pilgrimage
Zakah	Alms 2.5 %
Sawm	Fasting
khums	20% of surplus income
Jihad	The struggle to be a good Muslims
Amr-bil-Marooif	Encouraging people to do good
Nahil Anril Munkar	Discouraging bad actions
Tawalia	Duty to love friends of Allah
Tabarra	Disapproval of evil-doers

Differences between Sunni and Shi’a practices

Muslims only combine the five daily prayers if they have a good reason to, for example if they are travelling. Muslims have more freedom to combine certain prayers, such as the midday and afternoon prayers. Therefore they may only pray three times a day. Shi’a Muslims also often use natural elements when praying. For example, some place a piece of clay at the spot where their head will rest. The movements that Sunni and Shi’a Muslims make during prayer can also differ.

Id-ul-Adha

- The festival of sacrifice
- Most important festival
- Marks the end of Hajj.
- Remembers Ibrahim being prepared to sacrifice his son Ishma’il.
- New clothes, food presents, Id prayers at mosque, animal eaten

Id-ul-Fitr

- Festival of fast-breaking
- End of Ramadan (fasting)
- Feast, clothes, mosque for special sermon
- Zakah-ul-Fitr – special charity contribution
- Genoristy and gratitude

Ashura

- Most important to Shi’a – remembers when Husayn was killed (martyred)
- Sunni - Remembers when Allah saved the Israelites from Pharoah

Prayer

- Prepare – wudu (ritual cleansing)
- Times: Fajr, Zuhr, As’r, Maghrib and Isha
- Face Makkah
- Rak’ahs (prayer positions)

Why? –

- Feel close to Allah
- Shows submission
- Unites all Muslims
- Removes sins and temptation to do bad

Imam A religious leader within Islam.

For Sunnis he is an ordinary man. For Shi’as he is a holy figure.

Uses of the Mosque: -

- Place for worship
- Madrasah (mosque school)
- Library
- Place of study
- Shari’ah court
- Marriage bureau (to help people find potential wives/husbands)
- Community centre
- Zakah collection and distribution –
- Feeding the homeless



Reasons for war



- There are many reasons for war, often they are a combination of factors.
- **Greed:** ne country or people want what another has and tries to take it. Christians are against this as it breaks the Decalogue ‘Do not covet’ and it is against the Golden Rule.
- **Self-defence:** One country or people must defend themselves if attacked e.g. World War II. The Pope said that it is a duty to defend each other.
- **Retaliation:** One country is attacked and so they try to get back at the attackers e.g. war on terror in Afghanistan and Iraq after the Twin Towers attack. Religious groups are divided on this due to teachings such as ‘eye for an eye’ and ‘blessed are the peace makers’ which suggest different things.



- Other reasons can be social, political and moral (defending people who can’t defend themselves).

Terrorism



This is when a group of people use violence to get governments to give them what they want e.g. ISIS.

All religions think that terrorism is wrong as it is unjust and kills innocent people which goes against the Decalogue, ‘love your neighbour’ and the Golden Rule.



Religion as a cause of war

In the world today there is strong belief that religion causes war. This can be the case when you think of ISIS and the actions of the IRA in Ireland, however usually there is political motivation too. 93% of wars are caused by something other than religion e.g. wars in Syria and Libya was caused by oppression of the people by their leaders.

Others would argue that religion does cause conflict e.g. ISIS believe that traditional Islam is the correct religion that should be followed.

Weapons of mass destruction (WMD)

These are weapons which cause damage to people and the environment indiscriminately – they hurt anyone in their path regardless of whether they are a civilian or military. WMD are nuclear weapons, biological weapons or chemical weapons. Most people are against their use because they hurt innocent people and damage the environment. An example of the use of each weapon is:

- Nuclear: During WWII the US bombed Hiroshima in Japan killing thousands almost instantly
- Biological – 2001 anthrax was mailed to news media centres and senators killing 5 people
- Chemical – 1995 sarin gas was released during a terror attack on subway in Tokyo, Japan killing 12 people

Nuclear weapons

All religious people **are always against** their use due to ‘do not kill’, ‘love your neighbour’, the Golden Rule etc., they harm innocent people and bring suffering.

Some religious people may agree with having them **but not using them** as they act as a deterrent. This can prevent war as no-one would attack as it would mean mutually assured destruction.

Some people would argue that they are pointless as most countries will never use them so what’s the point in having them, they also are costly to build, replace and maintain.



Violent protest



Many Christians believe that violence is not the answer. People often get hurt which goes against “Do not kill, ‘love your neighbour’ and the Golden Rule. It also goes against St. Paul ‘Obey the State authorities’. Martin Luther King showed that non-violence works.

Others say that sometimes it is necessary as other ways don’t always work. Bonhoeffer used violence to try to kill Hitler as other methods just didn’t work. He said it was the ‘most loving thing’ and he was showing love to his neighbour.

Reconciliation

Forgiveness is very important in religion. If we expect God to be all loving then we should also be.



Corrie Ten Boom – Dutch girl who was captured by the Nazi’s and her family was killed. When giving talks on the Holocaust she met a SS guard who had guarded them in Ravensbrook Concentration Camp, as he held out his hand to shake her hand she fought with her emotions to refuse it but she decided that she should use agape and the example of Jesus I her actions and took his hand.

Eric Lomax – was captured and tortured by the Japanese during WWII. He learnt that the interpreter, Nagase had helped the Allies to locate the war dead. Lomax had said he would kill him if he ever saw him again, but he forgave Nagase when he said he was sorry.



Reasons for war

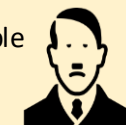
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Other reasons can be social, political and moral (defending people who can’t defend themselves).





Pacifism

This means people refusing to fight as a way to keep the peace. Many people think that not using violence is the best way to solve problems. People can protest, hold peace talks, countries can issue sanctions to force a country to behave. If people don't retaliate then it shows them to be the better person (as Martin Luther King did). Many would argue that **forgiveness** and **reconciliation** are better than violence as it allows people to move on and prevents war breaking out again, or continuing. Corrie Ten Boom and Eric Lomax are examples of people who forgave and reconciled with their enemy, both said it actually made them feel better.



Many Christians support pacifism as Jesus said “**Blessed are the peacemakers.**” Also, it follows the Decalogue “**Do not kill**” and Golden Rule etc. Keeping the peace prevents death and destruction which destroys God's creation. Forgiveness and reconciliation also follows ‘forgive not seven times but seventy times seven.’



War and violence

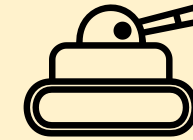
Some may argue that actually war is necessary, even though it is not liked, as it can lead to justice. At times war can be the ‘lesser of two evils’ e.g. if defending people such as in WWII. Sometimes a country has to fight back or seem weak which leads them open to further attack e.g. Britain had to fight for the Falklands

Some Christians think that war may be acceptable because in the Old Testament it teaches ‘**God is war**’ and there are many examples of God instructing people to fight in his name. The Just War Theory also allows war under certain conditions, and the Bible teaches ‘an eye for an eye’. The Qur'an teaches that Muslims who die in holy war will go to paradise. Jesus also said ‘**if you don't have a sword, sell your cloak and buy one.**’

The Just War Theory

Just means fair. This is a set of rules which tells Christians:

- a) When it's ok to go to war and be fair
- b) How to act when at war and be fair



It was created by St Aquinas as Christians were unsure how to follow Jesus' teachings about love yet live in a world where war was always around them. To be a Just war ALL rules need to be followed.

1. It must be declared by those in authority
2. There must be a just cause
3. There must be a reasonable chance of success
4. The intention behind the war must be good
5. All other ways of resolving the problem should have been tried first
6. The means used must be in proportion to the end that the war seeks to achieve
7. Innocent people must not be deliberately targeted
8. Only appropriate force can be used



Peace-making in the contemporary world

A non-religious organisation is the United Nations. This is a group of 193 countries who try to keep world peace through trade sanctions, diplomacy and their peace keeping army.

Pax Christi and Christian Aid both work for peace though using the millions of Christians worldwide to support each other. They try to stop causes of war through giving aid to troubled areas, they lobby governments to try to intervene, they give sermons on the need for peace etc.

Helping victims of war

All believers think that helping victims of war is good. These people are innocent and made ‘in the image of God.’ Jesus taught people to ‘**love their neighbour**’ and the Golden Rule. War causes suffering to people and the aim of Buddhism is to relieve suffering. Muslims follow the teaching ‘love your neighbour near and far’ and believe that everyone is a member of the ummah – the Muslim community.





AO phrases



On peut y + (verb)

One can + (verb) there

Si je pouvais, je voudrais...

If I could, I would like to...

Ce que (opinion) c'est que

What (opinion) is that

Qu'est-ce que vous me recommandez?

What do you recommend?

Je doute que ce soit

I doubt that it's

J'ai peur que ce soit

I'm afraid that it's

Je voudrais	être	professeur(e) de maths chef / cheffe de cuisine président(e) scientifique directeur / directrice d'entreprise	parce qu' car	il faut il ne faut pas il ne faut jamais	aimer... avoir... être... travailler...
Je veux					
Je vais					
Je ne voudrais pas Je ne veux pas Je ne vais pas					

The conditional tense

This tense refers to actions that you **would** do or how things **would** be. It's the tense most used when using your imagination.

The ending of the verb will change depending on who is doing the action.

Pronoun	Ending
Tu (you)	-ais
Il/elle/on (he/she/we)	-ait
Nous (we)	-ions
Vous (You formal/group)	-iez
Ils/Elles (they)	-aient

J'aime
Je n'aime pas
Ma matière préférée, c'est...

l'histoire.
les maths.
les sciences.

Je veux
Je ne veux pas
À l'avenir, je voudrais

aller à l'université.
faire un apprentissage de...
travailler / voyager.
gagner de l'argent.
être chanteur / chanteuse.
être médecin / professeur(e).
être footballeur / footballeuse
professionnel(le).
travailler dans un bureau.
travailler avec des enfants.
travailler avec des animaux.

Je fais un stage en	à	Londres / Birmingham. la réception / l'accueil.
	chez	Microsoft / mon oncle. un ami de mon père.
Je travaille	dans	une école / un refuge. une entreprise / une usine. un magasin. un restaurant / un hôtel.
	avec	des enfants / animaux.
Je m'occupe d'		enfants / animaux.
En ce moment, je suis en train de/d'		faire des photocopies. prendre des notes. répondre aux e-mails. recevoir des clients. nourrir les animaux. aider des personnes / jouer avec des enfants.



Être en train de means 'to be in the middle of' doing something, or doing something right now.

venir de means 'to have just' done something. Both are followed by another verb in the infinitive:

Je suis en train de travailler. I am in the middle of working.

Il est en train de jouer au foot.

He is playing football (right now).

Je viens de finir mes devoirs.

I have just finished my homework.

Il vient de manger.

He has just eaten.

Il y a means 'there is' or 'there are'.

Il y a un concert ce soir.

There is a concert this evening.

Il y a beaucoup de concerts. **There are** lots of concerts.

Il y aura means 'there will be'.

Il y aura un concert ce soir.
evening.

There will be a concert this

Il y aura beaucoup de concerts.

There will be lots of concerts.

<u>AO phrases</u>	<u>AO phrases</u>
Quand j'étais petit(e) j'adorais	J'ai dû + infinitive
When I was small, I used to love	= I had to ...
Auparavant, j'aimais	Je voulais + infinitive
In the past, I used to like...	= I wanted to ...
Si je pouvais, je voudrais...	Le pire c'était quand...
If I could, I would like...	The worst thing was when
Selon mon prof...	J'y suis allé(e)/resté(e)
According to my teacher	= I went/stayed there
Quand je peux, j'aime + infinitive	Quand je peux, j'aime + infinitive
= When I can, I like + infinitive	= When I can, I like + infinitive
J'ai toujours aimé/voulu + infinitive	J'ai toujours aimé/voulu + infinitive
I've always liked/wanted + infinitive	I've always liked/wanted + infinitive



Un problème environnemental qui m'inquiète, Ce qui m'inquiète,	c'est	la pollution de l'air. la déforestation. le réchauffement de la terre. la disparition des animaux. la fonte des glaciers. le plastique dans les océans.
Pour protéger l'environnement,	je voudrais je vais	planter des arbres. réduire ma consommation d'énergie. acheter des produits bio. recycler mes déchets. soutenir des associations écologiques.
		utiliser moins de plastique. des transports publics. des produits réutilisables.
Je (ne) voudrais (pas)		devenir végan(e). manger plus de légumes. découvrir de nouveaux aliments végans. essayer des recettes véganes.
Je crois que le véganisme		réduit la souffrance animale. peut améliorer notre/la santé. pourrait réduire mon empreinte carbone.

Là où j'habite,	il y a	des déchets dans les rues. trop de pollution.
	il n'y a	qu'un centre de recyclage.
		personne ne recycle.
		les usines produisent trop de gaz.
Le plus grand problème environnemental,	c'est	la pollution / les déchets dans les rues ... c'est que personne ne ... c'est qu'il n'y a qu'un ...
Pour améliorer l'environnement,	je vais on pourrait	planter des arbres. utiliser les transports en commun. obliger les gens à recycler. donner de l'argent aux associations écologiques.



AO1: Discuss issues, requests and topics spontaneously

AO1.1 - I can pose questions differently depending on formality	AO1.2 - I can express concerns that something is not available	AO1.3 - I can express there's a problem and request a solution	AO1.4 - I can give recommendations and solutions based on information given/known	AO1.5 - I can discuss an issue based on outsider information
Est-ce que vous aimez...?	il/elle/on manque de	Le problème qui me concerne le plus c'est	Selon _____ on doit...	Mon prof m'a montré en classe que...
Est-ce que tu aimes...?	J'ai besoin de il/elle/on a besoin de	J'ai un problème	Mon/ma _____ m'a dit qu'on devait...	_____ m'a expliqué le problème et je pense que...
Qu'est-ce que vous pensez de...?	Il n'y a plus de Il n'y a pas de	Pouvez-vous m'aider?	Mes amis m'ont dit qu'on devait...	J'ai fait des recherches et tout bien considéré...
Qu'est ce que tu penses de...?	On ne peut pas	Qu'est ce que tu me recommandes?	La recherche nous conseille de...	J'ai beaucoup réfléchi à propos de ce problème et...
Tu es d'accord? Vous êtes d'accord?	Il y a peu de	Qu'est ce que vous me conseillez?	Tout bien considéré, je te/vous conseille de	Après avoir lu la recherche, on ne peut pas nier que ce soit...



AO2: Describe events and the physical world around you

AO2.1- I can describe what i'm going to do using a future tense	AO2.2 - I can describe what I did in the past tense	AO2.3 - I can describe what I routinely do and compare it to past/future actions	AO2.4 - I can express doubt or uncertainty about actions	AO2.5 - I can narrate past events comfortably using the imperfect and perfect tenses
Je vais + [verb] Nous allons + [verb] Ça va être + [adj]	Je suis allé au/ à la/ aux + [building]	D'habitude j'aime + [verb] mais quand j'étais petit(e) je préfèrais + [verb]	Je doute qu'il/elle/ que ce soit + [adjective]	J'allais en ville quand mon ami m'a appelé au téléphone et m'a demandé si je voulais + [verb]
J'ai envie de + [verb] Je tiens à + [verb] Je veux + [verb]	Après avoir + [past participle] ...	Bien que j'adore + [verb] quand j'étais plus jeune j'adorais + [verb]	J'ai peur qu'il/elle que ce soit + [adjective]	Il faisait + [weather] donc je suis allé(e) + [location]
Si je pouvais, je voudrais + [verb]	Après être + [past participle]	D'habitude le lundi j'aime + [verb] mais la semaine prochaine je vais + [verb]	Je ne pense pas qu'il/elle que ce soit + [adjective]	Je regardais la télé lorsque + [passé composé action]
Si j'avais l'opportunité, j'aimerais + [verb]	J'ai décidé de + [verb]	Quand je peux, je préfère + [verb] mais demain je dois + [verb]	Je ne crois pas qu'il/elle que ce soit + [adjective]	Il n'y avait pas de + [noun] donc j'ai décidé de + [verb]
S'il fait + [weather] , je + [future verb]	Vu qu'il faisait + [weather] j'ai décidé de + [verb]	D'habitude,, + [present tense action] mais avant j'aimais + [verb]	Je crains que le problème soit très/assez + [adjective]	Dans le passé j'aimais + [verb] donc hier + [passé composé action]



AO3: Justify your thoughts, feelings and ideas

AO3.1 - I can use "so that" phrases to express my intentions	AO3.2 - I can compare how I feel now to how I used to feel about a situation	AO3.3 - I can justify my opinion by including the opinions of others	AO3.4 - I can explain how a past or future event influences my opinion	AO3.5 - I can use idioms effectively to sound more authentic and fluent
Pour + [verb]	Avant, je pensais que c'était + [adjective] mais maintenant je pense que c'est + [adjective]	[person] m'a dit que...	Après avoir + [past participle]	Ça coûte les yeux de la tête
afin de + [verb]		Selon + [person]	Après avoir fait des recherches...	Je vais mettre mon grain de sel + [opinion]
Car ça me permet de + [verb] Car ça m'aide à + [verb]	Quand j'étais petit(e) ça avait l'air + [adjective] mais maintenant je le trouve + [adjective]	[people/plural] m'ont dit que...	à la lumière des événements récents	C'est dommage que ce soit + [adjective]
Car je veux + [verb]		[person] toujours m'a dit que...	De peur que la situation s'empire...	Je saute du coq à l'âne mais [+ new topic]
Pour que je puisse + [verb]	Je le trouvais + [adjective] mais maintenant je le	il/elle me dit que...	Après avoir discuté + [noun] avec + [person]	Appelons un chat un chat + [opinion]



I can describe different jobs

Actor / Actriz	Azafato/a Auxiliar de vuelo	Arquitecto/a	Artista	Panadero/a	Albañil / Constructor
Carnicero/a	Cajero/a	Funcionario/a	Cocinero/a	Dentista / Odontólogo	
Diseñador/a	Médico/a	Conductor	Electricista	Ingeniero/a	Agricultor/a Granjero/a
Bombero/a	Periodista	Mecánico	Enfermero/a	Farmacéutico/a	
Fontanero/a	Agente/ Oficial de policía	Profesor/a	Técnico/a	Camarero/a	Peluquero/a

I can describe a part-time job

Repártir periódicos <i>Deliver papers</i>	Cuidar a niños <i>Care for children</i>	Trabajar de cajero <i>Work as cashier</i>	Servir comida y bebida <i>Serve food and drink</i>	Trabajar como socorrista <i>Work as a lifeguard</i>
Trabajo	<i>I work</i>	Antes del insti	<i>Before school</i>	
Lo hago	<i>I do it</i>	Después del insti	<i>After school</i>	
Los domingos	<i>On Sundays</i>	Cuando necesito dinero	<i>When I need money</i>	
Todos los días	<i>Every day</i>	Cuando mi madre está trabajando	<i>When my mum is working</i>	
En verano	<i>In summer</i>	Cuando me necesitan	<i>When they need me</i>	

Gano...	<i>I earn...</i>
Euros/libras	<i>Euros/pounds</i>
A la hora	<i>An hour</i>
A la semana	<i>a week</i>

Pasear al perro <i>Walk the dog</i>	Ser dependiente/a <i>Be sales assistant</i>	Lavar los coches <i>Work the cars</i>	Arreglar jardines <i>Sort out gardens</i>	Enseñar a personas mayores <i>Teach old people</i>

I can describe the chores at home

hacer de canguro <i>to babysit</i>	
	cocinar <i>to cook</i>
lavar los platos <i>to wash the dishes</i>	
	pasar la aspiradora <i>to pass the Hoover</i>
planchar la ropa <i>to iron clothes</i>	

	poner/quitar la mesa <i>to set/clear the table</i>
	pasear al perro <i>to walk the dog</i>
	cortar el césped <i>to cut the grass</i>

Limpiar la casa	<i>Clean the house</i>
Quitar la mesa	<i>Clear the table</i>
Planchar la ropa	<i>Iron clothes</i>
Fregar los platos	<i>Wash up the dishes</i>
Pasar la aspiradora	<i>Do the hoovering</i>
Arreglar mi habitación	<i>Sort out my room</i>

Lo hago...	<i>I do it...</i>
antes del insti	<i>before school</i>
después del insti	<i>after school</i>
cuando necesito dinero	<i>when i need money</i>
cuando necesita que le ayude	<i>when she needs me to help</i>
los miércoles	<i>on Wednesdays</i>
todos los días	<i>every day</i>
una vez a la semana	<i>once a week</i>



Year 11 – Spanish – Jobs and careers 2

I can describe a range of workplaces

en el extranjero <i>abroad</i>	la oficina de mi madre <i>my mum's office</i>	la comisaría <i>police station</i>
la granja <i>farm</i>	Trabajo en.... <i>I work in...</i>	el taller <i>garage</i>
la universidad <i>university</i>	Trabaja en... <i>S/He works in...</i>	agencia de viajes <i>travel agents</i>
la peluquería <i>Hairdresser's</i>	negocio/comercio <i>business</i>	el supermercado <i>supermarket</i>

I can describe a work experience

Tengo que.... <i>I have to...</i>	Suelo... <i>I usually...</i>
Tiene que... <i>S/He has to...</i>	Suele... <i>S/He usually...</i>
Tenemos que... <i>We have to...</i>	Solemos... <i>We usually...</i>

I can describe and explain the benefits of learning languages

Los idiomas <i>Languages</i>	<i>Languages</i>
Las lenguas <i>Languages</i>	<i>Languages</i>
Vivimos en una sociedad global <i>We live in a global society</i>	<i>We live in a global society</i>
Aprender otro idioma es importante para.... <i>Learning another language is important to</i>	<i>Learning another language is important to</i>

Mejorar tu carrera <i>Improve your career</i>	Conseguir un trabajo más fácilmente <i>Find a job more easily</i>	Obtener un mejor salario <i>Get a better salary</i>	Trabajar como traductor <i>Work as a translator</i>	Disfrutar mejor tus viajes <i>Enjoy your trips more</i>
--	--	--	--	--

Porque - because			
Estimula el cerebro	<i>It stimulates the brain</i>	Te abre la mente	<i>It opens your mind</i>
Te hace parecer más atractivo	<i>It makes you appear more attractive</i>	Mejorar tu lengua materna	<i>Improve your first language</i>
Comunicarte mejor en otros países <i>Communicate better in other countries</i>	Entender más del mundo <i>Understand more of the world</i>	Conocer más gente <i>Get to know more people</i>	Mejorar tu memoria <i>Improve your memory</i>
Aumentar tu confianza <i>Increase your confidence</i>			

I can describe my aspirations and explain why

Cuando sea mayor
When I am older


Cuando termine la educación
When I finish education










Cuando vaya a la universidad
When I go to university





Trabajaré como	<i>I'll work as</i>	Seré rico/a	<i>I'll be rich</i>	
Ganaré la lotería	<i>I'll win the lottery</i>	Viajaré mucho	<i>I'll travel a lot</i>	
Me casaré	<i>I'll get married</i>	Tendré hijos	<i>I'll have children</i>	
porque <i>because</i>	ya que <i>because</i>	dado que <i>given that</i>		
es un campo en el que me gustaría trabajar <i>it's a field in which I'd like to work</i>	quiero tener mi propia familia <i>I want to have my own family</i>	me importa el éxito <i>success is important to me</i>		
me encanta visitar nuevos lugares <i>I love to visit new places</i>	quiero comprar nueva ropa <i>I want to buy new clothes</i>	me interesa el conocimiento <i>knowledge interests me</i>		



I can describe environmental issues

	El medio ambiente	<i>The environment</i>
	Los problemas medioambientales	<i>Environmental problems</i>
	El problema más grave	<i>The most serious problem</i>

				
La destrucción de la selva tropical <i>Destruction of the rainforest</i>	La destrucción de la capa de ozono <i>Destruction of ozone layer</i>	El cambio climático <i>Climate change</i>	El calentamiento global <i>Global warming</i>	
				
La basura <i>Rubbish</i>	Los terremotos <i>Earthquakes</i>	El planeta <i>The planet</i>	Las inundaciones <i>Flooding</i>	La contaminación <i>Pollution</i>


			
El aumento de las sequías <i>Increase in droughts</i>	Las especies en peligro de extinción <i>Species in danger of extinction</i>	La falta de recursos naturales <i>Lack of natural resources</i>	La contaminación de los océanos <i>Pollution of the oceans</i>


I can describe different global issues













Los problemas globales	<i>Global problems</i>
Me preocupa (n)	<i>I'm worried about</i>
El mayor problema global es	<i>The greatest global problem is</i>







I can recommend ways on how to support the environment

	Proteger el medio ambiente	<i>Protect the environment</i>
	Para salvar nuestro planeta	<i>To save our planet</i>
	Se debe	<i>You must</i>
	No se debe	<i>You must not</i>

	En mi ciudad	<i>In my city</i>
	Hay demasiada	<i>There is/are too many/much</i>
	Basura en las calles	<i>Rubbish in the streets</i>
	Gente sin espacio para vivir	<i>People with nowhere to live</i>
	Destrucción de los bosques	<i>Destruction of the forests</i>
	Polución de los mares y ríos	<i>Pollution of the seas and rivers</i>

Es necesario que <i>It is necessary that</i>	Es importante que <i>It is important that</i>	Es increíble que <i>It is incredible that</i>		
<i>Followed by verbs conjugated in the present subjunctive</i>				
AR	ER/IR			
1 E	A			
2 ES	AS			
3 E	A			
4 EMOS	AMOS	Evitar <i>Avoid</i>		
5 ÉIS	ÁIS	Correr el riesgo de <i>Run the risk of</i>		
6 EN	AN	Aumentar <i>Increase</i>		
				
Reducir <i>Reduce</i>	Malgastar <i>Waste</i>	Dedicarse a <i>Devote time to</i>	Intentar <i>Try to</i>	Lograr <i>Achieve</i>
				
Ocuparse de <i>Concerned with</i>	Ponerse a <i>Start</i>	Quejarse de <i>Complain about</i>	Usar <i>Use</i>	

Para In order to	Limpiar las calles <i>Clean the streets</i>		Reducir la contaminación <i>Reduce pollution</i>	
	Proteger el medio ambiente <i>Protect the environment</i>		Luchar contra el calentamiento global <i>Fight against global warming</i>	
Commands				
Negative – Present subjunctive, all lines		Positive – Present subjunctive, 3rd line		
No corte tantos árboles <i>Don't cut down so many trees</i>	No vaya en coche a todos los lugares <i>Don't go by car to everywhere</i>	Plante más bosques y selvas <i>Plant more woods and forests</i>	Introduzca leyes más estrictas <i>Introduce stricter laws</i>	
No tire basura al suelo <i>Don't throw rubbish on the ground</i>	No malgaste energía <i>Don't waste energy</i>	Reduzca las emisiones de los vehículos <i>Reduce vehicle emissions</i>	Use energías renovables <i>Use renewable energy</i>	
No construya tantas casas <i>Don't build too many houses</i>	No eche desechos químicos <i>Don't release chemical waste</i>	Recicle el papel y el vidrio <i>Recycle paper and glass</i>	Diseñe casas más pequeñas <i>Design smaller houses</i>	

AO phrases

(people/plural) opinan que...

(people/plural) think that...

Al escuchar lo que dice la gente, ...

When listening to what people say, ...

Lo malo/peor es ...

The bad/worst thing is ...


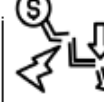
El problema más serio es...



The most serious problem is...

Lo que me preocupa más es

What worries me the most is

				
La guerra <i>War</i>	La pobreza <i>Poverty</i>	El paro <i>Unemployment</i>	El hambre <i>Hunger</i>	La deforestación <i>Deforestation</i>

				
La drogadicción <i>Drug addiction</i>	La salud <i>Health</i>	La obesidad <i>Obesity</i>	La crisis económica <i>Economic crisis</i>	Los ninis <i>No studies, no work</i>

				
Los desastres naturales <i>Natural disasters</i>	La falta de agua potable <i>Lack of drinking water</i>	El hambre mundial <i>World hunger</i>	Los derechos humanos <i>Human rights</i>	Los sin hogar / techo <i>The homeless</i>



I can describe solutions for global issues



Desde mi punto de vista	<i>From my point of view</i>
Creo que	<i>I believe that</i>
Me parece que	<i>It seems to me that</i>

Es necesario que <i>It is necessary that</i>	Es importante que <i>It is important that</i>	Es increíble que <i>It is incredible that</i>
<i>Followed by verbs conjugated in the present subjunctive</i>		
AR	ER/IR	
1 E	A	
2 ES	AS	
3 E	A	
4 EMOS	AMOS	Cuidar el planeta <i>Look after the planet</i>
5 ÉIS	ÁIS	Hacer proyectos de conservación <i>Do conservation projects</i>
6 EN	AN	Usar productos de comercio justo <i>Use fair trade products</i>

Apoyar proyectos de ayudar <i>Support aid projects</i>	Crear oportunidades de trabajo <i>Create work opportunities</i>	Cambiar la ley <i>Change the law</i>	Recaudar dinero <i>Raise money</i>	Hacer campañas publicitarias <i>Do publicity campaigns</i>
No es justo que haya <i>It is not fair that</i>	tanta desigualdad social <i>so much social inequality</i>	tanta contaminación <i>so much pollution</i>	tanta gente sin trabajo <i>so many people without a job</i>	
Es terrible que haya <i>It is terrible that</i>	tanta gente sin techo <i>so many people homeless</i>	tanta gente obesa <i>so many obese people</i>	tantos drogadictos <i>so many drug addicts</i>	

I can recommend ways on how to support after a natural disaster

Los desastres naturales	<i>Natural disaster</i>
Ocurrió	<i>It happened/occurred</i>

		Compartir <i>To share</i>	Darse cuenta de <i>To realise</i>	Enseñar <i>To teach</i>	Investigar <i>To research</i>
El temblor <i>Tremor</i>		Mostrar <i>To show</i>	Notar <i>To note</i>	Parar <i>To stop</i>	Tratar de <i>To try to</i>
El incendio forestal <i>Forest fire</i>	El terremoto <i>Earthquake</i>	Una organización de servicio voluntario <i>A voluntary organisation</i>	Una campaña para las víctimas <i>A campaign for the victims</i>	Recaudar fondos <i>Raise funds</i>	Solicitar donativos <i>Ask for donations</i>
El huracán <i>Hurricane</i>	La tormenta de nieve <i>Snow storm</i>	Una caja de supervivencia <i>A survival box</i>	Un concierto <i>A concert</i>	Organizar algunos eventos <i>Organise some events</i>	
El tornado <i>Tornado</i>	La acción humanitaria <i>Humanitarian campaign</i>	Las inundaciones <i>Floods</i>			

		Ser solidario <i>Showing solidarity</i>
Un espectáculo de baile <i>A dance show</i>	Una carrera de bici apadrinada <i>A sponsored bike race</i>	
		Te hace sentir más conectado <i>It makes you feel more connected</i>
Una ventana de pasteles <i>A cake sale</i>	Un lavado de autos <i>A car wash</i>	

I can describe ways to lead a healthy lifestyle

	Para llevar una vida sana <i>To have a healthy lifestyle</i>
	Llevar una dieta sana <i>To have a healthy diet</i>
	Para estar en forma <i>To keep fit/in shape</i>
	Llevar una dieta equilibrada <i>To have a balanced diet</i>
	Se debe <i>You must</i>
	No se debe <i>You must not</i>

Evitar comer comida basura <i>Avoid eating rubbish food</i>	Evitar beber alcohol <i>Avoid drinking alcohol</i>	Cambiar la dieta <i>Change diet</i>	Preparar con ingredientes frescos <i>Prepare with fresh ingredients</i>
Dormir ocho horas al día <i>Sleep for eight hours a day</i>	Hacer ejercicio cada día <i>Do exercise every day</i>	Entrenar una hora al día <i>Train an hour a day</i>	Fumar <i>Smoke</i>

Voy a	<i>I am going to</i>
Quisiera	<i>I would like to</i>
Tengo la intención de	<i>I have plans to</i>
Tendré que	<i>I will have to</i>





I can describe meal times and eating habits

Normalmente	Normally
Entre semana	During the week
De postre	For dessert
Por la mañana	In the morning
Por la noche	In the evening



desayunar	to have... for breakfast
comer / almorzar	to have... for lunch
merendar	to have... for tea
cenar	to have... for dinner
tomar	to have (food/drink)























algo ligero, como...	something light, like...
algo muy rápido	something very quick
algo dulce	something sweet
soy muy goloso/a	i have a sweet tooth
tengo mucha hambre	i'm very hungry
tengo mucha prisa	i'm in sch a hurry


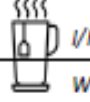






I can describe types of food

I can describe types of food

				
(los) cereales cereals	(los) churros fried doughnut sticks	(las) galletas biscuits	(las) petatas fritas chips	(las) tostadas toasts
				
un huevo an egg	un yogur a yogurt	un pastel a cake	un bocadillo a sandwich	una hamburguesa a hamburger
				
(el) marisco seafood	(el) pescado fish	(el) pollo chicken	(la) carne meat	(la) ensalada salad
				
(la) fruta fruit	(la) tortilla Spanish omelette	(las) verduras vegetables	(la) paella Spanish rice dish	(la) sopa soup
				
(el) café coffee	(el) té tea	(el) chocolate caliente Hot chocolate	(el) zumo de naranja Orange juice	(la) leche milk

I can compare my diet across three tenses

Antes	Before		Cuando era joven	When I was younger
Siempre	Always		Nunca	Never
Comía		I/He used to eat	Comía de todo	I ate everything
Bebíamos		We used to drink	No engordaba	I didn't get fat
Solía comer		I/He used to eat	Tenía energía	I had energy
Solíamos beber		We used to drink	Hacía ejercicio	I did exercise
				
Ahora	Now		Hoy en día	Nowadays
Normalmente	Normally		Cada día	Each day
Suelo comer		I usually eat	Tengo energía	I have energy
Solemos beber		We tend to drink	Tengo sueño	I am tired
Como		I eat	Tengo hambre	I am hungry
Bebemos		We drink	Tengo sed	I am thirsty
Desayuno		I have breakfast	Me engorda	it makes me fat
				
En el futuro	In the future		La semana que viene	Next week
Pasado mañana	Day after tomorrow		Cuando sea mayor	When I am older
Voy a comer		I'm going to eat	Quiero practicar más deporte	I want to do more sport
Vamos a beber		We're going to drink	No quiero engordar	I don't want to get fat
Comeré		I will eat	Quiero perder peso	I want to lose weight
Bebéremos		We will drink		
Desayunaré		I'll have breakfast		
				



I can describe different Hispanic Festivals

La fiesta de...	The festival of...
Esta tradición antigua...	This old tradition...
se caracteriza por...	is characterised by...
se celebra en...	is celebrated in...
se repite...	is repeated



se queman figuras de madera	wooden figures are burnt
se construyen hogueras	bonfires are built
se disparan juegos artificiales	fireworks are set off
se lanzan huevos	eggs are thrown
Las calles se llenan de...	The streets are filled with...



los niños / los jóvenes...	children / young people...
los parientes / las familias...	relatives / families
comen manzanas de caramelo	eat toffee apples
decoran las casas / las tumbas	decorate houses / graves
con flores / velas	with flowers / candles
preparan linternas / altares	prepare lanterns / altars
se disfrazan de brujas / fantasmas	dress up as witches / ghosts
ven desfiles	watch processions

I can narrate a past celebration

I can describe a range of special days/events

Ayer fue...	Yesterday was...
el baile de fin de curso	The school prom
el Día de Navidad	Christmas Day
el Domingo de Pascua	Easter Sunday
el Día de San Valentín	Valentine's Day
la Nochebuena	Christmas Eve
la Nochevieja	New Year's Eve
mi cumpleaños	my birthday
el Día de la madre	Mother's Day
Año Nuevo	New Year's Day



Fue...	It was...		
estupendo	amazing	divertido	fun
genial	great	aburrido	boring
increíble	incredible	estresante	stressful
inolvidable	unforgettable	agotador	exhausting

abrimos los regalos	we opened presents	
buscamos huevos de chocolate	we looked for chocolate eggs	
cantamos villancicos	we sang Christmas carols	
comimos dulces navideños / doce uvas	we ate Christmas sweets / twelve grapes	
nos acostamos muy tarde	we went to bed very late	
nos levantamos muy temprano	we got up very early	
rezamos	we prayed	
fuimos a la mezquita / iglesia	we went to the mosque / church	
me bañé y luego me maquillé	I had a bath and then did my make up	

I ask and respond to questions in a Spanish restaurant

I can ask questions and answers for a role play in a restaurant.



¿Qué va a tomar...
What are you going to have...

de primer plato?
for starter?

de segundo plato?
for main course?

de postre?
for dessert?

para beber?
to drink?

Voy a tomar...
I'm going to have...



el filete de cerdo pork fillet	jamón serrano Serrano ham	merluza en salsa verde hake in parsley and wine sauce
sopa de fideos noodle soup	croquetas caseras homemade croquettes	tortilla de espinacas spinach omelette
trucha a la plancha grilled trout	natillas custard	chuletas de cordero asadas roast lamb chops

¿Qué me recomienda?
What do you recommend?

El menú del día – The set menu

La especialidad de la casa – The house speciality

Está riquísimo/a – It's extremely tasty



¿Algo más?
Anything else?

Nada más, gracias

Nothing else, thank you

Soy vegetariano/a – alérgico/a a...

I'm vegetarian – allergic to...

¡Que aproveche!

Enjoy your meal!

¿Me trae la cuenta, por favor?

Can you bring me the bill, please?

Dejar una propina

To leave a tip

Equivocarse / pedir

To make a mistake / to order



A01: Discuss issues, requests and topics spontaneously

AO1.1 - I can pose questions	AO1.2 - I can express concerns that something is not available	AO1.3 - I can extend my sentences with details and examples	AO1.4 - I can express there's a main problem	AO1.5 - I can suggest or pass on recommendation from others
¿Cuáles son las ventajas y desventajas de....?	Es una pena que no haya [noun] / no fuera [adjective]	Como si esto fuera poco	Lo peor es que	Si yo fuera [noun/adj] me gustaría [verb]
¿Qué se puede + [verb] ?	Ojalá hubiera+ [noun] Ojalá fuera+ [adjective]	Para colmo de males	Lo malo es que	Si pudiera, me gustaría [verb]
¿Cómo es + [noun] ?	No hay + [noun] Ya no hay + [noun]	O sea	El problema más serio es que	Según... hace falta más/menos [noun]
¿Cuál es tu opinión de [noun/verb]	No se puede + [verb]	Por ejemplo	Lo que me preocupa más es que	Mis _____ piensan que necesitamos más/menos [noun]
¿Qué hay en [noun]?	Hay poco/a [noun]	tal como	Lo que me molesta es que	Mi _____ dice que

A02: Describe events and the physical world around you

AO2.1- I can describe a place, an event, a person	AO2.1 can express preferences over time	AO2.3- I can compare what used to be and describe what I routinely do	AO2.4 - I can narrate past events comfortably using the imperfect and imperfect progressive	AO2.5 - I can express doubt or uncertainty about actions
Lo mejor de [noun] es que	Si pudiera elegir, me gustaría + [verb]	Cuando era pequeño/a me gustaba + [verb/noun] pero ahora prefiero + [verb/noun]	Estaba estudiando, cuando mi amigo me llamó para [verb]	No pienso que haga falta + [noun]
Lo bueno de [noun] es que	Voy a + [verb] Vamos a + [verb] Va a ser+ [adjective]	Aunque ahora no tengo mucho tiempo libre, antes solía + [verb]	Estaba yendo a + [location], cuando +empezó a [weather] entonces decidí + [verb]	No creo que sea (tan/muy) + [adjective]
Es famoso/a conocido/a por + [noun]	Si tuviera la oportunidad, me gustaría + [verb]	En general me mola + [verb] pero este fin de semana voy a+ + [verb]	Empezó a +[weather], entonces fui a [location] para + [verb]	Dudo que sea + [adjective]
Se puede + [verb]	Mi sueño es de + [verb]	Cuando puedo, suelo + [verb] pero lo que prefiero de verdad es [verb]	Como no podía + [verb] entonces decidí + [verb]	Tal vez sería mejor con más/menos sin [noun]
Hay/tiene + [noun]	Quiero + [verb]	Aunque no sea + [adjective], suelo + [verb]	En el pasado me gustaba + [verb] entonces ayer fui + [verb]	A lo mejor
Es+ [adjective]				

A03: Justify your thoughts, feelings and ideas

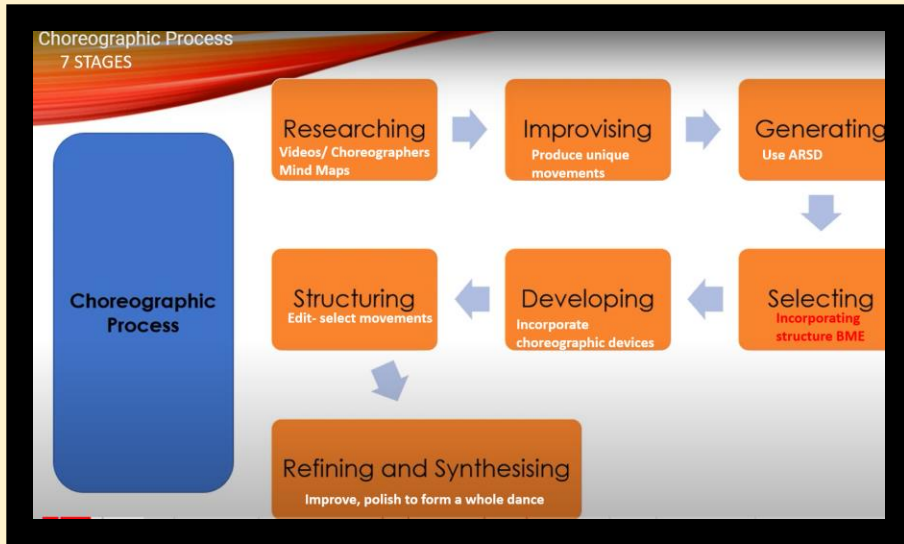
AO3.1 - I can use "so that" phrases to express my intentions	AO3.2 - I can compare how I feel now to how I used to feel	AO3.3 - I can justify my opinion based on the opinions of others	AO3.4 - I can justify how a past or future event influences my opinion	AO3.5 - I can use idioms effectively to sound more authentic and fluent
Para + [verb]	Si me hubiera preguntado hace 5 años, hubiera dicho que [noun/verb] era + adjective pero ahora diría que + [verb]	Al escuchar lo que dice la gente en general,	Después de haber considerado lo bueno y lo malo de [noun] diría que	¡Nadie está contento con su suerte!
Me ayuda a + [verb]	Siempre/nunca pensé que la idea de [verb] me habría gustado, sin embargo, ahora pienso que [verb]	En vista de la opinión general,	Considerando mis planes para el futuro,	¡Vale la pena!
me permite + [verb]	Antes me gustaba mucho + [verb] pero desde poco me interesa más + [verb]	[people/plural] opinan que....	Teniendo esto en cuenta	Sueño con + [verb / noun] pero ¡No hay tutial!
Si quiero + [verb]	Si pudiera elegir me gustaría + [verb]	[person] siempre dice que	Como ya he mencionado	¡Qué será será!
Si necesito + [verb]	Siempre me ha gustado la idea de [verb]	Según+ [person]	Que yo sepa	¡El tiempo lo dirá!



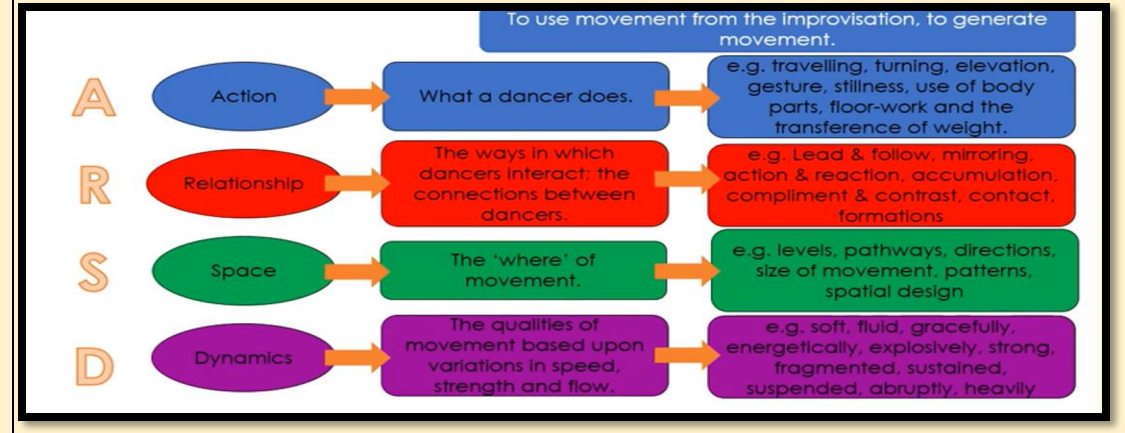
WJEC Level ½ Vocational Award in Performing Arts – Dance (Technical Award)

Unit 2 Creating 60 Marks

For this unit you will receive a stimulus from the exam board, and you will need to create a piece of original work to this. You are allowed to work individually or as part of a group. You will develop your choreography skills and the choreographic process.



Actions Relationships Space Dynamics



Choreographic devices

- Motif and development
- Repetition
- Contrast
- Highlight
- Climax
- Unison
- Canon
- Retrograde



Communication

- Intention
- Mood
- Meaning
- Ideas
- Theme
- Style / fusion

Effects on choreography outcomes

- Mood and atmosphere
- Structure
- Relationship to theme /idea
- Contrast and variety



STIMULUS – Starting point for a dance piece.

VISUAL - what we see

AUDITORY – what we hear

KINAESTHETIC - movement

TACTILE - what we touch

IDEATIONAL - ideas





Year 11 – Dance – Key Vocabulary

INSTRUMENTATION: Performing the same actions as the motif but with a different body part.



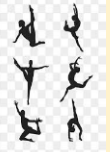
FACIAL EXPRESSION: Using your face to show how a character is feeling.



RE-ORDER: Changing the order of the actions within your motif.



ELEMENTS OF DANCE: The Actions, space, dynamics and relationships.



ADDING EXTRA ACTIONS: Adding extra actions into the motif.



NARRATIVE: Dance that tells a story.



REPETITION: Repeating the actions on the same or other side of the body.



SPATIAL AWARENESS: Consciousness of the surrounding space and its effective use.



RETROGRADE: Performing the whole motif backward.



LEAD AND FOLLOW: In a group dance, one dancer will lead the movement while the rest of the dancers follow.



CLIMAX: The focal point of the dance.



PATTERNS: A repeated design traced in space (on the floor or in the air).



CHOREOGRAPHIC INTENTION: The aim of the dance; what the choreographer aims to communicate.



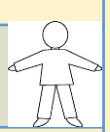
ISOLATIONS: An independent movement of part of the body.



CONTRAST: Movements or shapes that have nothing in common.



DYNAMICS: The HOW, the qualities of movement based upon variations in speed, strength and flow.



STRUCTURE: The way in which material is organised to create the whole.



ARTTISTIC INTENTION: The aim of a dance; what the choreographer aims to communicate.





Unit 3: For this unit you will receive a brief from the exam board and respond by planning an event which you will pitch to a panel. You will need to consider how to schedule, budget and promote your event. You will need to work with a variety of people to enable your performance to succeed. You will use extracts of practical examples and evaluate how successful you have been

Year 11 – Dance – Job roles and responsibilities

JOB ROLES & RESPONSIBILITIES

Creative roles

Director- their role is to organise the whole show.

Choreographer- their role is to create original dance routines.

Costume makeup- their role is to design the costume and makeup which suit the performance. They need to work with director and choreographer to create the mood by costume and makeup.

Stage designer- their role is to create and design how the background of the stage is. They need to cooperate with the director and choreography and try to satisfy the setting.

Lighting designer- their role is to design the lighting in the show. It is important because the colour could impact the atmosphere of the performance.

Performers- people who perform in the shows such as singing, drama, dance to entertain audience.

Musician- someone who play instrument or sing in to entertain audience.

Prop designer and maker- their roles is to design and create all props for the performance.



Production roles

Producer- their role researches funding and investment to finance a production. They also supervise the creation and performance. They work directly with the director, creative team and performers and the technical and stage management.

Stage manager- they will look after the whole team on the stage. They assist the director during rehearsals and supervise the lighting, costume and set.

Lighting designer/ technician- they design and oversee the lighting. They work directly with the director, choreographer, set designers, costume designers and sound designers.

Sound designer/ technician- their role is to manage and create the music, sound effect to create the correct atmosphere to fit the narrative. They work directly with the musical director, composer and live musicians.

Stage Crew- a group of people also known as stagehands who work behind the scenes during the show to ensure that scene changes are carried out at the correct time.

Customer service roles

Theatre manager- oversees the day-to-day operations and management of a venue. They deal with administrative and production-related aspects of a theatre.

Box office staff- they sell the ticket in the box office or online. They must communicate with the administration team for the price of the ticket.

Usher- They also are responsible to greet people and guide people to their seat. They need to sell some refreshments or program to audience.

Front of house - their role is to look after the audience customer service and auditorium, they sell food and drink for audience. They are responsible to cope problem with the customer.



Administration roles

Social media manager- their role is to promote the show in social platform such as Skiddle, ticket master and Face Book. They need to plan the strategies on reaching the public

Marketing- A Theatre Marketer is part of a team who focuses on the advertising of a production and encourages customers to buy tickets for a show. They will promote a theatre/production through social media, television, print and radio to inform and encourage the public.

Accountant- their role is to calculate the finances such as checking the income, spending and profit.

Stage door team- A Stage Door is the main entry point for performers, staff, and sometimes visitors who are not part of the general audience. The Stage Door team, Keeper or Operator will be the person who ensures the smooth running of this space.

HR's resource-their role is to look after the employees' progress and welfare.

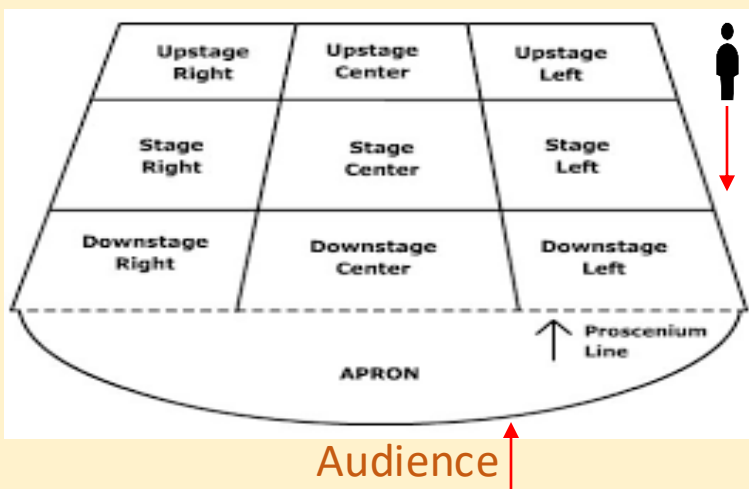
Licensing Manager- their role is to ensure that we got the permission to use the music script copy write.



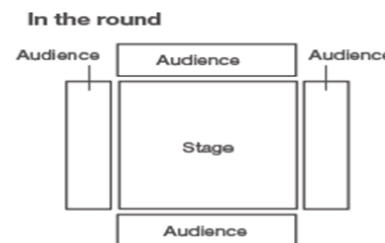
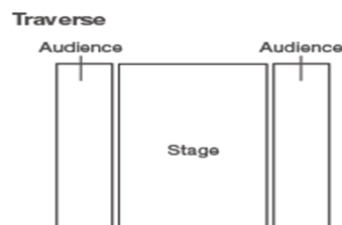
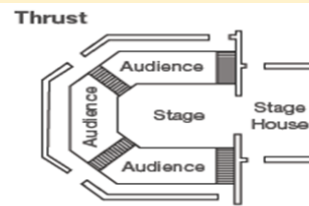
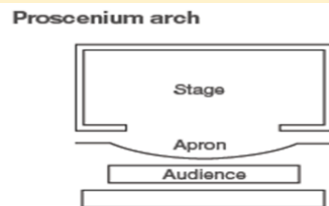
The aims of this unit are:
 To pitch analysed ideas
 To create devised Drama from stimuli

Vocal skills	Physical skills
TONE: How you show the emotion of a character.	FACIAL EXPRESSION: Using your face to show how a character is feeling.
PACE: The speed that you speak at	POSTURE: The way that you stand with the focus on the alignment of your back.
PITCH: How high or low your voice is.	GESTURE: A movement (of the head, arm, hand, leg or foot which communicates a specific meaning.
PAUSE: A break in speaking; a period of silence.	GAIT: The way that you walk.
VOLUME: The loudness or quietness of your voice.	Body language: Includes posture, stance and the placement of the arms to convey a character's feelings or personality.
ACCENT: The way you show what country or region a character is from by their use of vocabulary and the way they pronounce words.	EYE CONTACT: Choosing to look at a specific performer, object, audience member or direction.
PROJECTION: The amount of tension in your voice. This is not the same as volume – you can have large vocal power at a low volume.	Movement: The way that a character moves their head, body, arms and legs.
ARTICULATION: The way that you pronounce each letter in a word. If using a high level of articulation, you would pronounce every letter in every word. abcde...	CONTROL: Being able to execute a specific and precise movement
INTONATION: the rise and fall of the voice in speaking.	TENSION: How tightly you are holding your muscles.

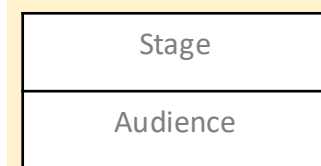
Stage positioning



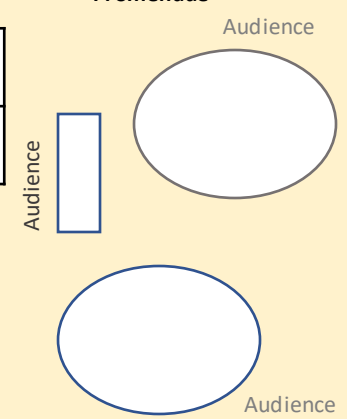
Staging configurations



End on



Promenade





Year 11 GCSE Drama – Component 1

Key terminology (Part 1)

Elements of Drama

Forms that make the story dramatic

- Dramatic tension
- Atmosphere and Mood
- Relationships between characters
- Character
- Form
- Style
- Language
- Sub-text
- Character motivation and interaction
- Pace and rhythm
- Dramatic climax and anti climax
- Stage directions
- Space
- Structure

Roles

Jobs within professional theatres

- playwright
- performer
- understudy
- lighting designer
- sound designer
- set designer
- costume designer
- puppet designer
- technician
- director
- stage manager
- theatre manager

Styles

Ways to convey the forms

- Naturalism
- Realism
- Expressionism
- Absurdity and surrealism
- Epic Theatre
- Political Theatre
- Melodrama
- Theatre of cruelty
- Physical Theatre
- Poor Theatre
- Immersive Theatre
- Forum Theatre
- Theatre in education (TiE)

Drama mediums

Theatral forms to help communicate meaning

- costume
- Masks
- Make-up
- Space and spatial relationships on stage
- Actor and audience configuration
- Relationships between performers an audience
- Hair and make-up
- music and sound
 - lighting
 - set
 - props
- Physical skills: movement, mime and gesture, posture, body language, gait
- voice skills: tone, pitch, pace, volume, intonation, accent
- Language

Explorative Strategies

Ways of exploring character/text/stimuli

- Thought tracking
- Conscience Tunnel
- Hot seating
- Role on the wall
- Forum Theatre
- Lecoq's seven states of tension
- Stanislavski's Magic if
- Stanislavski's Emotion Memory
- Stanislavski's Given Circumstances
- Stanislavski's Units and Objectives

Performance conventions

Ways of telling the story on stage

- Aside
- Drama Conventions
 - Slow motion
 - Soliloquy
 - Narration
- breaking into song
 - Chorus
- Cross cutting
 - Placards
 - Multi-role
- music underscore
- Marking the moment

Genre

Different types of play-texts

- Comedy
- Tragedy
- Melodrama
- Farce
- Tragicomedy
- Morality Play
- Theatre of the absurd
- Play
- Opera

Form

Categories for theatre performances

- Comedy
- Tragedy
- Melodrama
- Drama
- Farce
- Musical



Context	Practitioners	Connectives	Rehearsal techniques
<p>The context is all the information about when the play was written, including:</p> <ul style="list-style-type: none"> • The writer • The year the play was written • <i>When and where</i> it is set • Theatrical conventions during the time the play was set <p>The three contexts include:</p> <ul style="list-style-type: none"> • Social – the behaviours and attitudes of those that attended the theatre during the time the play was written. • Historical – Major historical events that impacted people that attended the theatre during the time the play was written. • Cultural - Beliefs, practices and lifestyle of those that attended the theatre during the time the play was written. • 	<p>Konstantin Stanislavski Style of theatre: Realism – portraying real life on stage</p> <ul style="list-style-type: none"> • Realistic setting, lighting and costume. • Chronological timeline. • Symbolism – using objects that represent something. <p>https://www.youtube.com/watch?v=ALzXCZlqodo</p> <p>Bertolt Brecht Style of theatre: Epic - drawing the audience's attention to the technical aspect of theatre</p> <ul style="list-style-type: none"> • Non-linear structure • Placards – additional messages • Montage <p>https://www.youtube.com/watch?v=AXCUBqtZySs</p> <p>Antonin Artaud Theatre of cruelty – freeing individual's subconsciousness by shocking them out of suppression</p> <ul style="list-style-type: none"> • Actor/audience relationship • pulsating lighting effects (sensory) • Symbolism <p>https://www.youtube.com/watch?v=Vvcg5YgvG3M</p>	<p>Adding: and, also, as well as, moreover, furthermore, besides, in addition.</p> <p>Cause and effect: because, so, therefore, thus, consequently, as a result of.</p> <p>Sequencing: next, then, first, second,.... finally, meanwhile, after.</p> <p>Comparing: equally, in the same way, like, similarly, likewise, as with, as compared with.</p> <p>Contrasting: whereas, instead of, alternatively, otherwise, unlike, on the other hand, in contrast.</p> <p>Qualifying: however, although, unless, except, if, as long as, apart from, yet, despite.</p> <p>Emphasising: above all, in particular, especially, significantly, indeed, notably, most of all.</p> <p>Illustrating: for example, such as, for instance, as revealed by, in the case of, as shown by.</p>	<ul style="list-style-type: none"> • Thought tracking • Off text improvisation • Conscience Tunnel • Hot seating • Role on the wall • Peer review • Speed run • Mime • Freeze frames • Status exercises • Forum Theatre • Lecoq's seven states of tension • Stanislavski's Magic if • Stanislavski's Emotion Memory • Stanislavski's Given Circumstances • Stanislavski's Units and Objectives • Brecht's gestic exploration • Artaud's Theatre of cruelty – lighting and sound



Blood Brothers (Set-text) – 4 questions

Year 11 – Drama – Component 1

Synopsis – Blood Brothers revolves around twin boys (Mickey and Edward) who are separated at birth and brought up in completely different environments in the city. The play, set in the 1960s, is divided into two acts, with songs throughout. Whilst the narrator comments on the action, predicting the fatal end.



Context summary

Writer: Willy Russell

Year: 1981

When and where: 1960s – 1980s, Liverpool

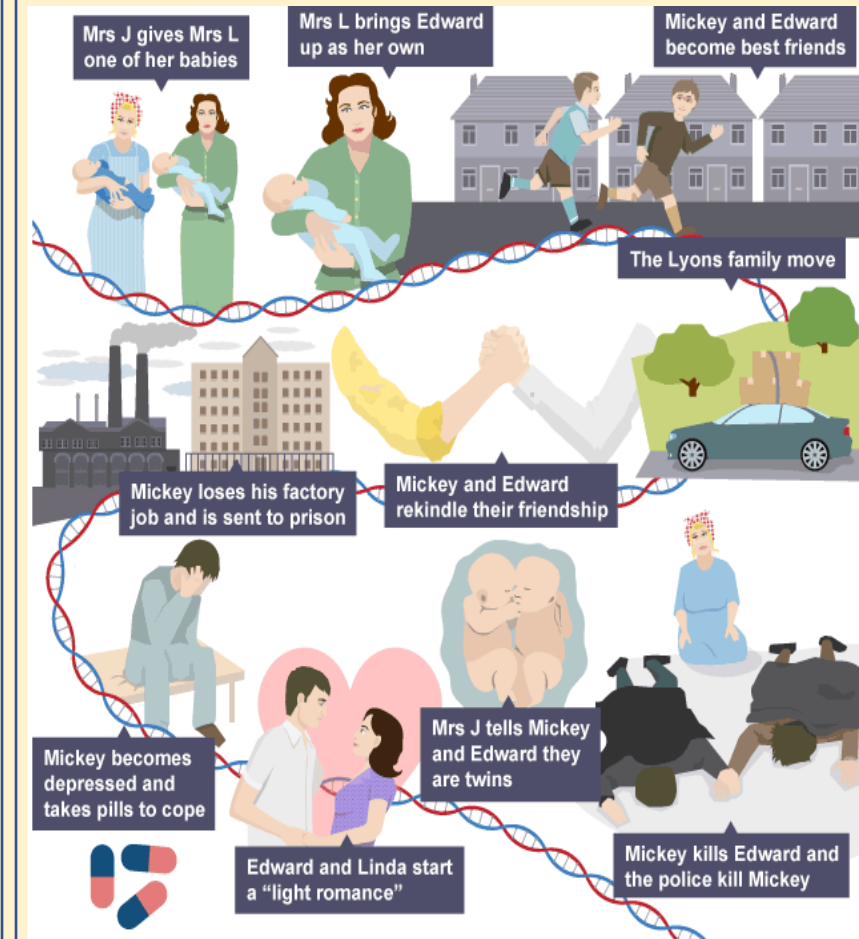
Theatrical conventions: The play was first performed at the Liverpool playhouse in 1983. This piece of musical theatre and was written to be performed on a proscenium arch stage. The narrator is a performance convention used by Russell, as well as foreshadowing the fatal events.

Key themes: Social class and inequality; nature vs nurture; friendship; loyalty; fate and superstition

Performance style

- The play is described as ‘A Musical’
- The style reflects elements of the 1950’s ‘kitchen-sink drama’ that focuses on social elements of the working classes
- The play is non-naturalistic in genre with the use of narration, musical elements, ensemble acting, asides and other non-naturalistic techniques.
- The play opens with a flashback, which is a re-enactment of the final scene, this is a type of prologue, used to predict events.
- The Narrator helps to bridge the time span and links scenes with the use of monologue.
- The narrator is used effectively throughout the piece to inform, predict, forewarn, advance the action and involve the audience. In using a narrator, the fourth wall is broken.
- The characterisation of Sammy, Linda, Edward and Mickey as children develops comedy, exaggeration and high energy in performance.
- **GENRE** - It has elements of comedy, tragedy and black-comedy and a tragic ending.

Key scenes/moment



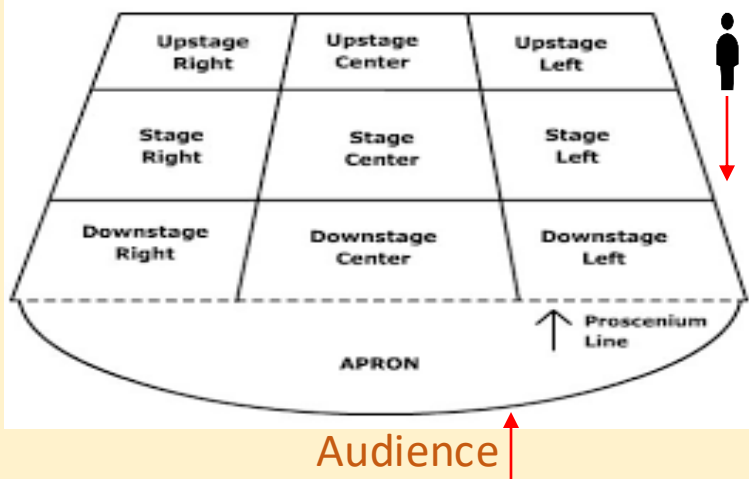


Year 11 - Drama – Component 1

Performance skills are the techniques used by the actor/actress. They are split into two categories – Vocal and Physical skills.

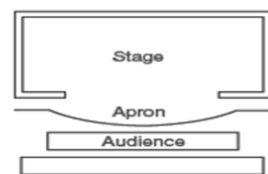
Vocal skills		Physical skills	
TONE: How you show the emotion of a character.		FACIAL EXPRESSION: Using your face to show how a character is feeling.	
PACE: The speed that you speak at		POSTURE: The way that you stand with the focus on the alignment of your back.	
PITCH: How high or low your voice is.		GESTURE: A movement (of the head, arm, hand, leg or foot which communicates a specific meaning.	
PAUSE: A break in speaking; a period of silence.		GAIT: The way that you walk.	
VOLUME: The loudness or quietness of your voice.		Body language: Includes posture, stance and the placement of the arms to convey a character's feelings or personality.	
ACCENT: The way you show what country or region a character is from by their use of vocabulary and the way they pronounce words.		EYE CONTACT: Choosing to look at a specific performer, object, audience member or direction.	
PROJECTION: The amount of tension in your voice. This is not the same as volume – you can have large vocal power at a low volume.		Movement: The way that a character moves their head, body, arms and legs.	
ARTICULATION: The way that you pronounce each letter in a word. If using a high level of articulation, you would pronounce every letter in every word. abcde...		CONTROL: Being able to execute a specific and precise movement	
INTONATION: the rise and fall of the voice in speaking.		TENSION: How tightly you are holding your muscles.	

Stage positioning

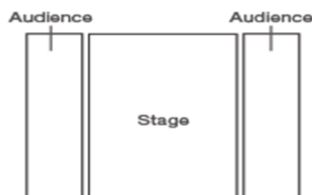


Staging configurations

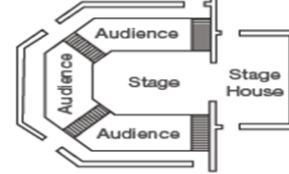
Proscenium arch



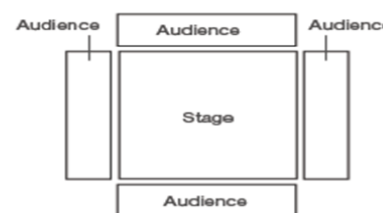
Traverse



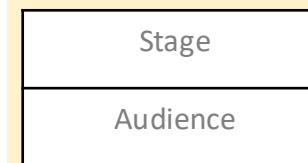
Thrust



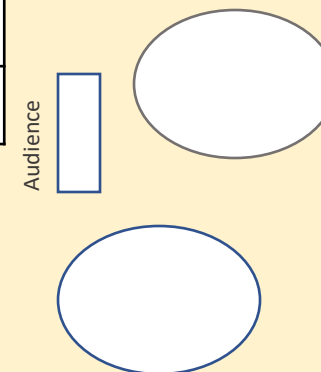
In the round



End on



Promenade



Audience



Frankenstein (The live performance) – 32 marker

Key information (Step 1)

Date of viewing: Autumn 2023

Play: Frankenstein

Venue: The National Theatre

Director: Danny Boyle



Synopsis - Childlike in his innocence but grotesque in form, Frankenstein's bewildered creature is cast out into a hostile universe by his horror-struck maker. Meeting with cruelty wherever he goes, the increasingly desperate and vengeful Creature determines to track down his creator and strike a terrifying deal.

Context summary

Writer: Nick Dear

Year: 2011

When and where: Unknown

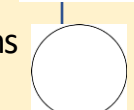
Theatrical conventions: The Olivier stage has a drum revolve. The floor is grey, which enables a versatile creation of setting. There are a lot of different internal and external locations in this play and so the set design must allow for quick transitions and utilise minimal items of set to indicate location and period.

Performance style

- The Creature's body movement is jerky and uncoordinated – we must remember he has been created by the fusion of various different body parts. He also gradually finds his voice and then starts to learn language. He is often childlike in his facial expressions and movements, just like any child learning to use their body.
- Look at the way in which The Creature mimics a lot of De Lacey's vocal and physical mannerisms, which creates comedy but also makes him a hugely sympathetic character. He is childlike and very endearing.
- Notice how transitions are created when the set changes are significant, for example at 43 mins 10 secs we focus on the characters downstage whilst the set is changed further upstage. It is a non-naturalistic set design so it does not matter that the audience can see the changes being made, particularly as this is a play about building one thing out of another!

Key scenes/moment

- 1) Opening scene, birth of The Creature**, which allows consideration of set design, lighting and performance. (00:00 – 10 mins 13 secs)
- 2) Entrance of the train**, ensemble soundscape and movement. (13 mins 31 secs)
- 3) The Creature arrives at the De Lacey cottage.** (24mins 12 seconds up to "I look bad" – 30 mins 16 secs)
- 4) The Creature meets/dreams the female creature.** (36mins 25 secs - 38 mins 21)
- 5) Fire at the cottage**, where you might like to focus on lighting, special effects, use of music, and transitions. (42 mins – 42 mins 48 seconds.)
- 6) The Creature and Frankenstein on Mont Blanc.** (51 mins 20 secs – 1 hr 4 mins)
- 7) Grave robbing.** (1hr 13 mins 45 secs – 1hr 17 mins 40 secs)
- 8) Frankenstein shows The Creature the female version and then destroys her.** (1hr 20 mins 50 secs – 1hr 28 mins 35 secs)
- 9) Victor arrives in the Arctic Circle.** (1h 47 mins – 1hr 53 mins 30 secs (end))



Key themes: Religion, Prejudice, Innocence; Ambition; Loneliness; Revenge



Year 11 – Music – Listening & Appraising Elements Grid

<u>Instrumentation (Orchestral)</u>	<u>Articulation</u>	<u>Melody</u>	<u>Texture</u>	<u>Instrumentation (Rock, Pop, World, Technology)</u>
<p>Keyboard instruments Piano • Harpsichord • Organ</p> <p>Strings Violin • Viola • Cello • Double Bass • Harp</p> <p>Brass Trumpet • French Horn • Trombone • Tuba</p> <p>Woodwind Piccolo • Flute • Clarinet • Oboe • Bassoon</p> <p>Unpitched Percussion Timpani • Snare/Bass Drum • Chimes • Tambourine • Cymbals • Gong • Triangle</p> <p>Pitched Percussion Xylophone • Glockenspiel</p>	<p>General Staccato • Legato • Accent • Sforzando • Glissando • Vibrato</p> <p>Strings Arco • Tremolo • Pizzicato</p> <p>Brass/woodwind Tongued • Slurred</p> <p>Guitar/Bass Picked • Strummed • Slide • Bend</p> <p>Voice Melismatic • Syllabic • Portamento</p> <p>Ornaments Trill • Turn • Mordent • Acciaccatura • Grace Note</p>	<p>Movement Stepwise • Skips • Leaps • Ascending • Descending • Rising • Falling • Scalic</p> <p>Tonality Major • Minor • Atonal</p> <p>Rhythm Long notes • Short notes • Fast notes • Semibreve • Minim • Crotchets • Quavers • Semiquavers • Triplets • Dotted notes.</p> <p>Imitation • Sequence • Repeat/Repetitive • Low/high pitch • Narrow/Wide Range • Balanced Phrases • Riff • Microtonal • Motifs • Hook • Interval • Octave • Improvisation</p>	<p>Thick/thin layers Monophonic – one single melodic line</p> <p>Polyphonic – interweaving parts</p> <p>Homophonic – melody with accompaniment</p> <p>Unison – playing/singing the same notes/rhythm</p> <p>Counter melody – the second most important melody</p> <p>Drone - a sustained note</p> <p>Pedal note – a note that remains the same despite the harmony changing.</p>	<p>Rock and Pop Piano • Guitar • Bass • Drums • Keyboard Vocals Male • Female • Backing Vocals</p> <p>Music Technology Synthesiser • Drum Machine • Sampling • Computer • Sequencer • MIDI • Looping • Effects • Distortion • Reverb • Delay • Amplification</p> <p>Indian Classical Music Sitar • Tanpura • Tabla • Sarod • Bansuri Bhangra Dhol • Tabla • Tumbi • Guitar • Bass • Music Tech</p> <p>Greek, Israeli and Palestinian Bouzouki • Doumbek • Oud • Riq • Zither African Djembe • Dundun • Talking Drum • Balafon • Agogo Bells Samba Whistle • Repinique • Surdo • Shaker • Tambourim • Caixa • Timbales • Agogo Bells • Brass Section • Cowbell Calypso Steel Pans • Drum Kit • Bass Guitar • Agogo Bells • Cabasa • Maracas • Claves • Bongos</p>
<u>Dynamics</u>	<u>Rhythm</u>	<u>Harmony</u>	<u>Tempo</u>	
<p>Fortissimo – very loud</p> <p>Forte – loud</p> <p>Mezzo forte – moderately loud</p> <p>Piano – soft</p> <p>Mezzo piano – moderatley soft</p> <p>Pianissimo - very soft</p> <p>Crescendo – gradually gets louder</p> <p>Diminuendo - gradually gets softer</p>	<p>Long notes</p> <p>Short notes</p> <p>Fast notes</p> <p>Semibreve</p> <p>Minim</p> <p>Crotchets</p> <p>Quavers</p> <p>Semiquavers</p> <p>Triplets</p> <p>Dotted notes</p> <p>Syncopated</p> <p>Ostinato</p> <p>Polyrhythm</p> <p>Cross rhythm</p>	<p>Major chords</p> <p>Minor chords</p> <p>7th chords</p> <p>Chromatic</p> <p>Dissonant</p> <p>Arpeggios</p> <p>Broken Chords</p> <p>Block Chords</p> <p>Modulation</p> <p>Power Chords</p> <p>Tonic - I</p> <p>Dominant - V</p> <p>Subdominant - IV</p> <p>Harmonic rhythm</p>	<p>Steady Pulse</p> <p>No Clear Pulse/Free of Time</p> <p>Largo – slow</p> <p>Adagio – slow</p> <p>Andante – walking pace</p> <p>Moderato – moderate</p> <p>Allegro – quick</p> <p>Vivace – fast</p> <p>Presto – fast</p> <p>Rubato – pulling back the tempo and making up the time as the piece goes on.</p> <p>Accelerando – gets quicker</p> <p>Rallentando – gets slower</p>	

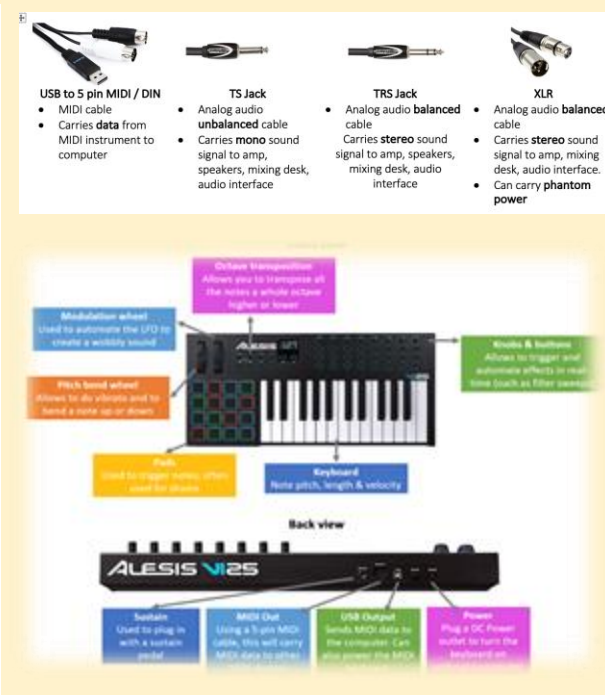




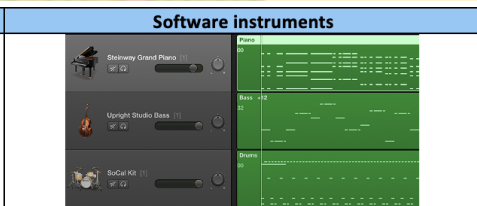
Year 11 – Music Technology – Unit 2: Creating



- Tracks (audio or MIDI)
- Regions
- Play-head
- Playback section
- Track controls (Mute, Solo, Record, Volume)
- Software instruments library
- Mixer window
- Audio region



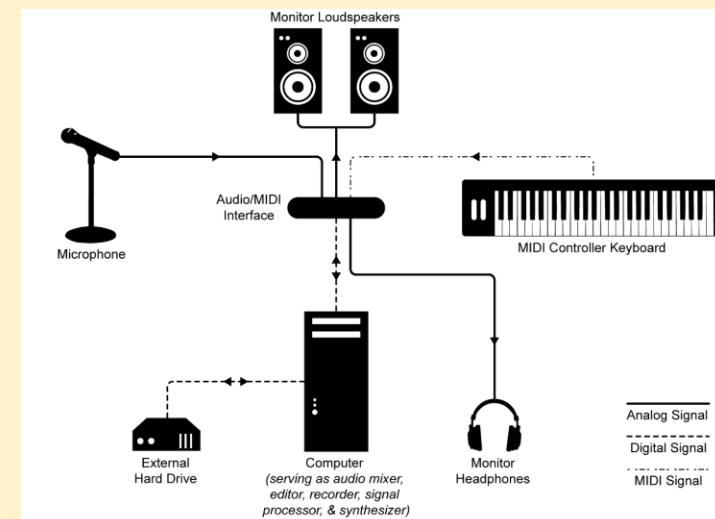
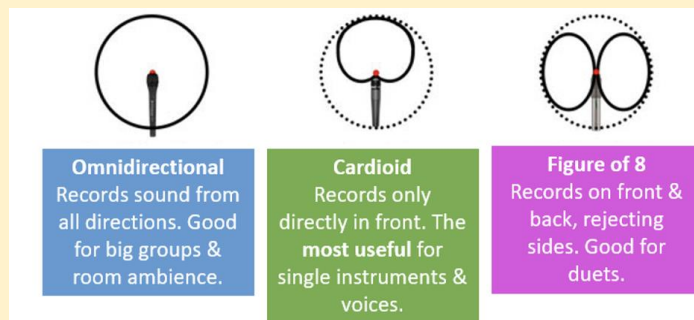
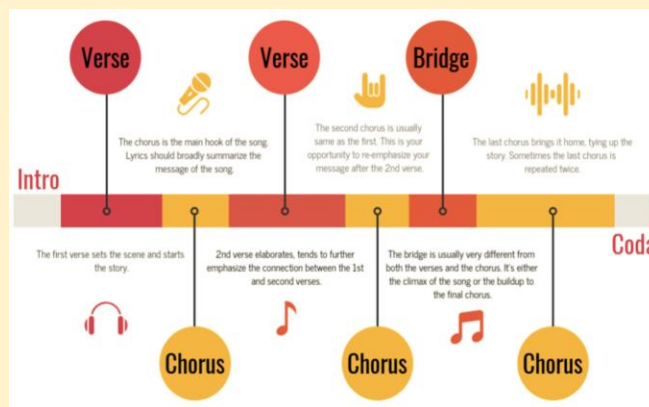
- Typically, a **real** instrument or voice
- Could be a track that has been bounced to audio
- You can see the sound wave
- You cannot edit individual notes



- Part of the DAW's VST (Virtual Studio Technology) **plugins**
- Software instruments are usually either synthesisers or samplers
- Software instruments read MIDI data, which is either inputted by a MIDI controller or by using the pencil tool
- You can edit each note individually, quantise them to be perfectly in time and change the velocity of notes

- Editing tools:
- Cut, copy, paste & loop
 - Time-stretch**
 - Speed up / slow down**
 - Reverse**
 - Autotune**

- Editing tools:
- Cut, copy, paste & loop
 - Change length & pitch of notes**
 - Quantise** (align the notes to a grid to make them in time)
 - Velocity** (how loud individual notes are)





INJURIES

Year 11 – Sport Science – Unit R180 Injuries

Soft tissue injury = damage to muscles, tendons and ligaments
 Hard tissue injury = damage to bones and cartilage
 Acute injury = caused by sudden impact/trauma

Chronic injury = an overuse injury caused by repetitive action

Acute Injuries	Definition	Symptoms	Treatment
Sprain	Over stretched ligament	Tenderness, pain, inflammation	PRICE, cryotherapy, massage, contrast therapy, electrotherapy, ultrasound
Strain	Over stretched muscle or tendon	Tenderness, pain	PRICE, cryotherapy, massage, contrast therapy, electrotherapy, ultrasound
Abrasion/graze	Skin damage caused by scraping skin against a playing surface	Pain, light bleeding, clear fluid leaking from wound	Apply pressure to stop bleeding, raise body part above heart, clean with water, apply plaster/dressing, take painkillers
Contusion/bruise	Blood vessels under the skin burst due to impact	Pain, tenderness, purple skin	Cool area with an ice pack for 10-15 minutes, take painkillers, cryotherapy
Laceration/cut	Skin damage caused by a sharp object leading to a tear or opening in the skin	Bleeding, pain, tenderness, inflammation	Apply pressure to stop bleeding, raise body part above heart, clean with water, apply plaster/dressing, take painkillers, bandaging
Blisters	Skin damage due to friction	Pockets of skin filled with fluid	Do not burst the blister, apply a padded plaster, take painkillers
Open fracture	Broken bone that has pierced the skin	Pain, tenderness, restricted movement	Cast, splint, sling, x ray to diagnose, surgery may be required, electrotherapy, hydrotherapy
Closed fracture	Broken bone that has not pierced the skin	Pain, tenderness, restricted movement	Cast, splint, sling, x ray to diagnose, surgery may be required, electrotherapy, hydrotherapy, cryotherapy,
Dislocation	Bone moves out of its correct position at a joint	Pain, obvious deformity, restricted movement	By medical staff immediately to prevent nerve and blood vessel damage, x ray to diagnose followed by manipulation, electrotherapy, hydrotherapy, cryotherapy,
Concussion	Trauma or damage to the brain	Headaches, nausea, dizziness, confusion, memory loss, loss of balance	Electrotherapy, rest

Chronic injuries	Definition	Symptoms	Treatment
Tendonitis	Inflammation and irritation of tendons	Pain, tenderness, reduced movement	PRICE, painkillers, massage, ultrasound, neoprene support
Epicondylitis	Inflammation of the epicondyle of the bone due to small tears in the tendon Lateral epicondylitis = Tennis elbow, Medial Epicondylitis = Golfer's Elbow	Pain, tenderness, reduced movement	PRICE, kinesiology tape
Shin splints	Inflammation of the tibia bone, tissue and muscles	Pain, tenderness	PRICE, cryotherapy, kinesiology tape
Stress fractures	Tiny cracks in the bone	Pain, tenderness	PRICE, kinesiology tape



NUTRITION

Carbohydrates

Simple carbohydrates are found in chocolate, sweets and fruit and are easily digested the body.

Complex carbohydrates are found in nearly all plant-based foods, and usually take longer for the body to digest. They are most commonly found in bread, pasta, rice, and vegetables.

Fats are made from fatty acids and there are 2 main categories:

Saturated fats – butter, full fat dairy products. These increase cholesterol.

Unsaturated fats – low-fat spreads and oily fish.

Protein is an essential nutrient promotes the **growth and repair of muscles**. Protein consists of amino acids which the body mostly synthesises itself (11 non-essential amino acids).

Animal-based proteins

Meat, Chicken, eggs, milk, cheese and yoghurt.

Plant-based proteins

Cereals, bread, rice, pulses, beans and nuts/seeds.

Fibre is a carbohydrate and also helps slow down the stomach emptying process and how quickly glucose enters the bloodstream.

Fibre can be found in wholegrain cereals, pasta, oats and vegetables.

Water The body can store food but is unable to store water. You are able to survive for about 3 days without drinking water. We lose approximately 2 litres of water every day. Water makes up 50-60% of total body weight depending on age, gender and body composition. Water can be lost through urine, sweat, breathing out and evaporation from the skin.

Vitamins and minerals are referred to as micronutrients as they are needed in smaller amounts than macronutrients. They are needed in smaller quantities but are important in regulating chemical reactions in the body.

Keyword	Definition
Nutrient	a substance that provides nourishment essential for the maintenance of life and for growth.
Macronutrient	a type of food (e.g. fat, protein, carbohydrate) required in large amounts in the diet.
Micronutrient	a chemical element or substance required in small amounts in the diet
Hydration	the process of causing something to absorb water.
Calorie	a unit of energy, often used to express the nutritional value of foods, equivalent to the heat energy needed to raise the temperature of 1 kilogram of water by 1 °C





Components of a Warm-Up

- **Pulse raising** – Exercises that slowly increase heart rate and body temperature: jogging around the pitch before a game of football
- **Mobility** – Exercises that take the joints through their full range of movement (ROM): a footballer performing arm swings and hip circles.
- **Dynamic stretching** – Dynamic stretches linked to the specific sport: ‘open and close the gate’ and groin walk before football.
- **Skill rehearsal phase** – Rehearsing common movement patterns and skills which will be used in the activity such as dribbling drills for football

Physiological benefits of a warm-up

- Increase in muscle temperature
- Increase in heart rate
- Increase in flexibility of muscles and joints
- Increase in pliability of ligaments and tendons
- Increase in blood flow and oxygen to muscles
- Increase in the speed of muscle contraction

Psychological benefits of a warm-up

- Heighten or control arousal levels
- Improve concentration/focus
- Increase motivation
- Increase confidence
- Mental rehearsal



Keyword	Definition
Intrinsic factors	Intrinsic factors are those that are internal to the athlete. Some of the intrinsic factors come with the athlete and cannot be influenced
Extrinsic factors	Extrinsic factors are those that are external to the athlete.
Environmental factors	Environmental factors make up the physical, social and attitudinal environment in which people live and conduct their lives.
Psychological	Relating to the mind
Physiological	Relating to the body
Arousal	the state of being physiologically alert, awake, and attentive
Direct aggression	an intentional act of foul play to injure another player
Channelled aggression	a forceful act within the rules of the game but with a secondary aim of injuring the player
Retaliation	the action of harming someone because they have harmed you
Mental rehearsal	Thinking about practising something rather than doing it
Imagery	Imagery is simply the formation of any mental pictures
Selective attention	Selective attention is the process of focusing on a particular thing and ignoring others
Individual variables	Individual difference variables are usually definable traits that can be measured, such as age, height, weight, sex, skin colour, etc
Severity	the condition of being very bad or serious
Human interaction	The way people communicate as they spend time together



Observe

Refine

Record

Develop

Present

Personal

Composition



Focus on developing a composition in a systematic way; not just one idea, but a series of ideas from a range of artistic sources, to refine the idea. Looked at both compositional and technical models to help develop your work. It is an excellent idea to use different artists and materials to help solve problems in your work.

Designing A Final Piece



The elements of final ideas pages:

- Don't just start with one idea. Draw them out carefully and annotate, linking back to the artists.
- You will probably know which one you want to use by the time you have finish.
- Use the media you plan chose on the final.
- Have some zoomed in areas to show the details.
- Plan your colour scheme.
- Make a step-by-step plan of how you will do it. **Don't forget to link it back to your artists.**

Reflect On Your Final Ideas

Self Assessment of Ideas

- Which idea uses previously explored imagery the most successfully?
- Which idea combines previously experimented with techniques?
- Which is the most successful composition (Which idea will utilise your talents the best?)
- Which will stretch your artistic ability the most?
- To you, now, which one do you prefer and why?
- Talk to a neighbour, which do they prefer and why?



Respond to artwork you have researched

Remember this is a **PERSONAL REPONSE** to the themes and the artists that you have researched.

How can you **CLEARLY** use the knowledge to present a final outcome, that shows an in-depth thoughtful understanding of the theme?





Response

Sophisticated

Composition

Design

Primary

Secondary

Starting Point



AO1 – Artist Research

You need to select at least three artists from your exam paper that has been provided. Each artist research should take up to a minimum of one double page spread in your sketchbook.

AO2 – Exploring different mediums

You now need to think about developing your ideas and experimenting with a range of media.



How will you be assessed?

AO3 – Drawings, Ideas and Intentions

You will need to record your ideas through primary and secondary observations. You must have detailed, refined pencil drawings, photographs and written annotations, which support the development of your work?



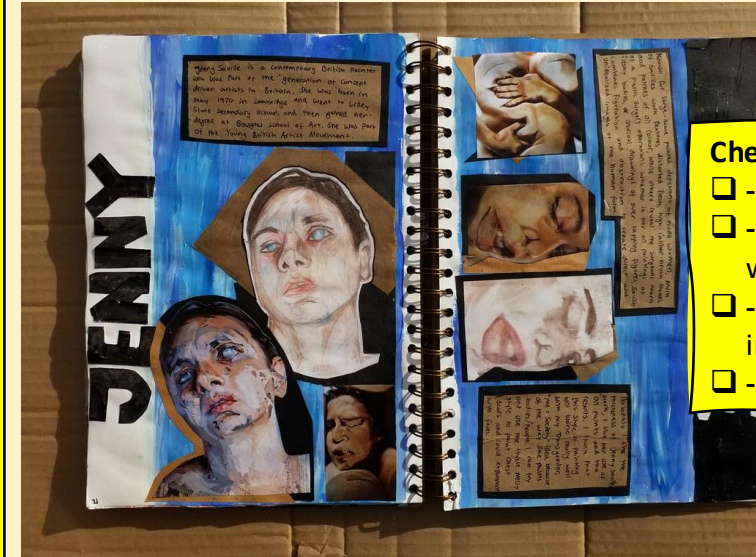
AO4 – Final Outcome

Final Piece: You need to use your artist research, your experiments and your recording to now develop and present a final piece. Try to create a minimum of 2 different designs and then carry out one in the 10 hours.



AO1 – Artist Research

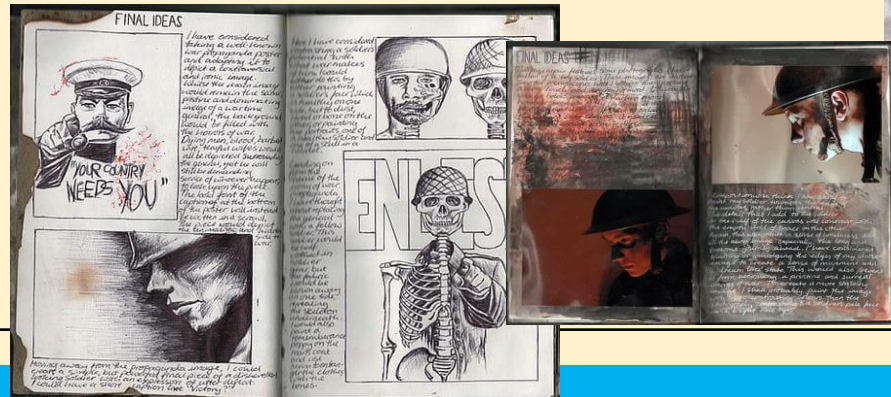
ARTIST RESEARCH: You need to EXPLORE at least three artists that reflect the theme Mixed Media 'Natural and Man made'. Each artist research should take up to a minimum of one double page spread in your sketchbook.



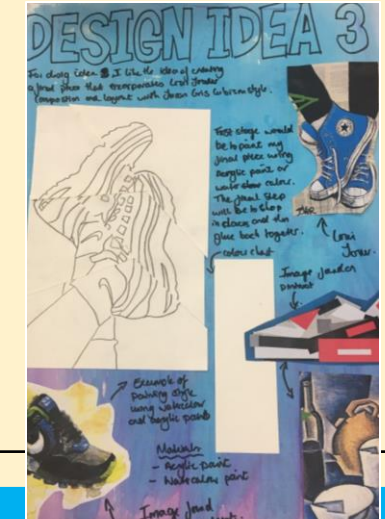
- Check list:**
- Thematic Title
 - Images of the artists work
 - USEFUL factual information
 - Artists analysis

Final outcome

Final Piece: You need to use your artist research, your experiments and your recording to now develop and present a final piece. Try to create a minimum of 2 different designs.



Design Ideas Check list	Tick
Title	
Notes, explaining your ideas	
Small Sketch A5 size	
First hand images	
Images of artist influence	
List of material	
Swatch, test out media and colours	





Formal Elements

Form	A 3D shape / to make something appear 3D
Shape	The outline of an object
Colour	The hue, tint or shade
Tone	The light and dark (highlight – midtone – lowlight)
Line	Individual marks made on a surface
Texture	The appearance of the surface
Pattern	Repeated motifs

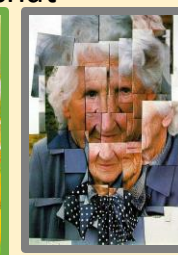
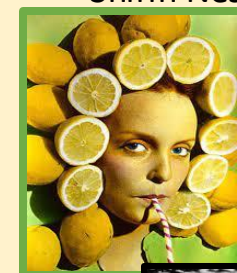
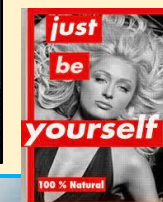
Portraits

Portraits - A portrait is a painting, photograph, sculpture, or other artistic representation of a person, in which the face and its expression is predominant. The intent is to display the likeness, personality, and even the mood of the person. A photographic portrait is generally not a snapshot, but a composed image of a person. A portrait often shows a person looking directly at the photographer, in order to most successfully engage the subject with the viewer.

PORTRAIT PHOTOGRAPHERS

David Bailey
Barbara Kruger
Jasper James

Ouka Leele
David Hockney
Shirin Neshat



Key Terminology

Portraits, Identity, Surrealism, Studio Lighting, Personality, Emotion, Characteristics, Convey, Joiners, Layers, Messages



Assessment Objectives

- A01 – DEVELOP Photographer Research
- A02 – REFINE Exploring different techniques and development in Photoshop
- A03 – RECORD Recordings, Ideas and Intentions
- A04 – PRESENT Final Outcome

Sentence Starters in Photography







- My first impressions of this image are...
- This piece of work is about...
- I think the Photographer has created this piece by...
- This image reminds me of...
- This piece of work makes me feel...
- The areas I like/don't like about this image are...

Inspirational Trip




The Photographer's Gallery, London





Pattern	There are patterns all around us if we only learn to see them. Emphasizing and highlighting these patterns can lead to striking shots – as can high lighting when patterns are broken.		JON MEASURES
Texture	Photographs of two dimensional objects yet with the clever use of 'texture' they can come alive and become almost three dimensional. You want the viewer to imagine how the object feels.		ANSEL ADAMS
Depth of Field	The depth of field that you select when taking an image will drastically impact the composition of an image. It can isolate a subject from its background and foreground (when using a shallow depth of field) or it can put the same subject in context by revealing it's surrounds with a larger depth of field.		ELIA LOCARDI
Symmetry	Can create a balanced composition that leaves the viewer with a feeling the photograph is staged in some way. Can add a striking effect depending on the subject/ object photographed.		IRVING PENN
Rule of Thirds	A 3x3 grid used by photographs to create a composition that feels right. Objects that fall on or near the lines are considered to have the best impact.		ERNST HAAS
Shape	The way subjects connect to each other in a photo forms shapes that draw the eye from subject to subject. If your subject is already triangular or diamond-shaped (like a pyramid), the viewer's eye will automatically focus on that shape.		MAN RAY

Helpful Websites for GCSE Photography

Website	QR Code	Summary
https://digital-photography-school.com/digital-photography-tips-for-beginners/		Really informative website with lots of easy to follow tutorials for beginners in photography.
https://www.bbc.com/bitesize/guides/zgwpnbk/revision/1		GCSE Bitesize website is great for video tutorials, subject specific vocab and helping to understand how GCSE Photography course works.
https://www.tate.org.uk/		The Tate website is a fantastic resource for finding out about exhibitions you could visit for primary research (AO1).

Light

- Can be used to create shadow or highlight an object/person.
- Comes in many different forms.
- Use of light can have an impact on camera settings.
- Direction of the light source is very important.



Natural Light



Artificial Light

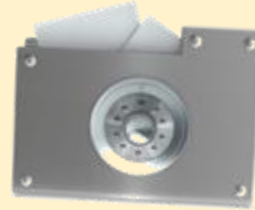


Legislation: Many countries have created legislation or have passed laws about the use of computers and data to protect data about people, hacking computer systems, and protecting copyright and patents.

The Data Protection Act 2018 (DPA)

The purpose of the DPA is to protect personal data.

- **Data subject** = person who the data is about.
- **Data controller** = The organisation that stores and uses the data.



The DPA 2018 means that:

1. Organisations are not allowed to collect and hold personal data except if it is necessary for a legitimate task or you give them permission *e.g. sending you a receipt for something you have purchased.*
2. Organisations can't keep data once the need has finished.
3. Data must be kept accurate, safe, and private.
4. Data must not be shared without permission.
5. Data subjects can request to see data held about them to check it.
6. If data is wrong, the organisation must change or delete it.

Creative Commons License

Developed to allow copyrighted material to be more freely distributed.



Attribution: Material can be copied, modified and used. However, the original creator must be given credit.



Non-commercial: Material can be copied, modified and used as long as there is no intention to make money from it.



Share-a-like: Material can be modified and used but must be covered by a similar license.



No derivative works: Material can be copied and used, but it cannot be modified.

Computer Misuse Act 1990

The Computer Misuse Act covers the use of technology to commit crimes such as hacking.



There are three levels of offence:

1. **Unauthorised access** to computer material.
2. **Unauthorised access with intent** to commit or facilitate a crime (*e.g. blackmail*).
3. **Unauthorised modification** of computer material (*e.g. distributing viruses*.)



Software Licences



Proprietary Software

Owned by the company that created it and the **source code** is usually not released. A licence key is often required to use it - you may have to purchase the software *'off the shelf'*.
You can get support from the company and the user community.

Open Source Software

The **source code** is published for others *to use and modify*. Large groups of programmers often contribute to open source software. The software is usually free of charge.
You can only get support from the user community.

Copyright, Designs and Patents Act 1988



Ensures that people are rewarded for their original work and are given protective rights if someone tries to copy it. If someone wants to use copyrighted material, they must ask for permission – applies to images, books, songs etc.



ETHICAL ISSUES

- Ethics refers to what is **right** and what is **wrong**. Ethics are not necessarily the same as legalities.
- When discussing ethics, it may be useful to consider different **stakeholders**, a **stakeholder is anyone with an interest in the organisation/ technology** etc. Stakeholders of Ellis Guilford include the: students, staff, governors, CET, the local community, uniform shops and caterers.



Worker Exploitation: Some companies may give their workers poor pay and conditions to maximise their profits by manufacturing abroad.



Digital Divide: With the increasing reliance on technology, those without access to technology can be at a disadvantage.



Accessibility: Many computer systems and software are not fully **accessible** to those with disabilities.



Building products to last: Many smart phones can only be used for a few years before breaking.



Character Sets: The **ASCII** character set can only represent enough characters for the English alphabet. **Unicode** was developed to represent the characters used in all languages around the world.



Signs and Symbols: User interfaces make extensive use of icons and graphics. These can have different meanings in different cultures. For example, a tick indicates an error in many countries.



Social Media: Not every country allows access to **social media**. There are countries which have limited access or no access at all to **social media** sites.

CULTURAL

PRIVACY

Technology makes it easy for governments to monitor their citizens in various ways. This raises many questions, including:

Is monitoring needed to keep us safe?

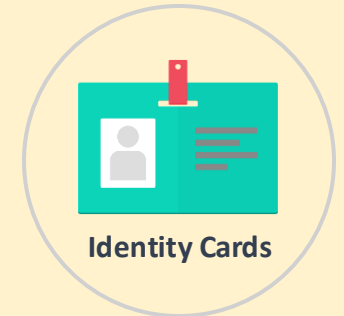
Is monitoring an invasion of privacy?



CCTV



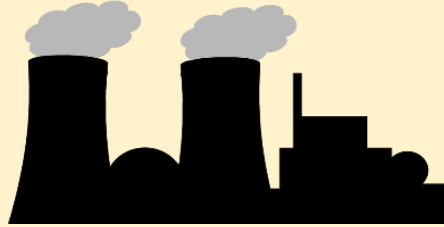
DNA Profiling



Identity Cards



Manufacture



The manufacture of computer systems uses a lot of power. This is mostly generated by burning fossil fuels which produce *carbon emissions*. Computer systems require raw materials to be mined, harming the local environments, wildlife and communities.

Carbon emissions can be reduced through the use of renewables to generate electricity.

E-waste



A large number of electronic devices are dumped in landfills when they are no longer needed. These devices often contain *harmful substances* such as mercury which can leak into the soil.

E-waste can be reduced by recycling electronic devices rather than sending them to landfill.

Power Consumption



Digital devices require power to operate and most of this power is generated by burning fossil fuels which *release carbon into the atmosphere*.

Manufacturers are reducing power consumption by making devices that are more energy-efficient.

EXAM QUESTION

In the exam you will need to answer an **8 mark** exam question applying your learning to a scenario. To reach mark band three your answer should:

- Include a wide range of points (5+), ensuring each point is well explained and discussed in context to the question.
- Cover all areas of the question - *these will be bullet-pointed for you*.
- Discuss positive and negative impacts for each area (each bullet point).
- Be balanced - *aim for equal positive and negative points*.
- Include computing terminology and link to other specification theory *if necessary*.



Abstraction is the process of removing or hiding unnecessary detail to make a problem easier to understand and solve.

Decomposition is the process of breaking a problem down into smaller parts in order to make it easier to solve.

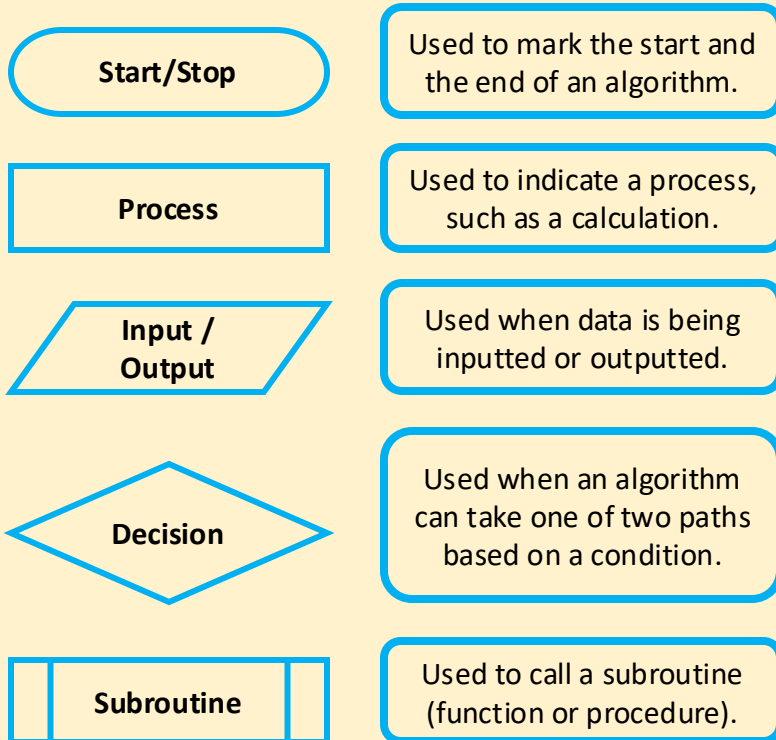
Algorithmic thinking is the ability to define a set of instructions that can be followed to solve a set of similar problems.



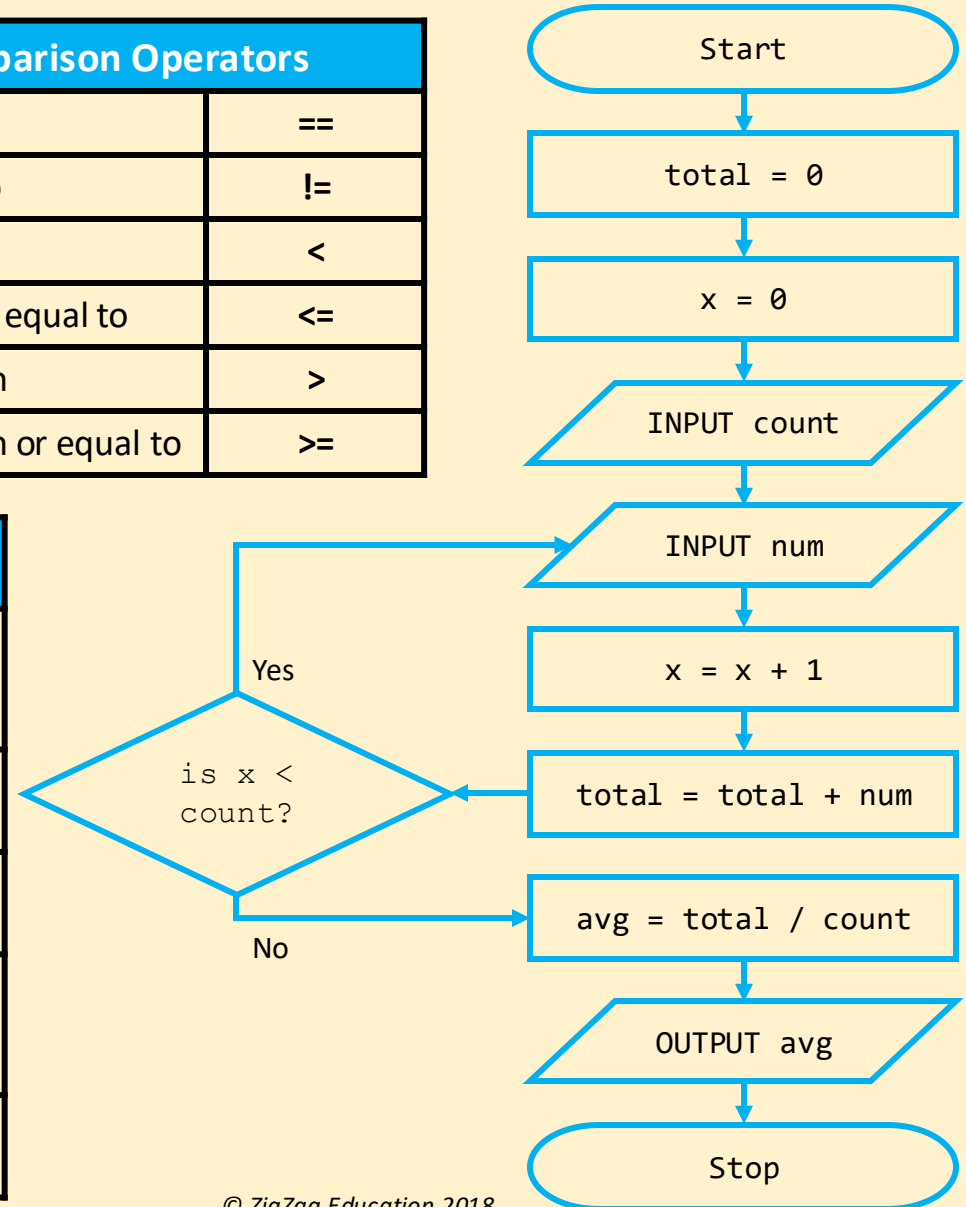
Flowcharts are used to represent algorithms in the form of a diagram.

Comparison Operators	
Equal to	==
Not equal to	!=
Less than	<
Less than or equal to	<=
Greater than	>
Greater than or equal to	>=

Flowchart Symbols



Data Types	
Character A single character (letter, number or symbol)	"T"
String A group of characters	"Tom"
Integer A whole number	7
Real/Float A number with a fractional part	7.5
Boolean Either TRUE or FALSE	TRUE





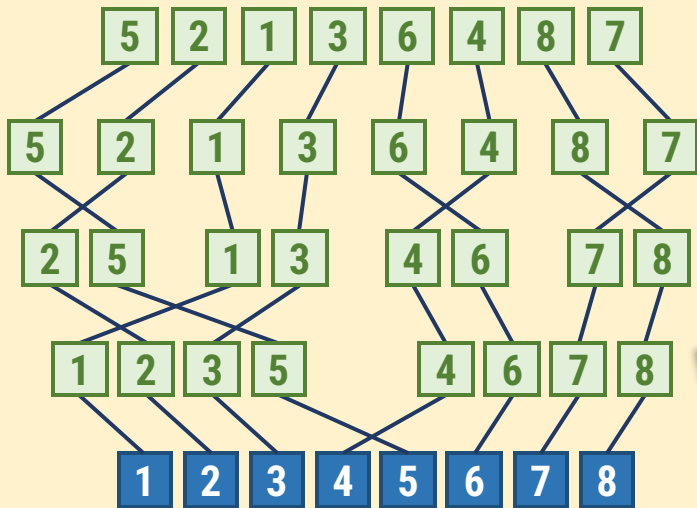
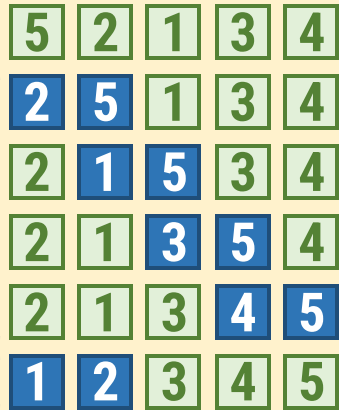
The **bubble sort** algorithm works through a list, comparing pairs of values and swapping them if necessary.

It keeps on passing through the list comparing values and making swaps until the list is sorted.

Easy to implement; however, it isn't very efficient.

Pass 1

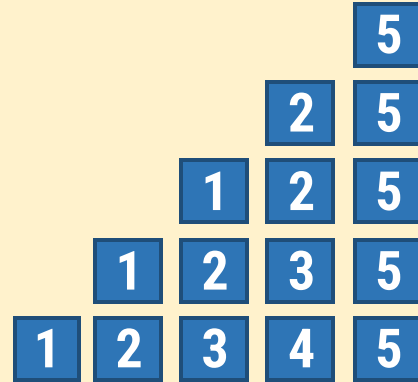
Pass 2



The **merge sort** algorithm works by splitting a list into individual elements and gradually merging them into larger and larger sorted lists until they are in one sorted list.

Very efficient when used with both large and small lists.

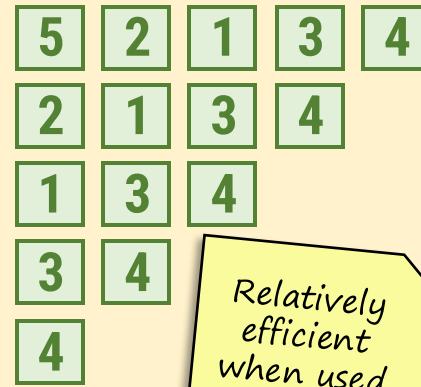
Sorted



The **insertion sort** algorithm uses two lists, one sorted and one unsorted.

Elements are gradually moved from the unsorted list to the correct position in the sorted list.

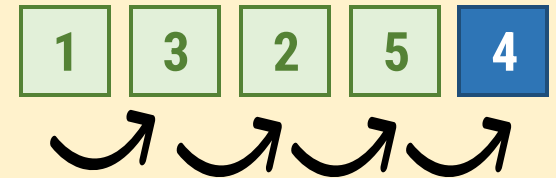
Unsorted



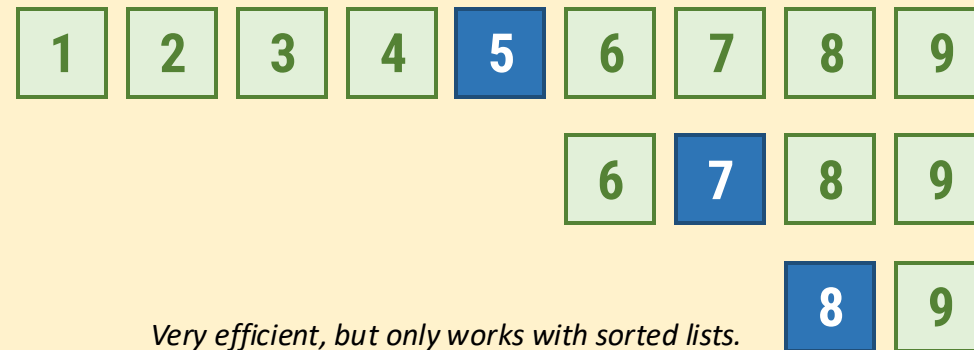
Linear Search

Searches for a value in a list by starting with the first element and comparing each element in turn until the value is found.

Very inefficient, but works with both sorted and unsorted lists.



Binary search works by finding the middle value in a list. If it is smaller than the value being searched for, the lower half of the list is discarded, if it is bigger the upper half is discarded. This process is repeated until the value is found.



Very efficient, but only works with sorted lists.



Variables & Constants

A **variable** is a *named location in memory* that can hold a value, which can be accessed or changed at any point in the program.

```
name = "Tom"
```

This example code creates a variable called 'name', which contains 'Tom'.



A Constant are similar to a **variable** except the value is set at the start of the program and *can't be changed while the program is running.*

```
const vat = 20
```

This example code creates a **constant** called 'vat', which contains '20'. In Python: **vat = 20**.

The = sign is the assignment operator used to assign a value to a variable or constant.

Sequence

A **sequence** is a set of commands that are executed once in the order they appear.

```
name = input ("Enter name: ")
print ("Hello", name)

movie = input("Favourite movie? ")
print (movie, "is my favourite too!")
```

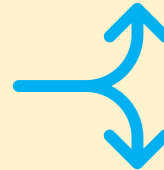


Selection

Selection uses a condition to decide the *path that will be taken through the program.*

```
num_1 = int(input("Enter a number: "))
num_2 = int(input("Enter a number: "))

if num_1 > num_2:
    print(num_1)
elif num_1 < num_2:
    print(num_2)
else:
    print("They are equal")
```



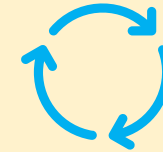
Iteration

Iteration enables a group of commands to be repeated a set number of times or until a condition is met. There are two types of **iteration**:

- **Count-controlled loops** repeat a group of commands a *set number of times.*
- **Condition-controlled loops** repeat a group of commands *until a condition is met.*

This algorithm uses a **for loop** to output the numbers from 1 to 10. **For** loops have an inbuilt counter that increments automatically.

```
for i in range (1,11):
    print(i)
```



```
x = 1
while x <= 10:
    print(x)
    x = x + 1
```

This algorithm uses a **while loop** to output the numbers from 1 to 10. The **condition** in a **while loop** is tested at the start.

Data Types

- Character** - A single character (a, 3)
- String** - Multiple characters (hello)
- Integer** - A whole number (7)
- Real** - A decimal number (3.5)
- Boolean** - True or False

Comparison Operators

- ==** Equal to
- !=** Not equal to
- >** Greater than
- <** Less than
- >=** Greater than or equal to
- <=** Less than or equal to

Casting

Casting is used to change from one data type to another. E.g. from a string to an integer.

```
num1 = int(input("Enter a number"))
```

Concatenation

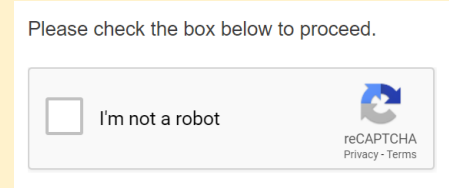
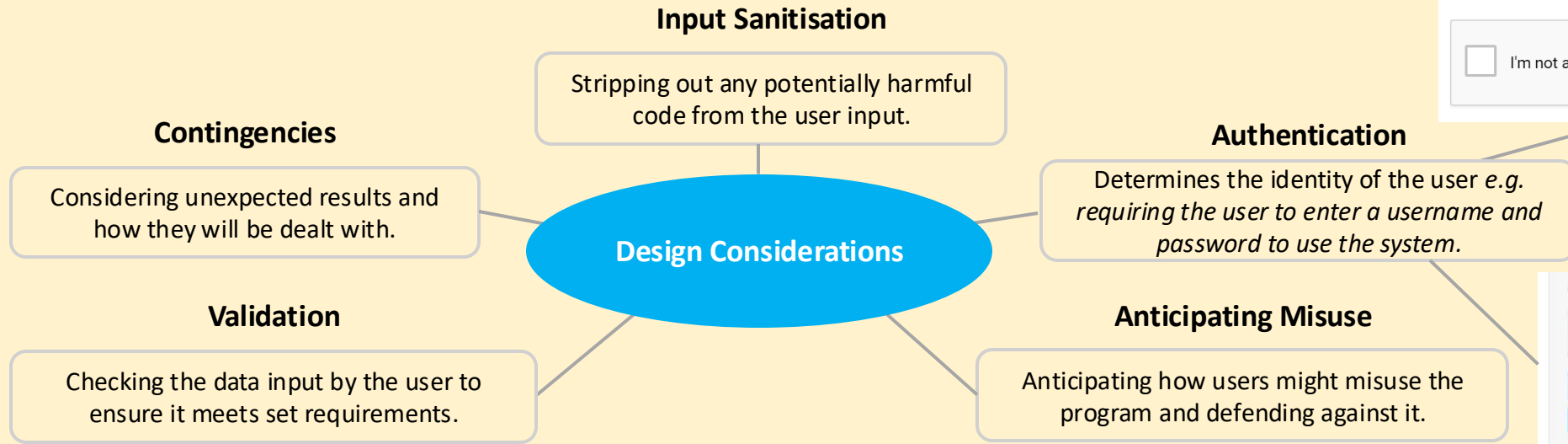
Concatenation means to join two strings together.

To do this, we use the '+' symbol. E.g:
`new_string = string_1 + string_2`



DEFENSIVE DESIGN

A number of things need to be considered during the design stage of a program to prevent potential misuse.



Validation

Spell Check	Checks spellings.
Format Check	Checks data is the correct data type.
Presence Check	Used to check that a field has not been left blank.
Range Check	Checks that data fits within a set criteria <i>e.g. between 1 and 10.</i>
Length Check	Checks that enough characters have been entered.
Lookup table	Pre-populated list for users to select from <i>e.g. dates, addresses.</i>

When writing code, it is important that it will be easy to maintain for programmers. This means it will be easy for other programmers to understand what your code does. There are four main techniques to improve maintainability:

Comments: Used to provide an explanation of each section of code, allowing programmers to understand it.

Naming Conventions: Using sensible variable names which refer to the data being stored.

Indentation: Makes it clear where each block of code starts and finishes *e.g. which lines of code are part of a while loop.*

Sub programs: Can make it easier to see how different parts of the program work. These can also be re-used within the program.

```
//Asks the users to input a number
max = int(input("Enter the target number"))

//Counts up from 1 to the target number
for number in range(1,max):
    print(number)
```

MAINTAINABILITY



In the exam you may need to complete a test plan, so it is important you understand the differences between normal, boundary, invalid and erroneous data!

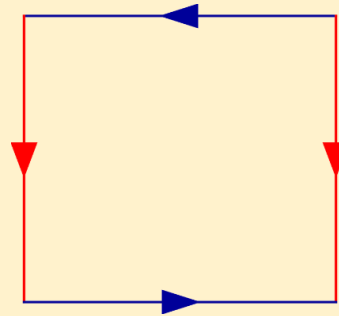
When programming using Python, you may see other errors (such as name error, indentation error etc) but you don't need to remember these for the exam.

TESTING

Testing is an essential part of the development process. It is used to identify errors and ensure the final program meets the outlined success criteria.

Iterative Testing

Each part of the program is tested at every stage of the development process to identify and fix any potential errors.



Example test table

Test No.	Description / Type of test	Expected outcome	Actual outcome	Pass/Fail

Final/Terminal Testing

Carried out at the end of the development process to ensure the program meets the **success criteria** outlined at the start of the project.

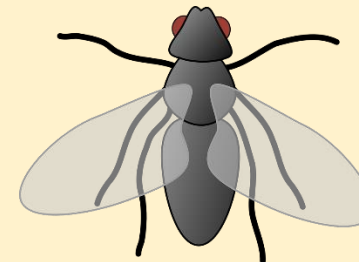
Suitable **test data** must be selected for effective testing to be carried out. A range of **test data** should be chosen that covers these categories:

- Normal** Data that is expected to work.
- Boundary** Data that is at the upper and lower limits of what the program should expect as valid data.
- Invalid** Invalid test data is data of the correct data type but should be rejected by a computer system.
- Erroneous** Data that is the incorrect data type which should be rejected by a computer system.

There are **two main types of error:**

Syntax Error

A **syntax error** is caused by code that breaks the rules of the programming language; for example, missing a closing bracket or a colon.



Logic Error

A **logic error** is caused by an error in the logic/design of the program. The program will run without an error message but *will produce the wrong result*.

TYPES OF ERROR

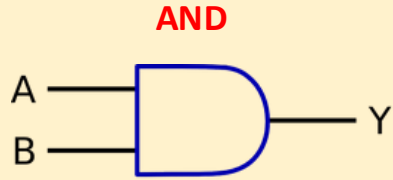


Logic gates are made up of a series of transistors which acts as switches. These switches are either **ON (1)** or **OFF (0)**.
Transistors are tiny electronic components found on the CPU.

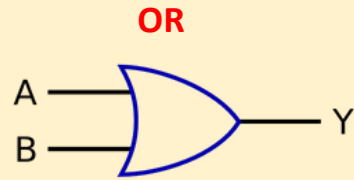
Year 11 - Computer Science - 2.4 Logic

LOGIC GATES

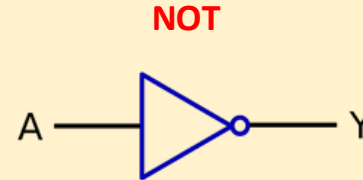
Logic gates are the basic building blocks of digital circuits and can be used to make decisions based on the inputs given. There are three basic gates:



Only outputs TRUE if both inputs are TRUE.

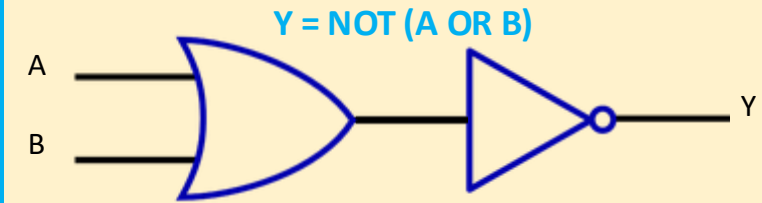


Outputs TRUE if one or both inputs are TRUE.



Inverts the input, TRUE becomes FALSE.

Logic gates can be combined to create **logic circuits**.



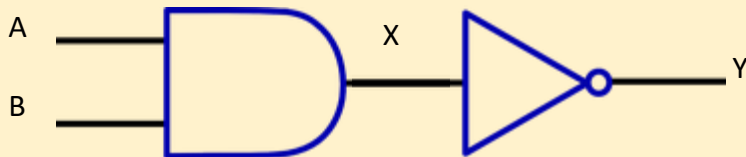
A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

COMBINING GATES

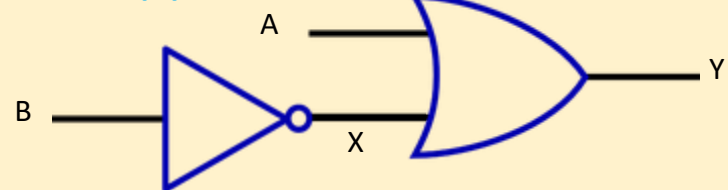
BOOLEAN STATEMENTS

Logic diagrams can also be represented in written form using **Boolean statements**.

$Y = \text{NOT} (A \text{ AND } B)$



$Y = \text{NOT} (B) \text{ OR } A$



All the possible combinations of inputs and outputs for a given logic diagram can be represented using a **truth table**.

AND Gate

INPUTS		OUTPUT
A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

OR Gate

INPUTS		OUTPUT
A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

NOT Gate

INPUT	OUTPUT
A	Y
0	1
1	0

TRUTH TABLES



LEVELS OF LANGUAGE

Low Level: Machine Code

Each of these instructions is represented using a **binary** code.

High level: Closer to written English; this makes writing programs easier (Python).

TRANSLATORS

The **CPU** can only understand instructions written in **machine code**. **Translators** are used to convert programs written in **High-level Languages** into **machine code** so that the computer can execute the instructions.

Compiler: Translates the *whole program* into **machine code** in one go. Creates an executable file (.exe) and reports all errors at the end. Compiling can take a long time.

Interpreter: Translates and executes each line of the program *one at a time*. This must be done every time the program runs. The interpreter will stop when it finds an error (good for debugging). Programs will run more slowly.

Year 11 - Computer Science - 2.5 IDE's

An **Integrated Development Environment (IDE)** is used by programmers when writing code. It features a range of tools and features which are designed to make the process of software development easier.

Editor

A text editor where the programmer writes their code. May include features such as **syntax highlighting** to make the code easier to read.

Translator

Converts the program into a **machine code**. A **compiler** or an **interpreter** would be used depending on the language.

```
File Edit View Options Window Help
file.write(name + " " + score + "\n")
file.close()

def showScores():
    file = open("scores.txt", "r")
    for line in file:
        items = line.split(" ")
        print("Name:", items[0]+", Score:", items[1])
    file.close()

def highest():
    file = open("scores.txt", "r")
    highest = ["", "0"]
    for line in file:
        items = line.split(" ")
        if int(items[1]) > int(highest[1]):
            highest = items
```

Error Diagnostics

Used to help the programmer locate and fix errors in their programs. This process is called **debugging**.

Runtime Environment

Allows the code to run quickly within the IDE. This can help the programmer to identify logic errors.

Output Window

This shows the output of the program when it is run.

```
while True:
    print("Welcome to the Magic 8-Ball")
    name = input("Please enter your name to begin > ")
    print("Hello " + name + ", shall we begin?")

    question = input("Please ask your question > ")

    outcome = random.choice(outcomes)
    print(outcome + "\n")
```

```
Welcome to the Magic 8-Ball
Please enter your name to begin > |
```

IDES

In class we use a web-based IDE to program (repl.it), this provides many of the features listed above: an editor, error diagnostics, translator, output window etc.

You will have all used auto-complete, auto-indent, syntax highlighting (different parts are different colours!)



Task 1 – Planning your Interactive Digital Media Product

Client Brief	Target Audience	Interpretation	Client requirements	Asset log	Mind map	Wireframe Diagram	Site Plan
The client's expectations for the completed product.	Who the product is for.	Explaining, reframing, or otherwise showing your own understanding of something.	Information which is required from the client for the company to provide the services.	A list of all the assets used in a media products.	Used to generate ideas.	A planning document that shows the layout and functionality of interactive products.	Used to how different pages or screens are linked together.

Client brief and requirements

Before creating a media product, it is important that you understand the clients' requirements of the project. These **requirements** will be given in the **client brief**:

Type of product - product that is being created

Time scale - Key dates and deadline for the project

Audience - which segment of people are being targeted e.g. boys aged 13-16

Purpose - key objective of the product e.g. advertise, entertain?

Client ethos - media product will need to align with the clients' values and belief

Content – components that need to be part of the media product such as images, videos, sound or functionality

Genre, style, theme - the look and the feel of the product

Mind map

Content of a mind map:

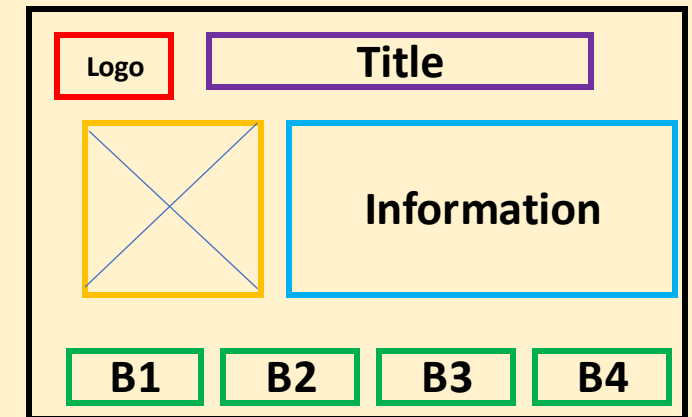
- **Central node** with a main theme
- **Nodes and sub-nodes**
- Interconnecting lines and branches to *link ideas together*
- Text
- *May include Images*



Wireframe diagram

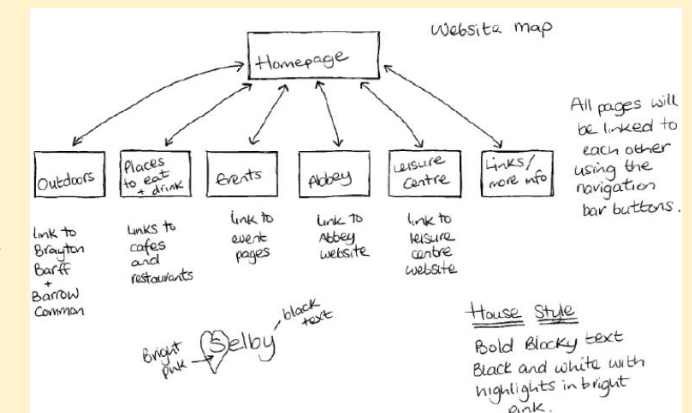
Content of a Wireframe Diagram

- Each screen or page
- Images, text
- Audio, video, buttons
- Annotation to justify design



Site map

- Shows all the screens / pages of the product.
- Lines and arrows are used to show how the user navigates from one page to another.





Task 2 – Creating your Interactive Digital Media Product

Source	Repurpose	Navigation	Asset	File Format	File Properties	Convention	Export
Declare where assets come from and that you have the right to use them in your product.	Content that transformed into a new format e.g. PSD to PNG.	Act of finding your way from one place to another.	Anything used to create an original media product. E.g. logo, image, sound or video.	Is a standard way that information is encoded for storage in a computer file.	Shows you information like the type of file, the size of the file etc.	Are closely connected to the audience expectations of a media product.	Converting a digital product from its native file type (e.g. .psd) to a format the client can use (e.g. .png)

Identify and explain assets required

Once you have collected and sourced the assets, you will need to explain where, how and why they will be used in your IDMP. Such as:

- Images
- Video
- Audio
- Text



Prepare assets to be used on the product

In your coursework, you must show what the image looked like when you collected the image from the internet, then what it looks like editing the image. You should also describe the tools that you used.

You should show how the key elements were made. **Screenshots** of the tools of the editing/creation software in use are one way this could be done.

1. I used the **type tool** to add the text and changed to the same shade of green inside the blender.

2. I used the **scale tool** to resize and rotate the blender.

I used an **outer glow** to text by setting blend mode to normal, increase the **opacity** and increased the **spread** so the black outline matches the one used in the blender.

Creating the interactive digital media product

1. Use **Master Slides** to prepare background and font styles.
2. Use **transitions** and **animations**.
3. Use **hyperlinks** and/or **animation triggers** to interact to user inputs.
4. **Navigation buttons** should enable the user to jump to **any** part of the product, not just the next page.
5. Include video and audio.

Maintain a **consistent theme** throughout the multimedia product with master slides.

Export the final product using a suitable electronic format and properties that meets the client requirements.



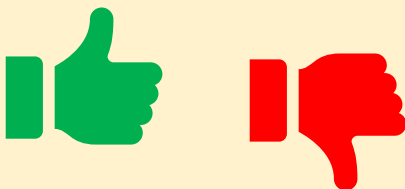
Task 3 - Testing/checking and review your Interactive Digital Media Product

Test table	Review	Effective	Justify	Comprehensive	Evaluate	Improvement	Development
Tests both individual elements of the assets and the final product.	A review is an evaluation of a publication, product, service, or company.	The work produced is effective in relation to a brief.	The reasons for doing something are explained in full.	Understanding and skills needed to produce the wanted or intended results be fully fit-for-purpose.	Judge or calculate the quality, importance, amount, or value of something.	Makes something better – needed when the product doesn't work!	Something changes and becomes more advanced.

Test Table

Using the OCR provided test table, you will need to test or check and explain to what extent the **technical properties** of your individual **repurposed assets** are fit for purpose and its **functionality**. This can be:

- Buttons
- Images
- Sound
- Video
- Animation



Test	Pass/Fail	Comments	Re-test	Result
Is the graphic suitable for web use?	Fail	<i>DPI set to 300 which is not suitable for web use, the file size is too large.</i>	Yes	<i>DPI changed to 72, which decreased the file size.</i>
Is font style suitable?	Pass	<i>Font style is clear and easy to read. It is suitable for the age range of the target audience.</i>	No	

Review

WWW: A clear, **comprehensive** response to what has been achieved.

EBI: What did not go so well, suggest **improvements** to make work it work and further **developments**.

- Creating the IDMP (*setting up the structure of IDMP, use of tools, collating assets etc*)
- Meeting the client requirements expectations (*house style, target audience, content, timescale? etc.*)
- Does the IDMP follow the plan? (*wireframe diagram, site map, storyboard? etc.*)
- Was anything mentioned above that you found difficult?

Improvements

- Explain how you could improve the assets used in your IDMP
- *Did you manage to improve and overcome the difficulties?*
- Explain how you could improve your IDMP?
- *Can you suggest improvements to what did not work?*



Further developments

- Explain how your IDMP could be developed further?
- *Can you suggest further developments that could be made to make the IDMP even better if you had more time?*








Task Area 1: The media industry

Traditional media	New Media	Pre-Production	Production	Post-Production	Creative roles	Technical Role	Senior Role
Advertising methods that have been around for a long time e.g. radio, print publishing, billboards, TV.	Digital methods to advertise e.g. Social media, apps.	The process of planning elements involved in a form of media.	The phase at which media products are created, assembled and finalised.	The stage after production when editing of visual and audio materials begins.	Your job will be to produce and develop ideas to help create a product.	You will be using technology and operation equipment to develop, improve and finalise media product.	You will oversee the creation and development of products and projects.

Job roles in the media industry

Creative job roles	Technical roles: Who makes the TV programs	Senior roles
Animator: Makes the animation. 	Camera operator: Films the program. 	Campaign manager: Makes and runs the marketing campaign for the final product
Script writer: Writes the words the actors to say. 	Games developer: Makes the game. 	Creative director: Decides what they want in the product that will get people to watch the film or play the game.
Web designer: Designs the website 	Sound editor: Edits sound for TV and games. 	Director: Speaks to the client, leads the project, tells the actors how they should perform in the scene 
	Video editor: Edits the video for TV programs and games 	Editor: Makes sure that the final product is suitable for the target audience. 
	Web developer: Makes the websites for people to use. 	Production manager: Runs the budget, production timetable, and makes sure locations for filming are safe. 

Purpose of media products

Purpose	Description	Examples
Advertising/promotional	Use persuasive language so that a customer wants to buy the product.	Billboard, radio, advert, web banner, film, poster 
Educate	To teach or provide instructions for someone to learn	Textbook, leaflet, webinar, website, podcast, documentary 
Entertain	To provoke an emotional response, for enjoyment or to provide escapism from daily life.	Comic, magazine, social media, video game 
Inform	To give brief instructions or information without going into depth.	Map, flyer, poster, booklet, website, sign 
Influence	To have a persuasive effect on an audience to make a choice/change their view.	Social media, music video, pod cast 



Task Area 2: Factors influencing product design

Influence	A client brief	Client	Target audience	Segmentation	Demographic	Primary research	Secondary research
The capacity to influence the character, development, or behaviour of someone or something.	Key information needed from the client to begin designing and planning a media product.	The customer who is paying for the work to be completed.	Who will be the end user the product.	The ways in which audiences can be broken down based on their characteristics.	The characteristics of a population. Including age, income, gender, race, ethnicity, marital status, education & employment.	First-hand accounts, data, and opinions of something. The information comes directly from the source.	Information which is a second-hand interpretation or recollection of information.

Style content and layout

Positioning of elements - Elements of media products needs to be carefully positioned to achieve a pleasing composition (layout).

Convention of genre – Different genres will use typical components and techniques. For example, a logo will be placed top right on a billboard to help the viewer to identify the product.

Adaptation to purpose – A product such as a billboard or a flyer can be adapted to different purposes.

Visual and audio style – The style of a media product is built using many components such as graphics, colour, layout and tone of language.

Research methods

Primary research sources

Focus groups | Interviews | Surveys

- Strengths**
- Up to date
 - Unique and relevant
 - Data is not available to others
 - Detailed responses

- Weaknesses**
- Participants not truthful
 - Expensive
 - Not accurate representative



Secondary research sources

Books | Internet | Magazines/newspapers

- Strengths**
- Convenient and easy to access
 - Cheaper
 - Less time consuming to gather information

- Weaknesses**
- Could be outdated
 - May lack detail or be incomplete
 - Inaccurate data



Client requirements

The purpose of a client brief is to provide information to the design and creative teams that will help them to produce successful media product for the client that is also successful with the target audience.

Client brief formats

- Negotiated
- Meeting/discussion
- Written
- Informal
- Formal
- Commission



Client requirements

- Purpose, requirements
- Client ethos
- Genre
- Timescale
- Target audience
- Restrictions



Audience segmentation (target audience)

Breaking down and identifying a target audience is important in developing a product for the end user.



Age



Gender



Income



Interests



Location



Education



Ethnicity



Occupation



Task Area 3: Pre-production planning

Pre-Production	Copyright	Asset Log	Flowchart	Storyboard	Visualisation Diagram	Intellectual Property	Location Recces
The process of planning elements involved in a form of media.	A legal right a creator or copyright holder has to use material as they would like.	A document used to monitor the assets that have been collected from other sources to be used in a digital media product.	Is a diagram of events or steps that show the order they should happen in.	Is a series of boxes or panels containing the action that occurs, shot by shot in an audio-visual product such as films.	Is a detailed drawing or sketch that shows what a final media product should look like.	Rights are given over our ideas and creations that we have in our mind.	Carried out on filming locations to assess their suitability for use and health and safety risks.

Mind maps

Purpose is to record thoughts and ideas in a structured way. To develop and show links between different ideas, aspects and processes of a project. To support the generation of ideas.

Content that appear on a mind map:

- Central node
- Node
- Sub – node
- Branches



Mood board

Purpose is to aid the generation of ideas by collecting a wide range of material that will give a 'feel' for what is desired. To stimulate creative and innovative approaches. Electronic mood boards can have video and sound, but not material.

Content that appear on a mood board:

- Images
- Colour scheme
- Text & font
- Texture

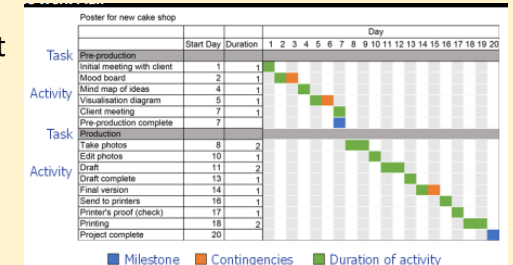
Digital mood board will include video, audio and animation



Work plan

Purpose of a work plan is to make stages of a project become clear.

- To book the correct people, equipment, locations, props.
- Everyone knows their responsibilities.
- Each person knows their role and who they are working with.
- Deadlines are made clear to all involved.
- Managers can see an overview of the whole project
- Progress can be tracked and evaluated easily
- Goals and deadlines are defined
- Resources and budgets can be used accurately
- Contingency plans are for when something does not go to plan.



Regulation, certification, and classification

- The rules which are enforced by the law to restrict, develop or shape the way in which media works. Two types of regulators that help protect viewers;
- Advertising Standards Authority (ASA) – ensure adverts are truthful.
- The Office for Communications (Ofcom) – regulate television, online and radio broadcasts.





Task Area 4: Distribution consideration

Distribution	Online platform	Physical platform	Physical media	Properties	Formats	Resolution	Compression
The action of sharing a product with others: Physical Platforms and Online Platforms	There are 3 types of online platforms: apps, multimedia and web	There are 4 types physical platforms: computer, interactive TV, Kiosks and mobile devices.	There are 3 main types of physical media: CD/DVD, memory stick and paper based.	Shows you information like the type of file, the size of the file	Is a standard way that information is encoded for storage in a computer file, determines which software the file is opened with.	The level of detail that is held in an image that affects how clear it is.	The re-encoding of data so less bits are used to store it. Done to increase transmission Speed.

Image File Types

Raster (bitmap) images are photographic images, made of pixels. The more pixels the better the quality and the larger the file size. Raster file types are JPEG, PNG, TIFF, PDF.

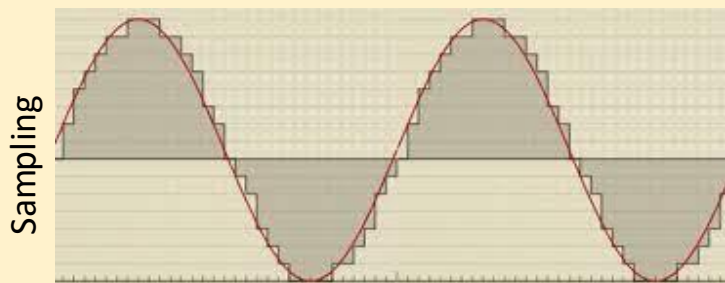


Vectors are clipart images, made using paths and points. You can expand the image or zoom in and the image remains sharp.



Audio files (music you might listen to on your phone)

- **Bit depth** – The amount of data for the sound (the more bits the better the quality).
- **Sample rate** – Sampling of the sound, while recording. The average sample rate is 44,100 samples per second. The more samples, the better the quality of the sound.



Properties of moving image files

SVG - animation is usually stored in SVG format. This format allows objects to have motion and slide or bounce.

GIF – is an older format for animation on web pages. It has broadly been replaced by SVG.

MP4 – used for streaming video and films. Used in some Blu-rays.

MPEG-2 – used in television broadcasts, DVDs and some Blu-rays

File compression

Lossy – reduces the file size but it will lose some of the original information.

Lossless – no information is lost when the file is compressed.

Distribution Platforms (Online Platforms, Physical Platforms and Physical media)

Platform advantages

Physical	Purpose: used to play or show media products User: No recurring subscriptions No need for internet connection for download. Distributor: Better control on views	
Online	Purpose: used to share large files within a media organisation without the need to upload or download User: Quicker to access media Environmentally friendly (less travel) Easily access updates Distributor: Cheaper, less equipment, Environmentally friendly (less waste)	



4.1 The Production Process & 4.2 Quality of Goods and Services

Job Production	Batch Production	Flow production	Automation	Quality Control	Quality Assurance	Recalls
Products are made individually.	One type of product is made and then production is switched to make a different product.	Production of one product takes place continuously using a production or assembly line.	Production process involves machinery that is not controlled by a person; usually controlled by a computer.	A system for inspecting the quality of products to ensure they are of a good standard.	The whole business focuses on quality, aiming to prevent quality problems.	Used when a fault occurs with a product, the business asks for the product to be returned so it can be repaired/replaced.
Returns	Customer Engagement	After-sales Service	Product Knowledge	Consumer Law	Logistics	Procurement
Goods which customers take back to the shop typically because of problems with quality.	Contact between the business and customer.	Advice and help given to a customer after they have bought a product or service.	The detailed knowledge of a product that staff within a business use to help persuade a customer to buy.	Law which protects the customers of a business - Consumer Rights Act 2015.	The management of the transportation and storage of goods.	The management of purchasing within a business.

4.1 The production process

Job production

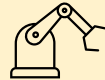


- + Products are usually high quality.
- + Products can be made to meet the needs of individual customers.
- Costs of production will be high.
- Labour costs may be high because production often requires skilled labour.



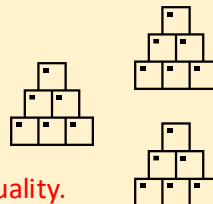
Batch Production

- + Needs of different customers can be met - making batches of different goods.
- + Batches are made to meet specific orders, this can reduce costs if goods don't need to be stored.
- + Specialist machines can be used to automate production, reducing costs.
- Takes time to switch production from one batch to another, increasing costs and reducing output.
- May need to hold materials for different batches - storage costs and materials need to be paid for.



Flow Production

- + Large amounts can be made.
- + Cost/unit is low due to economies of scale.
- + Machinery can be used to lower costs.
- Goods are mass-produced and may not be good quality.
- Jobs can be repetitive and boring.



4.1 Using technology in the production process - Automation, computers and robotics

- + Costs are reduced due to fewer workers being required.
- + Machines can be more accurate than human workers.
- + Machinery is never absent from work (*illness, holidays etc*) and work 24/7/365.
- + Machines can do dangerous and boring jobs that humans may be unwilling or unable to do.
- Workers may become redundant when new technology is used → **redundancy** payments.
- New, skilled workers might be needed. Skilled workers have higher salaries.
- Existing workers may need to be retrained, increasing costs.
- Machines are expensive to purchase and can break down disrupting production.



4.2 Quality of goods and services

Quality of production = product is fit for purpose. Reduces need to **recall** or **return** products.



Quality control helps prevent faulty goods being sold, increasing the businesses reputation. However, quality control costs money and does not prevent wasted resources.

Quality assurance is used to prevent problems with quality, therefore reduces wastage & cost. However, it can disrupt production if workers are stopping to check quality regularly.



4.3 The sales process and customer service

Selling Methods

E-commerce - Bringing a buyer and seller together electronically (online sales)

Face to face - Selling through a shop. Opportunity for advice and questions.

Telesales - Telephone sales. Useful when people are uncomfortable buying online.

Changes to business activity due to **e-commerce**:



- Location - *Now almost anywhere!*
- New skill development - *Workforce will need different skills i.e. website developer.*
- Delivery options - *Speed of delivery could be a competitive advantage i.e. next day.*

E-Commerce advantages and disadvantages to businesses

- ✓ **Sell worldwide, open 24/7/365, lower operating costs (doesn't require stores!)**
- ✗ **Worldwide competition, problems delivering goods, online security**



E-Commerce advantages and disadvantages to customers

- ✓ **Price comparison, available 24/7/365, wide range of products.**
- ✗ **Lack of personal contact, problems returning goods, can't see/touch the goods**

The importance of good customer service - *helps to maintain or increase sales!*

- Good after-sales service for when things go wrong.
- Good product knowledge, especially if selling electricals!



4.4 Consumer law

Consumer Rights Act 2015 - products must be:

- Of satisfactory quality - *not damaged or faulty when purchased*
- Fit for purpose - *goods must do what they are meant to do*
- As described

The impact of consumer law on business

- **If goods aren't good quality, they will be returned which will increase business costs**
- **Poor quality and defective goods will harm the businesses reputation**



4.5 Business Location

Factors influencing the location of business:

Site and labour costs -

Price of land, rent & labour differs in different parts of the UK.



Transport infrastructure -

Roads, rail, airports, ports & broadband.



Government - *e.g. reduced business rates in areas with higher unemployment.*



Proximity to the market -

Locating shops and warehouses close to customers.



Proximity to raw materials -

It can be very expensive to transport raw materials over long distances.



Proximity to labour - *does the business require skilled or unskilled labour?*



4.6 Working with suppliers

The role of procurement

1. **Identifying products to buy** - *time of year; changes in technology, fashion, and lifestyle.*
2. **Choosing suppliers** - *quality of goods, reputation of suppliers.*
3. **Ordering products** - *including services provided to the business e.g. cleaners.*
4. **Receiving deliveries from suppliers** - *orders will need to be stored.*



Impact of logistical and supply decisions on a business



- Time - *goods need to arrive at the right time.*
- Reliability of supply - *poor reliability would impact a businesses reputation.*
- Length of the supply chain - *Shorter supply chains are typically more reliable.*
- Costs - *Lower costs may be from less reliable suppliers or from poor quality products.*
- Customer service - *Businesses may also be customers and will want to receive good customer service!*





5 Finance

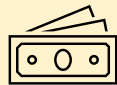
Interest	Loan	Overdraft	Trade Credit	Retained Profit	Crowdfunding	Revenue
Amount that has to be paid on borrowed money.	Sums borrowed for a certain period at an agreed rate of interest.	An arrangement with a bank that a business can spend more money than it has in its account.	When the business has the goods to sell and agrees to pay at a later time.	Profit that is not distributed to shareholders as a dividend.	Money raised through an appeal to the public - donations, loans, or become part-owners of the business.	Money from sales.
Fixed Costs	Variable Costs	Break-even forecast	Cash Flow Forecast	Net Cash Flow	Negative Cash Flow	Liquidity
Costs that stay the same as output changes e.g. rent.	Costs that change as output changes e.g. wages.	A prediction about the break-even quantity based on estimates of future sales revenues and costs.	A statement showing the expected flow of money into and out of a business over a period of time.	Total inflow minus total outflow.	When during one month, more cash is flowing out of the business than is flowing into it.	The ability of a business to turn assets into cash.

5.1 The finance function

- Large businesses will have a separate finance function.
- Small businesses, *sole traders* etc, would normally employ an accountant to check their finances.

The purpose of the finance function is to:

- **Manage the money that businesses need to operate**
- Provide financial information
 - Costs and revenues
 - Cash-flow & break-even output forecasting
 - Average rate of return (ARR)
 - Profitability
- Support business planning and decision making



Influence of the finance function on business activity - examples

- A business that wants to be more environmentally friendly may have higher costs and need to monitor cashflow or find additional finance.
- Sales may be reduced, and information would help the business to decide how to respond.
- A large business may decide to run a nationwide TV advertising campaign - information would be needed about the cost of this and any finance needed.
- A business may decide to change its production methods (e.g. job to batch) and would want information from the finance dept. showing how this would impact costs and revenues.

5.2 Sources of finance

Businesses need finance to: start-up, expand, recruit, and run marketing campaigns. Finance can be **short term (< 12months)**, **medium term (1-5 years)**, or long term (5+ years).

Owners capital - Owners use their savings - no need to repay the money and no interest to pay.

Retained profit - no need to repay and no interest to be paid

Sale of assets - Sell a fixed asset i.e. machinery or premises. Can take time to sell the asset.

Overdraft - Helps with short term cash flow problems. Interest is charged.

Trade credit - The business can sell goods before it pays the supplier.

New partner - The new partner could bring new skills but will be entitled to a share of profits.

Loan - Repayment is spread over time. Interest has to be paid.

Share Issue - New shares are sold - a lot of finance can be raised. Dividend payments.

Crowd funding - A lot of money can be raised. Takes time and effort to promote.



5.3 Revenue, costs, profit and loss

Total costs = fixed costs + variable costs

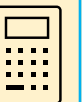
Gross Profit = Revenue - cost of sales

Net Profit = Gross profit - costs of running the business.

Gross Profit Margin = (Gross profit / revenue) x 100

Net Profit Margin = (net profit / revenue) x 100

Average Rate of Return (ARR) = (Annual average profit / cost of investment) x100

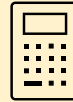




5.4 Break-Even

Break-even is when the total costs of production are equal to total revenue from sales.

- If a business 'breaks even' it does not make a profit, nor does it make a loss.



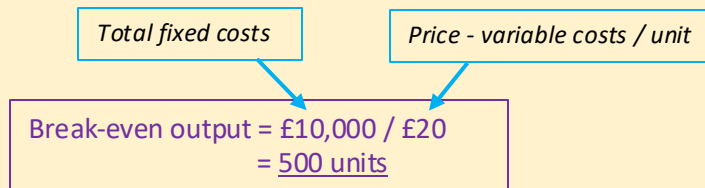
Break-even output = total fixed costs / (price - variable costs per unit)

Example:

Fixed costs = £10,000 per year

Selling price per unit = £50

Variable cost of each unit = £30



Margin of safety is the amount of sales that are greater than the level of sales needed for break-even.

Margin of safety = actual sales - break-even sales

- In the example above, any sales less than 500 units would result in a loss.
- Any sales greater than 500 units would see the business make a profit.
- If the business sold 800 units, it would have a **margin of safety** of 300 units.

- + Break-even forecasts will tell a business how much they need to sell to make a profit
- + They can be used to help secure finance from the bank
- + They can help a business make judgements about selling prices and costs.

- Does the business need to increase revenues, by raising prices? Or lower costs?

+ They can show the margin of safety.

Break-even forecast figures may be different to those predicted.

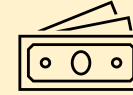
- The number of competitors may change, reducing sales or sales prices.
- Cost of materials could change, increasing costs.
- Price increases may not lead to increased revenue, instead it could lead to a fall in sales.



5.5 Cash and Cash Flow

A business needs cash to pay its expenses and meet its **short-term debts**, these include:

- Wages and salaries
- Rent
- Suppliers
- Heating and lighting bills.



Liquidity is the ability of the business to turn assets into cash in order to pay these expenses. If stock is slow to sell, the business might not be able to pay its bills!



Cash = money in bank accounts and in cash on the premises.

Profit = total revenue - total costs

A business might have a lot of cash but not make a profit!

Cash flow forecast - used as a planning tool, anticipates periods of cash shortages, and enables remedies to be put in place. Example →

Inflow - money coming into the business.

Outflow - money going out of the business.

Net cash flow = cash inflow - cash outflow

Opening balance - Amount of cash at the start of the month and is the same as the **closing balance** of the previous month.

	October	November	December
	£	£	£
Cash inflow			
Sales	30,000	40,000	55,000
Total inflow	30,000	40,000	55,000
Cash outflow			
Wages	6,000	7,500	10,000
Loan repayments and interest	3,500	3,500	4,000
Stock	35,000	15,000	10,000
Total outflow	44,500	26,000	24,000
Net cash flow	-14,500	14,000	31,000
Opening balance			
Opening balance	1,000	-13,500	500
Closing balance	-13,500	500	30,500

Is a negative cash flow a problem?

- May only be temporary.

- May require the business to get additional finance e.g. overdraft.

- May mean that the business has to delay payment of money owed e.g. to suppliers.

The business may be in trouble if it has a negative cash flow for a number of months!



6 Influences on Business

Ethics	Ethical Marketing	Environmentally Friendly	Sustainable Production	Renewable Resources	Economic Climate	Gross Domestic Product
What is right and wrong.	Marketing is honest, truthful, legal and decent.	Consumers and businesses that act to make production <i>sustainable</i> .	When production does not lead to the depletion (using up) of natural resources.	Resources that can be used more than once - such as wind or water power.	How well a country is doing in terms of the levels of income and employment.	GDP is a measure of how much a country produces in a year. Influences income.
Recession	Globalisation	International Branding	Free Trade	Tariff	Quota	Multinational Companies
When GDP is falling, causing income and employment to fall.	Business activity around the world has become increasingly interconnected.	Creating an image / values for a product that are communicated in countries around the world.	No restrictions on trade between countries.	Tax on products that are imported.	Limit in either weight or value on the amount of a product that can be imported.	Businesses that operate in different countries around the world.

6.1 Ethical and Environmental Considerations

Unethical behaviour

Treatment of workers:

- Using child labour
- Paying workers low wages
- Expecting workers to work very long hours
- Not providing safe working conditions
- Discrimination



Treatment of suppliers:

- Late payment of bills

Treatment of customers:

- Poor quality products
- Fake and/or dangerous products
- Increasing prices during difficult times



Treatment of animals:

- E.g. testing beauty products on animals



Fairtrade promotes ethical business activities as it ensures that businesses pay fair prices to farmers.

Impact of ethical considerations on businesses

- Higher costs - *higher wages, safe environments etc.*
- Lost sales - *more sales from dishonest marketing*
- Reduced profits - *higher costs, lost sales*
- Poor financial figures - *paying suppliers on time*

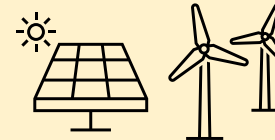


- Improve motivation, productivity, loyalty, and retention of workers
- Good reputation - *Can lead to an increase in sales.*

Environmental considerations

- Sustainability - *making goods without depleting natural resources*

- Solar and wind
- Using recycled resources
- Saving water and electricity



- Pollution

- Air
- Noise
- Sea & rivers



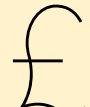
- Climate change

Benefits to business of being environmentally friendly

- Increased sales
 - Consumers want environmentally friendly products
- Reduced costs
 - e.g. generate own electricity using solar
- Reduced tax bills
 - Businesses may pay more taxes if they cause environmental damage
- Subsidies
 - Government pays money to businesses



- Increased raw material costs
 - materials could cost more
- Capital costs
 - e.g. cost of buying and installing solar panels
- Production methods may be more expensive



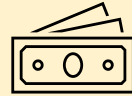


6.2 The Economic Climate

Income and employment levels

Income is the amount of money people receive from work and assets (such as shares and property).

- Income influences the amount of money people can spend as customers.
- As income increases, so does spending and businesses sell more products!
 - Businesses will produce more and may need to employ more people



The level of employment is the number of people in work.

- Generally, when employment increases, so does income.
 - This can make it difficult to find workers with the right skills!
 - Businesses will need to offer higher pay as competition for workers increases, which will increase costs and possibly prices.



Gross domestic product (GDP) measures the amount of goods and services that a country produces per year.

- Higher **GDP** will lead to higher incomes



Economic growth refers to the **GDP** rising, and the speed of this is usually shown as a percentage.

- 0.5% would be slow, 3% would be very good



Recession occurs when the **GDP** of a country falls.

- During recessions, incomes and therefore spending decreases
 - Businesses sell fewer products and decrease production
 - Workers lose jobs
 - Unemployment increases / employment decreases



International economic climate - if other countries enter recessions it could affect UK businesses exports and decrease sales.

Business could **respond to changes** in the economic climate by reducing the costs of production, increasing **motivation** and **productivity**, improving **cash flow**, or changing the **marketing mix**.

6.3 Globalisation

Globalisation refers to how business in different countries have become increasingly connected in their activities. It involves:

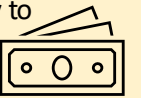


Buying and selling goods and services made in different countries.

The **movement of workers** from country to country.

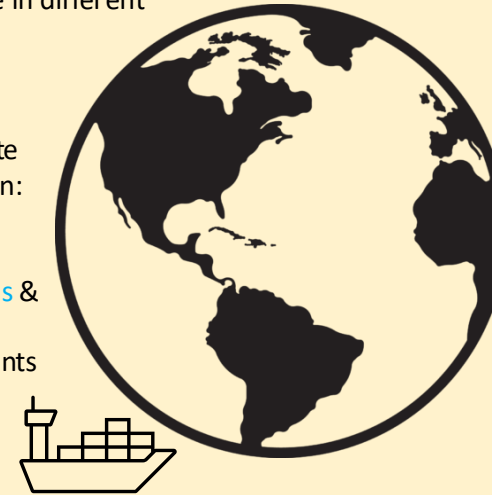


The **movement of capital (finance)** from country to country.



Globalisation has increased at a rapid rate due to improvements in:

- Transport** (ships, planes, rail, road)
- Telecommunications** & the **internet**
- Free trade** agreements
 - No barriers
 - No tariffs
 - No quotas



Impact of globalisation on business

- Growth of multinational companies (MNCs)**
 - Increased sales
 - Local business closure
- Influences business location**
 - Lower costs - labour, land, technology
 - Quality of products, communication

Impact of globalisation on business

- International branding - *Businesses must be aware of cultural and religious differences.*
- International competition - *Increased competition due to selling in the UK and abroad.*



Brexit - The UK is no longer a member of the EU.

+ The UK is free to make trade deals with non-EU countries, increasing export opportunities.

+ Some businesses may move production to the UK.

+ New businesses to help UK companies complete paperwork needed to export to the EU.

- Increased inspections and paperwork when exporting from the UK to the EU

- Costs time and money.

- Recruitment problems, the freedom of movement has ended.

- UK firms have relocated to the EU.





Episode One : The Care Values

Year 11 - Health and Social Care – Services and Values

Component 2 Learning aim B: Demonstrate care values and review own practice

Person Centred Approach



The values can be seen when a person-centred approach to care is taken.



Empowering and promoting independence by involving individuals, where possible, in making choices about treatments they receive or about how care is delivered. This is important so a service user still feels they have control over their lives and that their wishes are being taken into account.

Respect for the individual by respecting service users' needs, beliefs and identity. If a service user has a particular cultural need or religious belief that should be respected and adhered to. Examples can include, dietary requirements, religious practices such as praying at certain times of the day or ritual washing.

Maintaining confidentiality: sharing the records of the service user appropriately with other staff and services as necessary and not gossiping about the service user. Service user's records should also be kept securely in a locked room.

Preserving the dignity of individuals to help them maintain privacy and self-respect during their time at the service user. Examples of this would be shutting the door when a service user needs to undress, using appropriate feeding equipment for adults and helping with personal hygiene.

Effective communication that displays empathy and warmth. This includes verbal, non-verbal communication and active listening.

Safeguarding and duty of care: maintaining a healthy and safe environment, keeping service users and staff safe from physical harm and abuse.

Promoting ant discriminatory practice by being aware of types of unfair discrimination and avoiding discriminatory behaviour.

Episode Two: Application of care values in a compassionate way.

Care-Should be tailored to each individuals needs.

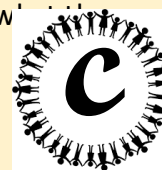
Compassion: Understanding of what the service user is going through

Competence: Safeguard and protect individuals.

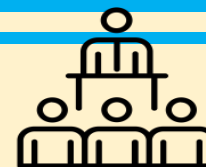
Communication: Adapting to individual's needs.

Courage: Speaking out if witness to something wrong or have made a mistake.

Commitment: Work to the best of your ability.



- Working together:
- All members of staff within a service have a responsibility to uphold the care values.
- Staff training is important to keep all staff up to date with legislation, new practices and shared experiences. It is also an opportunity to share information, if applicable in order to get the service users the best care.



Episode Three: Reviewing own application of care values.

Mistakes happen!

Own up – duty of care
Apologise- maintains trust and respect

Suggest ways to rectify the mistake

Work hard to prove your worth

Seek support from others if you need it.



Key aspects of a review



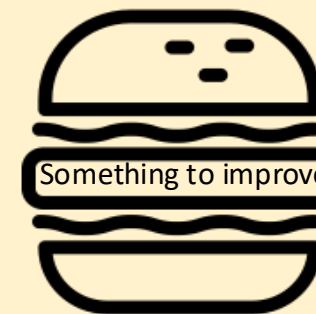
Identifying own strengths and areas for improvement

against the care values

Receiving feedback from teacher or service user about own performance



First positive point



Something to improve

Second positive point

Responding to feedback and identifying ways to improve own performance

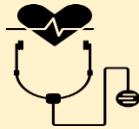


AO1 Demonstrate knowledge and understanding of factors that affect health and wellbeing

Episode One: Health and Well Being

Definition of health and wellbeing

Combination of physical health and social and emotional wellbeing, and not just the absence of disease or illness



The Holistic View of Health and Well-being is a combination of physical, emotional and social wellbeing.

Physical health – giving our bodies, water, shelter, warmth, clothing rest exercise and good personal hygiene.

Intellectual/ mental health: Keep brains working stimulated to keep us motivated and interested.

Social Aspects of wellbeing: Developing relationships and mix with other people appropriately.

Emotional aspects of wellbeing: Meeting the needs we have to feel happy and relaxed, respected, secure, able to express ourselves and manage our emotions.

It is important to note that as we go through the different life stages the holistic view of health and wellbeing provided by health and social services will have to adapt to the differing needs of each life stage.

Episode Two: *Factors* that can have positive or negative effects on health and well being.

Physical and lifestyle factors

Genetic inheritance, inherited conditions and predisposition to conditions such as sickle cell anaemia and cystic fibrosis.



Ill health Acute ill health comes on quickly and can usually be cured.



Chronic illnesses develop more gradually and can usually be treated not cured.



Diet Follow Eat Well Plate guidelines.

Amount of exercise: Regular exercise is a way of maintaining good health and well-being.



Substance use, Inevitable use includes, caffeine and prescribed medicines.



However, when the use becomes abuse, health and wellbeing will be negatively impacted including alcohol, nicotine, illegal drugs and misuse of prescribed drugs

Personal hygiene: Good hygiene limits the bacteria on us.

Personal hygiene includes brushing teeth twice a day, washing daily, regular hair washing and keeping finger and toe nails clipped and clean.



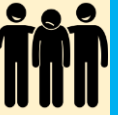
Economic factors:

Financial resources: The ability to purchase healthy food, join a gym and take part in leisure activities will impact health and well-being.



Social, emotional and cultural factors : Social interactions:

Supportive relationships, can affect health and well-being positively Isolation and unsupportive relationships can have the opposite impact.



Stress: Stress can have a big impact on a person's health and well-being.



Willingness to seek help or access services and the impact of changes to personal circumstances:

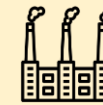


Support from informal and formal Support will only have an impact if the person is willing to access the support. Factors that may hinder this are culture, education and fear.



Environmental factors:

Environmental conditions: The level of noise and pollution will have an impact on a person's health and well-being.



Pollution will negatively impact health and wellbeing.

Housing: The condition of the housing and the location will influence the health and well-being of an individual.



Good housing conditions will have a positive impact on health and wellbeing.



Component 2 Pearson Set Assignment

Task 1:

Task 1 – How healthcare services work together to meet the needs of an individual

Produce a report on how different healthcare services work together to meet the needs of a 74-year-old who has recently been diagnosed with arthritis

Outcome A: Understand the different types of health and social care services and barriers to accessing them

Task 2 – How social care services meet the needs of an individual Produce a report on how social care services can meet the needs of a given individual

Your report must include:

- how social care services could meet the specific needs of the specified individual
- how voluntary care services could meet the specific needs of the specified individual
- how informal care options could meet the specific needs of the specified individual.

Learning outcome covered Outcome A: Understand the different types of health and social care services and barriers to accessing them

Checklist of evidence required

- a written response which can include supporting images Supervised hours to complete the task You will need approximately 1 hour to complete Task 2.

Task 3 – Barriers an individual could face when accessing services in health or social care

Produce a report on the barriers an individual could face when accessing services in health or social care and provide suggestions of how these could be overcome.

Your report must be based on a given individual with a health condition. You will be given additional information which will help you in this task. They will need to attend a health and social care service.

Your report must include:

- the barriers the specified individual may face when accessing the services
 - for each barrier, make realistic suggestions for how the health or social care services could minimise or remove the barrier
 - provide justifications to support each suggestion.
- Learning outcome covered Outcome A: Understand the different types of health and social care services and barriers to accessing them Checklist of evidence required
- Your report can take the following format
- a written response which can include supporting images
- Supervised hours to complete the task Learners would need approximately 1 hour to complete Task 3.

Task 4 – How healthcare professionals demonstrate the skills, attributes and values required when delivering care to an individual

Produce a report to show how healthcare professionals might demonstrate the skills, attributes and values required when delivering care to given individual with a health condition and additional factor.

Your report should include:

- how the skills and values held by the health and social care practitioners can be demonstrated by the professionals supporting the individual
 - reasons why the skills, values and attributes that you have included are important when providing the specified individual with care
- Outcome B: Understand the skills, attributes and values required to give care
- Checklist of evidence required Your report can take one of the following formats:
- a written response including supporting images
- Learners would need approximately 1.5 hours to complete

Task 5 – How the skills, attributes and values of care professionals can help an individual to overcome potential obstacles

Use the case study to produce a report on how the skills, attributes and values required of care professionals can help to overcome potential obstacles.

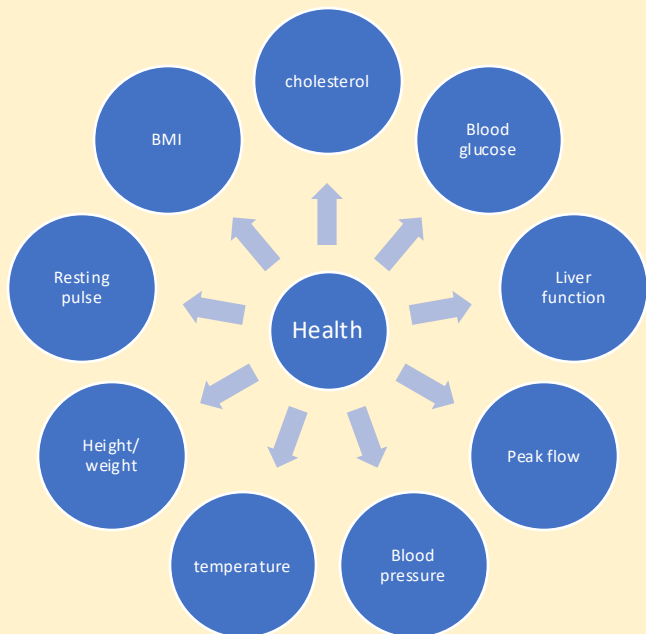
Your report must include:

- the potential obstacles that may faced
 - how these obstacles impact on recovery
 - how care professionals who show the care values can help – provide justification to support the reasons you have given
- Outcome B: Understand the skills, attributes and values required to give care required supporting images
- You will need approx 1.5 hour to complete Task 5.



Episode One : Health monitoring and illness prevention

In order to detect any problems in health regular monitoring to check everything is as it should be is carried out. There are many ways health can be measured.



Observed Indicators of health:

A health practitioner will observe whether a person is pale, flushed, sweaty, clammy, breathless, limping, twitching, has a swelling, lump or rash. They will also observe behaviour for any odd occurrences.

Episode two: Physiological indicators

A measure of health is to compare a resting pulse rate with the rate after exercise and see how long it takes to return to normal. The quicker it returns to resting pulse rate the healthier a person is deemed to be.



Blood Pressure:

Normal blood pressure is between 90/60 and 128/80.

High blood pressure can lead to heart disease, strokes, blindness and vascular dementia.

Low blood pressure can lead to fainting, dizzy spells falls or an indicator of Parkinson's disease.



Peak Flow: A measurement of how fast you can blow air out of your lungs. It is regularly tested in people who have asthma. However, it can also be used to diagnose bronchitis, emphysema, cystic fibrosis or lung cancer.

BMI: Is a measure of how much fat is in the body in relation to height.

$BMI = \frac{\text{Weight in kg}}{\text{height in m}^2}$

High BMI can lead to diabetes, stroke, arthritis, high blood pressure and cardiovascular disease.

Low BMI can indicate issues such as undiagnosed illness or an eating disorder.



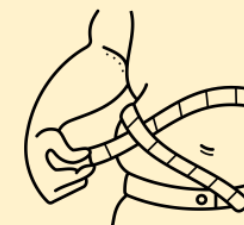
AO2 Interpret health indicators

Episode three: Using published guidelines to interpret data.

Published guidance can help the health practitioner to diagnose conditions.. Using baseline measurements (what is classed as normal) a comparison between the baseline and the person's readings can be made.

The readings should not be used in isolation ,different diagnostic assessments should be made to most accurately determine a person's health. In addition, multiple readings should be taken, and the highest reading noted . This will avoid inaccuracies.

Abnormal test results may mean that there is a **potential significance**- which means it could develop into something more. Of course, they could be abnormal through technical problems, or the reading was inaccurate- however it is very important to seek advice from a GP as to the next steps of action. If an abnormal reading is taken a repeat test should be given before any assumptions can be made. The service user may have been stressed or it was faulty equipment.





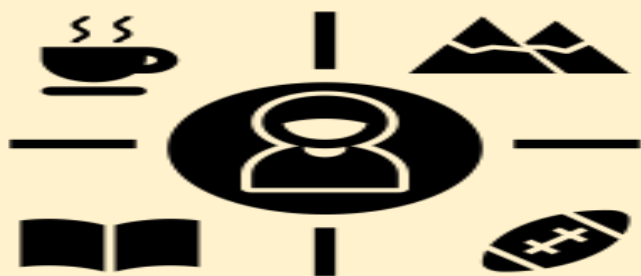
Episode 4 : Interpretation of lifestyle data.

The Office for National Statistics produces statistics for the UK on topics such as smoking, drinking, obesity and diet.

The data can be used to develop realistic health and wellbeing. It does this by accessing health status, setting targets for health practitioners to aim to improve the situation. Support will be provided in order to meet the targets, identify any difficulties that may arise and finally monitor and review progress.



As with any form of research Ethical considerations need to be taken into account. There are also strengths and weaknesses to statistics as a research methods.

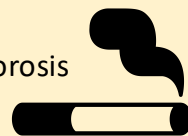


Episode 5 : Smoking and Alcohol consumption

AS- Action on Smoking and Health receives funding from Cancer Research and The British Heart Foundation and the UK department of Health to carry out research to influence, inform and campaign for tighter control to the tobacco industry.

The data collected shows:

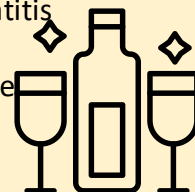
- 96,000 deaths a year are caused by smoking
- Smokers more likely to have dental issues and wrinkles
- Smoking can cause impotence
- Women smokers have a higher risk of osteoporosis
- More than 25% of cancer deaths are smokers
- 80% of lung cancer deaths are smokers



The ONS and the Drinkware Trust interpret data on alcohol consumption.

The data collected shows:

- Alcohol consumption is linked to 7 types of cancer.
- 3,000 cases of breast cancer in 2011 were directly linked to alcohol consumption.
- Each drink per day increases the risk of breast cancer in women between 7-13%
- Around 1,000 people die from acute pancreatitis in 2013.
- Two thirds of cases of chronic pancreatitis are caused by heavy drinking.



Cost of Alcohol and smoking:
Cost to personal health
Cost to the NHS

AO2 Interpret health indicators

Episode 6 : Inactive lifestyles

Data on regular exercise show that :

- 30% reduction of risk of early death
- 20% less risk of breast cancer
- 68% reduction in risk of hip fracture
- Reduced risk of depression
- 30% lower risk of colon cancer
- 30-40% less risk of developing type two diabetes
- 20-35% lower risk of developing cardiovascular disease, heart disease and stroke



Recommendations from the Chief Medical Officers

- Children 5-18 years should aim to be active every day
- Less sitting for extended lengths of time
- Moderate activity for 60 minutes per day and vigorous activity at least 3 days a week



Who uses data?

The British Heart Foundation
Public Health



Cost of inactivity

- Health deterioration
- Cost to the NHS
- Lack of social skills
- Increase the risk of people getting type 2 Diabetes , heart disease, strokes in later life





Treating people with dignity , compassion and respect
Care, support and treatment is coordinated
Care, support and treatment is personalised
Help people live independently by recognising strengths

AO3 Design a person-centred health and wellbeing improvement plan
AO4 Demonstrate knowledge and understanding of how to overcome obstacles relating to health and wellbeing improvement plans

Episode One : History of Person Centred Approach

Until 1960 care was done to the patient rather than with. Service users were expected to fit into what the health practitioners had in place. In 1960 Carl Rodgers , a psychologist, developed the person-centred approach to care saying that individuals should be trusted with making decisions about their treatment and care.

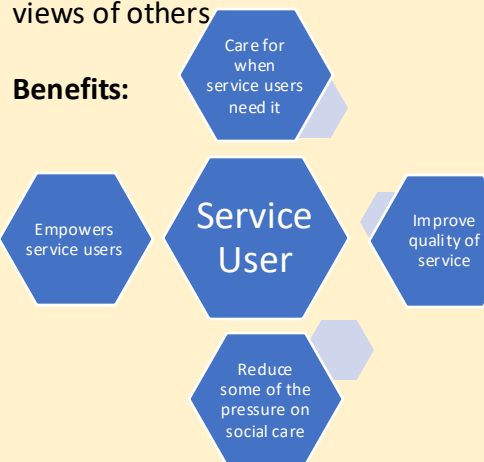
What is a person-centred approach?

The service user is at the centre of the care and support and is included in any discussions about the care. All involved services work **collaboratively** together showing **empathy** and willingness to see things from the service user's perspective.

Collaboratively: working well together

Empathy: Understanding and sharing the feelings and views of others

Benefits:



Episode Two :Health Improvement Plans

Information to be included in plan:

Statement of intent and purpose.

An end goal

Recommended actions to improve health and wellbeing so health matches the norm based on physiological indicators

Recommended actions to improve health and wellbeing so health matches the norm based on lifestyle indicators



Specific
Measurable
Achievable
Realistic
Time related

Creating targets: A good plan has both short (less than 6 months)and long- term targets (6 months plus). Breaking targets down makes the end goal more manageable.

Monitoring targets: Targets need to be monitored to ensure they are working; adjustments should be made as necessary.

Appropriate sources of support (Formal and/ or informal)



Episode three :Obstacles for implementation of health plans

Potential obstacles

Emotional/ psychological – lack of motivation, low self-esteem, acceptance of current state will impact whether people stick to targets.

Time constraints – work and family commitments, appointment times

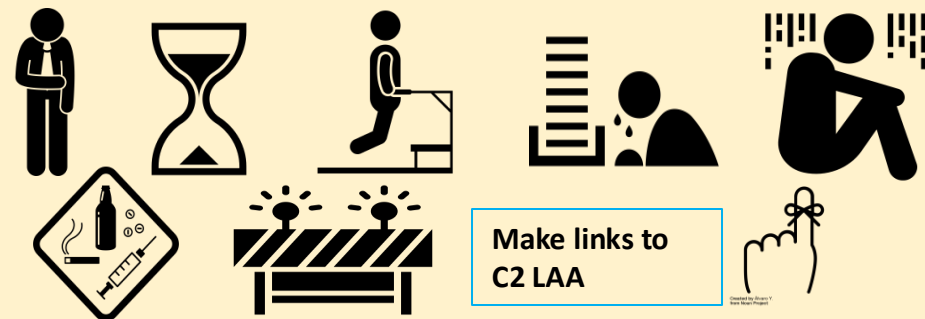
Availability of resources – financial, physical, e.g., equipment , membership to gyms and clothing.

Unachievable targets – unachievable for the individual or unrealistic timescale, this will demotivate people to carry on.

Lack of support, e.g., from family and friends

Other factors specific to individual – ability/ disability, addiction

Barriers to accessing identified services





Year 11 – Child Development - R059 Understand the development of a child from birth to five years



Physical, Intellectual and Social Development

Physical Development involves developing control of muscles and physical coordination, these can be **fine motor skills**, which are the ability to make movements using the small muscles in hands and wrist, such as cutting and sticking. In contrast to this, **gross motor skills**, which are the abilities that let us do tasks that involve large muscles in our torso, legs, and arms. They involve whole-body movements such as riding a bike or running.

Intellectual development involves the growth of a child's ability to think and reason. It's about how they organize their minds, ideas and thoughts to make sense of the world they live in, for example reading a book or telling a story.

Social Development involves a child's interaction with others around them. As they develop and perceive their own individuality, they also gain skills to communicate with other people and process their actions. This could include taking part in board games or a group activity such as circle time.

Key Vocabulary

Fine motor skills are the coordination of small muscles in movement with the eyes, hands and fingers

Play refers to a child engaging in activity for enjoyment and recreation

Gross motor skills are using the large muscles in the arms, legs and torso

Benefit is an advantage

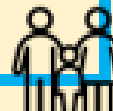
Observation is a statement that has been seen, heard, or noticed



Communication is the exchanging of information by speaking, writing or non verbal gestures

Sequence of development

Children tend to develop in broadly the same order, so even though the time at which they meet developmental norms might be different, they still tend to lean to stand before they walk and walk before, they run. However, there are some expectations, for example, a child with a disability may be expected to develop differently in some areas.



Milestones / Developmental Norms

Developmental milestones are behaviours or physical skills seen in babies and children as they grow and develop. **Rolling over, crawling, walking, and talking** are all considered milestones. The milestones are different for each age range. There is a normal range in which a child may reach each milestone

Examples of Intellectual milestones:

12 months: Respond to basic instruction
2 years: Completed simple jigsaw puzzle
5 years: Vocabulary is growing fast

Examples of Social milestones:

12 months: Waves goodbye
2 years: Understands own feelings
5 years: Enjoys group play

Examples of physical (gross motor skills) milestones:

12 months: Sits down from standing
2 years: Runs confidently
5 years: Rides a bike with stabilisers

Examples of physical (fine motor skills) milestones:

12 months: feeds self with spoon
2 years: Puts on shoes
5 years: Writes letters and short words





Remember, R059 is controlled assessment content and contributes towards 60% of your overall grade!

Stages of Play

Solitary play, also known as independent play, is one of the earliest stages of play where children play alone because they have not developed socially to be able to play with others yet or because they choose alone time. Examples of solitary play; Imaginary play (role play/ small world play), Puzzles, Books, Video/ computer games

Parallel play is a description of children playing side by side, but not interacting with each other to continue their play.

Associative Play is one of the categories used to describe the development of social play by preschoolers. It is generally the first stage where social interaction is required in children's play as they engage in a mutual activity, though not working toward a common goal

Cooperative play focuses on children working together to achieve a common goal, such as building a play structure, putting together a puzzle, or engaging in dramatic play. It has been described as the stage where children play in a group. Examples of Cooperative play; Board games, Circle games (here we go round the mulberry bush/ the farmers in his den), Playground games (what's the time Mr. Wolf?)



Benefits of play

Physical benefits include; increase fitness and the use of their fine and gross motor skills as well as hand eye co ordination, balance and co ordination

Intellectual benefits include; mental stimulation, problem solving and communication

Social benefits include; independence, confidence, sharing, self esteem and communication

Creativity benefits include a child using their imagination



Types of Play

Manipulative Play This involves children using their hands, (fine motor skills) for example to move, turn or screw things to make them fit. Examples of manipulative play: · Puzzles, Mark making (drawing/ painting/ writing), Shape sorters, Threading beads, Craft activities, Construction toys.

Physical Play is Play that involves gross motor skills, the muscles and moving around, such as football or a climbing frame. Examples of physical play include; Ball games, Running/ jumping/skipping/ hopping/ crawling, Playground equipment (slides/ swings), Ride– on– toys and bikes, Push and pull toys and Dancing.

Imaginative Play involves children learning and making sense of the world through their play. Activities such as dressing up, the use of puppets and role play will promote this.

Physical Play involves activities in which children use their manipulative or gross motor skills, develop balance, coordination, develop the senses or exercising such as riding a bike, dancing, ball games, hopping or using a trampoline.

Creative Play is when children express themselves by creatively responding to something that sparks their imagination such as model making by using household items such as cereal boxes/blankets, natural objects such as twigs. A child might also express themselves in ways such as making music, making up a story or singing and dancing.

Cooperative play focuses on children working together to achieve a common goal, such as building a play structure, putting together a puzzle, or engaging in dramatic play. It has been described as the stage where children play in a group. Examples of Cooperative play; Board games, Circle games (here we go round the mulberry bush/ the farmers in his den), Playground games (what's the time Mr. Wolf?)





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An observation is the process of watching and recording a child's behaviour to assess and track their development.

Observations:

Observations are the processes of watching and recording a child's behaviour to assess and track their learning and development.

Observations over time, help to build a picture of a child's individual development and behaviour. You can then track a child's progress, and plan activities that will support and extend their learning and development in each area.

If a child is not making the expected progress, intervention can be planned for the child.

Confidentiality

The parents / cares of children have the right to decide what information is collected, recorded and stores about their child. Professionals must get permission before carrying out the observations and keeping documentation on record.

How to use observation findings:

The information gathered during observations is to track a child's progress and conclude what a child can / cannot do. You can then make comparisons against other children their age and see if they are making the expected progress against the milestones. If they are not, extra support can be arranged based on the individual's needs.

Who will use observations on children?

Nursery staff, pre-school staff, teachers, social workers, health visitors and doctors.

Methods of observation

Narrative observation: When a child's natural spontaneous behaviour is observed for a set period	Time Sampling is when the observer decides on a period for the observation. The child's activity is recorded on a form at set intervals.
Checklist observation: A form (checklist) reminds the observer to look for particular skills or reflexes (e.g. milestones) that the child has or has achieved. The observer ticks these off as they are seen and records the date.	Participative observation is when the observer deliberately interacts with the child during the observation.
Snapshot observation is when a practitioner notices a child doing something interesting and spontaneously observes the child very briefly, often just a minute or two.	Non-Participative observation is when the observer does not interact with the child at all.

Methods of recording

Charts: Filling in a chart provides a lot of information quickly about the child effectively during a period of observation	Written methods: Written methods will be written out in full, with as much detail as possible.
Examples of a child's work: Work of the child, e.g. arts and crafts, writing/drawing items provides an excellent accurate record of what they did during an activity.	Photographs: Photographs are an excellent way of recording a snapshot of a child engaged in the activity.



Remember, R057 is the exam content and contributes towards 40% of your overall grade!

Year 11 - Child Development - R057 Topic Area 2: Antenatal care and preparation for birth

Antenatal Care

Antenatal care is the care given to a pregnant mother and her unborn baby during pregnancy. A pregnant woman will be supported by the following health professionals: Midwife; including hospital midwives and community midwives, Obstetrician, General Practitioner, Gynaecologist and Paediatrician.

The mother will talk through her choices available for delivery.

The choices include: Hospital birth, Home birth, Domino Scheme and Private hospital / independent midwife. Antenatal and parenting classes help with preparation for a safe pregnancy, labour and parenthood. Expectant mothers and their partners usually attend classes from 30-32 weeks of pregnancy and they support with: preparing for a safe pregnancy and delivery, preparation for labour and parenthood.

Throughout pregnancy, the midwife will carry out the following checks on the pregnant woman:



Weight check, Blood tests, Blood Pressure, Urine test, STI (Sexually transmitted Infections), Examination of the Uterus, Baby's heartbeat.

A sonographer also carries out an Ultrasound scans to check how far along the pregnancy is, the baby's development and for any abnormalities. Chromosomal abnormalities occur when a portion of chromosomal DNA is irregular, missing or duplicated.

A number of Specialised Diagnostic tests are offered during pregnancy to check for major physical abnormalities, however, some of these tests carry risks such as miscarriage. The tests include:

Nuchal fold translucency (NT) test, Alpha fetoprotein test (AFP), Chorionic Villus Sampling (CVS), Amniocentesis and Non-Invasive Prenatal testing (NIPT) blood test.




Labour

Every labour is different, but all pass through 3 common stages including:

- Stage 1 – neck of the uterus opens which can include the waters breaking and the woman having a 'show' where mucus comes away from the cervix.
- Stage 2- starts when the cervix becomes fully dilated at 10cm and ends with the birth of the baby.
- Stage 3 is the shortest stage of labour and includes the delivery of the placenta and membranes.



Key Vocabulary

 <p>Antenatal care is the care given to a pregnant mother and her unborn baby during pregnancy.</p>	<p>A sonographer also carries out an Ultrasound scans to check how far along the pregnancy is, the baby's development and for any abnormalities.</p>
<p>A Gynaecologist is a doctor who specializes in female reproductive health.</p>	 <p>An Obstetrician is a health professional that deals with all aspects of pregnancy</p>
<p>A domino scheme is when the midwife attends to the woman at home until both feel it's time to go into hospital</p>	 <p>Transition stage links the end of the first stage of labour and the beginning of the second stage of labour.</p>

Pain Relief and Methods of assisted delivery

Expectant mothers will be offered pain relief during labour, pain relief options will be discussed prior to the birth during antenatal classes with the midwife and these include; Gas and Air (Entonox), Pethidine, Epidural anaesthetic, TENS (Transcutaneous electrical nerve stimulation), Waterbirth

One in eight women require assistance during labour and this can include:
-Forceps; a curved metal instrument that fits around the baby's head and as a woman pushes with contractions, an obstetrician gently pulls to help deliver the baby.

-Ventouse; a vacuum extractor that fits on the baby's head and is attached by suction

-Elective / Emergency caesarean section is an operation to deliver the baby through a cut made in the abdomen and womb.





Remember, R057 is the exam content and contributes towards 40% of your overall grade!

Exam tip: APGAR score stands for Appearance, Pulse, Grimace, Activity and Respiration



The postnatal checks of the new-born baby

Straight after birth, the doctor/midwife carries out routine checks, checking for obvious physical problems, these include checks of the skin to identify any: Salmon patches, Mongolian spots, Infantile haemangiomas (strawberry marks), Vernix and Lanugo. Within 72 hours of the birth, a thorough physical examination of the baby is offered. The checks include:

Length, Weight, Head

Circumference, Fontanelle (soft spots between the bones in the skull), Eyes, Mouth, Feet, Fingers, Hips.

Newborns are observed to see if they display the expected reflexes, if the reflexes do not occur naturally, the baby's body may be stimulated, these reflexes include: Sucking, Rooting, Grasping, Standing and Walking and the Startle reflex (if a baby wakes suddenly or hears a loud noise, they will make a fist with their hands and move stiff arms away from their body).

Premature babies often require specific extra care with their breathing, feeding and treatment for infection.

The postnatal provision



Postnatal support is important as parents adjust to their lifestyles. Support can be provided by: The father / partner, Other family members, Friends, Health professionals such as GP, midwife and health visitors.




The mother will also have a postnatal check to ensure she feels well and that she is recovering well.

The baby's new born physical checks will also be repeated.

Fontanelle



Key Vocabulary

 <p>Premature baby: A baby born before 37 weeks</p>	<p>Fontanelle are soft spots between the bones in the skull</p>
<p>Infantile haemangiomas (strawberry marks) are blood vessels that form a raised red lump on the skin · appear soon after birth</p> 	<p>Vernix is the waxy white substance found coating the skin of new-born babies</p>
<p>Lanugo is the fine, soft hair which covers the body of the foetus</p> 	<p>SIDs (Sudden Infant Death Syndrome) is the sudden, unexpected and unexplained death of an apparently healthy baby</p>

Conditions for development & the need for boundaries

In order for children to thrive, develop and grow, children need the following conditions:-Love and security, Warmth, Rest/sleep, Exercise / fresh air, Cleanliness, Opportunities for talking / listening, Routine, Stimulation, Opportunities for play, listening, talking and Protection from SIDs (Sudden Infant Death Syndrome). Children need to learn how to behave in socially acceptable ways. Therefore, adults should always strive to be positive role models. A consistent approach should be taken to prevent confusion, this can be achieved through: - Boundaries, Being considerate to others, Explaining safety and Promoting positive behaviour





Remember, R057 is the exam content and contributes towards 40% of your overall grade!

Immunity, diseases and illnesses



During pregnancy, antibodies from the mother are passed to an unborn baby through the placenta. Some immunity can also be passed on through breastfeeding. Childhood immunisations begin at 2 months (8 weeks). Vaccinations are quick, safe and extremely effective but sometimes, children cannot be vaccinated against because of medical reasons.

An unwell child may display a range of signs and symptoms, for example, Vomiting and Diarrhoea to a headache or raised temperature.

Diet related illnesses include Childhood obesity, Deficiency diseases, Food intolerances and allergies. A severe allergic reaction can lead to an anaphylactic shock which can be a life-threatening situation and an ambulance needs to be called. Anaphylactic shocks can be caused by common triggers such as nuts, e.g.g.s and shellfish.

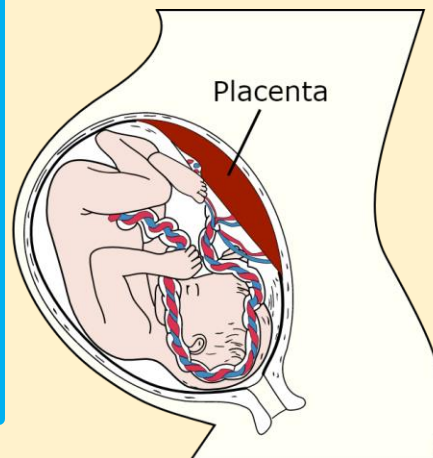


Key Vocabulary

Placenta: The organ in the uterus of pregnant woman, which nourishes the foetus through the umbilical cord		Meningitis is a serious disease caused by viral or bacterial infection, and marked by intense headache and fever, sensitivity to light, and muscular rigidity
Anaphylactic shock is an extreme, often life-threatening allergic reaction		A seizure is a burst of uncontrolled activity between brain cells that causes temporary abnormalities in muscle tone or movements (stiffness, twitching or limpness)
Deficiency is a lack or shortage		Antibodies help eliminate disease-causing microbes from the body, for instance by directly destroying them or by blocking them from infecting cells.

Supporting an ill child

When a child is unwell, they rely on an adult to meet all of their needs which include their physical, social, emotional and intellectual needs. It is important when a child is sick, they have plenty of rest and drink plenty of water which will meet their physical needs. To meet their social and emotional needs, adults can offer lots of reassurance and explain the illness to the child. It is also important children are given quiet activities and if appropriate, visits from family and friends which will support their intellectual and communication. Going into hospital can be a worrying time for children, therefore, if a hospital visit is planned, adults have the time to prepare the child to reduce the anxiety. Visiting a hospital can help put the child's mind at ease so they know exactly what to expect. Books and DVDs about hospitals can also help children to understand what to expect when visiting hospital.



When to seek treatment and help-the key signs and symptoms

Signs and symptoms of illness that require urgent medical assistance, i.e. you need to call an ambulance include: breathing difficulties, convulsions or seizures or fitting, child seems to be in significant pain, child is unresponsive, baby becomes unresponsive, a severe headache which may be accompanied by a stiff neck or a dislike of light, rash that remains (does not fade) when pressed with a glass as this can be a sign of meningitis, vomiting that persists for over 24 hours, unusual, high pitched crying in babies, high fever/temperature that cannot be lowered or will not drink fluids – especially in babies.



Exam tip: A child's average temperature reading for a child is between 36.5 degrees and 37.4 degrees



Remember, R057 is the exam content and contributes towards 40% of your overall grade!

Childhood Accidents

Adults should make a child's environment as safe as possible by removing hazards and assessing the risk.

Most accidents occur within the home. Key safety equipment can be used to prevent accidents, for example, safety gates can prevent access to kitchens, stairways and outdoors. Locks for cupboards can also be used to prevent children getting hold of dangerous substances. Children should always be under close supervision when crossing roads and should toddlers are safest on reins. Adults should be role models and cross at the safest place.

The most common childhood accidents include choking and suffocation, burns, falls, electric shocks, drowning and poisoning. If an accident occurs, it is important to recognise when medical assistance is urgently required as this can save a child's life. Workers within a childcare setting should take a paediatric first aid course.



Exam tip: Remember the difference between a hazard and a risk. Hazard: an item or situation that may cause harm. A risk is the likelihood of a hazard actually causing harm.



Social Safety



It is important children are taught about personal awareness, so they know exactly what to do if they are in an emergency situation. Teaching a child about strangers and avoiding inappropriate personal contact is important so that children know to tell a safe adult if they are worried. Children also need to be taught the dangers associated with internet safety. Some strategies could be through family discussions, agreeing boundaries and using safe search facilities and restrictions.

Safety Labels

Safety labels tell you whether a product or piece of equipment is safe for use by children. When buying products for children it is important to check for safety labels including; BSI safety mark/Kite mark which shows the product follows the quality of the British Standards Institution. The Lion mark can be found on toys that have been made by a member of the British Toy and Hobby Association. Age advice symbols are important to look out for as they show when equipment or products aren't suitable for children under 36 months (3 years old). CE symbols are the most common toy label and by law, has to be displayed on all new toys on the market in the EU. Nightwear can easily burn which can cause serious injury, so looking for children's nightwear labelling confirms they have met the flammability performance requirements.

Key Vocabulary	
A risk is a situation involving exposure to danger.	A hazard is a potential source of danger
A risk assessment is evaluating the potential risks that may be involved in an activity.	Suffocation is being deprived of air or being unable to breathe
Inappropriate means not suitable	Paediatric refers to medicine when dealing with children

