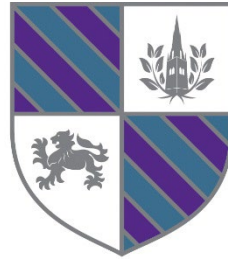


Student Name:



MAGNUS
CHURCH OF ENGLAND
ACADEMY

Knowledge Organiser: April 2026
Year 10

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

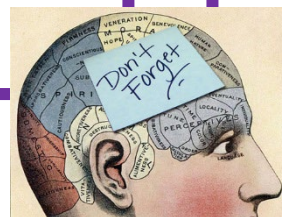
Determination – Integrity – Ambition – Humility – Compassion

Using Your Knowledge Organiser

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

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

1. Read the knowledge organiser and ensure you understand it. Try and make links between the information on it and what you already know and do.
2. Look, Cover, Write, Check – the traditional way of learning spellings!
3. Create a Mnemonic – Using the first letters of keywords create a memorable sentence or phrase.
4. Create an acronym – using the first letters of keywords to create a word to prompt you to remember all of the information.
5. Write it out in full on a blank version of the same format.
6. Write it out in note form, reducing it to key ideas or words. Try the same format but a smaller piece of paper.
7. Recreate the knowledge organiser as a series of images and words
8. Write a set of test questions for yourself using the organiser.
 - Answer these without the organiser the next day.
 - Swap your questions with a friend to increase challenge.
 - Turn your questions in to a game by putting them on cards and playing with friends.
9. Chunk the knowledge into smaller bitesize sections of around 5 pieces of information. Concentrate on mastering a chunk before you start on the next.
10. Try to make connections between the information and people you know. E.g. Visualise yourself trying these strategies with a specific teaching group.
11. Talk about the information on the knowledge organiser with another person. Teaching someone else about it helps us learn it.
12. Say the information out loud – rehearse it like learning lines for a play, or sing it as if you are in a musical!



Year 10 English Language

Box 1. Vocabulary: to describe characters/ emotions

Term	Definition
Optimistic	Hopeful and confident about the future.
Self-obsessed	Excessively occupied with one's own life and circumstances; thinking only about oneself.
Naïve	Easily fooled; trusting; innocent; sincere; a lack of experience/ wisdom.
Easily Intimidated	Easily frightened; easily terrified; unnerved.
Unwelcoming	Unfriendly, having an inhospitable or uninviting quality.
Bewildered	Perplexed; very confused or puzzled.
Astonished	Greatly surprised or impressed; amazed.
Concerned	Worried; troubled; anxious.
Overwhelmed	Inundated; have a strong emotional effect on; overpowered.

Box 2. What is a narrative?

- A narrative is a **spoken** or **written account** of connected events; a story; an anecdote.
- There are **5 main parts** of a narrative: **opening, development, problem, reaction, resolution.**
- An effective narrative should span over a **short time period.**
- An effective narrative should be based on a **factual event.**
- A narrative should avoid certain topics to allow for **realism** : murders, deaths, crimes, aliens., drug-dealers.
- Sentences starts need to be varied throughout a piece of writing to add variety and to hold the reader's interest.

Box 3: Varying Sentence Starts:

Narrative/

Fiction Writing (C1):

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

Box 4. How to structure a narrative:

- Write an **effective opening**: Open with dialogue OR a statement OR ask the reader a question. Introduce yourself as the narrator – give a little ***anecdote** to show what sort of a person you are. Explain the background to the story.
- **Develop** a narrative: set the scene where the problem happens (place, atmosphere, mood, relevant senses). Build up to the problem.
- Create a **problem**: describe what happens – 1 piece of action only. Hold the moment – describe your inner thoughts and feelings.
- Describe a **character's reactions**: describe your body's physical reaction. How do other people react? Was their reaction what you expected?
- Write an **effective ending**: describe your body's physical reaction. How do

Year 10 English Language

Crib sheet for Component 1: Reading



Question 1: Retrieval

- Use **full sentences** for 6 responses;
- Begin sentence with **character's name** or **he/she + a verb**.



Question 2: Impressions [5 C-E chains]

- Use phrases beginning with these words to extend/explain comment: **at, towards, because**.
- Use phrases to address structure: **To begin with, the writer..., Next, the writer..., By the end, the writer....**

Question 3 & 4: **HOW** [10 C-E chains]

- Use phrases beginning with these words to extend/explain comment: **at, towards, because**.
- Use the phrase **when the writer describes how**.
- Use phrases to address structure: **To begin with, the writer..., Next, the writer..., By the end, the writer....**



Question 5: **How far do you agree...?** **HOW** [10 C-E chains]

- Use phrases beginning with these words to extend/explain comment: **at, towards, because**;
- Use the phrase **when the writer describes how**;
- Begin response with **I agree** (and how much);
- Use phrases to address structure: **To begin with,...**
Next, By the end, Use the phrase **I think** throughout response.



Year 10 — ‘A Christmas Carol’, by Charles Dickens: *Quotations and Analysis*

1. Key Quotations:

<i>‘Hard and sharp as flint [...] as solitary as an oyster’</i>	The adjectives ‘hard’ and ‘sharp’ imply Scrooge has a tough exterior, but the simile ‘as flint’ suggests if hit hard enough it could spark a fire inside to create change. The simile comparing him to an oyster emphasises this by focusing on a hard exterior that if cracked open, may hold a pearl (something of beauty).
<i>‘If they would rather die, they had better do it, and decrease the surplus population’</i>	Scrooge shows his callous, selfish attitude towards the poor by viewing them as better off dead and simply a ‘surplus’, viewing them in monetary terms as opposed to human beings.
<i>‘I wear the chain I forged in life...The chain was made up of cash boxes... ledgers...heavy purses’</i>	Marley’s Ghost tells Scrooge that unless he changes he will have a chain holding him to the earth, forged by his sins ‘boxes, ledgers, purses’ (money). This is used to scare Scrooge and make him realise where his sins lie.
<i>‘A solitary child, neglected by his friends is left there still – Scrooge sobbed’</i>	The Ghost of Christmas Past shows Scrooge his time as a child at school, and Scrooge shows a moment of emotion. The reader is given a reason to sympathise with Scrooge, and Scrooge is given a reminder of who he was and how he felt.
<i>‘I see a vacant seat. The child will die’</i>	The Ghost of Christmas Present shows Scrooge the effect he has on others around him due to his selfish and hateful attitude. The Ghost tells him that Tiny Tim will die as a result of his treatment of the Cratchits, leading Scrooge to analyse his actions.
<i>‘They are Man’s. This boy is ignorance. This girl is Want. Beware for I see that written which is Doom.’</i>	Dickens explains that Mankind’s ignorance and want has poisoned them, and that ignorance especially will cause ‘Doom’. This summarises his message to the upper class, that their ignorance will lead to the death of people and ultimately society.
<i>‘It was shrouded in a deep black garment...left nothing visible except one outstretched hand.’</i>	The Ghost of Christmas Yet to Come does not speak to Scrooge, as Scrooge must decide to change by himself and without guidance. He is dressed as the Grim Reaper to emphasise that ultimately Scrooge will end up dead and without mourners if he does not change.
<i>‘I will honour Christmas in my heart. I will live in the Past, the Present and the Future. I will not shut out the lessons that they teach’</i>	By Stave 5, Scrooge is a changed man and promises to keep the lessons of all three Ghosts in his heart. The repetition of ‘I will’ shows that he has changed and that he now has a more positive and charitable attitude in life.

2. Key Vocabulary:

Covetous	Having or showing a great desire to possess something belonging to someone else.
Novella	A short novel.
Misanthropist	A person who dislikes mankind.
Omniscient	All knowing.
Miser	A person who hoards money.
Misanthropic	Having or showing a dislike of other people; unsociable.
Ominous	Giving the worrying impression that something bad is going to happen; threateningly inauspicious (unpromising).
Deftly	In a way that is neatly skilful and quick in movement.
Aspiration	A hope or ambition of achieving something.
Phantom	A ghost.
Surplus	An amount of something left over when requirements have been met.
Shroud	A thing that envelops or obscures something.
Sage	Someone who has attained wisdom.
Jovial	Cheerful and friendly.

3. Key Themes

Christmas	The story is set at Christmas and demonstrates the compassion and generosity that is shared during this time.
Redemption	Scrooge must achieve redemption (the act of being saved from sin). The ghosts facilitate this through their visits.
Charity	Scrooge refuses to give to the charity collectors at the start of the novella. Dickens highlights how we should show compassion to those who are poor and destitute (e.g the Cratchits).
Isolation	Scrooge is described as ‘solitary as an oyster’, and his past demonstrates him as a lonely child. His own greed has kept him isolated from those around him.
Social Injustice	The children of Want and Ignorance symbolise how society has forgotten about the poor. Dickens states how this is a problem for all mankind.

4. Tackling the Essay Question:

<p>You must answer two questions on A Christmas Carol. The second question is based on your entire knowledge of the novella. You have 30 minutes to complete it.</p>	<ol style="list-style-type: none"> 1. Read the question carefully, highlight any key words in the question. 2. Bullet point at least three moments in the novella that link to the question. 3. Write a short opening statement that answers the question and provides a focus for the rest of your response. 4. Write at least three analytical paragraphs that explore how the moments you have picked link to the question, using quotes where you can and linking it to the points made in your thesis statement. Be sure to show your understanding of the play and continuously answer the question.
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Year 10 — English Literature 'A Christmas Carol', Charles Dickens

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2. Plot Summary:

Stave One	Scrooge refuses to give money to the two charity collectors. Scrooge is visited by the Ghost of Marley, his dead business partner. Marley tells Scrooge because of his sinful, greedy life, he has to wander the Earth wearing heavy chains. Marley tries to stop Scrooge from doing the same. He tells Scrooge that three spirits will visit him.
Stave Two	The Ghost of Christmas Past takes Scrooge into the past. Scrooge revisits: his childhood school days, his apprenticeship with Fezziwig, and his engagement to Belle, who leaves Scrooge as he loves money too much.
Stave Three	The Ghost of Christmas Present takes Scrooge to see the Cratchit family. He sees Bob Cratchit's crippled son, Tiny Tim, whose kindness and humility warm Scrooge's heart. The spectre shows Scrooge his nephew's Christmas party. The ghost also shows Scrooge two starved children, Ignorance and Want.
Stave Four	The Ghost of Christmas Yet to Come takes Scrooge through a sequence of scenes linked to an unnamed man's death. Scrooge learns the dead man is himself and is desperate to change his fate and promises to change his ways.
Stave Five	Scrooge is a changed man. He sends a turkey to the Cratchit house and goes to Fred's party. He treats Tiny Tim as if he were his own child and is kind, generous and warm.

4. Characters:

Ebenezer Scrooge	A selfish business man who transforms into a charitable philanthropist (a person who seeks to promote the welfare of others, especially by the generous donation of money to good causes.) Our protagonist.
Fred	Scrooge's nephew whose party invitation he declines. Represents forgiveness and family. Son of Fan.
Jacob Marley	Scrooge's dead partner who returns to warn Scrooge to change his ways.
Bob Cratchit	Scrooge's clerk. He loves his family and is shown to be happy and morally upright. He has love but not wealth.
Tiny Tim	Bob's son whose story plays a part in inspiring Scrooge's transformation. Represents the victims of poverty.
The Ghost of Christmas Past	A strange combination of young and old, wearing white robes and looking like a candle.
The Ghost of Christmas Present	A portly, jovial gentleman surrounded by a warm glow. He brings joy to the neediest.
The Ghost of Christmas Yet to Come	A robed and hooded spirit who confronts Scrooge with his own tombstone.
Fezziwig	Scrooge's ex-employer. A representation of a good employer and generosity of spirit.
Belle	Scrooge's fiancé as a young man. She breaks up with him because he has become too greedy and obsessed with money.
Fan	Scrooge's sister who is said to have died young. She is the mother of Fred.

5. Tackling the Extract Question:

<p>You must answer two questions on A Christmas Carol. The first question is based on an extract from the novella and worth 20 marks. You have 30 minutes to complete it.</p>	<ol style="list-style-type: none"> 1. Read the question carefully, highlight any key words in the question. 2. Read through the extract, highlighting/underlining at least five different parts of the extract that link to the question (and highlighted key word). 3. Write a short opening paragraph making it clear where in the novella the extract is from, and then write an overarching thesis statement that answers the question and provides a focus for the rest of your response. 4. Write analytical paragraphs that explore the language within the extract, unpicking the specific language and linking it to the points made in your thesis statement. Be detailed and think about the alternative analysis you might construct from the same phrase/word.
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Subject terminology - Statistics	
Data	Information recorded for statistical purposes
Bivariate data	Data on each of two variables, where each value is paired with a value of the other variable. Usually used to investigate possible association between the variables
Ungrouped data	Data that has not been categorised
Grouped data	Data that has been sorted into categories based on the variable you are interested in
Frequency	The number of times an event or value occurs
Correlation	A mathematical relationship, if present it can be positive or negative
Interpret	To retrieve information from a chart or graph

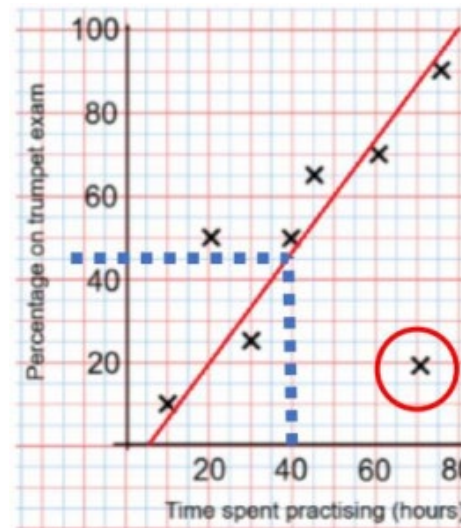
How to : estimate the mean from a grouped frequency table

Cost	Frequency	Midpoint	mp x freq
0 < c ≤ 4	2	2	4
4 < c ≤ 8	3	6	18
8 < c ≤ 12	5	10	50
12 < c ≤ 16	12	14	168
16 < c ≤ 20	3	18	54
Totals	25		294

$$\text{Estimated mean} = \frac{294}{25} = 11.76$$

- 1) Find the midpoint (centre) of each group by adding the end points and dividing by 2
- 2) Multiply the midpoints by the frequencies
- 3) Sum the 'frequency' and the 'midpoint x frequency' columns
- 4) Divide the 'midpoint x frequency' total by the 'frequency' total
- 5) Check - does the mean fit within the data range?

Scatter graphs - Bivariate Data



A scatter graph is used to show a correlation, or lack of, between two variables.

The points are plotted as pairs of values, in this case how many hours a person practiced and their % score.

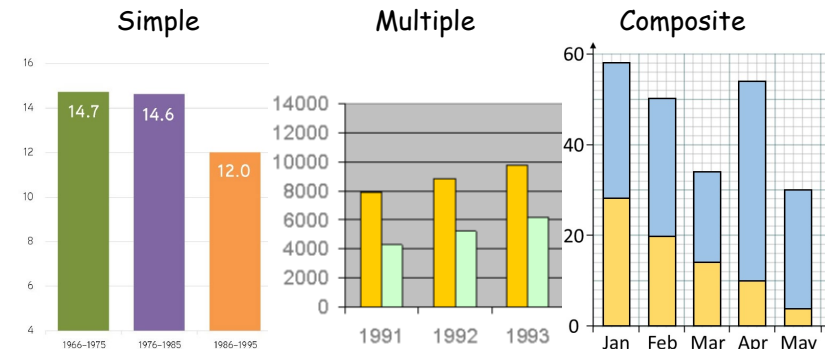
The circled value is an **outlier**, which does not fit the trend of the data.

The red line is a **line of best fit**, which can help to interpolate from the graph. (Note, it does not have to pass through the origin, but it has to have approximately as many data points above as below the line).

The dotted line shows **interpolation**, which lets us estimate the value of one variable at a value of the other. Example; a student who studies for 40 hours is likely to score 45% in their exam, according to this data.

Types of Bar Chart

Each type of Bar Chart has bars of equal width, that don't touch the y axis



Subject terminology - Statistics	
Data	Information recorded for statistical purposes
Bivariate data	Data on each of two variables, where each value is paired with a value of the other variable.
Frequency	The number of times an event or value occurs
Correlation	A mathematical relationship, if present it can be positive or negative
Interpret	To retrieve information from a chart or graph
Cumulative	The sum of all frequencies at a given point in a frequency table
Histogram	A graph whereby the frequency is represented by the area of each bar.

Drawing a histogram

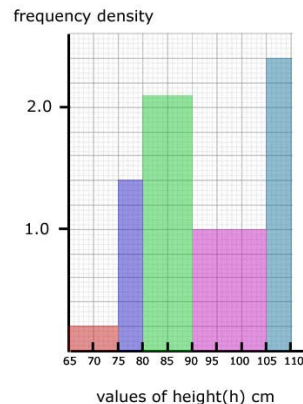
In a histogram, the area of the bar (and not the height) represents the frequency of the data.

To calculate the height of the bar, we use

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

Example:

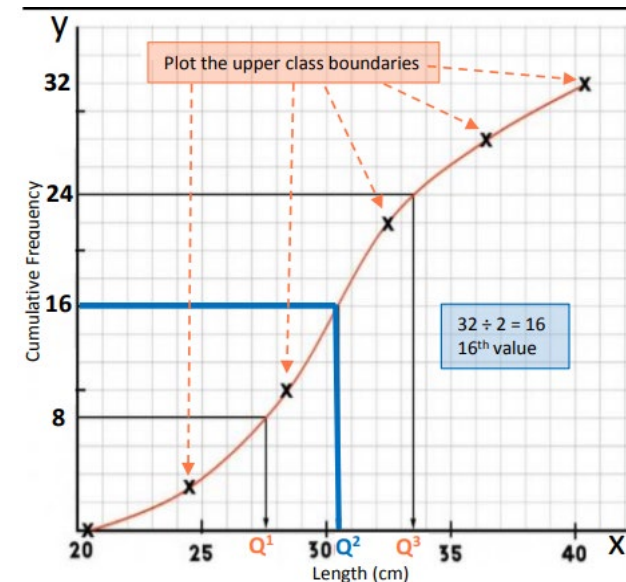
Height, <i>h</i> cm	Frequency	FD
$65 \leq h < 75$	2	$2 \div 10 = 0.2$
$75 \leq h < 80$	7	$7 \div 5 = 1.4$
$80 \leq h < 90$	21	$21 \div 10 = 2.1$
$90 \leq h < 105$	15	$15 \div 15 = 1.0$
$105 \leq h < 110$	12	$12 \div 5 = 2.4$



Drawing a Cumulative Frequency Curve

Length	Frequency	Cumulative Frequency
$20.5 < h \leq 24.5$	3	3
$24.5 < h \leq 28.5$	7	10 (= 3 + 7)
$28.5 < h \leq 32.5$	12	22 (= 3 + 7 + 12)
$32.5 < h \leq 36.5$	6	28 (= 3 + 7 + 12 + 6)
$36.5 < h \leq 40.5$	4	32 (= 3 + 7 + 12 + 6 + 4)

1. Complete the cumulative frequency table (as above)
2. Plot cumulative frequency on the y-axis and length on the x-axis
3. Plot each point at the upper-class boundary and connect with a smooth curve.
4. The median can be found by finding the halfway point on the y-axis ($32 \div 2 = 16$) drawing a line across until it intersects the curve and drawing a vertical line down to the x-axis
5. The interquartile range is found by splitting the curve into quarters and subtracting the LQ value from the UQ value



Order of Operations

Inverse Operations

+ ↔ -
 x ↔ ÷
 $\square^2 \leftrightarrow \sqrt{\square}$
 $\square^3 \leftrightarrow \sqrt[3]{\square}$

Square Numbers

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

Cube Numbers

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

Written methods

Multiplication (Grid method)

26×5

x	20	6
5	100	30

The 26 is broken into 20 and 6. These numbers are multiplied as shown. The results are then added, $100 + 30 = 130$.

Division (Bus stop)

$186 \div 6$

$$\begin{array}{r} 0 \ 3 \ 1 \\ 6 \overline{) 1 \ 8 \ 6} \\ \underline{6 } \\ 18 \\ \underline{18 } \\ 0 \end{array}$$

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

Multiplying Integers

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

$+ \times + = +$ $- \times - = +$
 $+ \times - = -$ $- \times + = -$

Column Addition

$$\begin{array}{r} 1 \\ 29 \\ + 35 \\ \hline 64 \end{array}$$

9+5=14
14 is more than 10!

Column Subtraction

$$\begin{array}{r} 5 \\ \cancel{6}4 \\ - 27 \\ \hline 37 \end{array}$$

(10+4=14) 14

Adding Negative Numbers

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

Rounding (to different degrees of accuracy)

*** 5 and above rounds up ***

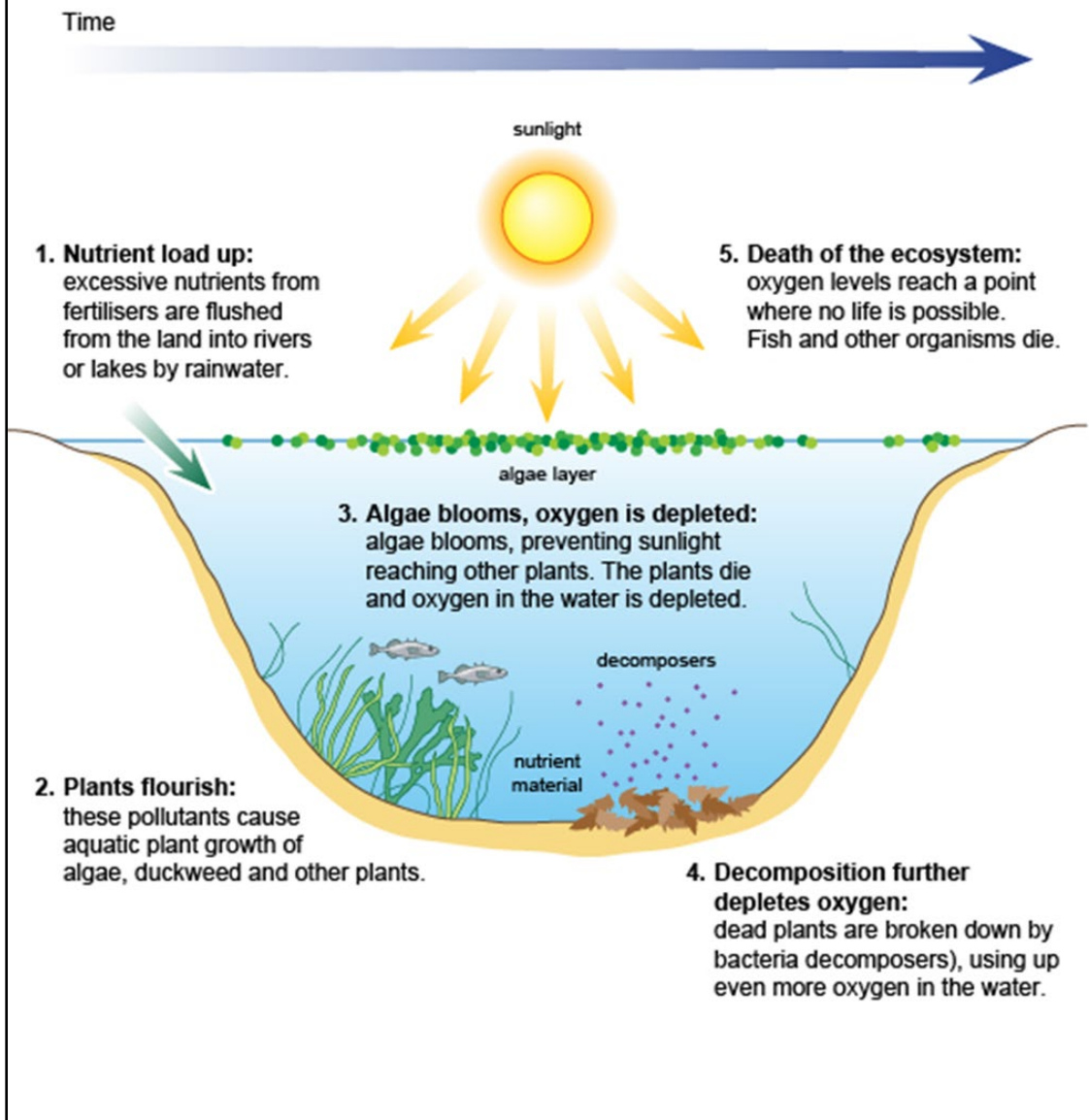
24.356 To the nearest integer (whole number)
24

24.356 To 3 significant figures (starting at first non-zero digit)
24.4

24.356 To 2 decimal places (digits after the decimal point)
24.36

Draw in your line then check the number to the right

The use of fertilisers can lead to eutrophication



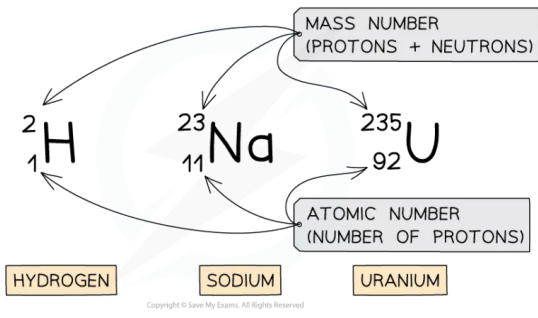
Subject Terminology	Definition
Biodiversity	The range of animals and plants in a given area.
Deforestation	The cutting down of trees and forests to allow a different land use.
Global warming	The rise in the average temperature of the Earth's surface.
Peat bog	Peat bogs are poorly drained areas made up of partially decomposed organic matter due to waterlogging.
Recycling	Reusing materials or reprocessing waste materials to produce new materials.
Decomposition	The process of breaking down material to release nutrients back into the soil.
Pollution	All of the members of a single species that live within a geographical area.
Ecosystem	The living organisms in a particular area, together with the non-living components of the environment.

Maintaining biodiversity

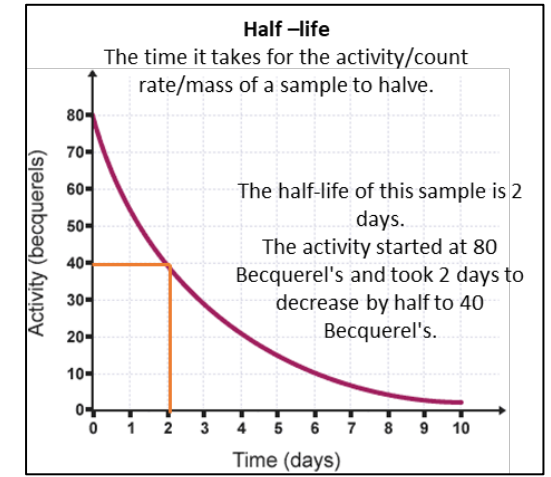
Scientists and concerned members of the public help maintain biodiversity by:

- breeding programs to help preserve **endangered species**, like the panda
- protection and development of new endangered **habitats**, often by making National Parks
- replanting hedgerows because there is higher biodiversity in them than the fields they surround
- reducing deforestation and the release of **greenhouse gases**
- recycling** rather than dumping waste in **landfill sites**

Nuclear Notation



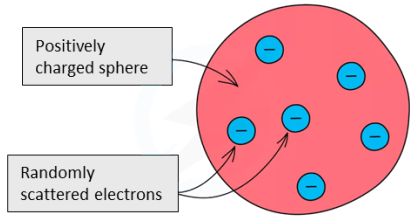
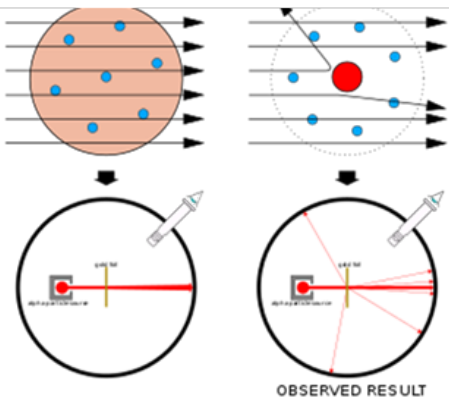
Subject Terminology	Definition
Decay	The process of an unstable nucleus becoming more stable by emitting radiation.
Irradiated	an object that has been exposed to ionising radiation
Radioactive contamination	the unwanted presence of materials containing radioactive atoms on other materials
Ionising radiation	radiation emitted from unstable nuclei that can dislodge outer electrons from other atoms causing them to become ions.
Half-life	average time taken for the number of nuclei of the isotope (or mass of the isotope) in a sample to halve
Isotope	atoms with the same number of protons and different numbers of neutrons
Activity	the number of unstable atoms that decay per second in a radioactive source
Count rate	the number of counts per second detected by a Geiger counter



Rutherford Scattering Experiment

Rutherford's alpha scattering experiment Disproved the plum pudding model

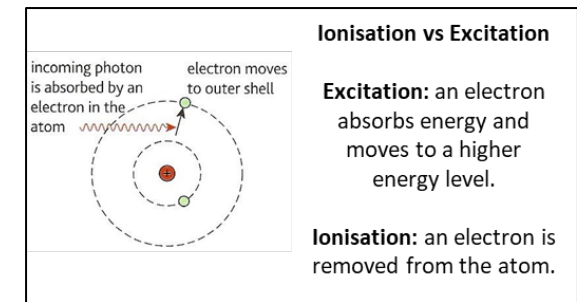
- Alpha particles were fired at very thin gold foil
- They expected the alpha particles to pass straight through because the positive charge was evenly distributed through the atom.
- The actual result was that most went through the gold foil but some alpha particles were partially deflected, some particles bounced straight back.
- They decided there must be something dense and charged in the centre of the atom (the nucleus) but the rest of the atom was empty space.



Plum Pudding Model

Properties of Ionising Radiation

Particle	What is it	Charge	Range in air	Penetration	Ionisation
Alpha (α)	2 protons + 2 neutrons	+2	Few cm	Stopped by paper or skin	High
Beta (β^-)	Electron	-1	1m	Stopped by few mm Aluminium	Medium
Gamma (γ)	Electromagnetic wave	0	Infinite	Stopped by thick lead or concrete	Low



	Irradiation	Contamination
Description	Object is exposed to radiation but does not become radioactive	the unwanted presence of materials containing radioactive atoms on other materials
Source	Danger is from radiation emitted outside the object	Danger from radiation emitted within the object
Prevention	Prevented by using shielding, such as lead clothing	Prevented by safe handling of sources and airtight safety clothing
Causes	Caused by the presence of radioactive sources outside the body	Caused by inhalation or ingestion of radioactive sources

Relief of the UK

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

Key

- Lowlands
- Uplands

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

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

Types of Erosion

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

Types of Transportation

A natural process by which eroded material is carried/transported.	
Solution	Minerals dissolve in water and are carried along.
Suspension	Sediment is carried along in the flow of the water.
Saltation	Pebbles that bounce along the sea/river bed.
Traction	Boulders that roll along a river/sea bed by the force of the flowing water.

Mass Movement

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

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

Formation of Coastal Spits - Deposition

Example: Spurn Head, Holderness Coast.

Material moved along beach in zig-zag way. Coastline changes direction. Material deposited in shallow, calm water, to form a spit. Spit curved with change of wind direction. Prevailing winds bring waves in at an angle. Spit.

Types of Weathering

Weathering is the breakdown of rocks where they are.

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

What is Deposition?

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



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

Unit 1c Physical Landscapes in the UK

AQA

Formation of Bays and Headlands

Bay Soft rock

Headland Hard rock

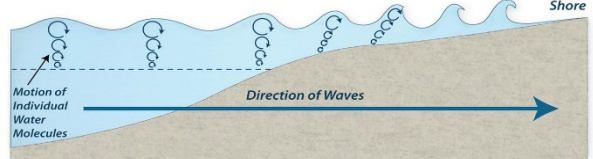
- 1) Waves attack the coastline.
- 2) Softer rock is eroded by the sea quicker forming a bay, calm area causes deposition.
- 3) More resistant rock is left jutting out into the sea. This is a headland and is now more vulnerable to erosion.

How do waves form?

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

Why do waves break?

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



Mechanical Weathering Example: Freeze-thaw weathering

Stage One	Water seeps into cracks and fractures in the rock.		Stage Two	When the water freezes, it expands about 9%. This wedges apart the rock.		Stage Three	With repeated freeze-thaw cycles, the rock breaks off.	
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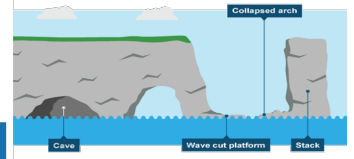
Size of waves

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

Types of Waves

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

Formation of Coastal Stack



Example: Old Harry Rocks, Dorset

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

Coastal Defences

Hard Engineering Defences		
Groynes	Wood barriers prevent longshore drift, so the beach can build up.	<ul style="list-style-type: none"> ✓ Beach still accessible. ✗ No deposition further down coast = erodes faster.
Sea Walls	Concrete walls break up the energy of the wave. Has a lip to stop waves going over.	<ul style="list-style-type: none"> ✓ Long life span ✓ Protects from flooding ✗ Curved shape encourages erosion of beach deposits.
Gabions or Rip Rap	Cages of rocks/boulders absorb the waves energy, protecting the cliff behind.	<ul style="list-style-type: none"> ✓ Cheap ✓ Local material can be used to look less strange. ✗ Will need replacing.

Soft Engineering Defences

Beach Nourishment	Beaches built up with sand, so waves have to travel further before eroding cliffs.	<ul style="list-style-type: none"> ✓ Cheap ✓ Beach for tourists. ✗ Storms = need replacing. ✗ Offshore dredging damages seabed.
Managed Retreat	Low value areas of the coast are left to flood & erode.	<ul style="list-style-type: none"> ✓ Reduce flood risk ✓ Creates wildlife habitats. ✗ Compensation for land.

Case Study: Holderness Coast

Location and Background
 Located on the coast of the East Riding of Yorkshire. It stretched from Flamborough Head in the north to Spurn Point in the south. It has a number of small towns and villages including Bridlington and Hornsea.

Geomorphic Processes

- The Holderness Coast experiences all of the coastal processes but most noticeably erosion. This is due to the boulder clay sediment that makes up the majority of the coast. This sediment easily erodes.
- There is also high levels of longshore drift which exacerbate the erosion issues.

Management

- Groynes are low walls built out into the sea, usually at right angles to the coastline. They help break the power of the incoming waves and slow down the process of longshore drift.
- Rock walls, stop waves removing sand and gravel from the beach.
- Sea wall are usually made of concrete and deflect the waves energy back out to sea.
- Beach building builds up beaches to reduce the power of the waves

Water Cycle Key Terms

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

Physical and Human Causes of Flooding.

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

Upper Course of a River

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

Formation of a Waterfall

- 1) River flows over alternative types of rocks.
- 2) River erodes soft rock faster creating a step.
- 3) Further hydraulic action and abrasion form a plunge pool beneath.
- 4) Hard rock above is undercut leaving cap rock which collapses providing more material for erosion.
- 5) Waterfall retreats leaving steep sided gorge.

Middle Course of a River

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

Formation of Ox-bow Lakes

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

Lower Course of a River

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

Formation of Floodplains and levees

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

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

River Management Schemes

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

Hydrographs and River Discharge

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

1. **Peak discharge** is the discharge in a period of time.
2. **Lag time** is the delay between peak rainfall and peak discharge.
3. **Rising limb** is the increase in river discharge.
4. **Falling limb** is the decrease in river discharge to normal level.

Case Study: The River Tees

Location and Background
 Located in the North of England and flows 137km from the Pennines to the North Sea at Red Car.

Geomorphic Processes

Upper – Features include V-Shaped valley, rapids and waterfalls. High Force waterfall drops 21m and is made from harder Whinstone and softer limestone rocks. Gradually a gorge has been formed.

Middle – Features include meanders and ox-bow lakes. The meander near Yarm encloses the town.

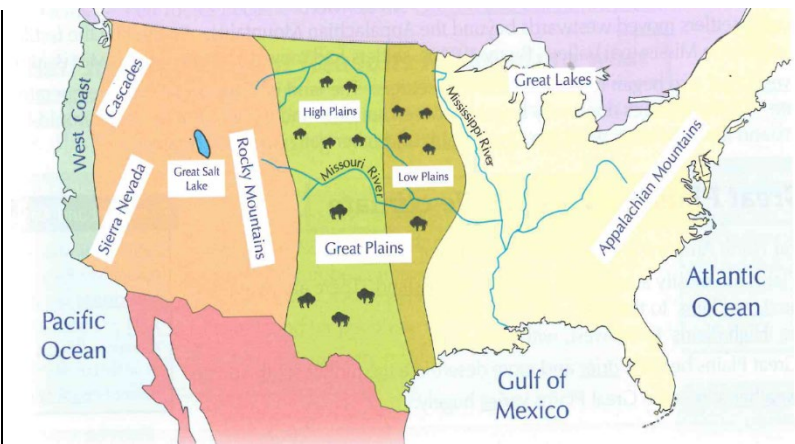
Lower – Greater lateral erosion creates features such as floodplains & levees. Mudflats at the river's estuary.

Management

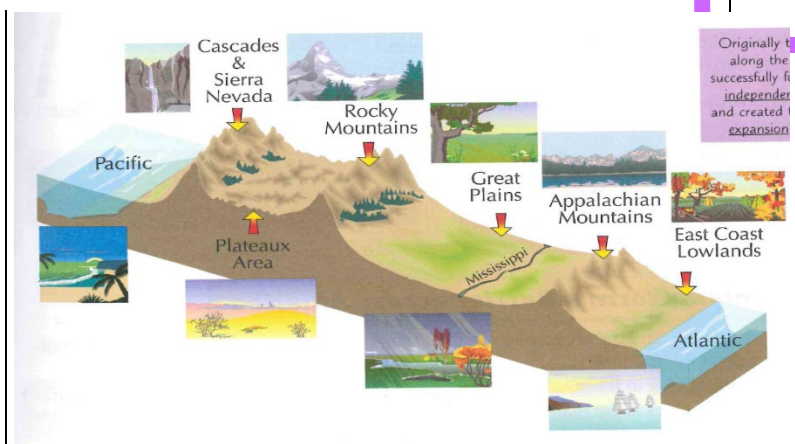
- Towns such as Yarm and Middlesbrough are economically and socially important due to houses and jobs that are located there.
- Dams and reservoirs in the upper course, controls river's flow during high & low rainfall.
- Better flood warning systems, more flood zoning and river dredging reduces flooding.

Key Dates In the Expansion and Consolidation of America	
1830	The Indian Removal Act was passed
1846	Brigham Young decides the Mormons should move West to Salt Lake City (owned by Mexico at this time)
1846 – 48	The Mexican-American War . America won and gained lots of states from Mexico (including Salt Lake City)
1848	Gold was found at John Sutter's sawmill in California
1849	Gold Rush , as tens of thousands of people made the journey to California hoping to make their fortune.
1850	Compromise of 1850 – Package of bills passed by US Congress to diffuse a political confrontation between Slave States and Free States due to the newly acquired territories.
1851	Indian Appropriation Act (provided government money to pay for moving Plains Indians onto reservations) and the Fort Laramie Treaty (Plains Indians guaranteed safe passage for white settlers and allowed roads and forts to be built in return they would keep their designated lands)

TECHNICAL VOCABULARY	
Manifest Destiny	To many white Americans it was God's will that they occupied the new land and they should take with them their ideas and beliefs of Christianity, freedom and Democracy.
Counting Coup	The Native American concept that it was braver to touch an enemy rather than kill them and it was foolish to fight if outnumbered.
Scalping	The Native American concept of taking an enemies scalp as a trophy from battle.
Abolitionism	The formal organised opposition to slavery which began as early as 1817 in the USA.
Policy of Concentration	The idea of containing Native Americans by agreeing which areas they could live in and hunt.
Buffalo Dances	A dance that would last for many days before a hunt, that would call upon the spirits to guide the Native Americans in their hunt
Indian Councils	The Council consisted of the most important men in the bands. The council would meet and make important decisions.
Warrior societies	All the men of the bands belonged to this. They were responsible for hunting, travelling and protection.
Chiefs	Most powerful men in the Indian Nation. They were elected because of their wisdom and skills as a warrior.



North America can be divided into several Geographical regions, all of which are quite different from each other.

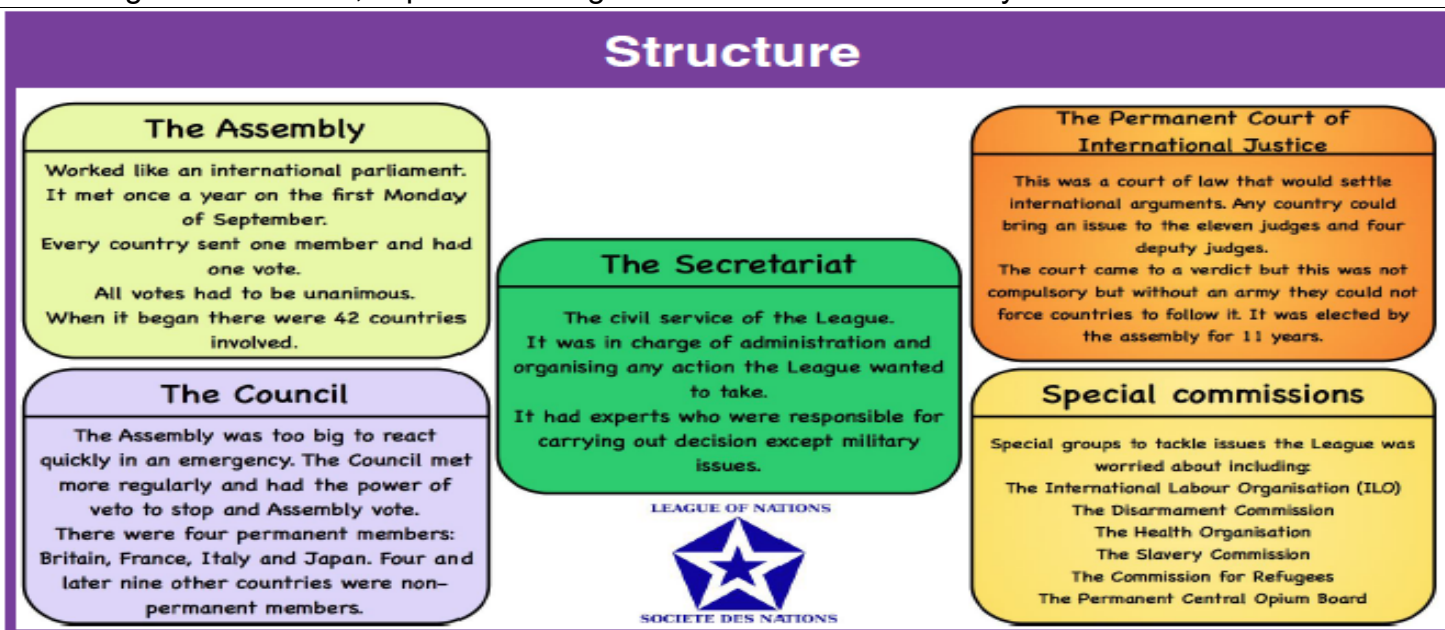


Over time, settler began to move West. Some went all the way to Oregon and California on the West Coast – but there were geographical barriers that people had to cross to get there.

The Plains Indians	
Way of Life	Native Americans living on the Great Plains were often known as the Plains Indians. Most were Nomadic (moved from place to place) and followed the Buffalo herd. Most Native Americans lived in Tipi's which could be set up and packed away quickly so they could follow the Buffalo easily.
Indian Government	Native Americans were divided into tribes known as Nations. Each nation was then divided into bands made up of around 100-500 Native Americans. Each band had a chief and a council for making important decision.
Indian Religion	The Native Americans believed in the spirit world and believed that a superior being, known as the Great Spirit was responsible for all things. They also believed that lesser spirits controlled different elements of the world. The Native Americans believed that land could not be possessed by mankind and we merely occupy it.

Early Pioneers			
Fur Trappers	Pioneer Farmers	Miners	Mormons
The first group of white Americans to travel West across the Great Plains and into the Rocky Mountains were fur trappers . Fur became fashionable in the Eastern United States and Europe in the 1820's and 30's and there was money to be made from it.	Thousands of Pioneer Farmers travelled West in the 1840's for a variety of reasons. For some it was the pull of good farming land, a better climate or simply the excitement of the new. Others were pushed by the Economic Depression of 1837 in the East.	Another group of white Americans to travel West were the Miners – the Forty-Niners. They sought wealth after the News spread of someone discovering gold in 1848. The population of California rocketed from 15,000 in 1848 to 250,000 by 1852.	Another group of settlers were the Mormons – members of 'The Church of Jesus Christ of Latter Day Saints'. Many US citizens disliked the Mormons and repeatedly drove them out of their homes. They didn't agree with the Mormons practice of polygamy, feared expansion of the Mormon faith and felt threatened by their power. Brigham Young decided to move the Mormons WEST to create an independent Mormon state, where they could live freely.

The League of Nations was a vision for bringing the world together in peace. It was to be a group of countries that would work together and solve problems, like a world parliament.
Four Aims of the League: Countries would work together to stop war from breaking out again, encourage disarmament, improve working conditions and tackle deadly diseases.



TECHNICAL VOCABULARY	
Unanimous	Fully in agreement
Veto	The right to reject a decision
Civil Service	The service responsible for the public administration of the government of a country
Mitigation	The action of reducing the severity, seriousness or painfulness of something.
Refugee	A person who has been forced to leave their country in order to escape war, persecution or natural disaster.
Geneva	Geneva is a global city, a financial centre and a worldwide centre for diplomacy in Switzerland.
Collective security	The co-operation of several countries in an alliance to strengthen the security of each.
Covenant	A set of rules each member country of the League of Nations agreed to abide by. Under the covenant, countries agreed not to declare war. Instead they would take the issue to the League and wait for them to rule a decision.
Economic Sanctions	Deciding not to trade with a country as a punishment
Moral Condemnation	Shaming a country into seeing that it is in the wrong.

The League of Nations in the 1920's	
Success	Failures
<ul style="list-style-type: none"> The first attempt at collective security The first World Parliament and step towards peaceful solutions for international affairs. The covenant forbade the use of aggression. The League resolved the dispute between Finland and Sweden in 1921 over the Aaland Islands. In 1925 Greece invaded Bulgaria. The League demanded a withdrawal which Greece did. 	<ul style="list-style-type: none"> The Polish army took control of the city of Vilna in Lithuania in 1920 as it had many Polish living there. Lithuania asked the League for help but France and Britain did nothing as they saw Poland as an ally. In 1923 Corfu was attacked by Italy claiming Greece had killed its surveying team. The League did not condemn Italy and even made Greece pay it compensation for deaths. In 1929 the Wall Street Crash led to a worldwide economic depression. The League of Nations was powerless to do anything.

Manchurian Crisis	Abyssinian Crisis
<p>In 1931, Kwantung Army was already posted in Manchuria to protect the Japanese owned South Manchurian railway.</p> <p>On 18th September 1931, the Kwantung exploded a bomb on the railway. The Japanese claimed the train had been attacked by the Chinese soldiers. Chinese denied this and claimed their soldiers were asleep at the time.</p> <p>The Kwantung Army used the events as an excuse to take over Manchuria. People in Japan were delighted with the invasion and celebrated on the streets. The Government wasn't happy but went along with it. By 1937, Japan had taken over large parts of China with no action taken by the League.</p> <p>Officials from the League sailed to Manchuria to assess the legality of the invasion. This was known as the Lytton Council. By Sept 1932, the report was presented which stated that Japan had invaded illegally. Instead of withdrawing, Japan decided to try and invade more of China. Japan left the League 27th March 1933. The remaining powers in the League were powerless to punish or stop Japan with the USA. The crisis highlighted how defenceless the league of Nations was.</p>	<p>On Mussolini's order in Dec 1934, Italian soldiers clashed with Abyssinians at Wal Wal, an oasis on the border between Abyssinia and Somaliland. In the initial conflict, 150 Abyssinians and 2 Italians were killed. The League tried to intervene in this situation but it was difficult as both countries were members of the League. Italy was also intent on war.</p> <p>On 30th June 1935 Haile Selassie, the Abyssinian emperor, addressed the League in Geneva; warning of the effects failing to address Mussolini's actions would have. Despite moral condemnation from the League, Mussolini's troops entered Abyssinia on 3rd October 1935. Italy was a modern and advanced country with a large army and the latest technology.</p> <p>The Italians bombed the tribal villages of Abyssinia and used chemical weapons to terrorise people into surrendering. The only resistance they met was the small Abyssinian army and some soldiers were armed with merely spears. The League did nothing to help and failed to prevent another one of its members from violating the Covenant.</p>

Weaknesses of the League of Nations			
No Army	USA not a member	Slow to react	Germany and the USSR not allowed to join
Britain reluctant to give up own troops as they needed them to protect their own empire. This meant that the League of Nations could not threaten anyone who broke the rules. Meant LON could impose Trade Sanctions or Moral Condemnation only.	This meant any trading sanctions could be undermined. Britain and France now had to lead the League. They were more interested in their own interests.	To make a decision, the League had to vote within the Assembly. This only met once a year which meant decision took a long time. The council could also undermine the decisions made in the Assembly which meant all power laid with Britain, France, Italy and Japan.	This meant that not all the superpowers were involved in decision making.

Verb	Noun	Noun	
Vivo = I live	en una casa individual = a detached house	en el centro de la ciudad = in the city centre	con tres dormitorios = with three bedrooms
Vives = You live	en una casa adosada = a semi-detached house	en las afueras = on the outskirts	con dos cuartos de baño = with two bathrooms
Vive = He/She lives	en un bloque de pisos = a block of flats	en el campo = in the countryside	con una cocina amplia y bien equipada = with a spacious, well equipped kitchen
Vivimos = We live	en una granja = on a farm	en la costa = on the coast	con un comedor recién renovado = with a recently refurbished dining room
Vivís = You (plural) live	en una residencia de ancianos = an old people's home	en la montaña = in the mountains	con un estudio / un jardín = with a study / garden
Viven = They live	en un apartamento = in an apartment	en el barrio = in the suburbs	con un sótano = with a basement

Time marker	Noun	Verb	Nouns	Connective	Verb	Adjective
<p>Quando era más joven = When I was younger</p> <p>Quando era pequeño = When I was small</p> <p>En el pasado = In the past</p> <p>Quando tenía años = When I was years old</p> <p>Antes = Before</p>	<p>mi casa = my house</p> <p>mi piso = my flat</p> <p>mi casa adosada = my semi-detached house</p> <p>mi domicilio = my home</p> <p>mi vivienda = my dwelling</p> <p>mi caravana = my caravan</p> <p>mi apartamento = my apartment</p> <p>mi dormitorio = my bedroom</p>	<p>tenía = used to have</p> <p>consistía en = used to consist of</p> <p>había = there used to be</p>	<p>una alfombra - a rug</p> <p>un ascensor - a lift</p> <p>un baño - a bathroom</p> <p>la calefacción - central heating</p> <p>un césped - a lawn</p> <p>las cortinas - curtains</p> <p>un dormitorio - a bedroom</p> <p>una ducha - a shower</p> <p>un estante - a shelf</p> <p>las estanterías - bookshelf</p> <p>un lavabo - a sink</p> <p>un lavaplatos = a dishwasher</p> <p>una librería - a bookcase</p> <p>una mesa - a table</p> <p>los muebles - furniture</p> <p>una nevera - washing machine</p> <p>las paredes - walls</p> <p>un pasillo - corridor</p> <p>la puerta - door</p> <p>el salón - living room</p> <p>el microondas - microwave</p> <p>la silla - chair</p> <p>el sillón - armchair</p>	<p>pero - but</p> <p>sin embargo - however</p> <p>así que - so</p> <p>aunque - although</p> <p>por eso - therefore</p> <p>por lo tanto - therefore</p> <p>pues - then</p> <p>tal vez - perhaps</p> <p>también - also</p> <p>además - in addition</p> <p>es decir - in other words</p> <p>claro que - of course</p> <p>por un lado - on the one hand</p> <p>por otro lado - on the other hand</p> <p>sin duda - without a doubt</p> <p>por una parte - on the one hand</p> <p>por otra parte - on the other hand</p>	<p>era = it was</p> <p>no tenía = it didn't have</p>	<p>ruidoso - noisy</p> <p>pequeño - small</p> <p>asqueroso - disgusting</p> <p>antiguo - old</p> <p>barato - cheap</p> <p>bonito - pretty</p> <p>distinto - distinct</p> <p>encantador - lovely</p> <p>fenomenal - great</p> <p>guay - cool</p> <p>hermoso - nice</p> <p>impresionante - impressive</p> <p>maravilloso - great</p> <p>nuevo - new</p> <p>precioso - precious</p> <p>viejo - old</p> <p>una moqueta - a carpet</p> <p>un sótano - a basement</p> <p>un vestíbulo - a hall</p> <p>los electrodomésticos - domestic appliances</p> <p>una ventana - a window</p> <p>las persianas - blinds</p> <p>el espejo - mirror</p> <p>el horno - oven</p> <p>una cama individual = single bed</p> <p>literas = bunk beds</p> <p>una lámpara = a lamp</p> <p>un armario = a wardrobe</p>

Time Expression / Wow Phrase	Verb	Infinitive	Noun	Connective + verb	Adjective
<p>Si fuera posible = If it was possible Si pudiera = If I could Si fuera rico = If I was rich Si fuera famoso = If I was famous Si ganara la lotería = If I won the lottery</p> <p>Cuando sea mayor = When I am older</p> <p>Cuando tenga dieciocho años = When I am 18 Si tuviera bastante dinero = If I had enough money</p>	<p>me encantaría = I would love me chiflaría = I would love me molaría = I would love me fliparía = I would love me interesaría = I would be interested me apetecería = I would be interested me gustaría = I would like</p> <p>quisiera = I would like no me gustaría = I wouldn't like odiaría = I would hate detestaría = I would hate</p>	vivir = to live	<p>en un apartamento = in an apartment en mi casa ideal = in my ideal house en una casa individual = in a detached house en una granja = on a farm</p> <p>en un palacio = in a palace en un castillo = in a castle en un bloque de pisos = in a block of flats</p>	<p>porque sería = because it would be</p> <p>dado que sería = because it would be</p> <p>ya que sería = because it would be</p>	<p>ruidoso - noisy tranquilo = calm pequeño - small grande = big antiguo - old nuevo - new viejo - old moderno = modern barato - cheap bonito - pretty cómodo = comfortable incómodo = uncomfortable distinto - distinct encantador - lovely fenomenal - great</p>
<p>Mañana = Tomorrow Pasado mañana = The day after tomorrow El día siguiente = The following day</p> <p>Mañana... = Tomorrow... por la mañana = morning por la tarde = afternoon por la noche = evening El fin de semana próximo = Next weekend La semana que viene = Next week El finde = At the weekend</p> <p>El año próximo = Next year El año que viene = Next year En el futuro = In the future En el porvenir = In the future</p>	<p>voy a = I am going to vas a = you are going to va a = he/she is going to</p> <p>vamos a = we are going to vais a = you are going to van a = they are going to</p> <p>tengo ganas de = I want to tiene ganas de = he/she wants to tenemos ganas de = we want to tienen ganas de = they want to tengo la intención de = I intend to tiene la intención de = he/she intends to tenemos la intención de = we intend to tienen la intención de = they intend to espero = I hope to espera = he/she hopes to esperamos = we hope to esperan = they hope to planeo = I plan to planea = he/she plans to planeamos = we plan to planean = they plan to quiero = I want to quiere = he/she wants to queremos = we want to quieren = they want to</p>	tener = to have	<p>una piscina climatizada = a heated pool un jardín enorme = a large garden una pista de tenis = a tennis court un garaje = a garage</p> <p>una sala de juegos = a games room</p> <p>una cama matrimonial = a double bed un gimnasio = a gym</p> <p>mi propio cine en casa = my own home cinema</p> <p>un balcón = a balcony</p>	<p>puesto que sería = because it would be</p> <p>aunque sería = although it would be</p>	<p>guay - cool hermoso - beautiful lujoso = luxurious</p> <p>impresionante - impressive</p> <p>maravilloso - great precioso - precious</p>

voy a = I am going to	a la carnicería = to the butcher's	para comprar = to buy	el carne = meat
tengo ganas de ir = I want to go	al estanco = to the tobacconist's	para buscar = to look for	los sellos = stamps
espero ir = I hope to go	a los grandes almacenes = to the department stores	para encontrar = to find	la ropa de marca = designer clothes
planeo ir = I plan to go	a la joyería = to the jeweller's		los pendientes = earrings
quiero ir = I want to go	a la juguetería = to the toy shop		la muñeca = doll
	a la panadería = to the baker's		el pan = bread
	a la pastelería = to the cake shop		el pastel = cake
	a la tienda de comestibles = to the grocery store		las verduras = vegetables
	a la zapatería = to the shoe shop		los zapatos = shoes

Musical Theatre / Choreography (Musical Theatre – see also Music and Acting)

Accent: a movement or shape performed to give emphasis

Accumulation: one dancer performs a phrase, other dancers join in one after another until performing in unison

Actions: travelling, turning, elevation, leaps

Adagio: slow, flowing and graceful movements

Alignment: correct placement of body parts in relation to each other, important for health and safety

Allegro: fast, lively movements

Arabesque: standing on one leg, working leg is fully straight, extending long behind the dancer

Attitude: standing on one leg with the other lifted (front or back). The leg in the air is bent, usually to a 145 degree

Beat: rhythmic unit of time

Binary: structure of a dance, consisting of two parts **AB**

Book: the dialogue and storyline of the musical

Canon: choreographic device where dancers perform the same movement at different times, overlapping the previous one

Chorus: type of refrain, repeated between versus / group of performers

Contact Improvisation: creation of movement without planning, where working with another dancer, parts of the body must always be touching

Contraction: curving the spine forward, starting from hips

Contrast: movements or shapes with nothing in common

Duet: performance with two dancers

Dynamics: qualities of the movement based on speed, strength, flow

Episodic – choreography with several sections, linked by a theme

Improvisation: creation of movements without planning

Inversion: performing phrases or sections upside down

Isolations: movement which only involves one part of the body

Jukebox Musical: a musical with a plotline based around existing songs

Mirroring: two or more dancers perform the same movement while facing each other

Motif: a movement / phrase repeated in different ways

Narrative: the story of the dance

Phrase: a short sequence of linked movements

Posture: the way the body is held

Relationships: the way dancers interact

Repetition: repeating movements or motifs

Retrograde: reversing the actions of a phrase or sequence

Revue: a musical show without a narrative storyline

Ronde de Jambe: movement where the leg is moved in a circular motion

Rondo: structure, three or more sections, alternating between the main theme and additional ones – **ABACAD**

Solo: one dancer

Syncopation: movements which do not occur on the main beat

Tempo: the speed of the dance

Ternary: structure of a dance, in three parts – **ABA**

Transitions: movements linking phrases or sections

Unison: two or more dancers performing the same move at the same time



Acting / Devised Drama

Accent: a way of speaking which reflects a particular region or country

Actioning: giving a verb to a line of text

Amphitheatre: circular or oval open air theatre

Antagonist: a character who opposes the protagonist

Apron: part of a proscenium arch stage which extends past the curtain

Articulation: clear and precise pronunciation of words

Aside: character speaks directly to the audience

Backstory: the history of a character

Beat: brief pause in speech or unit of action in a scene

Blocking: movement and positioning on stage

Body language: non-verbal communication

Character: a role played by an actor

Chorus: often used in Greek Theatre, a group who comment on the action

Climax: the most intense point in a plotline

Conflict: a central struggle between opposing forces

Cue: a trigger for an actor's entrance, exit, line or action

Dialect: a form of language specific to a region

Dialogue: the spoken words of a text

Diction: the clarity of an actor's speech

Downstage: the area of stage closest to the audience

Dress Rehearsal: final rehearsal in costume

Duologue: dialogue between two actors

Dynamics: interaction between characters

Ensemble: a group of performers working together

Epilogue: a speech or scene following the end of a play

Fourth Wall: the imaginary barrier between performer and audience

Gait: way of walking

Gesture: a movement to express meaning

Gestus: developed by Brecht – character gesture or movement which captures an attitude or moment.

Given Circumstances: the world of the play

Improvisation: creating spontaneously without a script

Inflection: modulation of pitch or tone, used to convey meaning

Intonation: variation in pitch during speech

Isolation: moving one part of the body at a time

Monologue: speech by one character

Motive: the reason behind a character's actions

Objective: what the character wants to achieve

Pace: the speed of dialogue or action

Pause: a brief break in dialogue or action

Physicality: movement skills used by an actor

Pitch: how high or low the voice is

Proscenium Arch: type of staging where the audience face the main stage

Protagonist: the main character in a play

Proxemics: the use of stage space to create meaning

Sight Lines: what the audience can see from their seats

Sub text: underlying meaning in a text, the unspoken story

Tableau: freeze frame, usually of a key moment

Tension: the suspense or intensity of a scene

Tone: the emotional sound of the voice

Upstage: area of the stage furthest from the audience



Music / Composition

Accompaniment: musical support to the melody

Adagio: slow speed

Allegro: fast speed

Articulation: the way each note is performed, for example short and detached (staccato) or smooth (legato).

Balance: ensuring that sounds are at an equal level

Beatboxing: a vocal performance using the voice to create sounds like drum beats

Belt: singing high notes with your chest voice

Binary: two sections – **AB**

BPM: beats per minute

Breath Control: controlling the breathing

Cadence: progression of two chords used at the end of a musical phrase

Canon: the first part starts to play a melody, then a second part plays the same melody but with a delay, for example 2 bars

Chromatic Harmonies: harmonies involving notes which are not part of the tonic key

Coda: the final section of a piece of music

Composer: a person who writes music

Counter Melody: a second melody is played at the same time as the original.

Crescendo: music gradually gets louder

Cross Rhythm: rhythms which conflict with the regular beat of the music, also known as polyrhythm

Decrescendo: music gradually gets quieter

Dynamics: how loud or quiet a section of music should be

Falsetto: high pitched singing

Fill: a short rhythmic flourish, usually on the drums

Harmony: more than one note is heard at the same time

Imitation: one instrument copying another

Intonation: small variations in pitch

Melody: a single line of music containing pitches and rhythms organised into a tune

Metre: the number and type of beats in a bar

Orchestra: a large group of instruments, consists of strings, woodwind, brass and percussion instruments

Phrasing: the way a melody is shaped by a performer

Pitch: how high or low a sound is

Pulse: implied or audible steady beat

Range: the distance between the highest and lowest notes in a piece of music

Rhythm: a combination of sounds and silences of specific lengths

Riff: a short repeated musical idea used in pop and rock music

Rondo: Section A returns between new section

ABACAD

Sequence: when a short musical idea is repeated at a higher or lower pitch

Slur: a musical notation connecting two or more notes to indicate that they should be played smoothly so that each note joins onto the next

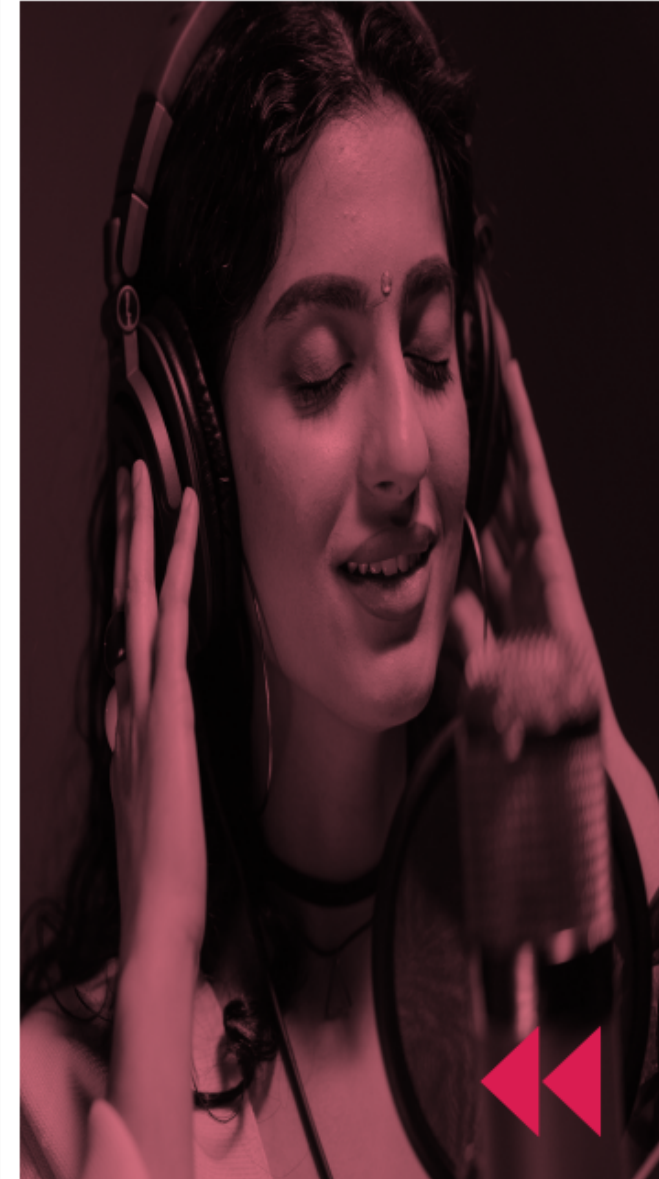
Tempo: the speed of a piece of music

Ternary: three sections **ABA**

Texture: the overall effect of how melody, harmony and rhythm are combined in a piece of music

Timbre: the specific tone or quality an instrument has

Tonality: the organisation of notes and chords in a piece dependent on a home note or tonic. If a piece is in major or minor key



Make Up and Hair Design

Acetone: solvent used to remove skin adhesive from wigs

Alginate: a powder made from seaweed, used to make casts of body parts

Applicator: a tool used to apply make-up, for example, brush, sponge or wand

Backcomb: combing hair from the end of the strand towards the scalp, creating a thicker look

Bake: technique involving applying a thick layer of translucent powder over foundation, then leaving it to sit before dusting off

Balayage: hair colouring technique

Bald Cap: usually made of silicone or latex

Base: initial layer of make-up applied to create an even skin tone

Blend: merging different make up colours or products to create a smooth finish

Braid: hairstyle created by weaving strands of hair together

Collodion: liquid make up for creating scars

Contour: technique used to define areas of the face

Derma Wax: putty used to create skin wounds

Dewy: a make-up finish giving a healthy, radiant glow

Exfoliate: process of removing dead skin cells from the surface of the skin

Flashback: when the camera bounces off make up, for example, some powders, creating a white appearance

Greasepaint: make up supplied in stick form

Guide Comb: comb with graduated teeth

Hairpiece: a small section of hair attached to the scalp or performer's own hair to create volume or a specific style

Halo Eye: technique used where a lighter colour is applied to the centre of the eyelid, this is surrounded by a darker colour

Henna: a natural dye, often used to create temporary tattoos or hair colour

Highlighting: using a lighter shade of colour to bring attention to certain features

Illuminator: product used to add a subtle glow or shimmer

Infill: adding new hairs or filling gaps in eyebrow or eyelash extensions

Intensity: level of pigmentation in a product

Iridescence: gives off a shimmering effect in the light

Kabuki Brush: a dense, short handled brush

Kohl: eyeliner ingredient made from soot or charcoal

Liquid Latex: used for special effects, can be applied on skin to create wrinkles

Matte: a finish which has no shine

Neutralising: using make up to balance out certain colours, for example redness

Pancake: water based make up powder, applied with a wet sponge

Pigment: the colour or tint of make up or dye

Prosthetics: the use of sculpting and moulding to create a different look, for example different facial features. Usually glued to the performer, rather than painted or moulded onto the skin like in SFX

SFX: special effects

Waterline: area below the eye but above the lower lashes

Wig Block: head shaped block

Xanthan Gum: natural ingredient often used as a thickener



Music / Composition

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Western Classical Music

Baroque Period 1600-1750	Classical Period 1750-1810	Romantic Period 1810-1910
Bach, Vivaldi, Handel	Mozart, Haydn, Beethoven	Chopin, Schubert, Wagner
Ornaments	Balanced, regular phrases	Use of the leitmotif
Terraced Dynamics	Alberti Bass	Music more expressive
Major & Minor Keys	Wider range of dynamics	Huge range of dynamics
Harpischord	Pianoforte introduced	Use of chromatic chords
Small Orchestra (Mostly Strings)	Wider range of mood	Unusual Key Changes
Basso Continuo	Orchestra got bigger	Large Orchestra
	Elegant/Graceful style	Use of Rubato

STYLE

Minimalism

- *Started in 20th Century
- *Composers - Philip Glass...
- *Based upon **Repetition**
- *Uses small motifs that **gradually change**
- ***Slow changing harmony**

Jazz & Blues

*The 12 Bar Blues

I	I	I	I
IV	IV	I	I
V	IV	I	I/V

- ***Improvisation** - Performers make up music in the performance
- ***Rhythm Section** - Drums, Double Bass, Piano/Guitar
- ***Front Line Instruments** - Saxophones, Trumpets, Trombones
- ***Walking Bass** - The bass plays a steady rhythm & walks up/down the notes of the chord or scale.

***Swung rhythms**

***Extended chords:** 7th, 9th...

***Blue notes** – ‘bending’ some notes by a semitone



Fusion - Mixing more than one style of music together

For example...

Bhangra - Came to UK in 1980s. Mixing traditional Indian music & pop music.

Tempo	Structure	Melody
Lively and Upbeat	Verse / Chorus structure	Quite repetitive. Simple. Decorated.
Rhythm	Instruments	Technology
Syncopation. 4 beats per bar.	Indian instruments (e.g. Dhol, Tabla, Sitar) & Pop Instruments	Drum machines. Synths. Scratching.

Pop & Rock Music

- ***Pop** - Commercial music which appeals to lots of people
- ***Rock** - Generally ‘more aggressive’ but also includes rock-ballads.
- ***Instruments** - (See instruments sheet!)

Intro	The beginning. Sets the mood & style. Usually just instruments.
Verse	Tells the story. Lyrics change each time but tune stays the same.
Chorus	The main message of the song. Same words and tune each time.
Bridge	A section that links two other sections.
Middle 8	A contrasting section of new ideas – usually 8 bars long.
Outro	Extra bit of music to finish off the song.

***Riff** - A repeated pattern. Can help make the song memorable.

*Examples:

The Who Jimmy Hendrix The Beatles

Pink Floyd The Sex Pistols The Clash

AC/DC David Bowie Queen

Film Music

***Genre** - Action, Adventure, Horror, Romance, War, Sci-fi, Western...

*Composers - John Williams, James Horner, Jerry Goldsmith

*Think, how do the **musical features represent what is happening on-screen?**

e.g.

Car Chase: Fast tempo, loud dynamics, sudden changes in melody direction...

WWII Film: Military instruments, fanfare, monophonic to represent isolation...

Large Theme Park Scene: Big Orchestra, Loud Dynamics, Fast/exciting rhythms...

Horror Scene: Dissonant chords and use of repeated pattern to build tension...

***Leitmotif** - A short musical idea linked to a specific character / thing



Musical Theatre

*A theatrical story told through music, singing, acting and dance

*Types: Jukebox, Film-to-stage, Sung-through (no speaking), Disney...

*Composers - Andrew Lloyd Webber, Leonard Bernstein, Stephen Sondheim...

***Overture** - The music played before the musical begins, usually featuring the musical’s main themes.

***Solo** - Song for one character

***Duet** - Song for two characters

***Chorus** - Song for usually the whole ‘company’ to sing

***Recitative** - A song which does not have a memorable tune (more speech-like), often used to fill in the story if the show is all sung.

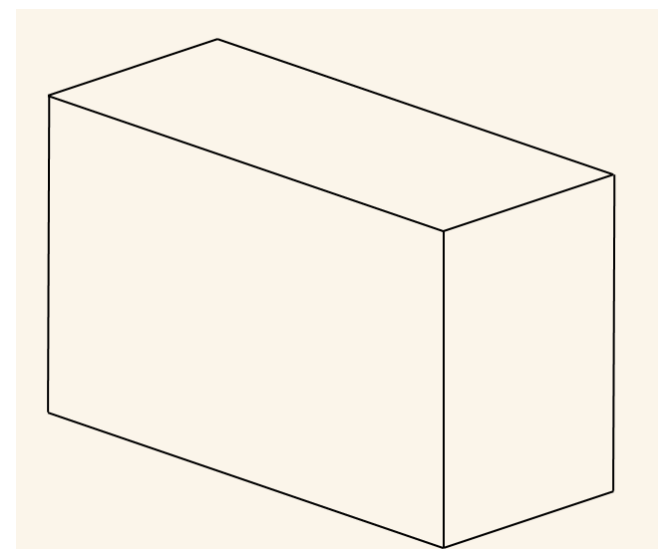
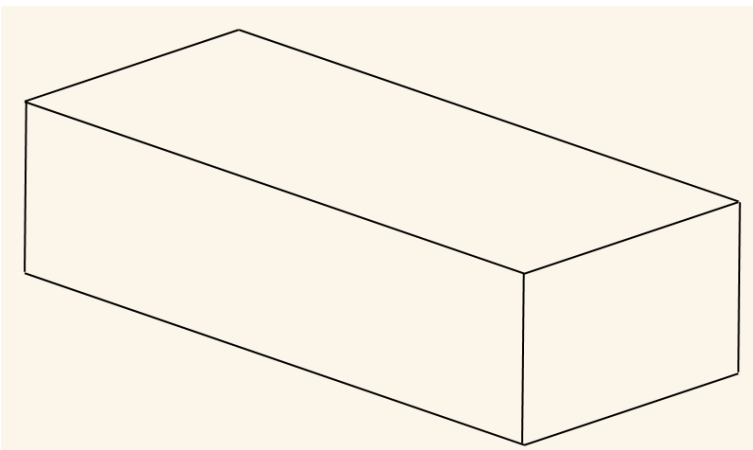


Brick dimensions

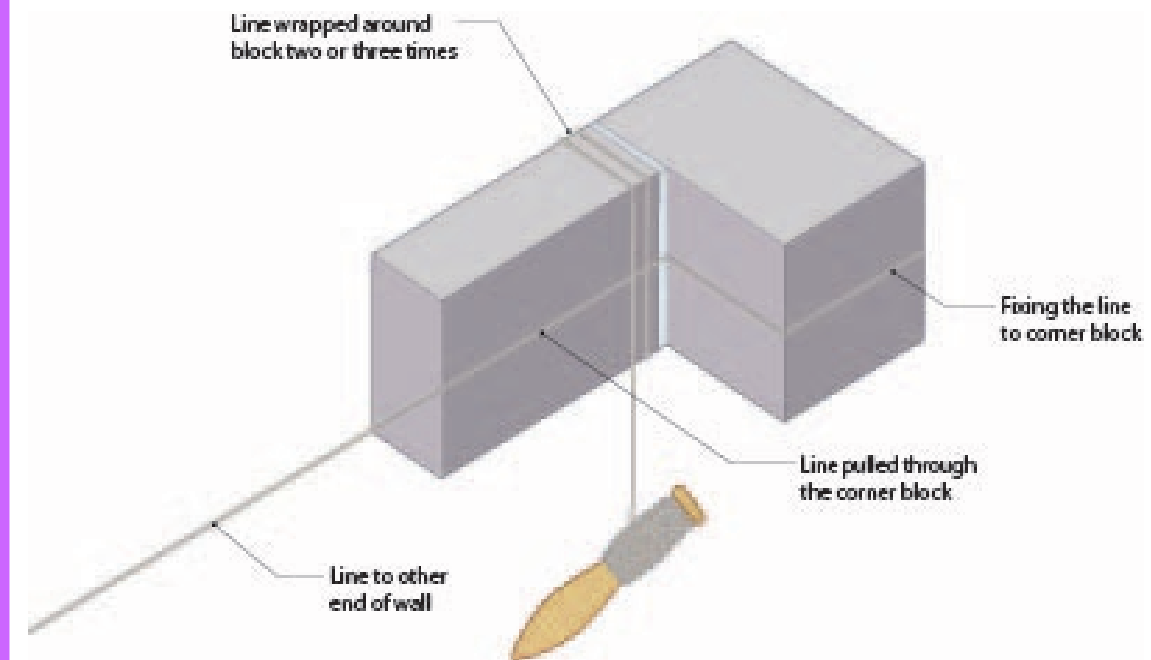
- What is the length of a brick?
- What is the width of a brick?
- What is the depth of a brick?
- How thick is a mortar joint?

Block dimensions

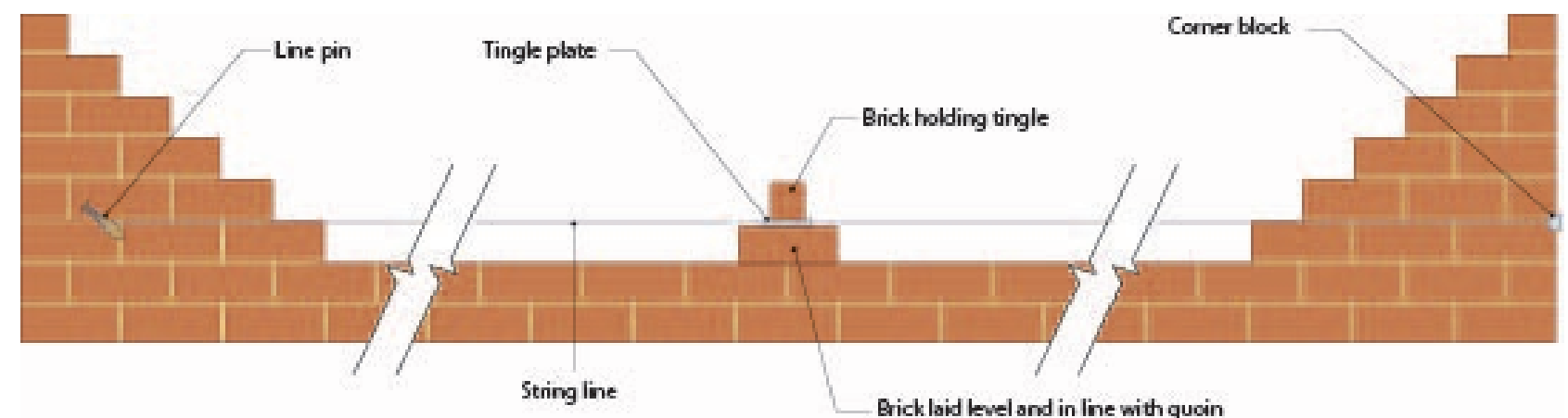
- What is the length of a block?
- What is the width of a block?
- What is the depth of a block?



There are different methods of holding in place a string line so you can build to it.



- How does the tingle plate work?
- Why is it required?
- When would you use it?



CORE RE – Relationships and families HT5

What are Christian attitudes towards human sexuality?

Many Christians see heterosexual relationships as part of God's plan for humans. Genesis says that a man and woman should be united and 'increase in number.' Therefore, some are against sex outside marriage, homosexuality and artificial contraception.

Some Christians are against homosexuality based on Leviticus 18 but some Christians argue about the meaning behind these texts. The Bible does not mention relationships between two women. The Catholic Church teaches that being a homosexual is not a sin, but homosexual sex is. The Church of England welcomes faithful committed homosexual couples but does not marry them in church. Other Christians believe that the Bible passages need to be interpreted in context and would marry homosexual couples, just like heterosexual couples.

GCSE Theme: Religion, Relationships and Family

What are Buddhist Attitudes towards Sex?

Buddhist attitudes vary, depending on the country and culture.

Buddhism teaches that sex is not wrong, and that people have desires and they shouldn't be denied. However, sexual attraction leads to craving which can lead to suffering. Buddhists believe that their sexual behaviour should be guided by kindness, generosity, honesty and not causing harm to oneself or others.

Buddhist monks and nuns take a vow of celibacy. They avoid sexual activity as one aspect of a simple life.

The Buddha did not teach on homosexuality or same-sex relationships. Many Buddhists would say that the five moral precepts apply to all relationships. What matters is consent and respect.



What are Christian attitudes to Contraception and Family Planning?

All Christians believe that having children is a gift from God. Christianity also teaches that parents should be responsible and there may be times when bringing children into the world, because of economics or psychological reasons, is not sensible.

Christians disagree about the methods of limiting family size. The Catholic and Orthodox teach that artificial methods (condom) goes against God's purpose of sex which is to express love AND allow the possibility of creating new life. To use contraception is to be selfish and prevent God's plan. Any form of contraception should be natural (rhythm method). Some Catholics disagree with this when considering the modern world.

Many Christians believe that sex is for creating new life OR express love and should make responsible choices about family life. Also contraception may be used to protect the mother's health and to allow a time for the relationship to develop.

Some Christians will only use certain forms of contraception because some allow for the egg and sperm to meet (coil) and they see this as causing an early form of abortion and the ending of life that started at conception.

SUBJECT TERMINOLOGY

Adultery	a married person having sex with someone other than their marriage partner
Civil partnership	a legal ceremony giving a homosexual couple the same legal rights as a husband and wife.
Cohabitation	living together without being married
Contraception	intentionally preventing pregnancy from happening.
Divorce	Legal ending of a marriage
Extended family	A family which extends beyond the nuclear family to include grandparents and other relatives.
Faithfulness	staying with your marriage partner and having sex only with them.
Family planning	Using contraception to control how many children couples have and when they have them.
Gender equality	The idea that people should be given the same rights and opportunities regardless of whether they are male or female.
Gender prejudice	Unfairly judging someone before the facts are known ; holding biased opinions about an individual or group based on their gender.
Gender discrimination	Acting against someone on the basis of their gender; discrimination is usually seen as wrong and may be against the law
Nuclear family	mother, father and the children living as a unit
Procreate	Produce children
Human sexuality	How people express themselves as sexual beings
Heterosexual	Sexually attracted to members of the opposite sex
Homosexual	Sexually attracted to members of the same sex
Marriage	A legal union between two people as partners in a relationship
Polygamy	The practice or custom of having more than one wife or husband at the same time.
Re-constituted family	where two sets of children become one family when their divorced parents marry each other.
Re-marriage	marrying again after being divorced from a previous marriage.
Sex before marriage	Sex between two single unmarried people
Same sex marriage	Sex between partners of the same sex

What are Buddhist Attitudes to Contraception and Family Planning?

Buddhist traditions may differ about contraception because of when it is believed consciousness arises. Some may say at conception, some may say that it is continuous from life to life. Most Buddhists believe that it is acceptable to use a form of contraception that prevents fertilisation, but others would say something like the morning after pill is less acceptable as it may be seen as a form of killing and going against the first moral precept. If having the child might harm the life of the mother, the morning after pill may be seen as the lesser of two harms.

Having children is not a sacred duty in Buddhism and the Buddha did not recommend family life as a path to enlightenment. Buddhists can choose what to do but should be able to bring children up in a happy and safe environment.

What are Buddhist teachings on Marriage?

Marriage is a social contract and not a religious duty or sacred act. Marriage is a secular ceremony depending on the country but a Buddhist monk may bless the service.

Having children is not seen as the purpose of marriage and there is no obligation or pressure to have them. Because everything is interconnected a benefit of married couples is that it develops relationships which produce stronger communities.

Most ideas around sex before marriage are cultural but it is not forbidden but must be according to the five moral principles. The same is true of cohabitation. Most Buddhists would see adultery as wrong as it involved dishonesty and does not show kindness towards your partner. Same sex marriages are more likely to be accepted because of culture. Buddhism does not teach against them but teaches that in any relationship respect should be shown.

What are Buddhist teachings on Divorce?

Buddhism does not say that a couple cannot be divorced but does say that they should lead a life of implied duty and responsibility to one another so would not encourage it. Often ideas about divorce are also influenced by cultural values. By following the five moral precepts and trying to lead a life developing loving-kindness Buddhists is more skilful and would be encouraged to try and make their marriage work.

Buddhists are also likely to teach that hanging on to a broken relationship produces suffering and should be avoided. Buddhism accepts that divorce may well be a painful process, but every attempt should be made to make it as respectful as possible. Causing hurt will never make a person happy.

Buddhists also do not teach against remarriage as it may be a way to commit to a new relationship and find happiness.

What are Buddhist teachings on the nature and purpose of family life?

Buddhism is not a family-centred religion, there is no expectation to have children. The nature of the family, extended or nuclear, usually reflects the customs of the country they live in. The Buddha did not forbid polygamy but did say it may cause suffering for those involved. Same-sex parents are accepted as long as the relationship is respectful, Buddhist values are more important than gender.

Buddhism does not teach about family life apart from the general rules to be loving, caring and to remain faithful to each other. Parents are responsible for raising children and teaching them the faith. Buddhists will often have a shrine in the home and children are shown how to show respect to the Buddha.

In later life, children are expected to support their parents when old age or illness becomes an issue.

What are Christian Teachings about Marriage?

Society now recognises same-sex marriages as having the same legal status as non-same sex marriages. Many Christians are against this as they see marriage as being more than a committed relationship and somewhere that new life can be created. The law protects churches from having to marry same sex couples.

For many Christians marriage is seen as part of God's plan to unite couples. Some Christians see it as a sacrament which reflects the commitment made by God to humans. Marriage is a spiritual bond that reflects the love of God. For many Christians the purpose of marriage is to provide a stable, secure environment for family life.

Christians who are opposed to sex before marriage also oppose cohabitation. Many Anglican and protestant Christians believe that marriage is best, but people may live together in a faithful, loving and committed way without being married.

What are Christian teachings on Divorce?

Some Roman Catholic Christians believe there can be no divorce because Jesus banned divorce. Also when you marry, you make a covenant with God which cannot be broken without God's consent. Therefore a couple can never be divorced according to God's law. Catholics do have Marriage Tribunals which can decide that a marriage never existed (annulment), but there can be no divorce and Catholics who have state divorces are not allowed to remarry.

Most Protestant Christians believe that if a marriage goes wrong and there is no chance of bringing the couple back together, then there can be a divorce. They believe this because God is always prepared to forgive sins if people are determined to live a new life, and in St Matthew's Gospel Jesus allows divorce for adultery.

What are Christian teachings on Family Life?

All Christians believe that children should be brought up in a family with a mother and father (unless one of them has died). Christian marriage services refer to founding a family and bringing children up in a Christian environment as a major purpose of marriage.

Christians see the family as the basis of society. Children are a gift from God and parents are expected to look after them properly (feeding, clothing, educating, etc) and help them to be Christians by having them baptised and taking them to church on Sunday. Christian children are expected to respect their parents (fifth commandment) and care for them when they are old.

Child Development: Learning Through Play (Unit 2).

Physical Play	
What do children learn through physical play?	Spatial awareness Activities to stay healthy How to take care of yourself and self-care Gross motor skills Fine motor control
What activities and resources can we use for physical play and learning?	Role play of home life situations Food preparation, snack times and handwashing Bat and ball games Tricycles, bicycles, sit and ride toys Climbing frames, swings, slides Creative activities Playdough, sand and water activities Construction toys Baby gyms, push along toys, rattles.



Cognitive Play	
What learning is promoted through cognitive play?	Problem solving skills Creativity Use of imagination Listening and attention skills Numeracy skills Exploration of environments inside and outside Confidence using technology Understanding of others' experiences
What activities and resources can we use for cognitive play?	Counters, weights, play money Shape sorters, puzzles, matching pairs Trips and visits Digging and building Computer games, apps, PCs, tablets Writing Small world toys

Social Play	
What learning is promoted through social play?	Development of friendships and relationships Emotional support networks Sharing, turn taking, compromise.
What activities and resources can we use for social play?	Team games and activities Group activities Role play Board games

TECHNICAL VOCABULARY	
Unoccupied play	Baby makes movements discovering how their body moves.
Solitary play	A child plays alone, not interested in playing with others.
Spectator/onlooker play	A child watches other children play but doesn't join in with them.
Parallel play	A child plays alongside or near others but does not play with them.
Associative play	A child starts to interact with others during play but there is not a lot of interaction.
Co-operative play	A child fully interacts with others and is interested in the activity and other children, they create their own rules.
Locomotor play	Any type of physical activity using gross motor skills- enjoying movement.
Creative play	Freedom to explore resources, making something, trying new ideas.
Sensory play	Using the senses to explore, discover textures and functions.
Imaginative play	Children pretend in some ways, act out their experiences, role play and small world play.

Communication and language play	
What learning is promoted through communication and language play?	Listening skills Process of following instructions Vocabulary and literacy skills, speaking and questioning skills Expressing and discussing feelings Having conversations
What activities and resources can we use for communication and language play?	Books – lift the flap, textured, stories, talking books, story sacks. Role play Nursery rhymes, songs, dances Listening/action games.

Emotional Play	
What learning is promoted through emotional play?	Expression of feelings Promoting independence Improving confidence, esteem and awareness Building relationships
What activities and resources can we use for social play?	Puppets and dolls Role play activities Emotion faces Mirrors Circle time/carpet time

Topic Formula	
Revenue	Number of Sales x Price
Total costs	Total Fixed Costs + Total Variable Costs
Gross Profit	Sales revenue – Cost of sales
Net profit	Gross profit – Other expenses
Interest	$\frac{\text{Total repayment} - \text{borrowed amount}}{\text{Borrowed amount}} \times 100$
Break-even Point in units	$\frac{\text{Fixed Costs}}{\text{Sales price} - \text{variable cost}}$

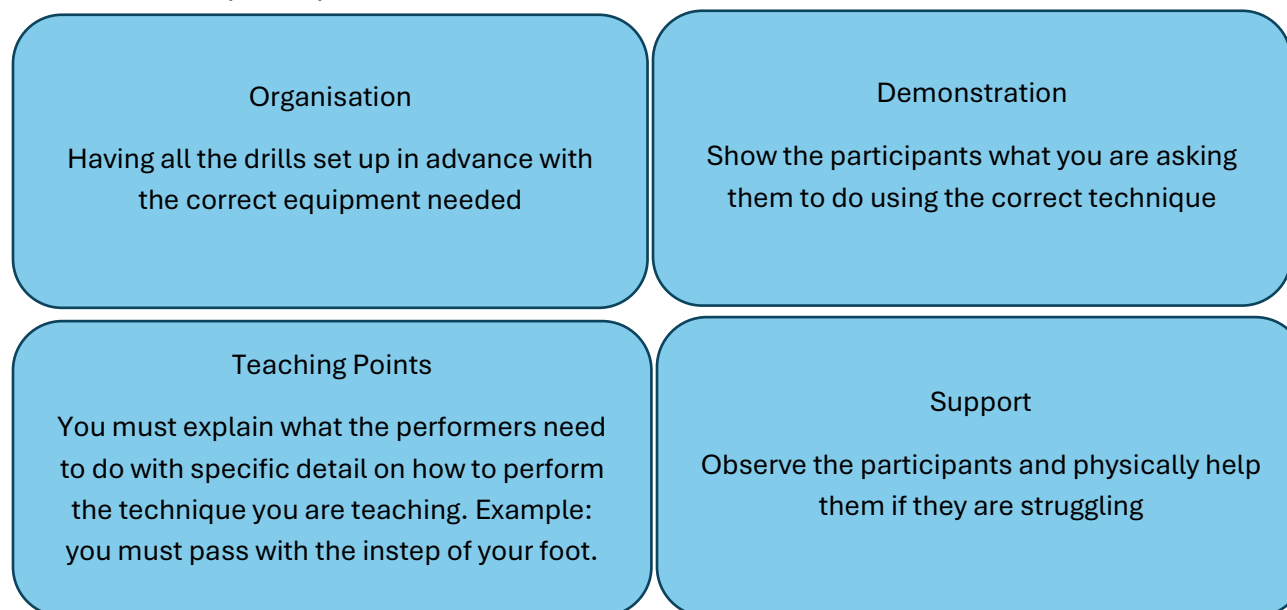
TECHNICAL VOCABULARY	
Limited Liability	The level of risk is limited to the amount of money that has been invested in a business or promised as an investment.
Shareholders	Investors who are part owners of a company
Sole Trader	A business run by one person; that person has unlimited liability for any business debts.
Private Limited Company (LTD)	A small family business in which shareholders enjoy limited liability.
Franchising	Paying a franchise owner for the right to use an established business name, branding and business methods
Royalties	Percentage of the sales revenue to be paid to the overall franchise owner.
Business Plan	A detail document setting out the marketing and financial thinking behind a proposed new business.
Stakeholders	All those groups with an interest in the success of a business
Pressure Groups	Organisations formed to put forward a particular viewpoint, such as promoting organic farming.
Bankrupt	When an individual is unable to pay their debts, even after all personal assets have been sold for cash.



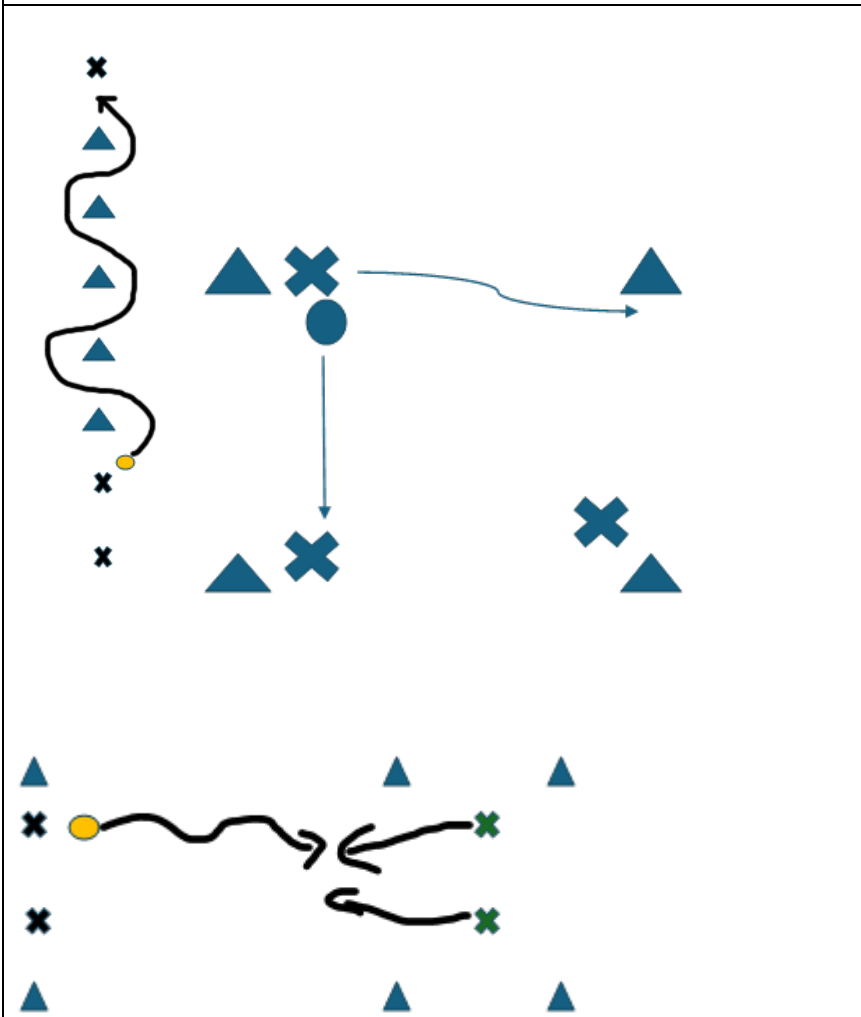
Type of ownership	Ownership	Control of business
Sole Trader	By one owner	By one owner
Partnership	2 or more owners	By partners, although senior partners may have more decision making power
Private limited company (LTD)	Shareholders – usually friends and family	By directors and paid managers. Some will have more control than others
Public limited company (PLC)	Shareholders	By directors and paid managers. Some will have more control than others
Franchise	Franchisee hold a licenced but only for a given period	Franchisee must operate in a framework set out by the franchisor

C1: Drills and Practices	
Unopposed stationary drills	These break down skills into their most basic form. They are practiced without moving. Example: two people stood 5m apart passing a ball in netball.
Drills with the introduction of travel	By adding movement such as walking or jogging you can now help performers develop more complex skills. Example: Passing and moving in groups of 3 in football.
Drills with passive opposition	This is where there is an opposition or obstacle, but they don't interfere with the drill. Example: Dribbling in and out of cones in football. Example: Passing the ball over an opposition in netball.
Drills with active opposition	These are drills with an opposition who is actively trying to disrupt the activity. This puts pressure on the performers and encourages them to think about decision making. Example: 3v2 in netball or football.

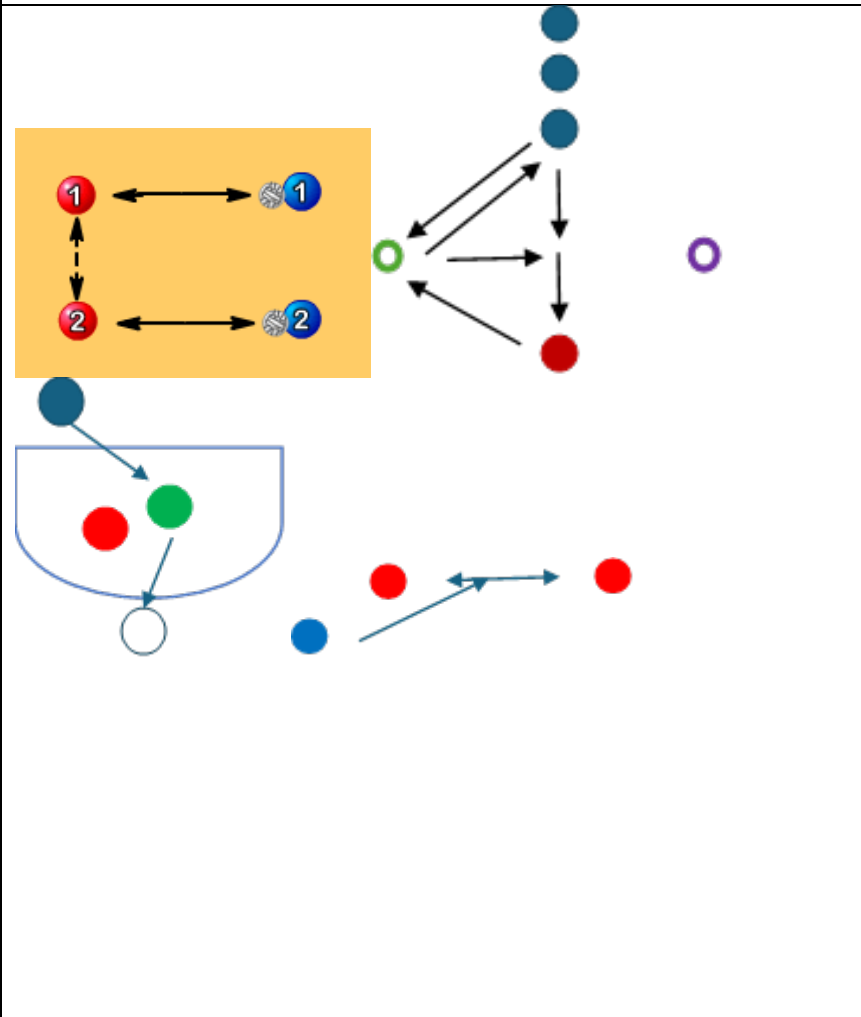
C2: Drills to improve performance



Examples of Football Drills

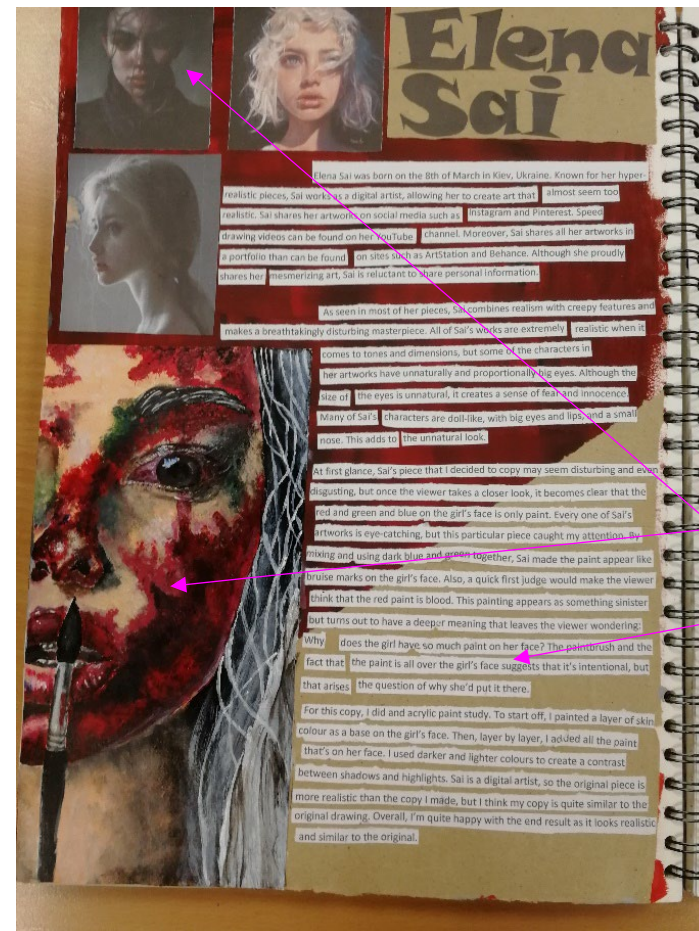
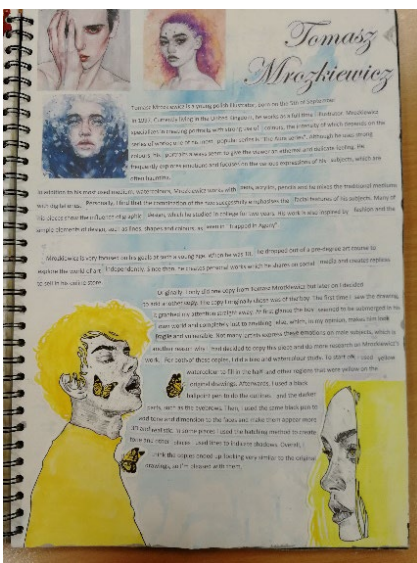
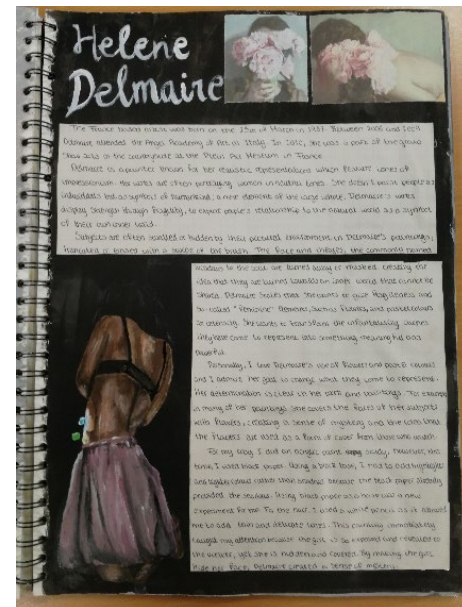
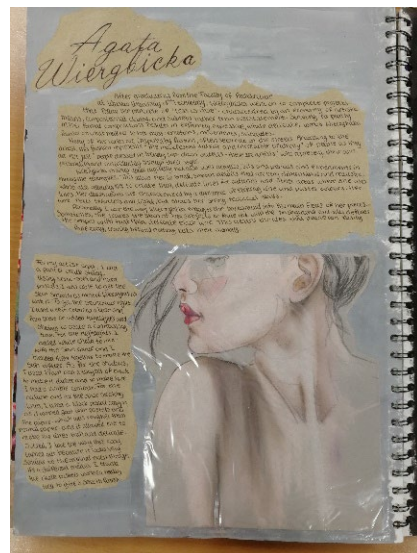


Examples of Netball Drills



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

TECHNICAL VOCABULARY	
Response	A reaction (to the work of an artist)
Develop	To evolve, grow and improve
Experiment	To test (with different art media)
Annotate	Explanatory notes
Review	Evaluate
Reflect	Reconsider and modify
Independent	On your own
Formal Elements	The Formal Elements are the parts used to make a piece of artwork. They should be commented on when discussing your own work
Analyse	To examine in detail
Interpret	Explain/translate art work



Mock exam – Chosen theme development
From the 4 themes of manmade, people, natural world and environment you are to choose your favourite. You are then to pick 4 artists. For each artist you are to do;

1. One side
2. A copy
3. Some information/personal opinion
4. Examples of their work

This is the same as you have done before but with no response, just a copy.

Energy, materials, systems and devices– Knowledge organiser

<u>What</u>	<u>Definition</u>	<u>What</u>	<u>Definition</u>
<u>Turbines and generators</u>	Electricity we use mainly involves a rotating turbine which turns a generator. 1. Fossil fuels are burned to create heat which intern superheats water. 2. The steam is used to rotate the turbines which are linked to a generator. 3. Provide us with a supply of electricity.	<u>Solar energy</u>	
<u>Fossil fuels</u>	Most of the heat that we generate electricity in the uk comes from burring fossil fuels such as coal, gas and oil. These are FINITE resources as they formed over many millions of years and cannot be replaced as they will eventually be run out!	<u>Nuclear</u>	The process harnesses a nuclear reaction that takes place in a vessel. Control rods are moved in or out of the core to regulate the power. The reaction generates heat which superheats water and then generates power by driving turbines and generators.
<u>Shale Gas</u>	Shale gas is a natural gas that is trapped within areas of shale in the earth crust. Shale is a sedimentary rock that can be a rich source of petroleum and natural gas. <u>Fracking</u> is the controversial process of extracting this shale gas.	Energy storage	There are a number of ways to store mechanical power. In most mechanical products, it uses tension or compression.
<u>Renewable energy sources</u>	This is energy that comes from the planets non-finite resources is considered to be renewable. This includes wind, wave and tidal, hydroelectricity, geothermal and biomass and Solar energy.	<u>Pneumatics</u>	Form of compression is used to store gas or air under pressure – controlled via valves and pistons.
<u>Wind turbines</u>	1. Produce more power in the winter. 2. Do not produce power when it is not windy. 3. Can harm wildlife especially birds. 4. Some consider it to be an eye sore. 5. Has a term 'Nimbyism' – not in my back yard.	<u>Hydraulics</u>	The gas or air in a pneumatic system can be swapped for a liquid, the most common is oil. Used in breaking systems and lifting mechanisms.
<u>Solar energy</u>	The solar cell technology captures the sun's rays and converts them into electric energy. The cells only produce energy during the daytime and production is less in the winter months owing to the shorter daytime length.	<u>Kinetic energy</u>	Kinetic is energy involve in motion. Any object in motion in kinetic energy. Throwing a ball or a person walking in kinetic energy.
<u>Tidal energy</u>	Tidal is more reliable than solar and wind and more predictable. The difficulty is the environment/ where it can be located. This means distance from land, repair work and is it in a conservation area. It is also very expensive to build.	<u>Batteries</u>	Electronic power can be stored in batteries. Batteries contain electro chemicals that react with each other to produce electricity. They come in many different sizes and provide different voltages and power levels. Batteries contain cells. Each cell providing 1.5 volts.
<u>Hydro electric Power</u>	Hydro electric power (HEP) generation is a very reliable source of renewable energy. It has high initial set up due to the machinery and the land needs to be flooded to create a reservoir.	<u>Alkaline cells</u>	Alkaline batteries have a higher capacity for their size than traditional acid based batteries. Alkaline batteries tend to hold their charge well.
<u>Biofuel</u>	Production of Biofuel is becoming a way of producing energy for transporting and heating needs. Oil- and starch – producing crops are grown, harvested and refined into a number of products. This is biomass energy production. Biomass can also include wood chips and farm waste	<u>Rechargeable batteries</u>	These are available in different forms and is used in cordless products, phones, power tools portable speakers, laptops and tablets. These can be charged hundreds of times. These are more expensive than traditional batteries but they can be used, better on the environment and save you money down the long run.

Customer Expectations/ Customer Service	
<p>Value for Money The price for a room and for a meal is fair, doesn't mean cheap. Extra facilities are expected the more luxury the accommodation.</p>	<p>Reliability That the service you are promised on initial booking will be delivered. Like room service takes 20mins, then it should.</p>
<p>Advice and help Customers will be given help and advice when needed. A receptionist should be able to deal with most issues.</p>	<p>Accuracy What you order is what you get, if you booked a room with a walk in shower that's what you get.</p>
<p>Health, safety and security The hospitality business has a duty of care towards all its customers to ensure safety, health and well being</p>	<p>Complaints dealt with correctly These should be dealt with swiftly effectively and to the customer's satisfaction. If the customer is unhappy this could be put on social media with detrimental effect to the business</p>

Different Customer Needs	
Customer need	Starts the relationship between customer and business
Customer requirement and expectation	Factors which determine customer satisfaction with the service they receive
Market Research	Ways of finding out what customer's needs, requirements and expectations are, using questionnaires, online and postal surveys. Check on line feedback
Leisure Needs	<ul style="list-style-type: none"> • Pool, gym spa • Tourist information • Sightseeing information • Afternoon tea
Business and corporate needs	<ul style="list-style-type: none"> • Airport pick up service • Express check in • Laundry service • Conference rooms • High level of food and beverage service • Excellent WIFI and IT facilities
Needs of the local residents	<ul style="list-style-type: none"> • Access to a pool and gym • Spa days, afternoon tea • Able to use the restaurant and bar facilities • Employment for local residents

LO2 – (2.3)

Customer Rights and Equality
<ul style="list-style-type: none"> • Trade descriptions Act 1968 It's illegal to mislead customers by incorrect descriptions or making false statements • Equality Act 2010 Protects people from unfair treatment such as gender bias, disability, sex, race, sexual orientation, age and religion • Consumer Rights Act 2015 This gives you the right to complain about a product which is not fit for purpose, it doesn't match the description or be of a satisfactory quality • Consumer protection Act 1987 Gives you the right to claim compensation against a producer or a business if it has caused damage or personal injury. E.g. When customers are staying in accommodation and get an electric shock from faulty electrical equipment • General data protection regulation 2016 Under the GDPR rules businesses are not allowed to use or pass on your personal information for marketing purposes or share it with other businesses.

Different Customer Needs Cont...	
<p>Dietary Requirements</p> <ul style="list-style-type: none"> • Nutritional information is on the menu • Nutritional information available on line. • Choices for vegetarians and vegans • Special dietary requirements, lactose and gluten intolerance • Children's menu choices 	<p>Leisure requirements</p> <p>Sports Activities-</p> <ul style="list-style-type: none"> ▪ Golf courses ▪ Walking <p>Outdoor pursuits-</p> <ul style="list-style-type: none"> ▪ water park ▪ Theme Park ▪ Zip wire ▪ Climbing <p>Tourism-</p> <ul style="list-style-type: none"> ▪ Stately homes ▪ Historical sites ▪ Areas of outstanding beauty <p>Facilitate</p> <ul style="list-style-type: none"> • Families- Accommodation to suite • Children- A wide age range /offer kids clubs • Individuals- single travellers • Groups- hen and stag does