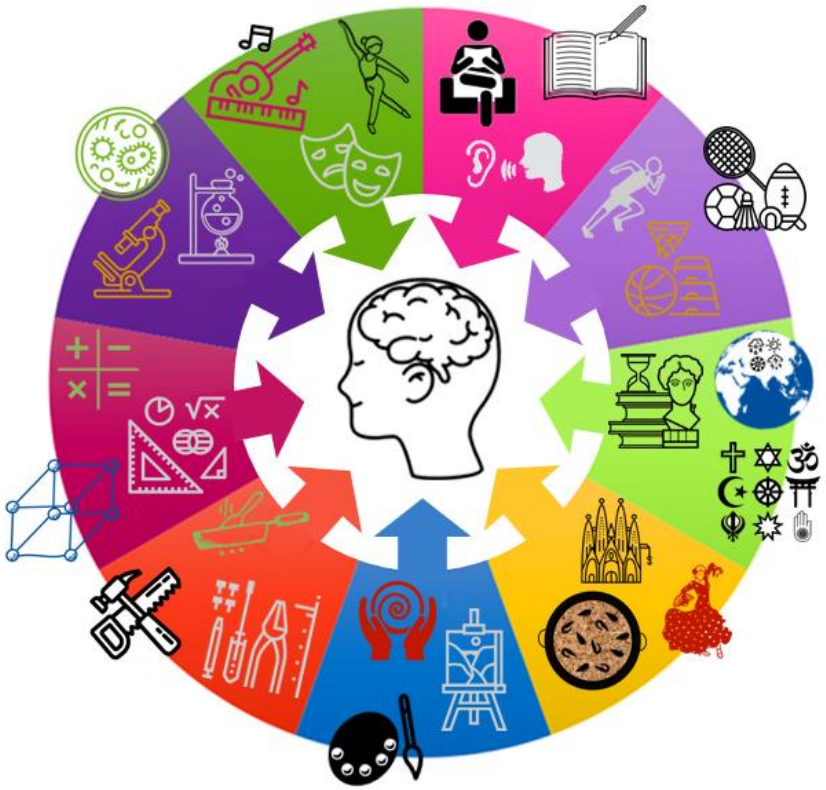
100% book - Year 10 Mainstream sets 1/2

Aim to memorise 100% of the knowledge on these Knowledge Organisers.



Term 2

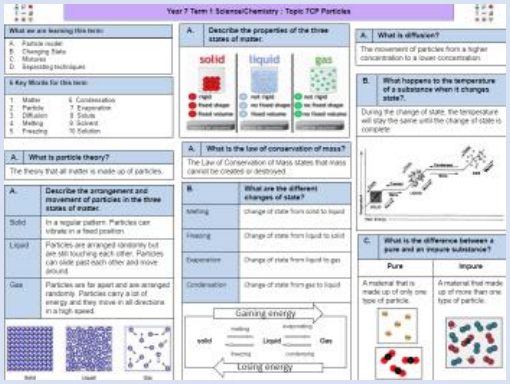
Swindon Academy 2022-23	
Name:	
Tutor Group:	
Tutor & Room:	

"If you are not willing to learn, no one can help you.
If you are determined to learn, no one can stop you."

Swindon Academy The best in everyone™ Part of United Learning
Swindon Academy The best in everyone™ Part of United Learning
Swindon Academy The best in everyone™ Part of United Learning
Swindon Academy The best in everyone™ Part of United Learning

How to use your 100% book of Knowledge Organisers and Quizzable Organisers

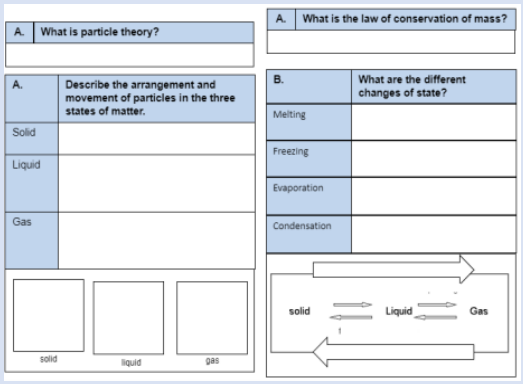
Knowledge Organisers



Knowledge Organisers contain the essential knowledge that you MUST know in order to be successful this year and in all subsequent years.

They will help you learn, revise and retain what you have learnt in lessons in order to move the knowledge from your short-term memory to long-term memory.

Quizzable Knowledge Organisers



These are designed to help you quiz yourself on the essential Knowledge.

Use them to test yourself or get someone else to test you, until you are confident you can recall the information from memory.

Top Tip

Don't write on your Quizzable Knowledge Organisers! Quiz yourself by writing the missing words in your prep book. That way you can quiz yourself again and again!

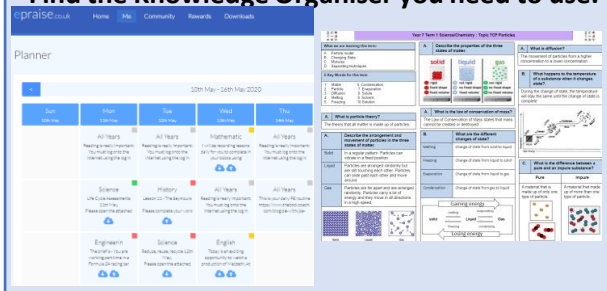
Expectations for Prep and for using your Knowledge Organisers

1. Complete all prep work set in your subject prep book.
2. Bring your prep book to every lesson and ensure that you have completed all work by the deadline.
3. Take pride in your prep book – keep it neat and tidy.
4. Present work in your prep book to the same standard you are expected to do in class.
5. Ensure that your use of SPAG is accurate.
6. Write in blue or black pen and sketch in pencil.
7. Ensure every piece of work has a title and date.
8. Use a ruler for straight lines.
9. If you are unsure about the prep, speak to your teacher.
10. Review your prep work in green pen using the mark scheme.

How do I complete Knowledge Organiser Prep?

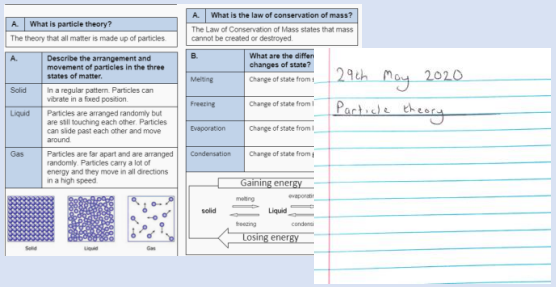
Step 1

Check Epraise and identify what words /definitions/facts you have been asked to learn. Find the Knowledge Organiser you need to use.



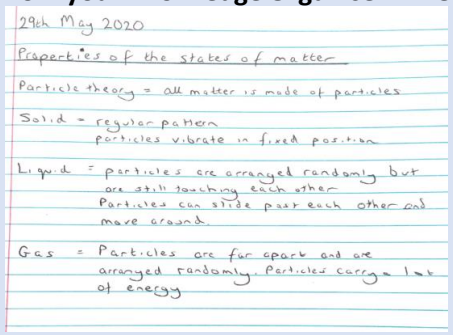
Step 2

Write today's date and the title from your Knowledge Organiser in your Prep Book.



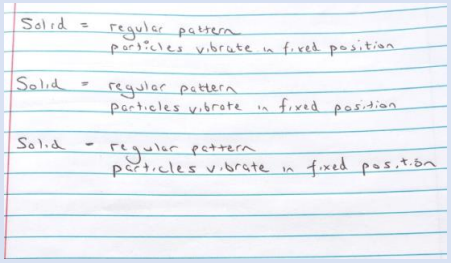
Step 3

Write out the keywords/definitions/facts from your Knowledge Organiser in FULL.



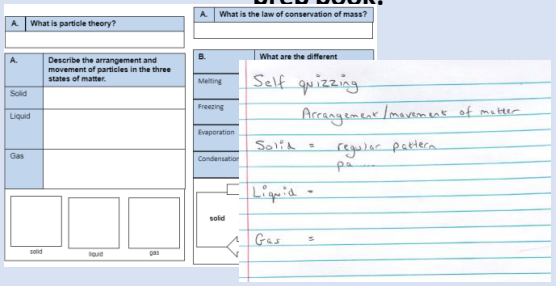
Step 4

Read the keywords/definitions/facts out loud to yourself again and again and write the keywords/definitions/facts at least 3 times.



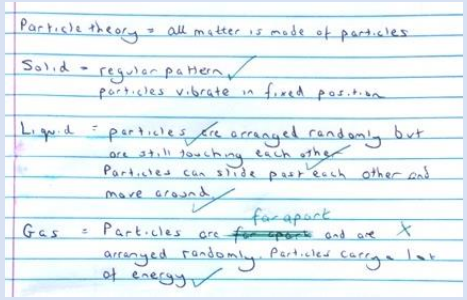
Step 5

Open your quizzable Knowledge Organiser. Write the missing words from your quizzable Knowledge organiser in your prep book.



Step 6

Check your answers using your Knowledge Organiser. Repeat Steps 3 to 5 with any questions you got wrong until you are confident.



Make sure you bring in your completed Prep notes to demonstrate that you have completed your prep.

Year 10 - ENGLISH – Poetry cluster 1: The Romantics- Grammar

Key Vocabulary	
Tyrant	A cruel and unfair ruler
Transient	Lasting for only a short time
Hubris	Having extreme pride or self-confidence
Oppression	When leaders treat people in a cruel or unfair way over a long period of time.
Patriarchy	A society where men have the most power and control
Egocentric	Thinking only of oneself
Awe	A feeling of deep respect mixed with fear or wonder
Radical	Wanting to see extreme changes in politics and society
Ephemeral	Lasting a very short time
Autocratic	A ruler who has complete power and makes decisions without asking anyone else's advice
Sinister	Something that seems evil or harmful
Revolution	A large group of people using force to change the political system of their country
Exploit	Treating someone unfairly in order to benefit from them.
Anti-establishment	Disagreeing with the people who have power and make decisions

Romanticism:

A movement in literature and the arts
From around 1800-1890
During this time, major transitions took place in society, as dissatisfied intellectuals and artists challenged the Establishment (the church and the monarchy).
The Romantics valued freedom, imagination, emotion and nature
They were critical of power that institutions (such as the church and monarchy) had as they believed that they exploited the poor and restricted people's freedoms

Poem	Context	Events in the poem	Message	Form/ structure
The Prelude- William Wordsworth	• Born in in 1770, Wordsworth was orphaned at 13 and sent to a grammar school. • Whilst there, he was influenced by the countryside. • The poem you study is just a section of an epic poem originally going to be called 'The Recluse'. • The poem is mostly autobiographical.	• An autobiographical account of Wordsworth as a boy. • The poem focusses on a boy stealing a boat and rowing it into the middle of a lake. • Whilst there he feels as though nature is judging him and feels guilt for his theft. • He returns the boat, but the memory stays with him	• Nature has the power to inspire and destroy and so should be respected. • Nature can be overwhelming and render us feeling small and insignificant. It can remind us of our flaws and inspire us to do better. • Imagination and memories are powerful. They can cause us to permanently change our outlook.	• The poem is written in blank verse and uses iambic pentameter to mimic the conversational flow of speech. It is not split into separate stanzas but flows continuously- much like the power of nature over us. • It is an epic poem (poems that
My Last Duchess- Robert Browning	• Browning was inspired by the writing of radical poets such as Shelley • Written in 1834, it is inspired by the actions of an Italian duke who married a young girl, who died in suspicious circumstances. • Browning moved to Italy to marry his wife because of her overprotective father. As a result, he was familiar with over-controlling patriarchs.	• The speaker of the poem (the Duke) shows a visitor through his palace. He stops before a portrait of the late Duchess who has died. • The Duke reminisces about the portrait sessions and about the Duchess. His musings give way to a rant about her disgraceful behaviour: he claims she flirted with everyone and did not appreciate his "gift of a nine-hundred-years- old name." • As his monologue continues, the reader realises that the Duke caused the Duchess's early death: when her behaviour escalated, "[he] gave commands; / Then all smiles stopped together." • Having made this admission, the Duke returns to the business at hand: arranging another marriage, with another young girl.	• Browning makes us question whether the expectations of society are too oppressive, especially for women; strict rules should not be imposed on others and there should be equality of power in society. • The power of humans is exposed as having potential dangers and Browning warns us that evil can take many forms – we should not be deceived by the outward appearance of someone; anyone can be cruel. • Furthermore, Browning shows how unattractive arrogance is; it can lead to the abuse of power. He warns us of the consuming nature of pride and jealousy: they can take over	• Dramatic monologue- reflective of the Duke's egocentricity • The regular meter and rhyme scheme (rhyming couplets) demonstrate the Duke's control over the narrative and how he has carefully constructed his argument. • However, some of the rhyming couplets are subdued by enjambment so are hidden when listening to the poem. This is reflective of the Duke's true nature. Beneath his wealth and status, he is no more than a murderous villain. • There are no breaks in the poem to split it into stanzas. This could symbolize the lack of gaps in his fortress. In a patriarchal society, a man of such a high status is protected from the repercussions of his actions.
Ozymandias- Percy Shelley	• Shelley was considered to be a radical due to his atheism and his opposition of the church and monarchy • The poem is inspired by an Egyptian pharaoh, Ramesses II. • Rameses II was remembered for leading armies into many battles and building a huge empire. However, to do this he used slave labour and allowed his people to struggle whilst he invested huge sums of money into expanding his kingdom.	• The poem imagines a traveler describing the broken statue of Ozymandias in the vast expanse of the empty desert. • In the poem, the tyrannical Ramesses II believed himself to be 'king of kings' and that his power would be eternal. • However, where a great empire once stood, now only sand and ruins remain. • Shelley uses the poem to demonstrate the transient nature of political power and as a metaphor for his opposition of the Establishment's power.	• Shelley wanted to communicate how all power is transient – even powerful individuals are no match against nature and time. • Shelley warns tyrants that they are vulnerable; they should not be arrogant, but instead be humble and accept their own limitations and the ephemeral nature of their power. • The poem offers hope to ordinary people as they are reminded that no one's power can last forever. Shelley reminds us that the power of art and artists endures over the power of kings – particularly tyrants.	• Sonnet- Sonnets are typically love poems written in iambic pentameter. They are 14 lines long and have a strict rhyme scheme. The use of the sonnet form is reflective of Ramesses' love of power whilst the rigid structure is symbolic of both Ozymandias' oppressive rulership. It could also reflect the poet's lasting power and control over the way we remember Ozymandias – far outlasting the power of Ramesses II. • Shelley also breaks the conventional sonnet form which could symbolise how the power of tyrants is ephemeral.
London- William Blake	• Born in London in 1757, Blake was anti-establishment and opposed many of the things he saw in London. He believed that the government, the church and the monarchy were to blame for the widespread suffering he saw on London's streets. • During this era, life was difficult for the poor. There was much sickness, disease and the children of poor parents would have had to work hard and dangerous jobs, such as chimney sweeping.	• Walking through through London's streets, the speaker notices how the course of the Thames seems to be dictated as it flows through the city. • The speaker sees sadness in the faces of every person he passes and hears pain in every voice in the city. Every law and restriction oppresses the people of London. • He hears the cry of young chimney-sweeps, whose misery brings shame on the Church authorities. Thinking of British soldiers dying in vain, the speaker imagines their blood running down the walls of a palace. • He also hears the cries of young prostitutes, who curse at their situation. This miserable sound brings misery to their tearful new-born children. The speaker also imagines this sound plaguing what the speaker calls "the Marriage hearse"—a surreal imagined vehicle that carries love and death together.	• Blake wanted to highlight the desperate suffering of the poor in 19th century Britain. • Blake believed people should be supported and cared for by institutions of power such as the church, the government and the education system. • Blake was appalled that people endured such difficulties and wanted them to break free from the oppressive control. • It could be said to be his call to revolution as he subtly hints at the French revolution in which people stood up against oppressive rulership.	• Blake uses regular stanzas and a regular rhyme scheme which reflects the monotony of the pain and suffering that the people of London face. The controlled structure is also symbolic of the control that the Establishment has over society.

Year 10 - ENGLISH – Poetry cluster 1: The Romantics- Grammar

Key Vocabulary	
	A cruel and unfair ruler
	Lasting for only a short time
	Having extreme pride or self-confidence
	When leaders treat people in a cruel or unfair way over a long period of time.
	A society where men have the most power and control
	Thinking only of oneself
	A feeling of deep respect mixed with fear or wonder
	Wanting to see extreme changes in politics and society
	Lasting a very short time
	A ruler who has complete power and makes decisions without asking anyone else's advice
	Something that seems evil or harmful
	A large group of people using force to change the political system of their country
	Treating someone unfairly in order to benefit from them.
	Disagreeing with the people who have power and make decisions

Romanticism:

A movement in literature and the arts
From around _____
During this time, major transitions took place in society, as dissatisfied_____and _____ challenged the _____ (the church and the monarchy).
The Romantics valued _____, _____, _____ and _____
They were _____ of power that institutions (such as the church and monarchy) had as they believed that they _____

Poem	Context	Events in the poem	Message	Form/ structure
The Prelude- William Wordsworth	• Born in in _____, Wordsworth was… • Whilst he was there, he was influenced by … • The poem you study is… • The poem is mostly…	• An _____ account of… • The poem focusses on… • Whilst there he feels... • He…	• Nature has the power to… • Nature can be … • Imagination and memories are…	The poem is written in blank verse and uses iambic pentameter to mimic the conversational flow of speech. It is not split into separate stanzas but flows continuously- much like the power of nature over us.
My Last Duchess- Robert Browning	• Browning was inspired by… • Written in _____, it is inspired by	• The speaker of the poem (the Duke) shows… • The Duke talks about… • As his monologue continues, the reader realises that… • Having made this admission, the Duke…	• Browning questions… • Browning warns us that… • Furthermore, Browning shows how…	Dramatic monologue- The regular meter and rhyme scheme (rhyming couplets) demonstrate
Ozymandias- Percy Shelley	• Shelley was considered to be… • The poem is inspired by… • He…	• The poem imagines… • In the poem,… • However…	• Shelley wanted to… • Shelley warns tyrants that… • The poem offers…	Sonnet- The use of the sonnet form is reflective of The rigid structure is symbolic of
London- William Blake	• Born in London in _____, Blake was… • He believed… • During this era,…	• Walking through … • The speaker sees… • He hears… • Thinking of… • He also hears…	• Blake wanted to… • Blake believed… • Blake was… • It could be said to be…	Blake uses regular stanzas and a regular rhyme scheme which reflects The controlled structure is also symbolic of

ENGLISH –A Christmas Carol- Mainstream

1. Context

Writer: Charles Dickens (1812-1870)
Dates: First published in 1843
Genre: Allegorical; a ghost story.
Era: Victorian
Set: Victorian London
Structure: The novella is divided into 5 staves (chapters).

Biography of Dickens

- Born in Portsmouth in 1812
- When Dickens was 12, his father was sent to debtors' prison as he was unable to pay his bills.
- His mother and youngest siblings were sent with him, whilst Dickens stayed with a family friend. In order to help his family, Dickens had to leave school and work in a factory sticking labels on bottles.
- Dickens dedicated his life to writing works that revealed the horrors of life in Victorian London for those living in poverty.

Christmas:
Dickens grew concerned that, due to capitalism, society had lost sight of traditional values (Christian morals, forgiveness, charity). He felt that Christmas was the perfect time to reconnect with these values and used his novella to do this. He also knew that Christmas would be a popular topic so it would sell well – therefore enabling his message to reach a wider audience.

London and inequality:
Dickens juxtaposes scenes of middle-class comfort and poverty to emphasise the close proximity and contrast of the different classes. It highlights the Christian concept of 'love thy neighbour'. The urban setting allows Dickens to exercise his fondness for hyperbole, with the exaggerated extremes of poverty adding to the effect of the 'plight of the poor'.

The Poor Law, 1834
In order to deter poor people from claiming financial help, the government made claimants live in workhouses: essentially, prisons for the poor. Dickens hated this law. He spent 1843 touring factories and mines in England and wished to highlight the situation facing poor people. A Christmas Carol was published soon after – in December 1843.

Malthusian Theory
The reformation of The Poor Law was partially informed by the writings of Thomas Malthus. Malthus argued that if living standards increased, population would increase and eventually the number of people would be too great for the food that could be produced. As a result, Malthus argued it was important not to support the poor or improve their standards of living, but to allow them to die if they couldn't support themselves because charity would only prolong their suffering.

The Supernatural: Victorian society was fascinated by the supernatural, including mediums, ghosts, and spiritualism. However, this belief in the supernatural was also heavily influenced by the church, with the belief that ghosts were souls who were trapped in purgatory (a place of suffering where the souls of sinners were trapped).

2. Key Characters

Ebenezer Scrooge: The protagonist is initially established as an archetypal villain who dismisses the goodwill and generosity associated with Christmas. After being forced to transform, he feels remorse for his avarice and becomes a symbol of Christmas spirit. Scrooge embodies the relentless capitalist spirit of the time, but also demonstrates that everyone has the capacity to reform.

Bob Cratchit: Bob is Scrooge's downtrodden but loyal employee. His family are a symbol of Victorian poverty, cheerfulness in adversity, togetherness and Christmas Spirit. Bob shows pity for Scrooge, and provides a contrast to Scrooge's isolation and meanness. His son, Tiny Tim, is an emblem for noble poverty; he accepts his disability without complaint.

Fred: Fred juxtaposes the character of Scrooge and epitomises the concept of goodwill and forgiveness, refusing to be discouraged by his uncle's misery. People speak highly of Fred and his generosity, in contrast to how they speak of Scrooge. Fred shows that Scrooge has chosen isolation and shows forgiveness to Scrooge, welcoming him in Stave Five.

Marley's Ghost: Marley's ghost is the spiritual representation of Scrooge's potential fate. The chains that drag him down symbolize the guilt caused by his failure to help people in need. Marley's ghost warns Scrooge that he too will experience the same guilt if he continues to deny people help.

The ghosts: The Ghost of Christmas Past is a symbol of childhood, truth and enlightenment.
The Ghost of Christmas Present represents goodwill, plenty and the festival of Christmas.
The Ghost of Christmas Yet to Come symbolises a catastrophic future for mankind.

Belle: The woman that Scrooge was engaged to when he was a young man. Belle's role is crucial in Scrooge's transformation, as the scenes show Scrooge what he might have had in his life if he had not been so avaricious. Through the character of Belle, Dickens sets emotional love directly against Scrooge's love of money and suggests that avarice can lead to a deprivation of kindness, love and empathy.

3. Central Themes

Social injustice	Dickens highlights the unfairness within society through the juxtaposition of the poor and wealthy. Through Scrooge's refusal to give to charity and his exclamation that the poor should be in workhouses or die, Dickens illustrates the selfishness of the higher classes and the injustice of wealth distribution in Victorian society. The children, Ignorance and Want, personify the dangerous consequences of allowing poverty to continue.
Transformation and redemption	By establishing Scrooge as an archetypical villain, Dickens is able to emphasise the idea that everyone is capable of transformation and redemption. From starting as a greedy, avaricious miser, Scrooge is able to reflect upon his actions and to understand that he must live his life helping others to avoid Marley's fate.
Social responsibility	Dickens felt that every individual had a responsibility for those around them. Marley's Ghost conveys the message of the novella when he cries, 'Mankind was my business' demonstrating that the proper 'business' of life is not about seeking financial reward but having concern for others. Dickens highlights the importance of trying to make a difference- whether that be large financial contributions (Scrooge), smaller contributions (Fezziwig) or simply showing compassion and kindness to one another.

4. Key Vocabulary

Avarice	Extreme greed of possessions or money
Salvation	Saving someone from harm or destruction
Miserly	someone who is greedy and does not like spending money
Callous	Mean or cruel
Antithesis	The exact opposite of something
Epiphany	A moment of sudden understanding
Redemption	The act of being saved or freed from sin or error
Benevolence	Kind and helpful towards others
Philanthropic	Showing concern for others by being charitable
Misanthropic	Someone who has a hatred for other people
Penitence	sincere regret for wrong or evil things that you have done
Remorse	a strong feeling of sadness and regret about something wrong that you have done
Deprivation	When someone is unable to have the things they need or want
Despotism	exercising power in a cruel and controlling way
Capitalism	A political system in which property, business, and industry are owned by private individuals and not by the government

5. Key Terminology, Symbols and Devices

Stave	Chapters in the novella, but we normally associate staves with music, as if the **book** is a Christmas carol, and each chapter is part of the song. As Christmas carols are repetitive and easy to remember, it links to how Dicken's wishes his message to be remembered.
Intrusive Narrator	A narrator who interrupts the story to provide a commentary to the reader on some aspect of the story or on a more general topic. In 'A Christmas Carol' the narrator helps to shape our impressions of Scrooge.
Circular structure	Circular narratives cycle through the story one event at a time to end back where the story originated.
Allegory	A story that can be interpreted to reveal a hidden meaning, typically a moral or political one.
Allegorical figures	An **allegorical** figure is a **character** that serves two purposes: first, they are an important person in the story in their own right, and, second, they represent abstract meanings or ideas.
Foreshadowing	Foreshadowing is a literary device in which a writer gives an advance hint of what is to come later in the story.
Didactic	A type of literature that is written to inform or instruct the reader, especially in moral or political lessons.
Semantic Field	A set of words that are related in meaning. Dickens frequently uses semantic fields of warmth and coldness that are associated with the characters.

ENGLISH –A Christmas Carol- Mainstream

1. Context

Writer: _____ (1812-1870)

Dates: First published in _____

Genre: Allegorical; a ghost story.

Era: _____

Set: V_____n London

Structure: The novella is divided into _____ staves (chapters).

Biography of Dickens

- Born in Portsmouth in 1812
- When Dickens was 12, his father was sent to _____n as he was unable to _____.
- His _____were sent with him, whilst Dickens _____. In order to help his family, Dickens had _____school and work in a factory s_____.
- Dickens dedicated his life to writing works that revealed the _____.

Christmas:
Dickens grew concerned that, due to _____, society had lost sight of _____ _____ (Christian morals, f_____). He felt that Christmas was the perfect time to _____. He also knew that Christmas would be a popular topic so it would _____ – therefore enabling his message to reach a _____

London and inequality:
Dickens j_____ scenes of middle-class _____ and _____to emphasise the close proximity and contrast of the different _____. It highlights the _____ concept of 'love _____'. The urban setting allows Dickens to exercise his fondness for h_____e, with the exaggerated extremes of _____ adding to the effect of the 'plight of the poor'.

The Poor Law, 1834
In order to deter poor people from claiming financial help, the government made claimants live in _____: essentially, _____. Dickens _____ this law. He spent 1843 touring _____in England and wished to highlight the situation facing _____people.

Malthusian Theory
The reformation of The Poor Law was partially informed by the writings of Thomas Malthus. Malthus argued that if _____, population would i_____ and eventually the number of people would be _____. As a result, Malthus argued it was important not to _____ the poor or improve their standards of living, but to allow them to die

The Supernatural: Victorian society was fascinated by the supernatural, including _____. However, this belief in the supernatural was also heavily influenced by the _____, with the belief that ghosts were _____s who were trapped in purgatory (a place of suffering where the souls of sinners were trapped).

2. Key Characters

Ebenezer Scrooge: The protagonist is initially established as an _____who dismisses the _____ and generosity associated with Christmas. After being forced to transform, he feels r_____ for his a_____ and becomes a s_____l of Christmas spirit. Scrooge embodies the relentless capitalist spirit of the time, but also demonstrates that everyone has the capacity to reform.

Bob Cratchit: Bob is Scrooge's d_____but _____employee. His family are a s_____ of Victorian poverty, c_____ in a_____, t_____ and Christmas Spirit. Bob shows pity for Scrooge, and provides a contrast to Scrooge's isolation and meanness. His son, Tiny Tim, is an emblem for noble poverty; he accepts his disability without complaint.

Fred: Fred j_____ the character of Scrooge and e_____ the concept of g_____and f_____, refusing to be discouraged by his uncle's misery. People speak _____ of Fred and his g_____, in contrast to how they speak of Scrooge. Fred shows that Scrooge has chosen isolation and shows forgiveness to Scrooge, welcoming him in Stave Five.

Marley's Ghost: Marley's ghost is the s_____ representation of Scrooge's potential fate. The chains that drag him down s_____the _____caused by his f_____ to help people in_____. Marley's ghost warns Scrooge that he too will experience _____.

The ghosts: The Ghost of Christmas Past is a symbol _____The Ghost of Christmas Present represents _____.
The Ghost of Christmas Yet to Come symbolises _____.

Belle: The woman that Scrooge was engaged to when he was a young man. Belle's role is crucial in Scrooge's transformation, as the scenes show Scrooge what he might have had in his life if he had not been so avaricious. Through the character of Belle, Dickens sets emotional love directly against Scrooge's love of money and suggests that avarice can lead to a deprivation of kindness, love and empathy.

3. Central Themes

Social injustice	Dickens highlights the u_____ within society through the j_____ of the _____ and w_____. Through Scrooge's refusal to give to charity and his exclamation that the poor should be in workhouses or die, Dickens illustrates the se_____ of the higher _____s and the i_____e of wealth distribution in Victorian society.
Transformation and redemption	By establishing Scrooge as an archetypical v_____, Dickens is able to emphasise the idea that _____. From starting as a greedy, avaricious miser, Scrooge is able to reflect upon his actions and to understand that he _____
Social responsibility	Dickens felt that every individual had a re_____. Marley's Ghost conveys the message of the novella when he _____, 'M_____ was my bu_____s' demonstrating that the proper 'business' of life is not about seeking financial reward but having concern for others..

4. Key Vocabulary

	Extreme greed of possessions or money
	Saving someone from harm or destruction
	someone who is greedy and does not like spending money
	Mean or cruel
	The exact opposite of something
	A moment of sudden understanding
	The act of being saved or freed from sin or error
	Kind and helpful towards others
	Showing concern for others by being charitable
	Someone who has a hatred for other people
	sincere regret for wrong or evil things that you have done
	a strong feeling of sadness and regret about something wrong that you have done
	When someone is unable to have the things they need or want
	exercising power in a cruel and controlling way
	A political system in which property, business, and industry are owned by private individuals and not by the government

5. Key Terminology, Symbols and Devices

	Chapters in the novella, but we normally associate staves with music, as if the **book** is a Christmas carol, and each chapter is part of the song. As Christmas carols are repetitive and easy to remember, it links to how Dicken's wishes his message to be remembered.
	A narrator who interrupts the story to provide a commentary to the reader on some aspect of the story or on a more general topic. In 'A Christmas Carol' the narrator helps to shape our impressions of Scrooge.
	Circular narratives cycle through the story one event at a time to end back where the story originated.
	A story that can be interpreted to reveal a hidden meaning, typically a moral or political one.
	An **allegorical** figure is a **character** that serves two purposes: first, they are an important person in the story in their own right, and, second, they represent abstract meanings or ideas.
	Foreshadowing is a literary device in which a writer gives an advance hint of what is to come later in the story.
	A type of literature that is written to inform or instruct the reader, especially in moral or political lessons.
	A set of words that are related in meaning. Dickens frequently uses semantic fields of warmth and coldness that are associated with the characters.

Science T2 Y10 C2.5 Mainstream Higher – Chemical Changes

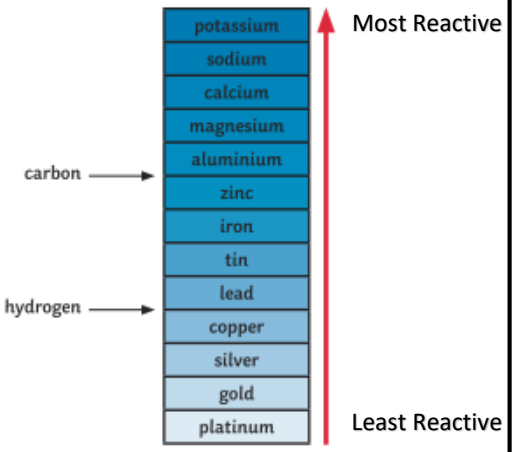
Vocabulary: Crystallisation

The Reactivity Series

- A more reactive metal will replace a less reactive metal in a compound (**displacement**
- e.g. potassium + magnesium chloride → potassium chloride + magnesium

Potassium is more reactive than magnesium

Potassium **displaces** magnesium from the compound and takes it's place.



Extraction of Metals

- Extraction = remove metal from an ore or a compound.

Ore = a rock containing enough metal to make extracting metal worthwhile.

How to extract metals:

Less reactive than carbon – reduction with carbon

Reduction = loss of oxygen

E.g. iron oxide + carbon → iron + carbon dioxide

Oxygen has been removed to extract iron.

Carbon and the oxygen removed from the iron react to make carbon dioxide

More reactive than carbon – electrolysis is used.

- Some metals are found in **native** form (not reacted, so in element form) – usually platinum and gold as **very unreactive**.

1. What is meant by displacement?
2. Name a very reactive metal
3. Name two metals which are less reactive than hydrogen.

1. Define extraction.
2. What is an ore?
3. How do you extract a metal less reactive than carbon?
4. What is meant by reduction?
5. What is meant by a 'native metal'?
6. Give an example of a metal found in native form.

1. State the general equation for the reaction of metal with oxygen.
2. Write a word equation for the reaction of iron with oxygen.

Reaction of metals with oxygen

- Metal + oxygen → metal oxide

e.g magnesium + oxygen → magnesium oxide

$2Mg + O_2 \rightarrow 2MgO$

Oxidation reaction as metal gained oxygen

- Oxidation = gaining oxygen
- Reduction = losing oxygen

Reaction of metals with water

- Most metals don't react well with water
- Group 1 and group 2 react to form alkalis
- Metal + water → metal hydroxide + hydrogen

e.g lithium + water → lithium hydroxide + hydrogen

$2Li + 2H_2O \rightarrow 2LiOH + H_2O$

Metal hydroxides are alkaline

1. State the general equation for the reaction of metal with water.
2. Are hydroxides acid/alkaline?

1. State the general equation for the reaction of metal with acid.
2. State the salts produced from hydrochloric acid, sulfuric acid and nitric acid.

Reactions of acids with metals

- Metal + acid → salt + hydrogen

E.g. iron + sulfuric acid → iron sulfate + hydrogen

To name salt :
1st name Metal
2nd name Acid used

Naming Salts

Acid used	Salt produced
Hydrochloric	Chloride
Sulfuric	Sulfate
Nitric	Nitrate

Reactions of acids with alkalis

- Acid + alkali → salt + water

neutralisation

Hydrochloric acid + sodium hydroxide → sodium chloride + water

salt

$HCl + NaOH \rightarrow NaCl + H_2O$

Reactions of acids with carbonates

- Acid + carbonate → salt + water + carbon dioxide

sulfuric acid + calcium carbonate → calcium chloride + water + carbon dioxide

salt

$H_2SO_4 + CaCO_3 \rightarrow CaSO_4 + H_2O + CO_2$

1. State the general equation for the reaction of acid with an alkali.

1. State the general equation for the reaction of acid with carbonates.

Science T2 Y10 C2.5 Mainstream Higher – Chemical Changes

Redox Reactions (HT only)

- Redox = reduction and oxidation takes place at same time in a reaction.

- Metal + acid = redox reaction

Example

$H_2SO_4 + Ca \rightarrow CaSO_4 + H_2$

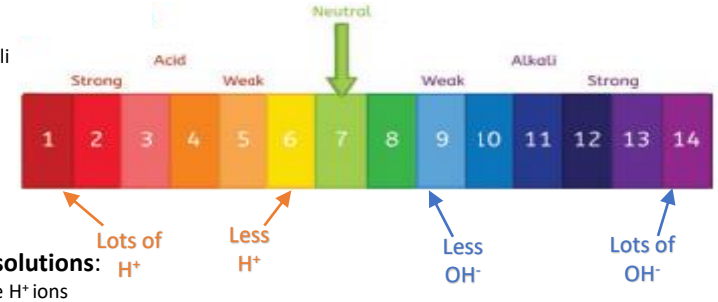
Ionic equation: $2H^+ + Ca \rightarrow Ca^{2+} + H_2$

Half equation 1: $Ca \rightarrow Ca^{2+} + 2e^-$ ← Lost 2 electrons (oxidation)

Half equation 2: $2H^+ + 2e^- \rightarrow H_2$ ← Gained 2 electrons (reduction)

pH Scale

- Shows how acidic or alkaline solution is.
- pH 1-6 = acid
- pH 7 = neutral
- pH 8-14 = alkali



In aqueous solutions:
Acids – produce H^+ ions
Alkalis – produce OH^- ions

In neutralisation reactions:
$H^+_{(aq)} + OH^-_{(aq)} \rightarrow H_2O_{(l)}$

Strong/Weak Acids (HT only)

Strong acid = completely dissociates in a solution
e.g. $HCl \rightarrow H^+ + Cl^-$
Examples = nitric acid and sulfuric acid

Weak acid = partially dissociates in solution.
e.g. $CH_3COOH \rightleftharpoons CH_3COO^- + H^+$ ← Hasn't fully turned into ions – only partially
$\rightleftharpoons$ = reversible reaction

Concentration = how much is dissolved in every cm^3
Strong/weak = how well it ionises

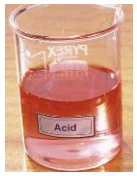
As **pH** decreases by 1 unit, **hydrogen ion concentration** of solution increases by factor of 10

Measuring pH of a solution

- Can use **universal indicator**
- Gives the solution a colour
- Can compare colour to the pH scale


Unknown solution


Add universal indicator



Changes colour to give pH value

Disadvantages of method

- Colour is **subjective** – different people may see different colours
- Doesn't give an exact pH number (could use **pH probe** to make more **accurate**).

1. What is a redox reaction?
2. In terms of electrons, what does oxidation mean?
3. In terms of electrons, what does reduction mean?

1. What is the pH range for an acid?
2. What is the pH range for an alkali?
3. If a substance has a pH of 7, what type of substance is it?
4. What ions do acids produce in solution?
5. What ions do alkalis produce in a solution?
6. State the ionic equation for neutralisation reactions.

1. Define a strong acid.
2. Give an example of a strong acid.
3. Define a weak acid.
4. What happens to H^+ concentration as the pH value decreases by 1?

1. Describe a simple method to test the pH of an unknown solution.
2. State 2 disadvantages of using universal indicator.
3. How can pH be measured more accurately?

Science T2 Y10 C2.5 Mainstream Higher – Chemical Changes– Required Practical – Preparation of soluble salts

Aim

Prepare a pure, dry sample of a soluble salt from an insoluble **oxide or carbonate.**

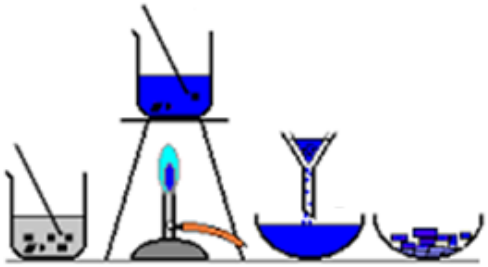
Equipment

- Beaker
- Measuring cylinder
- Bunsen burner and safety mat
- Filter funnel and filter paper
- Named acid (e.g. hydrochloric acid)
- Metal oxide or carbonate.
- Spatula
- Glass stirring rod

Change method depending on reactants in the question.

Method (example copper oxide and sulfuric acid to make copper sulfate)

1. Using measuring cylinder – 20cm^3 **sulfuric acid** → beaker
2. Warm the acid gently (not boiling)
3. Using spatula add **copper oxide** to the acid and stir
4. Keep adding until no more oxide will dissolve (excess).
5. Using a filter funnel and filter paper – filter excess copper oxide.
6. Evaporate some of the filtrate using a water bath.
7. Pour remaining filtrate into an evaporating basin – leave overnight to evaporate water
8. Pat the crystals dry.



Common questions

Q1) Why do you heat the acid before adding the oxide?

A1) To speed up the reaction (particles have more energy to react).

Q2) Why is the oxide added in excess?

A2) To make sure that all the acid has been neutralised.

Q3) Why is the solution filtered?

A3) Remove any unreacted, excess solid.

Q4) Why is the solution left overnight in a warm, dry place?

A4) To evaporate excess water, to form crystals (crystallise).

Q5) Name 2 safety precautions you should take during this practical.

A5) Safety goggles and allow equipment to cool before putting away

1. Write a method to prepare a pure, **dry** sample of copper sulfate crystals (6 marks).

Q2) Why do you heat the acid before adding the oxide?

Q3) Why is the oxide added in excess?

Q4) Why is the solution filtered?

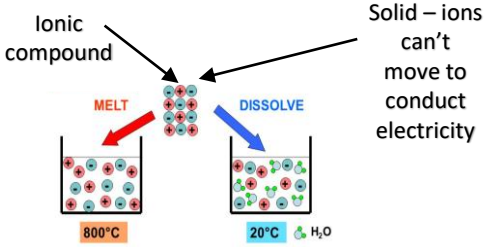
Q5) Why is the solution left overnight in a warm, dry place?

Q6) Name 2 safety precautions you should take during this practical.

Science T2 Y10 C2.6 Mainstream Higher - Electrolysis Vocabulary: Electrolysis, Electrolyte

Electrolysis

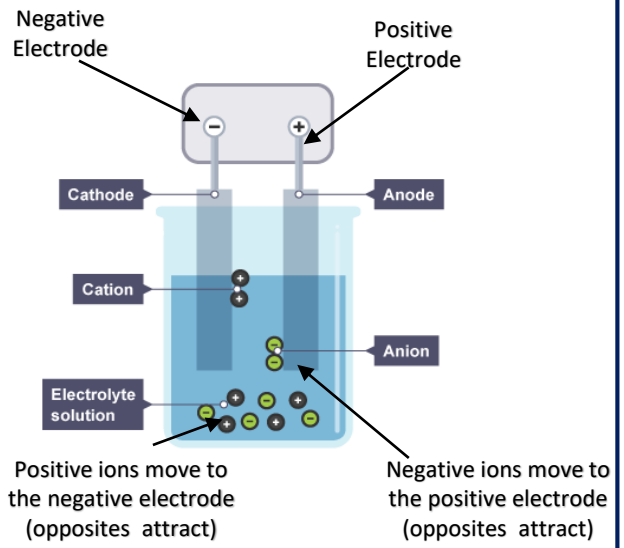
- **Splitting** up a **compound** using electricity.
- Used to extract metals from compounds**,** purify metals (eg copper)



- Must be **molten** or **aqueous** (dissolved in water) to allow **ions** to **move** to the electrodes

The Process of Electrolysis

Two **electrodes –** made of **inert** material (doesn't react)



Half-Equations at Electrodes (HT only)

During electrolysis:

Cathode – positive ions **gain** electrons (**reduction**)

Anode – negative ions **lose** electrons (**oxidation**)

- Ions become **discharged** (lose their charge) at the electrodes to form the atoms again.

- Reactions at electrodes can be represented by half equations.

Examples

Cathode - $2H^+ + 2e^- \rightarrow H_2$

Gained 2 electrons (reduction)

molecules of hydrogen gas produced

Anode – $4OH^- \rightarrow O_2 + 2H_2O + 4e^-$

molecules of oxygen produced

Lost electrons (oxidation)

Cathode – $Cu^{2+} + 2e^- \rightarrow Cu$

Gained electrons (reduction)

Copper atoms are formed at the cathode

Anode – $2Cl^- \rightarrow Cl_2 + 2e^-$

chlorine molecules are formed

Lost electrons (oxidation)

1. What is meant by the term electrolysis?
2. What is electrolysis used for?
3. What must the compound be for electrolysis to take place?
4. Why can solid ionic compounds not conduct electricity?
5. What does inert mean?
6. Name the positive electrode.
7. Name the negative electrode.
8. Why do positive ions move to the negative electrode?

1. In terms of electrons, what happens at the positive electrode?
2. In terms of electrons, what happens at the negative electrode?
3. Write the half equation for the production of hydrogen.
4. Write the half equation for the production of oxygen from hydroxide ions.
5. Write the half equation for the production of copper from copper ions.
6. Write the half equation for the production of chlorine from chloride ions.

Science T2 Y10 C2.6 Mainstream Higher - Electrolysis

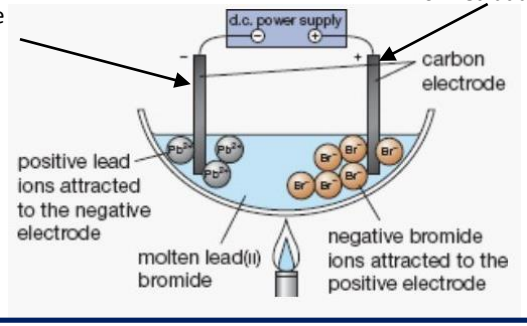
Electrolysis of Molten Ionic Compounds

Molten = melted **so ions** can move.
- Metal = produced at **anode**
- Non-metal = produced at **cathode**

Example: Lead Bromide - $PbBr_2$

Lead forms at the cathode

Bromine gas is formed at anode



Using Electrolysis to Extract Metals

- Used if metal is **too reactive** to be extracted by reduction with carbon.
- Requires **large amount of energy** to melt the compound and produce electrical current. **(expensive)**

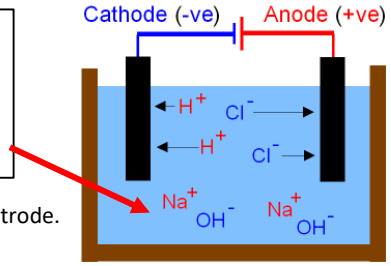
Example: Aluminium Oxide
- **Cryolite** is added – reduces the melting point (less energy needed – less expensive)
- **Carbon** used as positive electrode – needs to be replaced constantly as **oxygen** will react with it to produce CO_2 – it will degrade.

1. Why is an ionic compound melted before electrolysis takes place?
2. Metals are produced at the..
3. Non-metals are produced at the..

Electrolysis of Aqueous Solutions

- Compound is dissolved in water so ions can move.

When aqueous $-H^+$ and OH^- (from H_2O) are also present along with the two ions from the compound.



- Only **one** ion is discharged at each electrode.

Anode – Non-metal or oxygen
Cathode – Metal or hydrogen

Rules

+ ANODE Attracts – ions ('Anions')	**- CATHODE** Attracts + ions ('Cations')
If – ions are group 7 i.e. **chloride Cl^-** **bromide Br^-** **iodide I^-** Then the groups 7 element is produced as a gas	If + ions (metals) are MORE REACTIVE than hydrogen **K, Na, Ca, Mg, Zn, Fe** Then **HYDROGEN** is produced
If – ions are NOT Group 7 Eg sulphate SO_4^{2-} nitrate NO_3^- carbonate CO_3^{2-} OXYGEN is produced.	If + ions (metals) are LESS REACTIVE than hydrogen **Cu, Ag, Au** Then the METAL is produced

Examples

Solution	Product at cathode	Product at anode
Potassium chloride	Hydrogen – because K is more reactive than H	Chlorine – as it is a halogen
Copper sulfate	Copper – as copper is less reactive than H	Oxygen – as there is no halogen

1. Why is the compound dissolved in water before electrolysing?
2. What two ions are also present in aqueous solutions (along with the compound)?
3. Which two substances can be produced at the anode?
4. Which two substances can be produced at the cathode?
5. When would a metal be produced at the cathode?
6. When would oxygen be produced at the anode?

1. When is electrolysis used to extract a metal?
2. Why is electrolysis expensive?
3. Why is cryolite added to aluminium oxide before electrolysis?
4. Why does the positive anode need constantly replacing when electrolysing aluminium oxide?

Science T2 Y10 C2.6 Mainstream Higher - Electrolysis Required Practical – Electrolysis of Aqueous Solutions

Aim

To investigate the electrolysis of an aqueous solution using inert (unreactive) **electrodes**.

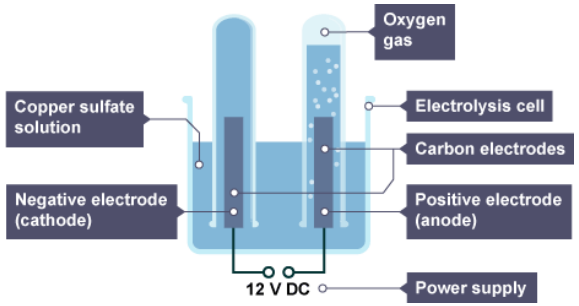
Equipment

- Beaker
- Two test tubes (or measuring cylinders)
- Graphite electrodes
- Two splints
- Aqueous solution
- DC powerpack

Change method depending on the question.

Method (example copper sulfate solution.)

1. Pour some copper sulfate solution into a beaker.
2. Place two graphite rods into the copper sulfate solution. Attach one electrode to the negative terminal of a dc supply, and the other electrode to the positive terminal.
3. Completely fill two small test tubes with copper sulfate solution and position a test tube over each electrode as shown in the diagram.
   (use measuring cylinders if measuring volume of gas produced)
4. Turn on the power supply and observe what happens at each electrode.
5. Test any gas produced with a glowing splint and a burning splint.
6. Record observations and the results of your tests.



Common questions

Q1) How do you test for hydrogen gas?

A1) Lit splint will make a squeaky pop.

Q2) How do you test for oxygen gas?

A2) Glowing splint – will relight.

Q3) Explain why copper is produced at the cathode.

A3) Copper ions are **positive**, so are attracted to the negative electrode (opposites attract). Copper is less reactive than hydrogen so is discharged. The copper ions **gain electrons** and are **reduced** to form **copper atoms**.

Q4) Why do hydrogen ions move to the cathode?

A4) Hydrogen ions are **positive** so move to the negative electrode as **opposites attract**.

Q5) Why are measuring cylinders better to collect the gas?

A5) Because they are more accurate when measuring the volume of gas produced.

Q1. Draw a labelled diagram to show the equipment needed to electrolyse copper chloride.

Q2. Write a method for the electrolysis of aqueous copper chloride solution.

Q2) How do you test for hydrogen gas?

Q3) How do you test for oxygen gas?

Q4) Explain why copper is produced at the cathode.

Q5) Why do hydrogen ions move to the cathode?

Q6) Why are measuring cylinders better to collect the gas?

GCSE Geography. Paper 2 : 1. Urban issues and challenges

1. Global pattern of urban change

The world's population is growing rapidly; currently 50% of us live in urban areas.	
Urbanisation	An increasing percentage of a country's population living in towns and cities.
HICs	Very slow rate of urbanisation. Already have high urban populations. Urbanisation happened earlier (during the industrial revolution).
NEEs	Fast rate of urbanisation due to industrialisation. Urban population is increasing rapidly.
LICs	Fast rate of urbanisation. Urban population is low as many still work in farming.

2. Factors affecting urbanisation

Rural-Urban migration	The movement of people from a rural area (countryside) to an urban area (towns and cities).
Push factors	Negative factors that make people leave an area *e.g.* drought, famine, war, few services.
Pull factors	Positive factors that attract people to an area *e.g.* better access to services, better paid jobs, access to electricity.
Natural Increase	When the birth rate is higher than death rate; the population grows. High in NEE cities as migrants are often young and health care is improving.

3. Megacities

Megacity	A city of more than 10 million people living there.
How many?	There are now 34. Rapidly increasing.
Where?	Most are in Africa and Asia.

4. Key terms

Social deprivation	The extent an individual or an area lacks services, decent housing, adequate income and employment.
Dereliction	Abandoned buildings and wasteland.
Urban Greening	Process of increasing and preserving open space in urban areas *i.e.* parks.
Urban sprawl	Unplanned growth of urban areas into surrounding rural areas.
Integrated Transport System	Different forms of transport are linked together to make it easy to transfer from one to another.
Brownfield	Land that has been used, abandoned and now awaits reuse; they are often found in urban areas.
Greenfield	A plot of land, often in rural areas or on the edges of urban areas that has not been built on before.
Commuter settlements	A place where people live but travel elsewhere for work *e.g.* Yate → Bristol.

5. Sustainable urban living

Sustainable urban living	Where people living, now, have the things they need, without reducing the ability of people in future to meet their needs.
Water conservation	Recycling grey water. ½ flush toilets. Rainwater harvesting on roofs. Permeable pavements- filters pollutants.
Energy conservation	Energy efficient appliances. Energy saving (south facing windows). Use of renewable energy sources.
Waste recycling	Recycling boxes in houses. Recycling facilities nearby. Encourage websites like 'Freecycle'.
Creating green space	Maintain green spaces around towns-Cools area, encourage exercise, happy.

6. Urban transport strategies used to reduce traffic congestion

Problems with congestion	↗ air pollution (global warming). Late for work, deliveries delayed. ↗ accidents, stress, asthma. In Bristol, 200 people die as a result of air pollution each year.
Beryl Bikes	Shared bikes in Bournemouth + Poole.
Oyster Cards	Quick and easy to pay for more than one type of public transport (London).
Park and ride	Car parks on the outskirts of a town, with buses into the city centre.
Congestion charge	Charge for entering the city centre at peak times.
Bus lanes	Stop buses being held in traffic.

GCSE Geography. Paper 2 : 1. Urban issues and challenges

1. Global pattern of urban change

The world's population is growing rapidly; currently 50% of us live in urban areas.

Urbanisation	
HICs	
NEEs	
LICs	

2. Factors affecting urbanisation

Rural-Urban migration	
Push factors	
Pull factors	
Natural Increase	

3. Megacities

Megacity	
How many?	
Where?	

4. Key terms

Social deprivation	
Dereliction	
Urban Greening	
Urban sprawl	
Integrated Transport System	
Brownfield	
Greenfield	
Commuter settlements	

5. Sustainable urban living

Sustainable urban living	
Water conservation	
Energy conservation	
Waste recycling	
Creating green space	

6. Urban transport strategies used to reduce traffic congestion

Problems with congestion	
Beryl Bikes	
Oyster Cards	
Park and ride	
Congestion charge	
Bus lanes	

GCSE Geography. Paper 2 : 1. Urban issues and challenges

7. Distribution of population and major cities in the UK

Population	66 million. Distribution is very uneven. 82% live in urban areas. Upland areas are sparsely populated.
Cities	Most in lowland areas and on coasts. London is the biggest city and the capital. It has 10% of the population. Cities reflect our industrial past (near raw materials *e.g.* Leeds near coal). Counter-urbanisation is a recent trend.

8. Location and importance of Bristol

Location	South west of the UK, on Bristol Channel. Near to junction of M4 & M5.
Importance within the UK	Largest city in the southwest. 8th most popular city for foreign tourists. 2 universities and 2 cathedrals.
Importance to wider world	Largest concentration of silicon chip manufacturing outside of California. International airport (links to Europe). Many TNCs located there (AirBus, BMW)

9. Impacts of migration on the growth and character of the city

National migration	1851 - 1891 population doubled as people arrived looking for work.
International migration	Now,international migration accounts for half of its growth. 50 countries. Many from Europe (Poland, Spain).
Impact on	Many cultural opportunities. Afro-Caribbean- strong community

10. Urban change in Bristol

- Population is growing rapidly.
- Population is more ethnically diverse.
- More under 16-year olds than of pensionable age.
- Electrification of railway to London (<70 minutes).
- Become more accessible (road, rail, air).

11. Opportunities created by urban change

Cultural mix	50 countries represented (food, art). St Paul's Carnival (attracts 40,000).
Recreation and entertainment	Underground music scene -Colston Hall. Entertainment (The Bristol Old Vic). 2 football teams (City, Rovers). Shopping Cribbs Causeway, Cabot Circus.
Employment	Highly tech. industries = jobs. 50 silicon businesses. Many TNCs. £100 million improved broadband.
Integrated transport system	Links different types of public transport Reduces congestion in the city. ↗ % people walking and cycling (57%).
Urban greening	> 90% live within 350m of park/water. 300 parks. 1/3 Bristol is open space. 2015 European Green Capital status.

12. An example of an urban regeneration project

Example	Why did it need regeneration?	What are the main features?	Successful?
Temple Quarter, Bristol	• Bristol surrounded by a green belt. • Brownfield site- rundown, ugly. • By Bristol Temple Meads Station- poor impression for new visitors. • Previously an industrial area.	• Enterprise Zone *e.g.* low rents. • Improve access *e.g.* ITS. • New bridge across River Avon (access to planned Bristol Arena). • Maintain historical features, cobbled streets- gives character • Brunel's Engine Shed £1.7mill.	✓ 4,000 new jobs by 2020 (17,000 by 2037) ✓ Attracts tourists. ✓ Redeveloped brownfield site ✗ Arena still not built

13. Challenges created by urban change

Urban deprivation	Some areas face social deprivation. 1/3 of people in Filwood are in very-low income households. Problems of crime, drug use, low quality housing, lack of transport.
Inequality in housing	Filwood- 50% in council housing. Stoke Bishop- millionaires (large villas)
Inequality in education	Filwood- 36% get top GCSE grades. Stoke Bishop- 94%.
Inequality in health	Filwood- Life expectancy 78 years. Stoke Bishop- 83 years.
Employment	Filwood- 1/3 16-24-year olds. Stoke Bishop- Just 3%.
Dereliction	Industrial buildings derelict (inner-city). Stokes Croft (many squatters).
Building on brown and greenfield	2006-13 94% housing on brownfield. Plan for 30,000 homes on brownfield. Temple Meads built on brownfield.
Waste disposal	>1/2 million tonnes of waste/year. (23% lower per head than UK average) ↗ recycling by 50%. Teach it in schools.
Urban sprawl	Greenbelt to prevent merge with Bath City extended to NW (Bradley Stoke). Led to destruction of greenfield sites. Yate- Commuter settlement.

GCSE Geography. Paper 2 : 1. Urban issues and challenges

7. Distribution of population and major cities in the UK

Population	
Cities	

8. Location and importance of Bristol

Location	
Importance within the UK	
Importance to wider world	

9. Impacts of migration on the growth and character of the city

National migration	
International migration	
Impact on character	

10. Urban change in Bristol

11. Opportunities created by urban change

Cultural mix	
Recreation and entertainment	
Employment	
Integrated transport system	
Urban greening	

12. An example of an urban regeneration project

Example	Why did it need regeneration?	What are the main features?	Successful?
Temple Quarter, Bristol			

13. Challenges created by urban change

Urban deprivation	
Inequality in housing	
Inequality in education	
Inequality in health	
Employment	
Dereliction	
Building on brown and greenfield	
Waste disposal	
Urban sprawl	

8. Introduction to Nigeria

Located just north of the equator, in west Africa.

Importance of Nigeria	
Global importance	NEE in 2014 > 21st largest economy. 5th largest contributor to UN peace keeping.
Local importance	Fastest growing economy in Africa. In 2014 they had the highest GDP.
Nigeria's context	
Political	Ⓟ Boko Haram have killed 17,000 people since 2002.
Environment	○ Rainforest- south > savanna- north.
Social	500 ethnic groups Literacy 61%, life expectancy 52 years
Cultural	Nollywood (2nd largest film industry).

9. Nigeria's changing industrial structure

Term	Definition
Industrial structure	The relative proportion of the workforce employed in different sectors of the economy (p, s, t, q).
Primary sector	Jobs that extract/collect natural resources. ↓ Decreasing due to mechanisation and industrialisation. This started rural to urban migration.
Secondary sector	Jobs making things. ↑ Increasing (industrialisation).
Tertiary	Jobs that provide a service. ↑ Increasing as people start to have more disposable income.

How does manufacturing stimulate economic development?

- Factories provide jobs > people have more disposable income > home market enlarges.
- Companies pay tax > government invests in infrastructure like roads > attracts more companies to invest. **Positive multiplier effect.**

10. Transnational corporations

Term	Definition
Transnational Corporation	Companies that operate in more than one country. (40 TNCs in Nigeria)
Host country	Country the TNC places its factories.
Footloose	Industries not tied to a certain location
Shell in Nigeria	
Advantages	+ 65,000 jobs = > disposable income. + 91% contracts to Nigerian companies (reduces economic leakage)
Dis-advantages	- Bodo oil spill 08/09. 11 million gallons of oil spilt over 20km^2.
Summary	National economic benefits vs local environmental costs in Bodo.

12. Impacts of economic development

Impact on the environment	70-80% forests destroyed. Bodo Oil spill (Shell 08/09). 10,000 illegal industries = air pollution. Loss of species (giraffes, 500 plants).
Impact on quality of life	Life expectancy ↑ from 46-52 years HDI from 0.47 to 0.53. BUT inequality has widened due to oil wealth and corruption.

13. Unilever in Nigeria

Advantages:	Disadvantages:
Unilever employs around 1500 people in Nigeria	Unilever is a British-Dutch company so some of the profit leaves Nigeria
40% of Unilever's profits go to Nigeria in Tax	Workers in factories earn very low wages and have poor working conditions
Unilever works with local communities to improve education and healthcare	.Manufacturing cause environmental problems such as water and air pollution

11. Nigeria's changing relationships

Political relationships	- Gained independence (UK in 1960). - Member of British Commonwealth.
Trading relationships	- Member of OPEC (oil). - Member of ECOWAS (Western Africa trading group). - Has strong links with China and USA.

International aid in Nigeria

Term	Definition
International aid	Money, goods and services given to help the QoL of **another** country.
Emergency aid	Usually follows a natural disaster or war. e.g. Food, water, shelter.
Develop-mental aid	Long term support by charities or governments to improve QoL. E.g. infrastructure, education, clean water
Aid in Nigeria	
What?	4% of aid given to Africa. UK gave £360 million in 2014.
Nets for life	Nets to prevent malaria. 82,500 given out in Abuja. ✓ Successful as community based.
Problems with aid	- Sometimes it isn't sustainable. - Corruption. - Can be tied (strings attached).

13. Shell in Nigeria

Advantages:	Disadvantages:
Employs 65,000 people in Nigeria	260,000 barrels of oil spilt a year in the Niger Delta
Social investment programs (e.g., 10 postgraduate scholarship)	Bodo oil spills in 2008 and 2009, 600,000 barrels of oil spilt
Brought in $17 billion in taxes	Oil bandits: 4.5 trillion barrels of oil lost

9. Introduction to Nigeria

Importance of Nigeria	
Global importance	
Local importance	
Political	
Environment	
Social	
Cultural	

10. Nigeria's changing industrial structure

Term	Definition
Industrial structure	
Primary sector	
Secondary sector	
Tertiary	

How does manufacturing stimulate economic development?

10. Transnational corporations

Term	Definition
Transnational Corporation	
Host country	
Footloose	
Shell in Nigeria	
Advantages	
Dis-advantages	-
Summary	

12. Impacts of economic development

Impact on the environment	
Impact on quality of life	

13. Unilever in Nigeria

Advantages:	Disadvantages:

11. Nigeria's changing relationships

Political relationships	-
Trading relationships	-

International aid in Nigeria

Term	Definition
International aid	
Emergency aid	
Develop-mental aid	
Aid in Nigeria	
What?	
Nets for life	
Problems with aid	

13. Shell in Nigeria

Advantages:	Disadvantages:

Year 10 OCR A Term 1 – Landscapes of the UK

Background:

1. The physical landscapes of the UK have distinctive characteristics. The characteristics are caused by changes in Geology, Climate and Land Use (A).
2. There are a number of geomorphic processes which create distinctive landscapes (B, C, D)
3. Rivers create a range of landforms which change with distance from their source within a river basin (E).
4. There are a range of landforms within the coastal landscape (G, H, I & J)
5. Landscapes are dynamic and differ depending on their geology, climate and human activity (F & K)

A. UK Distinctive Landscapes

Mountainous / Upland Area	• Over 600m in height. • Unevenly distributed across the UK, • Located in Northern Ireland, Scotland & Wales. • Characteristics are mountainous, steep, rocky with low population. • Geology = Igneous & Metamorphic Rock • Climate is cool and wet.
Lowland Area	• Between 0 and 200m above sea level. • Evenly distributed across Southeast England. • Characteristics are hills, wide rivers, flat land and farmland with high population. • Geology = fertile soil over Sedimentary rock. • Climate is mild with lower rainfall.
Glaciated Areas	• Glaciers are slow moving flows of ice which carve large valleys into mountains. • Unevenly distributed across UK • Located in Northern Scotland./ Lake district. • Characteristics are mountainous areas with U shaped valleys used for sheep farming & tourism. • Geology = Igneous & Metamorphic Rock • Climate is cool and wet.

B. Geomorphic Processes

Geomorphic means a process that changes the landscape.

Weathering	A Weathering is the breakdown of material in place (without being transported).
Mechanical weathering	Physical actions of rain, frost and wind that weaken the rock such as Onion Skin weathering and freeze thaw.
Chemical Weathering	Minerals in rocks reacting in different ways making them weaker such as Carbonic Acid dissolving limestone.
Biological	Plants and animals breaking rocks apart, such as roots growing in cracks or rabbits burrowing through soil.
Mass Movement	The movement of soil and sediment down a slope by gravity. **Sliding** happens when a section of soil or rock moves suddenly down a slope. **Slumping** happens when a section of soil or rock moves gradually down a slope.

C. Erosion

Attrition	The 'knocking' of sediment against each other to become more rounded.
Hydraulic action	The sheer force of the water and air in cracks breaking down the riverbanks and bed.
Solution	The dissolving of minerals.
Abrasion	The action of sediment scraping against the bed and bank of the river (like sandpaper.

D. Rivers - Transportation

Traction	Large rocks and boulders that are too heavy to pick up are ROLLED along the river bed.
Saltation	Medium size rocks are BOUNCED along the river bed.
Suspension	Small particles of sediment are CARRIED along by the river.
Solution	Minerals from the rock are DISSOLVED into the water.

E. Rivers - Landforms

V Shaped Valley (Upper Course)
- When it rains, the water soaks into the sides of the valley making them unstable.
- Vertical erosion makes the valley sides even more unstable.
- They collapse into the river and are transported away.
- This leaves behind a v-shaped valley.

Waterfall (Upper Course)
- Occur when hard rock overlies soft rock.
- Soft rock erodes faster, **undercutting** the hard rock leaving a **ledge**.
- Eventually the unsupported ledge **collapses** and falls into the plunge pool.
- The process **repeats** and the waterfall **retreats** upstream, leaving behind a **Gorge**.

Meander (Middle / Lower Course)
- A meander is a bend in a river.
- Water flows faster around the outside of the bend eroding the riverbank and creating a **River Cliff**.
- Water flows slower around the inside of the bend, depositing sediment and creating a **slip off slope**.
- Meanders constantly change the floodplain making it flat.

Oxbow Lake (Middle / Lower Course)
- Form when the neck of a meander has been cut through by erosion.
- Water takes the quickest route.
- Deposition occurs sealing off the old meander,
- Over time sediment builds up completely cutting the Oxbow Lake off from the river.

Levee (Middle / Lower Course)
- Levees are made of large material which cannot travel as far.
- When a river floods, it slows down away from the channel. The larger material is deposited first either side of the river.
- When the flood water drains away, the large pieces of sediment are left behind.
- These form raised embankments either side of the river called levees.

Year 10 OCR A Term 1 – Landscapes of the UK

Background:

1. The physical landscapes of the UK have distinctive characteristics. The characteristics are caused by changes in Geology, Climate and Land Use (A).
2. There are a number of geomorphic processes which create distinctive landscapes (B, C, D)
3. Rivers create a range of landforms which change with distance from their source within a river basin (E).
4. There are a range of landforms within the coastal landscape (G, H, I & J)
5. Landscapes are dynamic and differ depending on their geology, climate and human activity (F & K)

A. UK Distinctive Landscapes

Mountainous / Upland Area

- Over _____ in height.
- _____ distributed across the UK,
- Located in _____, Sc_____d & _____.
- Characteristics are _____s, v, r_____with v population.
- Geology = l_____ & M_____ic Rock
- Climate is _____.

Lowland Area

- Between 0 _____above sea level.
- Evenly distributed across _____
- Characteristics are h_____
- Geology = _____
- S_____y rock.
- Climate is _____.

Glaciated Areas

- Glaciers are _____Unevenly distributed _____
- Located in _____./ Lake district.
- Characteristics are _____.
- Geology = _____Rock
- Climate is _____.

B. Geomorphic Processes

Geomorphic means a process that changes the landscape.

	A Weathering is the breakdown of material in place (without being transported).
	Physical actions of rain, frost and wind that weaken the rock such as Onion Skin weathering and freeze thaw.
	Minerals in rocks reacting in different ways making them weaker such as Carbonic Acid dissolving limestone.
	Plants and animals breaking rocks apart, such as roots growing in cracks or rabbits burrowing through soil.
	The movement of soil and sediment down a slope by gravity. **Sliding** happens when a section of soil or rock moves suddenly down a slope. **Slumping** happens when a section of soil or rock moves gradually down a slope.

C. Erosion

	The 'knocking' of sediment against each other to become more rounded.
	The sheer force of the water and air in cracks breaking down the riverbanks and bed.
	The dissolving of minerals.
	The action of sediment scraping against the bed and bank of the river (like sandpaper.

D. Rivers - Transportation

	Large rocks and boulders that are too heavy to pick up are ROLLED along the river bed.
	Medium size rocks are BOUNCED along the river bed.
	Small particles of sediment are CARRIED along by the river.
	Minerals from the rock are DISSOLVED into the water.

E. Rivers - Landforms

V Shaped Valley (Upper Course)

- When it rains, the water _____ making them u_____.
- _____makes the valley sides _____
- They collapse into _____and are transported away.
- This leaves behind a _____.

Waterfall (Upper Course)

- Occur when _____overlies _____.
- Soft rock _____, **undercutting** the _____leaving a **l**_____**e**.
- Eventually the u_____ ledge **collapses** and falls into the p_____ pool.
- The process **repeats** and the waterfall **retreats** upstream, leaving behind a _____.

Meander (Middle / Lower Course)

- A meander is a _____.
- Water flows f_____around the outside of the bend eroding the riverbank and creating a _____.
- Water flows _____ around the inside of the bend, depositing s_____t and creating a _____.
- Meanders constantly _____

Oxbow Lake (Middle / Lower Course)

- Form when the neck of a meander _____
- Water takes the _____.
- Deposition occurs sealing off the _____,
- Over time sediment builds up completely cutting the _____from the river.

Levee (Middle / Lower Course)

- _____ are made of large material which cannot travel as far.
- When a river floods, _____away from the channel. The larger material is deposited _____
- When the flood water drains away, the large pieces of sediment are _____.
- These form raised e_____ either side of the river called _____s.

Year 10 OCR A Term 1 – Landscapes of the UK

Background:

1. The physical landscapes of the UK have distinctive characteristics. The characteristics are caused by changes in Geology, Climate and Land Use (A).
2. There are a number of geomorphic processes which create distinctive landscapes (B, C, D)
3. Rivers create a range of landforms which change with distance from their source within a river basin (E).
4. There are a range of landforms within the coastal landscape (G, H, I & J)
5. Landscapes are dynamic and differ depending on their geology, climate and human activity (F & K)

F. Case Study - River Wye

Human Influence

Craig Goch Dam
- Provides flood protection downstream by regulating flow.
- Is a reservoir (it stores water for drinking)
- Made of impermeable rock.
- Some people think it is an eyesore.

Flood Warning
- Soft engineering to alert people when flooding is likely.

River Straightening
- River Lugg, a tributary to the Wye near Hereford was illegally straightened in 2020.
- River straightening speeds up flow and reducing flooding where it is straightened.
- It can cause flooding downstream and destroys habitats.

Floodplain Zoning
- Land use on the lower course is restricted.
- Building houses on the floodplain is prohibited, as they would be damaged by flooding.
- Farming, sports fields and car parks are allowed on the floodplain around towns such as Hereford.

Industry
- Industry grew near the River Wye as it provides raw materials (Iron and Stone) and was used for transport

Agriculture
- The lower course is used for farming because it cannot be built on and is flat, fertile land.

Tourism
- Tourists use the river for walking, canoeing, rock climbing and visit attractions such as Tintern Abbey.

G. Coast - Landforms

Headland
- An area of resistant rock that sticks out into the sea.

Bay
- An inlet along the coast where rock has been eroded away

Concordant coasts
- A stretch of coastline that is made of the same rock type.

Discordant Coasts
- A stretch of coastline that is made of different rock types, forming headlands and bays.

H. Coasts - Erosional Landforms

As headlands erode they form a sequence of distinctive landforms.

Crack
- The top of the headland is weathered, exposing an area of weakness that turns into a **crack.**

Cave
- Abrasion and hydraulic action erode the crack making it wider and turning it into a **cave.**

Arch
- Eventually the cave erodes through to the other side of the headland forming an **arch**.

Stack
- The bottom of the arch is eroded making it wider, and top of the arch is weathered making it weaker. Eventually the arch will collapse leaving behind a pillar of rock called a **stack**.

Stump
- The base of the stack is eroded by waves and collapses leaving a **stump**.

I. Coasts - Transport

Longshore drift is a process of transportation that moves eroded material along the coastline.

1. The prevailing wind makes waves approach the coast at an angle.
2. Swash carries sediment up the beach at an angle.
3. Backwash carries sediment straight down the beach with gravity – at right angles to the beach.
4. This creates a zig-zag movement of sediment along the beach.

J. Coasts – Depositional Landforms

Deposition is the dropping of sediment due to reduction in energy.

Beaches
- Beaches are formed by deposition. The sea loses energy due to friction with the seabed slowing down the wave.
- This causes the sea to drop sediment which forms a beach along the coastline.
- It can also be formed in sheltered bays where the land stops the wind and slows the waves down.
- Longshore drift moves sediment along a beach.

SPIT
- A spit is a stretch of beach that projects out to sea.
- Longshore drift moves material along the coastline.
- A spit forms when the material is deposited due to change in direction of the coast.
- As the spit grows it will develop a hook if there is a secondary wind direction.
- Salt marshes form in the sheltered area behind the spit.

K. Case Study – Holderness Coast

Geology

Made of hard rock (Chalk) to the North and weak rock to the south (Boulder Clay). Has one of Europe's fastest eroding coastlines at 2m / year.

Human Influences

Hard Engineering
- Groynes act as barriers to stop longshore drift.
- Gabions stabilise the base of cliffs stopping landslips.
- Sea walls reflect wave energy back out to sea.

Soft Engineering
- Beach nourishment is where sand is pumped back onto the beach.
- Beach reprofiling is the reshaping of a steep beach, usually after a storm event.
- Managed retreat means deciding that some areas cannot be protected and are left to be flooded by the sea.

Year 10 OCR A Term 1 – Landscapes of the UK

Background:

1. The physical landscapes of the UK have distinctive characteristics. The characteristics are caused by changes in Geology, Climate and Land Use (A).
2. There are a number of geomorphic processes which create distinctive landscapes (B, C, D)
3. Rivers create a range of landforms which change with distance from their source within a river basin (E).
4. There are a range of landforms within the coastal landscape (G, H, I & J)
5. Landscapes are dynamic and differ depending on their geology, climate and human activity (F & K)

F. Case Study - River Wye

Human Influence

Craig Goch Dam
- Provides _____downstream by regulating _____
- Is a re_____r (it stores water for drinking)
- Made of _____
- Some people think _____.

Flood Warning
- Soft engineering to alert people when flooding is l_____y.

River Straightening
- River Lugg, a tributary to the _____ near H_____ was illegally s_____ in 2020.
- River straightening _____flow and reducing fl_____ where it is straightened.
- It can cause flooding do_____ and destroys _____

Floodplain Zoning
- Land use on the lower course is restricted.
- _____on the floodplain is prohibited, as they would be damaged by _____g.
- _____are allowed on the floodplain around towns such as Hereford.

Industry
- I_____y grew near the River Wye as it provides _____ _____ (Iron and Stone) and was used for transport

Agriculture
- The lower course is used for f_____g because it cannot be built on and is _____.

Tourism
- Tourists use the river for w_____ and visit attractions such as _____.

G. Coast - Landforms

Headland
- An area of resistant rock that sticks out into the sea.

Bay
- An inlet along the coast where rock has been eroded away

Concordant coasts
- A stretch of coastline that is made of the same rock type.

Discordant Coasts
- A stretch of coastline that is made of different rock types, forming headlands and bays.

H. Coasts - Erosional Landforms

As headlands erode they form a sequence of distinctive landforms.

Crack
- The top of the headland is weathered, exposing an area of weakness that turns into a _____

Cave
- _____erode the crack making it wider and turning it into a **cave.**

Arch
- Eventually the _____e erodes through to the other side of the _____ forming an **arch**.

Stack
- The _____is eroded making it _____r, and top of the arch is weathered making it _____r. Eventually the arch will c_____ leaving behind a _____

Stump
- The base of the stack is eroded by _____ and collapses leaving a **stump**.

I. Coasts - Transport

Longshore drift is a process of transportation that moves eroded material along the coastline.

1. The prevailing wind makes waves _____
2. Swash carries sediment _____.
3. Backwash carries sediment _____h.
4. This creates a _____of sediment along the beach.

J. Coasts – Depositional Landforms

Deposition is the dropping of sediment due to reduction in energy.

Beaches
- Beaches are formed by d_____n. The sea loses energy due to friction with the seabed slowing down the wave.
- This causes the sea to drop sediment which forms a beach along the coastline.
- It can also be formed in _____where the land stops the wind and slows the waves down.
- Longshore drift moves sediment along a beach.

SPIT
- A spit is a stretch _____
- Longshore drift moves material _____.
- A spit forms when the material is _____
- As the spit grows it will develop a _____ if there is a secondary wind direction.
- _____form in the sheltered area behind the spit.

K. Case Study – Holderness Coast

Geology	Made of hard rock (Chalk) to the North and weak rock to the south (Boulder Clay). Has one of Europe's fastest eroding coastlines at 2m / year.
Human Influences	**Hard Engineering** • _____ act as barriers to stop longshore drift. • _____stabilise the base of cliffs stopping landslips. • _____reflect wave energy back out to sea. **Soft Engineering** • Beach nourishment is where sand is pumped _____. • Beach reprofiling is the _____ • Managed retreat means deciding that some areas _____ _____.

GCSE History : Medicine in 18th and 19th Century Britain

What we are learning this term:

3.1 Ideas about the cause of disease and illness
3.2 Approaches to treatment and prevention
3.3 Key Individuals and fighting cholera in London, 1854

A.	*Can you define these key words?*
microbes	Any living organism that is too small to see without a microscope. Microbes include bacteria.
vaccination	Treatment with a vaccine to produce immunity against a disease
spontaneous generation	Claimed rotting matter created microbes.
bacteriology	The study of bacteria.
inoculate	Deliberately infecting yourself with a disease to avoid a more severe case later on.

C.	Fighting cholera in London , 1854 (3.3)
What is Cholera?	Cholera was a terrible water borne disease that spread quickly across England from 1831. There were lots of cases in slum dwellings.
Attempts to prevent it	Some steps were taken to clean up the filthiest areas of the city. Idea that it was caused by miasma was widespread, so local councils focused on cleaning up the mess in which they were living
John Snow	John Snow was surgeon who investigated the 1854 epidemic. He created a spot map to show the deaths and noticed they were concentrated around a water pump in Broad Street, SoHo. Clear the water pump was the source of the outbreak
Impact of Snows work	In the short-term Snow removed the handle from the Broad Street pump and the deaths in that area went away. Long-term Snow presented his work to the government arguing clean water needed to be supplied. Many rejected his work and clung to the idea of miasma causing cholera

B. Change and continuity in ideas about disease and illness in the 18th and 19th Century. (3.1-3.2)

Causes	Prevention	Treatments
Religion – People no longer believed that God was responsible for illnesses and world events	Vaccinations – the work of Edward Jenner in the 18th century led to the first vaccination being created for smallpox. This led the way to other vaccinations being produced as Pastuer and Robert Koch isolated microbes which caused certain diseases	Continuance – despite the new ideas about the cause of disease and illness in the 18th century, it took a while for medical science to catch up. Not a great deal of understanding how to remove germs as part of treatment
Age of Enlightenment/Scientific Revolution – people started to look for answers in the world about disease and illness. There was also great change across science influencing ideas about cause	Public Health Act 1875 – in the 18th Century the government had a very *laissez-faire* attitude to public health. This changed when more men could vote. The government realised changes were needed and passed the Public Health Act. This Act stated that clean water, sewage system, public parks, housing officers and street lighting had to be provided	Hospitals – Florence Nightingale was a pioneer in changing hospitals and hospital care in the 19th Century. Following her success at the war hospital in the Crimea, Nightingale changed the way that hospitals were designed to having separate wards and more ventilation. Also set up a training school for nurses to give better care
Miasma – people still believed in the theory that disease and illness was caused by harmful fumes in the air. BUT it was becoming less popular	Role of the government – Took a more active role in preventing disease, making smallpox vaccinations compulsory	Anaesthetics – one of the big problems in the 18th and 19th centuries was pain during surgery. Ether and laughing gas had been used but they were not good enough. **John Simpson** discovered that chloroform could be used as a pain relief – this led to more complex surgeries being performed
Spontaneous Generation – this theory stated that rotting matter caused bacteria to form, causing people to get ill		Antiseptics – another big problem with surgery was infections. **Joseph Lister** built on Pasteur's work and discovered that carbolic acid could be used to prevent infections. Used on wounds and Sterlised equipment, but some surgeons did not like the change
Germ Theory – this correct theory put forward by Louis Pastuer was that germs caused matter to rot. He linked this to disease and illness, stating that germs caused people to get ill		

D. Key People (3.3)

Edward Jenner	John Snow	Edwin Chadwick
Country doctor who realised that milkmaids who got cowpox did not catch smallpox – decided they must be connected. Tested his theory by infecting a local boy with cowpox and then tried to infect him with smallpox but he did not get ill. Wrote up his findings to make sure doctors could follow. Had successfully developed the first vaccine, which was supported by the government.	Used scientific methods to prove that cholera was a water borne disease in the 1850's. Snow presented his findings to the government, recommending that the sewer systems were improved, which they were eventually.	Published his *Report on the Sanitary Conditions of the Labouring Classes* in 1842. he spent time researching the urban poor and discovered that people living in cities had a lower life expectancy than people living in the countryside. Campaigned for all cities to set up boards of health, responsible for clean water and disposing sewage.

GCSE History : Medicine in 18th and 19th Century Britain

What we are learning this term:

3.1 Ideas about the cause of disease and illness
3.2 Approaches to treatment and prevention
3.3 Key Individuals and fighting cholera in London, 1854

A.	*Can you define these key words?*
microbes	
vaccination	
spontaneous generation	
bacteriology	
inoculate	

C.	Fighting cholera in London , 1854 (3.3)
What is Cholera?	
Attempts to prevent it	
John Snow	
Impact of Snows work	

B. Change and continuity in ideas about disease and illness in the 18th and 19th Century. (3.1-3.2)

Causes	Prevention	Treatments

D. Key People (3.3)

Edward Jenner	John Snow	Edwin Chadwick
.	.	

GCSE History : Medicine in 18th and 19th Century Britain

What we are learning this term:

3.1 Ideas about the cause of disease and illness
3.2 Approaches to treatment and prevention
3.3 Key Individuals and fighting cholera in London, 1854

A.	*Can you define these key words?*
microbes	Any living organism that is too small to see without a microscope. Microbes include bacteria.
vaccination	Treatment with a vaccine to produce immunity against a disease
spontaneous generation	Claimed rotting matter created microbes.
bacteriology	The study of bacteria.
inoculate	Deliberately infecting yourself with a disease to avoid a more severe case later on.

C.	Fighting cholera in London , 1854 (3.3)
What is Cholera?	Cholera was a terrible water borne disease that spread quickly across England from 1831. There were lots of cases in slum dwellings.
Attempts to prevent it	Some steps were taken to clean up the filthiest areas of the city. Idea that it was caused by miasma was widespread, so local councils focused on cleaning up the mess in which they were living
John Snow	John Snow was surgeon who investigated the 1854 epidemic. He created a spot map to show the deaths and noticed they were concentrated around a water pump in Broad Street, SoHo. Clear the water pump was the source of the outbreak
Impact of Snows work	In the short-term Snow removed the handle from the Broad Street pump and the deaths in that area went away. Long-term Snow presented his work to the government arguing clean water needed to be supplied. Many rejected his work and clung to the idea of miasma causing cholera

B. Change and continuity in ideas about disease and illness in the 18th and 19th Century. (3.1-3.2)

Causes	Prevention	Treatments
Religion – People no longer believed that God was responsible for illnesses and world events	Vaccinations – the work of Edward Jenner in the 18th century led to the first vaccination being created for smallpox. This led the way to other vaccinations being produced	Continuance – despite the new ideas about the cause of disease and illness in the 18th century, treatments to remove germs took longer to find
Miasma – people still believed in the theory that disease and illness was caused by harmful fumes in the air. BUT it was becoming less popular	Public Health Act 1875 – in the 18th Century the government did not care much about public health. This changed when more men could vote. The government realised changes were needed and passed the Public Health Act. This Act stated that clean water, sewage system, public parks and street lighting had to be provided	Hospitals – Florence Nightingale helped to change hospitals and nursing. Nightingale changed the way that hospitals were designed to having separate wards and more ventilation. Also set up a training school for nurses to give better care
Spontaneous Generation – this theory stated that rotting matter caused bacteria to form, causing people to get ill	Role of the government – Took a more active role in preventing disease, making smallpox vaccinations compulsory	Anaesthetics – one of the big problems in the 18th and 19th centuries was pain during surgery. Ether and laughing gas had been used but they were not good enough. **John Simpson** discovered that chloroform could be used as a pain relief – this led to more complex surgeries being performed
Germ Theory – this correct theory put forward by Louis Pastuer was that germs caused matter to rot. He linked this to disease and illness, stating that germs caused people to get ill		Antiseptics – another big problem with surgery was infections. **Joseph Lister** built on Pasteur's work and discovered that carbolic acid could be used to prevent infections. Used on wounds and Sterlised equipment, but some surgeons did not like the change

D. Key People (3.3)

Edward Jenner	John Snow	Edwin Chadwick
Country doctor who realised that milkmaids who got cowpox did not catch smallpox – decided they must be connected. Tested his theory by infecting a local boy with cowpox and then tried to infect him with smallpox but he did not get ill. Had successfully developed the first vaccine, which was supported by the government.	Used scientific methods to prove that cholera was a water borne disease in the 1850's. Snow presented his findings to the government, recommending that the sewer systems were improved, which they were eventually.	Published his *Report on the Sanitary Conditions of the Labouring Classes* in 1842. He spent time researching the poor in cities and discovered that people living in cities had a lower life expectancy than people living in the countryside. Asked for boards of health to be set up to make cities cleaner.

GCSE History : Medicine in 18th and 19th Century Britain

What we are learning this term:

3.1 Ideas about the cause of disease and illness
3.2 Approaches to treatment and prevention
3.3 Key Individuals and fighting cholera in London, 1854

A.	*Can you define these key words?*
microbes	Any living organism that is too small to see _____. Microbes include _____
vaccination	Treatment with a vaccine to _____ against a _____
spontaneous generation	Claimed _____ created microbes.
bacteriology	The study of _____.
inoculate	Deliberately _____ yourself with a disease to avoid a _____ case later on.

C.	**Fighting cholera in London , 1854 (3.3)**
What is Cholera?	Cholera was a terrible _____ disease that spread quickly across England from _____. There were lots of cases in _____ dwellings.
Attempts to prevent it	Some steps were taken to clean up the _____ areas of the city. Idea that it was caused by _____ was widespread, so local councils focused on _____ up the mess in which they were living
John Snow	John Snow was _____ who investigated the 1854 epidemic. He created a _____ to show the deaths and noticed they were concentrated around a water pump in _____, SoHo. Clear the water pump was the source of the outbreak
Impact of Snows work	In the short-term Snow removed the _____ from the Broad Street pump and the deaths in that area _____. Long-term Snow presented his work to the government arguing _____ needed to be supplied. Many _____ his work and clung to the idea of _____ causing cholera

B. Change and continuity in ideas about disease and illness in the 18th and 19th Century. (3.1-3.2)

Causes	Prevention	Treatments
Religion –	Vaccinations – the work of _____ in the 18th century led to the first vaccination being created for _____. This led the way to other vaccinations being produced	Continuance – despite the new ideas about the cause of disease and illness in the 18th century, _____ took longer to find
Miasma – people still believed in the theory that _____ was caused by harmful fumes in the air. BUT it was becoming _____	Public Health Act 1875 – in the 18th Century the government did not care much about _____. This changed when more men could vote. The government realised changes were needed and passed the _____. This Act stated that clean _____, _____, public parks and street lighting had to be provided	Hospitals – _____ helped to change hospitals and nursing. Nightingale changed the way that hospitals were _____ to having separate wards and more _____. Also set up a _____for nurses to give better care
Spontaneous Generation – this theory stated that _____ _____, causing people to get ill	Role of the government – Took a more _____in preventing disease, making smallpox vaccinations _____	Anaesthetics – one of the big problems in the 18th and 19th centuries was _____ during surgery. Ether and laughing gas had been used but they were _____ **John** _____ discovered that chloroform could be used as a _____– this led to more complex surgeries being performed
Germ Theory – this correct theory put forward by _____ was that germs caused matter to rot. He linked this to _____ and illness, stating that germs _____		Antiseptics – another big problem with surgery was _____ **Joseph** _____ built on Pasteur's work and discovered that _____ could be used to prevent infections. Used on wounds and Sterlised _____, but some surgeons did not like the change

D. Key People (3.3)

Edward Jenner	John Snow	Edwin Chadwick
Country doctor who realised that _____ who got _____ did not catch smallpox – decided they must be connected. Tested his _____ by infecting a local boy with cowpox and then tried to infect him with smallpox but he _____. Had successfully developed the first _____, which was supported by the government.	Used _____ to prove that cholera was a _____ disease in the 1850's. Snow presented his findings to the _____, recommending that the sewer systems were _____, which they were eventually.	Published his *Report on the Sanitary Conditions of the Labouring Classes* in _____. He spent time researching the _____ and discovered that people living in cities had a _____ expectancy than people living in the countryside. Asked for boards of health to be set up to make cities _____.

Year 10 GCSE Religious Education KO - Islam Practices

Keywords	
Tawalla	Showing love for God and for those who follow Him
Tabarra	Disassociation with God's enemies
Khums	The obligation to pay one-fifth of acquired wealth
Lesser jihad	The physical struggle or holy war in defence of Islam
Greater jihad	The **daily** struggle and inner spiritual striving to live as a Muslim
Sunni	Muslims who believe in the successorship of Abu Bakr, Umar, Uthman and Ali as leaders after the Prophet Muhammad
Shi'a	Muslims who believe in the Imamah, leadership of Ali and his descendants
Niyyah	Intention during prayer - having the right intention to worship God
Du'a	A personal prayer that is done in addition to Salah e.g. asking Allah for help

What we are learning in this unit

A. The 5 Pillars and 10 Obligatory Acts
B. Salah
C. Sawm
D. Zakah
E. Hajj
F. Jihad
G. Id-ul-Adha
H. Id-ul-Fitr

A.	*5 Pillars of Islam and 10 obligatory acts*
What are the 5 pillars	• 5 key practices or duties for Muslims • Both Sunni and Shi'a keep these (Shi'a have them as part of the 10 obligations) • They are seen as pillars "holding up the religion" and are all of equal importance
What are the 10 obligatory acts	• There are 10 obligations for a Muslim according to the Shi'a branch of Islam. • These include prayer, fasting, almsgiving, pilgrimage, jihad, khums, directing others towards good, forbidding evil, tawalla and tabarra
Shahadah	• Shahadah is the first of the 5 pillars • It is the Muslim declaration of faith • ***"there is no God but Allah, and Muhammad is His messenger"*** • This is a statement that Muslims reject anything but Allah as their focus of belief • It also recognises that Muhammad has an important role and his life is an example to follow

	Jihad

Lesser Jihad	• Originated when Prophet Muhammad and early Muslims were being attacked and oppressed by the Meccans and had no choice but to engage
	• ***"Fight in the way of God those who fight against you but do not transgress"***
	• Conditions for declaration
	  • self-defense
	  • proportionate
	  • legitimate authority
	  • no harm to civilians

Greater Jihad	• A struggle within oneself to follow the teachings of Islam and be a better person • e.g. perform the Five Pillars, follow Sunnah and avoid temptation • ***"encourage what is right and forbid what is wrong"***

B.	*The 5 Pillars - Salah*
What is it?	• ***"Salah is a prescribed duty that has to be performed at the given time by the Qur'an"*** • ***Muslims pray 5 times per day and this allows them to communicate with Allah.*** • The prayers are done at dawn (fajr), afternoon • (zuhr), late afternoon (asr), dusk (maghrib) and night (isha) • Muslims face the holy city of Makkah when paying.
Wuzu	• The washing process to purify the mind and body for prayer • Muhammad said the key to Salah is cleanliness • Hands, arms, nose, mouth, head, neck and ears are cleaned as well as both feet up to the ankle.
Rak'ahs and recitations	• These are the movements that Muslims make during prayer • Takbir – raise hands to ears and say 'Allahu Akbar' • Qiyam – Standing, Muslims recite Surah • Then bow to the waist saying ***"Glory be to my Great Lord and praise be to Him"*** • Then sink to their knees saying ***"Glory be to my Lord, The Most Supreme...".***
Salah at home	• Salah is a big part of family life • Meals and other activities are usually scheduled to fit around prayer times • Families pray all together and might have a room set aside for prayer
Salah in the mosque	• All mosques have a qiblah wall which is to show where to face Makkah • Men and women pray in separate rooms at the Mosque
Jummah	• Jummah is congregational prayer held on a Friday at the mosque where the imam leads the prayer • Praying together as a community develops the feeling of unity amongst Muslims • Men are obliged to attend unless they are sick or too old • Women do not have to go – they may pray at home instead
Differences between Sunni and Shi'a	• Shi;a Muslims combine some prayers so they may only pray 3x a day • Shi'a use natural elements e.g. clay where their head rests

Year 10 GCSE Religious Education KO - Islam Practices

Keywords	
Tawalla	
Tabarra	
Khums	
Lesser jihad	
Greater jihad	
Sunni	
Shi'a	
Niyyah	
Du'a	

What we are learning in this unit

A. The 5 Pillars and 10 Obligatory Acts
B. Salah
C. Sawm
D. Zakah
E. Hajj
F. Jihad
G. Id-ul-Adha
H. Id-ul-Fitr

A.	*5 Pillars of Islam and 10 obligatory acts*
What are the 5 pillars	
What are the 10 obligatory acts	
Shahadah	

	Jihad
Lesser Jihad	
Greater Jihad	

B.	*The 5 Pillars - Salah*
What is it?	
Wuzu	
Rak'ahs and recitations	
Salah at home	
Salah in the mosque	
Jummah	
Differences between Sunni and Shi'a	

Year 10 GCSE Religious Education KO - Islam Practices

	The 5 Pillars - Zakah
The role of giving alms	• ***Muslims believe it is their duty to ensure Allah's wealth has been distributed equally as everyone is the same*** • The Qur'an commands to give to those in need
The significance of giving alms	• Giving 2.5% of savings/wealth to charity • Wealth can cause greed which is evil, so Zakah purifies wealth – wealth is given by God and must be shared • The Prophet Muhammad practiced Zakah as a practice in Medina • Given to the poor, needy and travellers • ***Sadaqah*** is giving from the heart out of generosity and compassion
Khums	• Shi'a Islam – one of the 10 obligatory acts • 20% of any profit earned by Shi'a Muslims paid as a tax • Split between charities that support Islamic education and anyone who is in need • ***"know that whatever of a thing you acquire, a fifth of it is for Allah, for the Messenger, for the near relative, and the orphans, the needy, and the wayfarer"***

	The 5 Pillars - Hajj
The role of pilgrimage	• A pilgrimage to Makkah which is compulsory for Muslims to take at least once as long as they can afford it and are healthy
The significance of pilgrimage	• God told Ibrahim to take his wife and son on a journey and leave them without food or water • Hajira ran up and down two hills in search of water, could not find any and prayed to God. Then water sprung from the ground. This is the Zamzam well • When Ibrahim returned he was commanded to build the Ka'ba as a shrine dedicated to Allah • Hajj is performed in the month of Dhu'l-Hijja
Actions	• Ihram – dressing in two pieces of white cloth • Circling the Ka'aba 7 times (tawaf) • Drinking water from the Zamzam well like Hajar • walking between Al-Safa and Al-Marwa hills seven times • Throwing stones at 3 pillars (jamarat) to represent casting out the devil and remembering Ibrahim throwing stones at the devil to drive him away • Asking Allah for forgiveness at Mt Arafat • Collecting pebbles at Muzdalifah

	The 5 Pillars - Sawm
The role of fasting	• Fasting during Ramadan (9th month in Muslim calendar) • Muslims give up food, drink, smoking and sexual activity in daylight hours • Pregnant people, children under 12, travellers and elderly people are exempt from fasting.
The significance of fasting	• Ramadan is believed to be the month that Prophet Muhammad began to receive revelations of the Qur'an • Helps Muslims to become spiritually stronger
Reasons for fasting	• Obeying God and exercising self-discipline • Develops empathy for the poor • Appreciation of God's gifts • Giving thanks for the Qur'an • Sharing fellowship and community with other Muslims
Night of power	• The night when the Angel Jibril first appeared to Muhammad and began revealing the Qur'an. • The most important event in history – ***"better than a thousand months" (Surah 97:3)*** • Laylat Al-Qadr is the holiest night of the year. Muslims try to stay awake for the whole night to pray and study for the Qur'an

	Id-ul-Adha, Id-ul-Fitr, Ashura
Id-ul-Adha Not an official holiday in UK	• ***Festival of sacrifice*** • Marks the end of Hajj and is a chance for whole Ummah to celebrate • ***Origins*** – Ibrahim's commitment to God in being willing to sacrifice his son, Ishmael. God was testing Ibrahim • ***Key events –*** new clothes, sacrificing an animal, visiting the Mosque. • People ask a butcher to slaughter a sheep for them and share the meat with the community
Id-ul-Fitr Public holiday in Muslim majority countries, not UK	• ***Festival of fast-breaking*** • Marks the end of Ramadan • ***Key events –*** Decorate homes with colourful light and banners, dress in new clothes, gather in Mosques, give gifts and money, give to the poor • ***Zakah ul-Fitr –*** donation to the poor so that everyone can eat a generous meal at the end of Ramadan.
Ashura	• Sunni celebration – many fast on this day which was established by Prophet Muhammad • Shi'a mourning – Husayn was murdered and beheaded. Muslims remember his death and betrayal • ***Key events –*** public displays of grief, day of sorrow, wear black, re-enactments of martyrdom, not a public holiday in Britain but Muslims may have day off school

Year 10 GCSE Religious Education KO - Islam Practices

	The 5 Pillars - Zakah
The role of giving alms	
The significance of giving alms	
Khums	

	The 5 Pillars - Sawm
The role of fasting	
The significance of fasting	
Reasons for fasting	
Night of power	

	The 5 Pillars - Hajj
The role of pilgrimage	
The significance of pilgrimage	
Actions	

	Id-ul-Adha, Id-ul-Fitr, Ashura
Id-ul-Adha Not an official holiday in UK	
Id-ul-Fitr Public holiday in Muslim majority countries, not UK	
Ashura	

GCSE Unit 7 SPANISH Knowledge organiser.
Topic Global Issues

What we are learning this term:

A. Talking about reusing things, reducing waste and recycling
B. Talking about ways of protecting the environment
C. Talking about poverty
D. Talking about homelessness

6 Key Words for this term

1. la libertad
2. pensamientos
3. asistir a
4. el destrozo
5. violento/a
6. la culpa

7.1G Reutilizar, reducir, reciclar

ahorrar	to save
la basura	rubbish
la bolsa de plástico	plastic bag
el cartón	cardboard
cerrar	to shut, to close,to turn off (tap)
el contenedor	container
en vez de	instead of
intentar	to try to
la lata	tin, can
el malgasto	waste
el papel (reciclado)	(recycled) paper
la papelera	wastepaper basket
la pila	battery
el plástico	plastic
ponerse	to put on (clothes)
los productos químicos	chemicals, chemical products
el proyecto	project
recargable	rechargeable
reciclar	to recycle
reutilizar	to reuse
la Tierra	Earth
tirar	to pull, to throw away
tratar de	to try to
el vidrio	glass

7.1F Protegiendo el medio ambiente

la basura	rubbish
la bombilla (de bajo consumo)	(low-energy) light bulb
el combustible	fuel
combatir	to fight, to combat
la contaminación atmosférica	air pollution
desaparecer	to disappear
el desastre	disaster
desconectar	to disconnect, to unplug, switch off
deshacer	to undo
los desperdicios	rubbish, refuse, waste
la especie	species
incluso	even
inquietante	worrying
luchar	to struggle, fight
la medida	measure, means
medioambiental	environmental
el motor	engine
los residuos	refuse, waste, rubbish
salvar	to save

7.2G Los necesitados

a favor (de)	in favour (of)
la alimentación	feeding, nourishment,food
la asistencia médica	medical care
asistir a	to attend
buscar	to look for
contribuir	to contribute
la creencia	belief
la culpa	blame, fault
la enfermedad	illness
en contra	against
estar dispuesto/a a	to be prepared to, to be ready to
faltar	to be lacking, to be missing
fresco	fresh
hace(n) falta	to be necessary, to need
la libertad (de pensamiento)	freedom (of thought)
merecer	to deserve
necesitar	to need
perder	to lose
perezoso/a	lazy
querer	to love

Key Verbs

Reciclar To recycle	Ir To go	Apagar To turn off	Hacer – to do/make	Encender To turn on
Reciclo I recycle	Voy I go	Apago I turn off	Hago I do	Enciendo I turn on
Reciclas You recycle	Vas You go	Apagas You turn off	Haces You do	Enciendas You turn on
Recicla Sh/e recycles	Va s/he goes	Apaga He/she turns off	Hace s/he does	Encienda He/she turns on
Reciclamos We recycle	Vamos They go	Apagamos We turn off	Hacemos We do	Encendemos We turn on
Reciclan They recycle	Van They go	Apagan They turn off	Hacen They do	Enciendan They turn on

7.2F Los “sin techo”

el destrozo	damage, destruction
escoger	to choose
la falta	lack
formar parte de	to be part of
el/la gamberro/a	hooligan, lout, troublemaker
maltratar	to mistreat, to ill-treat
los niños de la calle	street children
la ONG (organización no gubernamental)	NGO (non-governmental organisation)
la pobreza	poverty
recoger	to pick up
robar	to steal, rob
el vertedero	rubbish dump, tip
la violencia	violence
violento/a	violent

7.2H Es importante ayudar a los demás

el agua corriente (fem.)	running water
bastar	to be enough
la comisaría	police station
consumir	to consume
la corriente	(electric) current, electricity supply
crear	to create
la criminalidad	crime
cualquier(a)	any
el empleo	job
el/la encargado/a	person in charge
el éxito	success

7.1H Problemas ecológicos

acercarse a	to approach
el agujero	hole
la aldea	(small) village
alejar	to move (something) further away
alejarse de	to move further away from
amenazar	to threaten
arruinar	to ruin
el atasco	traffic jam, hold-up
el ave (marina) (fem.)	(sea) bird
el calentamiento global	global warming
la capa de ozono	ozone layer
el casco	helmet, hull (of ship)
el centenar	about a hundred
la central eléctrica	power station
la circulación	traffic
constituir	to constitute
cortar	to cut, to cut off
el efecto invernadero	greenhouse effect
extender	to spread, to stretch
frenar	to brake, to put a stop to
el humo	smoke
el huracán	hurricane
el incendio	fire
la lluvia	rain
la mancha	stain
la marea negra	oil slick
la muerte	death
el nivel	level
el petrolero	oil tanker
el/la pescador/a	fisherman/fisherwoman

GCSE Unit 7 SPANISH Knowledge organiser.
Topic Global Issues

What we are learning this term:

A. Talking about reusing things, reducing waste and recycling
B. Talking about ways of protecting the environment
C. Talking about poverty
D. Talking about homelessness

6 Key Words for this term

1. la libertad
2. pensamientos
3. asistir a
4. el destrozo
5. violento/a
6. la culpa

7.1G Reutilizar, reducir, reciclar

ahorrar	_____
la basura	_____
la bolsa de plástico	_____
el cartón	_____
_____	to shut, to close,to turn off (tap)
el contenedor	_____
_____	instead of
intentar	_____
la lata	_____
_____	waste
el papel (reciclado)	_____
la _____	wastepaper basket
la _____	battery
el _____	plastic
ponerse	to _____
los _____	chemicals, chemical products
el proyecto	_____
_____	rechargeable
_____	to recycle
reutilizar	to _____
la _____	Earth
_____	to pull, to throw away
tratar de	_____
el _____	glass

7.1F Protegiendo el medio ambiente

la basura	_____
la bombilla (de bajo consumo)(low-energy) light bulb	
el _____	fuel
_____	to fight, to combat
la contaminación atmosférica	_____
desaparecer	to _____
el desastre	_____
_____	to disconnect, to unplug, switch off
deshacer	_____
los _____	rubbish, refuse, waste
la especie	_____-
_____	even
inquietante	_____
_____	to struggle, fight
la _____	measure, means
medioambiental	_____
_____	engine
_____	refuse, waste, rubbish
salvar	_____

7.2G Los necesitados

a favor (de)	_____
la alimentación	feeding, nourishment,food
la asistencia médica	_____
_____	to attend
_____	to look for
contribuir	to _____
la _____	belief
la culpa	_____
la enfermedad	_____
en contra	_____
estar dispuesto/a a	to be prepared to, to be ready to
_____	to be lacking, to be missing
fresco	_____
_____	to be necessary, to need
la libertad (de pensamiento)	_____
_____	to deserve
necesitar	to _____
_____	to lose
perezoso/a	_____
_____	to love

Key Verbs

Reciclar _____	Ir To go	Apagar To turn off	Hacer – _____	_____ To turn on
_____ I recycle	Voy I go	Apago _____	_____ I do	_____ I turn on
Reciclas _____	Vas _____	_____ You turn off	Haces _____	Enciendas _____
_____ Sh/e recycles	Va s/he goes	Apaga He/she turns off	Hace _____	_____ He/she turns on
Reciclamos _____	Vamos They go	Apagamos We turn off	Hacemos We do	Encendemos _____
Reciclan They recycle	Van They go	Apagan They turn off	_____ They do	_____ They turn on

7.2F Los "sin techo"

el _____	damage, destruction
escoger	to _____
la falta	_____
formar parte de	_____
_____	hooligan, lout, troublemaker
_____	to mistreat, to ill-treat
los niños de la calle	_____
la ONG (organización no gubernamental)	NGO (non-governmental organisation)
_____	poverty
_____	to pick up
_____	to steal, rob
_____	rubbish dump, tip
la violencia	_____
violento/a	v_____

7.2H Es importante ayudar a los demás

el agua corriente	_____
_____	to be enough
la _____	police station
consumir	to _____
la _____	(electric) current, electricity supply
_____	to create
la criminalidad	_____
cualquier(a)	_____
_____	job
el/la encargado/a	_____
_____	success

7.1H Problemas ecológicos

acercarse a	to _____
el agujero	_____
la aldea	_____
_____	to move (something) further away
_____	to move further away from
_____	to threaten
arruinar	to _____
el _____	traffic jam, hold-up
el ave (marina) (fem.)	_____
el calentamiento global	_____
la _____	ozone layer
el _____	helmet, hull (of ship)
el _____	about a hundred
la central eléctrica	_____
la circulación	_____
c_____	to constitute
_____	to cut, to cut off
el efecto invernadero	_____
_____	to spread, to stretch
_____	to brake, to put a stop to
el humo smoke	_____
el huracán	_____
el _____	fire
la lluvia	_____
la mancha	_____
la marea negra	_____
la _____	death
el nivel	_____
el petrolero	_____
el/la pescador/a	_____

GCSE Unit 8 SPANISH Knowledge organiser.
Topic Holidays and Travel

What we are learning this term:

A. Talking about travelling to holiday destinations
B. Talking about the weather
C. Talking about holiday accommodation
D. Talking about the regions of Spain
E. Understanding tourist leaflets and websites

6 Key Words for this term

1. alojarse
2. veranear
3. la pensión
4. vacaciones
5. un folleto
6. el AVE

8.1G ¡Me voy de vacaciones!

el aire acondicionado air conditioning
el andén platform
el asiento seat
el autocar coach
el AVE (tren de alta velocidad) high-speed train
el avión plane
barato/a cheap
el barco boat
la bici(cleta) bike, bicycle
el coche car
la consigna left-luggage office
el crucero cruise
desde luego of course
echar de menos to miss
Escocia Scotland
estrecho/a narrow
el equipaje luggage
el ferrocarril railway
el invierno winter
la maleta suitcase
el metro underground
no fumador non smoking
el otoño autumn
la primavera spring
la sala de espera waiting room
Sudamérica South America
el tranvía tram
las vacaciones holidays
el verano summer
viajar to travel
el viaje journey

8.1F ¿Dónde te alojas?

el abrebotellas bottle-opener
el abrelatas tin-opener
el aeropuerto airport
a la derecha on the right
a la izquierda on the left
el albergue juvenil youth hostel
Alojarse to stay (in a hotel)
el bañador swimming costume
la cama de matrimonio double bed
camping campsite, camping
la estación de servicio petrol station
la estrella star
fatal awful, terrible
el folleto leaflet
la gasolina (sin plomo) (unleaded) petrol
el guía / la guía guide (person)
la guía guidebook
la habitación (doble/ (double/single) room individual)
la llave key
mojarse to get wet
la oficina de turismo tourist office
el papel higiénico toilet paper
el parador state-owned hotel (in Spain)
el pasaporte passport
la pensión boarding house, B & B
ponerse en camino to set off
por desgracia unfortunately
la recepción reception
la reserva reservation
el saco de dormir sleeping bag
los servicios toilets
la tarjeta de embarque boarding card
la tienda (de campaña) tent
la taquilla ticket office

8.2G ¿En qué región vives?

el desempleo unemployment
la diversión entertainment
muy poblado crowded
nacer to be born
Nací I was born
nació he/she was born
el país country
Pescar to fish
el río river
la sierra mountain range
tanto so much, so many

Key Verbs

Quedarse To stay	Ir To go	Veranear To summer holiday	Hacer – to do/make	Volar To fly
Me quedo I stay	Voy I go	Veraneo I summer holiday	Hago I do	Vuelo I fly
Te quedas You stay	Vas You go	Veraneas You summer hol	Haces You do	Vuelas You fly
Se queda He/she/it stays	Va s/he goes	Veranea He/she summer hol	Hace s/he does	Vuela He/she/ it flys
Nos quedamos We stay	Vamos They go	Veraneamos We summer hol	Hacemos We do	Volamos We fly
Se quedan They stay	Van They go	Veranean They summer hol	Hacen They do	Vuelan They fly

8.2F Un folleto turístico

abrir to open
abierto/a open
callado/a quiet, reserved
cargar to load
cerrar to close, shut
la cocina cuisine, cooking
conocer to know (a person /a place)
el cultivo crop
entero/a entire, whole
gruñón/oña grumpy
ir de paseo to go for a walk
la mina mine
el monasterio monastery
el monte hill, mountain
la oveja sheep
Pintoresco picturesque
recomendar to recommend
el recuerdo memory, reminder,souvenir
la refinería (de petróleo) (oil) refinery
la sombrilla sunshade, parasol
el taller workshop
tranquilo/a peaceful
la vaca cow
el valle valley
el/la visitante visitor

8.2H Describiendo tu región

acostumbrado/a accustomed to, used (adj) to
la barca pesquera fishing boat
casero/a home-made
la cita amorosa date (with someone)
el clima climate

8.1H ¿Qué hiciste y qué te gustaría hacer durante las vacaciones?

aburrirse to get bored
acabar de (+ infinitive) to have just (done something)
broncearse to get a tan
coger to catch, to take
el crucero cruise
descansar to rest
el esquí acuático water skiing
extranjero/a foreign
el extranjero (en el __, abroad al__)
Francia France
genial brilliant, great
Grecia Greece
la insolación sunstroke
la isla island
las Islas Canarias Canary Islands
a mediados de in the middle of (time)
el Mediterráneo Mediterranean
ocupado/a busy, engaged
el oro gold
la plata silver
regresar to return
relajarse to relax
la sombrilla sunshade, parasol
el vestuario changing room, cloakroom
la vida nocturna night life
volver to return
el vuelo flight
colocar to place, to put
la empresa company, firm
la época era, age, time

GCSE Unit 8 SPANISH Knowledge organiser.
Topic Holidays and Travel

What we are learning this term:

A. Talking about travelling to holiday destinations
B. Talking about the weather
C. Talking about holiday accommodation
D. Talking about the regions of Spain
E. Understanding tourist leaflets and websites

6 Key Words for this term

1. alojarse
2. veranear
3. la pensión
4. vacaciones
5. un folleto
6. el AVE

8.1G ¡Me voy de vacaciones!

el aire acondicionado _____
el andén _____
el asiento _____
el autocar _____
el AVE (tren de alta velocidad) _____
_____ plane
_____ cheap
_____ boat
_____ bike, bicycle
_____ car
_____ left-luggage office
_____ cruise
desde luego _____
echar de menos _____
_____ Scotland
_____ narrow
_____ luggage
_____ railway
el invierno _____
la maleta _____
_____ underground
_____ non smoking
el otoño _____
_____ spring
la sala de espera _____
_____ South America
_____ tram
las vacaciones _____
_____ summer
viajar _____
el viaje _____

8.1F ¿Dónde te alojas?

el abrebotellas _____
_____ tin-opener
el aeropuerto _____
_____ on the right
a la izquierda _____
el albergue juvenil _____
Alojarse _____
_____ swimming costume
la cama de matrimonio _____
camping campsite, camping
la estación de servicio _____
la estrella _____
_____ awful, terrible
el folleto _____
la gasolina (sin plomo) _____
el guía / la guía _____
la guía _____
_____ (doble/ (double/single) room individual)
la llave _____
_____ to get wet
la oficina de turismo _____
el papel higiénico _____
_____ state-owned hotel (in Spain)
el pasaporte _____
_____ boarding house, B & B
ponerse en camino _____
_____ unfortunately
la recepción _____
_____ reservation
el saco de dormir _____
los servicios _____
la tarjeta de embarque _____
la tienda (de campaña) _____
la taquilla ticket _____

8.2G ¿En qué región vives?

_____ unemployment
_____ entertainment
_____ crowded
nacer _____
Nací _____
_____ he/she was born
el país _____
pescar _____
_____ river
la sierra _____
_____ so much, so many

Key Verbs

Quedarse To stay	____ To go	_____ To summer holiday	Hacer – to do/make	Volar _____
Me quedo _____	Voy I go	_____ I summer holiday	Hago _____	_____ I fly
Te _____ You stay	Vas _____	Veraneas _____	_____- You do	Vuelas _____
____ queda He/she/it stays	_____ s/he goes	_____ He/she summer hol	Hace s/he does	Vuela He/she/ it flys
Nos quedamos We stay	Vamos They go	Veraneamos We summer hol	_____ We do	_____ We fly
Se _____ They stay	_____ They go	_____ They summer hol	Hacen They do	_____ They fly

8.2F Un folleto turístico

abrir to _____
_____ open
_____ quiet, reserved
cargar _____
_____ to close, shut
_____ cuisine, cooking
_____ to know (a person /a place)
el cultivo _____
_____ entire, whole
gruñón/oña _____
_____ to go for a walk
la mina _____
_____ monastery
el monte _____
_____ sheep
pintoresco _____
_____ to recommend
_____ memory, reminder,souvenir
_____ (de petróleo) (oil) refinery
_____ sunshade, parasol
el taller _____
tranquilo/a _____
_____ cow
_____ valley
el/la visitante _____

8.2H Describiendo tu región

_____ accustomed to, used (adj) to
la barca pesquera _____
_____ home-made
_____ date (with someone)
_____ climate

8.1H ¿Qué hiciste y qué te gustaría hacer durante las vacaciones?

aburrirse _____
_____ (+ infinitive) to have just (done something)
broncearse _____
_____ to catch, to take
_____ cruise
descansar _____
el esquí acuático _____
_____ foreign
el extranjero (en el __, abroad al__)
Francia _____
_____ brilliant, great
Grecia _____
la insolación _____
_____ island
las Islas Canarias _____
a mediados de _____
_____ Mediterranean
_____ busy, engaged
el oro _____
la plata _____
_____ to return
relajarse _____
_____ sunshade, parasol
_____ changing room, cloakroom
la vida nocturna _____
volver _____
el vuelo _____
colocar to place, _____
la empresa _____
la época _____

COMPUTER SCIENCE - TERM 1 FUNDAMENTALS OF ALGORITHMS FUNDAMENTALS OF PROGRAMMING AND PROGRAMMING

Term	Definition
Abstraction	The process of removing all unnecessary details from a problem.
Algorithm	The sequence of steps required to carry out a specific task.
Assignment	Setting the value of a variable in a computer program.
Data	Units of information which is acted upon by instructions.
Decomposition	Breaking down a problem into smaller steps that are easier to work with and solve.
Flowchart	A diagram which shows the step by step flow of an algorithm.
Input	Data which is inserted into a system to be processed or stored.
Output	Data which is sent out of a system.
Process	An action taken by the program without input from the user.
Pseudocode	A method of writing an algorithm using plain English.
Variable	A memory location within a computer where values are stored

Data Type	Explanation	Example
Boolean	TRUE/FALSE or 1/0	TRUE or 1
Character	A single, alphanumeric character.	1 or A or!
Integer	Whole numbers	15
String	One or more alphanumeric characters.	1A!
Real - Float	Decimal numbers	15.5

Flowchart Symbol	Name	Usage
.-. Start/Stop	Terminator	The start or end of the algorithm.
Process	Process	An action which occurs during the algorithm.
w Input/ *M* * Output	Input/ Output	Data is either inputted to or outputted from the algorithm.
	Decision	A Yes/No, True/False decision.

Common Algorithms	Explained
Binary Search	Compares the search object to the middle point of a sorted list. If they are not equal, the half in which the target cannot lie is eliminated and the search continues on the remaining half, again taking the middle point to compare to the search object, and repeating this until the target value is found or the end is reached.
Bubble Sort	Sorts a list by continuously stepping through a list, swapping items until they appear in the correct order.
Linear Search	Compares the search object with each item in the list in order from the beginning until it is found or the end is reached.
Merge Sort	Sorts a list by repeatedly dividing a list into two until all the elements are separated individually. Pairs of elements are then compared, placed into order and combined. The process is then repeated until the list is recompiled in the correct order as a whole.

Term	Definition
Arithmetic Operator	A mathematical character to perform a calculation. Example: +
Array	A set of values, of the same data type, stored in sequence. A list.
Casting	Setting or changing the data type of a variable.
Concatenation	Connecting strings of characters together.
Condition	A statement which is either true or false. A computation depends on whether a condition is true or false.
Constant	A value which does not change whilst the program is running.
Element	An individual item in an array. A value in a list.
File	Anything you can save. Document, piece of music, data etc.
Identifier	A name, usually for part of the program such as a constant, variable, array etc.
IF Statement -Selection	A statement that lets a program select an action depending on whether it is true or false.
Loops -Iteration	Repeating an action, activity or section within a program.
Operator	A character which determines what action is to be considered or determined. Example: =
Relational Operator	An operator which compares two values. Example: <
Subroutine	A section of code written outside of the main program. Covers procedures and functions.

Variable	A memory location
	within a computer
	where values are stored.

Input/Output and Calculation

```
userInputName = nput("Enter your name: ") userNum = int(input("Enter an integer: ")) userDec = float(input("Enter a decimal number: "))

calculation = userNum + userDec

print("Hello", userInputName, "the result is", calculation)
```

Enter your name: Mr. Weston Enter an integer: 3 Enter a decimal number: 15.2 Hello Mr. Weston the result is 18.2

IF Statements

```
print("Press 1 for a greeting. Press 2 for a farewell.") userChoice = int(input("Awaiting Input: "))

if userChoice == 1: print("Hello User!")

elif userChoice == 2: print("Goodbye User!")

else:
    printf'Error - T or '2' not detected.")_
```

```
Press 1 for a greeting. Press 2 for a farewell Awaiting Input: 1
Hello User!
>>>
Press 1 for a greeting. Press 2 for a farewell Awaiting Input: 2
Goodbye User!
>>>
Press 1 for a greeting. Press 2 for a farewell
Awaiting Input: 3
Error - '1' or '2' not detected.
```

LOOPS

```
(userChoice = "Yes"

while userChoice == "Yes":
   userChoice = input ("Do you want to repeat this? ")
```

```
userCount = int(input("How many times do you want to use this
    loop? "))
forx in range (1, userCount+1): print("You asked for this many.")
```

```
Do you want to repeat this? Yes Do you want to repeat this? Yes
Do you want to repeat this? No thank you.
How many times do you want to use this loop? 3 You asked for this many.
You asked for this many.
You asked for this many.
```

COMPUTER SCIENCE - TERM 1 FUNDAMENTALS OF ALGORITHMS FUNDAMENTALS OF PROGRAMMING AND PROGRAMMING

Term	Definition
	The process of removing all unnecessary details from a problem.
	The sequence of steps required to carry out a specific task.
	Setting the value of a variable in a computer program.
	Units of information which is acted upon by instructions.
	Breaking down a problem into smaller steps that are easier to work with and solve.
	A diagram which shows the step by step flow of an algorithm.
	Data which is inserted into a system to be processed or stored.
	Data which is sent out of a system.
	An action taken by the program without input from the user.
	A method of writing an algorithm using plain English.
	A memory location within a computer where values are stored

Data Type	Explanation	Example
	TRUE/FALSE or 1/0	
	A single, alphanumeric character.	
	Whole numbers	
	One or more alphanumeric characters.	
	Decimal numbers	

Flowchart Symbol	Name	Usage
.-.	Terminator	
Start/Stop		
Process	Process	
	Input/	
w Input/ ***M***	Output	
* Output		
	Decision	

Common Algorithms	Explained
	Compares the search object to the middle point of a sorted list. If they are not equal, the half in which the target cannot lie is eliminated and the search continues on the remaining half, again taking the middle point to compare to the search object, and repeating this until the target value is found or the end is reached.
	Sorts a list by continuously stepping through a list, swapping items until they appear in the correct order.
	Compares the search object with each item in the list in order from the beginning until it is found or the end is reached.
	Sorts a list by repeatedly dividing a list into two until all the elements are separated individually. Pairs of elements are then compared, placed into order and combined. The process is then repeated until the list is recompiled in the correct order as a whole.

Term	Definition
	A mathematical character to perform a calculation. Example: +
	A set of values, of the same data type, stored in sequence. A list.
	Setting or changing the data type of a variable.
	Connecting strings of characters together.
	A statement which is either true or false. A computation depends on whether a condition is true or false.
	A value which does not change whilst the program is running.
	An individual item in an array. A value in a list.
	Anything you can save. Document, piece of music, data etc.
	A name, usually for part of the program such as a constant, variable, array etc.
	A statement that lets a program select an action depending on whether it is true or false.
	Repeating an action, activity or section within a program.
	A character which determines what action is to be considered or determined. Example: =
	An operator which compares two values. Example: <
	A section of code written outside of the main program. Covers procedures and functions.

Variable	A memory location
	within a computer
	where values are stored.

Input/Output and Calculation

```
userInputName = nput("Enter your name: ") userNum = int(input("Enter an integer: ")) userDec = float(input("Enter a decimal number: "))

calculation = userNum + userDec

print("Hello", userInputName, "the result is", calculation)
```

Enter your name: Mr. Weston Enter an integer: 3 Enter a decimal number: 15.2 Hello Mr. Weston the result is 18.2

IF Statements

```
print("Press 1 for a greeting. Press 2 for a farewell.") userChoice = int(input("Awaiting Input: "))

if userChoice == 1: print("Hello User!")

elif userChoice == 2: print("Goodbye User!")

else:
    printf'Error - T or '2' not detected.")_
```

```
Press 1 for a greeting. Press 2 for a farewell Awaiting Input: 1
Hello User!
>>>
Press 1 for a greeting. Press 2 for a farewell Awaiting Input: 2
Goodbye User!
>>>
Press 1 for a greeting. Press 2 for a farewell
Awaiting Input: 3
Error - '1' or '2' not detected.
```

LOOPS

```
(userChoice = "Yes"

while userChoice == "Yes":
   userChoice = input ("Do you want to repeat this? ")
```

```
userCount = int(input("How many times do you want to use this
    loop? "))
forx in range (1, userCount+1): print("You asked for this many.")
```

```
Do you want to repeat this? Yes Do you want to repeat this? Yes
Do you want to repeat this? No thank you.
How many times do you want to use this loop? 3 You asked for this many.
You asked for this many.
You asked for this many.
```

17. Business Aims & Objectives

Businesspeople like to use the term SMART objectives

Which Objective?	Explanation of Objective
Specific	Businesses set very specific targets that are very clear and to the point
Measurable	Businesses set measurable targets that can be measured. For example: Business set themselves specific sales targets over a set period.
Achievable	Businesses set realistic targets that are ambitious yet achievable.
Realistic	Businesses set realistic targets that will motivate employees at the same time they will be achievable
Time- Bound	Businesses set their targets over a period of time as this creates a sense of excitement and urgency.

18. Aims and Objectives in Business

Businesses have both financial and non-financial aims

Type of Objectives	Explanation
Financial Objectives	Profit. Sales. Market Share. Reduce costs.
Non-Financial Objectives	Social objectives. Independence. Control.

19. Business Revenue, Costs & Profits

Term	Definition
Fixed Costs	Costs that don't vary just because output varies for example 'rent'.
Profit (gross/net)	The difference between revenue and total costs; if the figure is negative the business is making a loss
Revenue	The total value of the sales made within a set period, such as a month.
Total Costs	All the costs for a set period, such as a month
Variable Costs	Costs that vary as output varies such as raw materials

20. Business Revenue, Costs & Profits

Term	Formulae
Sales Revenue	**Price x Quantity Sold**
Total Costs	**Variable costs + Fixed Costs**
(Gross) Profit	**Total Revenue – Total Costs**

21. Breaking Even

Term	Definition
Break - Even	The level of sales at which total costs are equal to total revenue. At this point the business is making neither a profit nor a loss.
Break-even Chart	A graph showing a company's revenue and total costs at all possible levels of output
Margin of Safety	The amount by which demand can fall before the business starts making losses

22. The Importance of Cash

Question	Answer
Why does Cash matter to a Business?	Cash matters because, without it, bills go unpaid and a business can fail. If you have no cash, you can't pay suppliers or employees.
Why is cash important to a business?	Cash is required to pay suppliers, employees or other costs. Typical overheads include: **Salaries/ Rent and Rates/ Utilities and Bills**
What is the difference between cash and profit?	Cash flow shows the immediate impact of a transaction on a company's bank account; profit shows the longer-term impact after costs have been taken into account.

23. The Importance of Cash (definitions)

Term	Definition
Cash	The money the firm holds in notes and coins, and in its bank accounts
Cash Flows	The movement of money into and out of the firm's bank account.
Insolvency	When a business lacks the ability to pay its debts
Overdraft	A short-term form of credit. A bank will allow a business to spend more money than it actually has.
Overdraft Facility	An agreed maximum level of overdraft

25. Short Term Sources of Finance

Term	Definition
Bank Overdraft	**If a company requires some short term finance they can negotiate to extend their overdraft facility with the bank**
Trade Credit	**When a supplier provides goods without immediate payment – This gives the business time to sell products in order to pay off the debt.**

24. Cash Flow Forecasts

Cash flow forecasting means predicting the future flows of cash into and out of a Business.

Successful cash flow forecasts require:

- **Accurate prediction of monthly sales**
- **Accurate predictions of when customers will pay for the goods they have bought**
- **Careful allowance of operating costs and the timing of payments**
- **Careful allowance for in flows and outflows of cash**

Key Term	Definition
Opening Balance	The amount of cash in the bank at the start of the month
Net Cash Flow	Cash inflow minus cash outflow over the course of a month
Negative Cash Flow	When cash outflows are greater than cash inflows
Closing Balance	The amount of cash left in the bank at the end of the month

26. Long Term Sources of FInance

Term	Definition
Crowdfunding	Raising Capital online from many small investors (but not through the stock market.
Share Capital	Raising finance by selling a share of the business, Shareholders have the right to question the directors and take profit out the firm.
Venture Capital	A combination of share capital and loan capital, provided by an investor.
Retained Profit	Profit kept within the Business that is used for business growth.

17. Business Aims & Objectives

Businesspeople like to use the term SMART objectives

Which Objective?	Explanation of Objective
Specific	
Measurable	
Achievable	
Realistic	
Time- Bound	

18. Aims and Objectives in Business

Businesses have both financial and non-financial aims

Type of Objectives	Explanation
Financial Objectives	
Non-Financial Objectives	

19. Business Revenue, Costs & Profits

Term	Definition
Fixed Costs	
Profit (gross/net)	
Revenue	
Total Costs	
Variable Costs	

20. Business Revenue, Costs & Profits

Term	Formulae
Sales Revenue	
Total Costs	
(Gross) Profit	

21. Breaking Even

Term	Definition
Break - Even	
Break-even Chart	
Margin of Safety	

22. The Importance of Cash	
Question	**Answer**
Why does Cash matter to a Business?	
Why is cash important to a business?	
What is the difference between cash and profit?	

23. The Importance of Cash (definitions)	
Term	**Definition**
Cash	
Cash Flows	
Insolvency	
Overdraft	
Overdraft Facility	

25. Short Term Sources of Finance	
Bank Overdraft	
Trade Credit	

24. Cash Flow Forecasts	
Cash flow forecasting means predicting the future flows of cash into and out of a Business.	
Key Term	**Definition**
Opening Balance	
Net Cash Flow	
Negative Cash Flow	
Closing Balance	

26. Long Term Sources of FInance	
Term	Definition
Crowdfunding	
Share Capital	
Venture Capital	
Retained Profit	

Year 10 Term 2 : Topic = Keith Vaughan

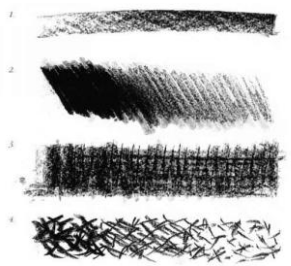
What we are learning this term:

A. Oil pastels
B. Artist research
C. Mono-printing
D. Trace Layering
E. Lino Print
F. Charcoal

6 Key Words for this term

1 Observe
2 Construct
3 Proportion
4 Blending
5 scoring
6 accuracy

A.	What are three different ways to use charcoal?

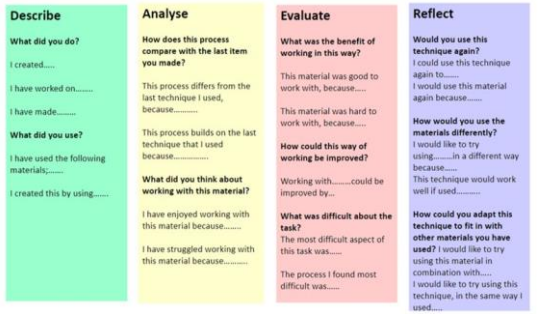


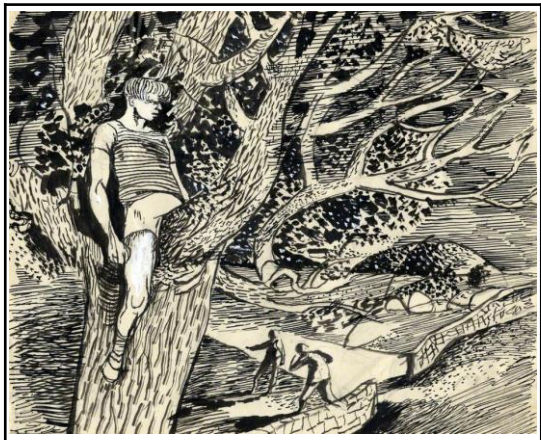
B.	What is analysis?
What makes a good quality photograph?	

B.	How do you separate an image to respond to the work of Keith Vaughan?
1 2 3	

C.	*Describe the process of creating a lino print – How does this differ from a monoprint?*
<u>Lino Print:</u> • 1 • 2 • 3	<u>Monoprint</u> • 1 • 2 • 3

G.	Describe the framework we use when we annotate a piece of work we have made
Describe	
Evaluate	
Reflect	
Analyse	





KS4 FOOD AND NUTRITION KNOWLEDGE ORGANISER T2

Name: Date:

Macronutrients, fibre and water

Macronutrients
Macronutrients provide energy. The macronutrients are:
- carbohydrate;
- protein;
- fat.

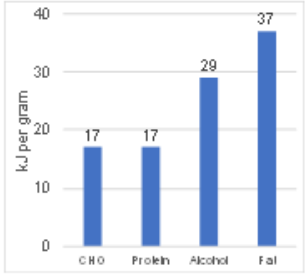
Macronutrients are measured in grams (g).

Alcohol
Alcohol is not considered a nutrient, but is a source of energy in the diet.

The government recommends no more than 14 units of alcohol per week for both men and women.

Energy from food
- Energy intake is measured in joules (J) or kilojoules (kJ), but many people are more familiar with Calories (kcal).
- Different macronutrients, and alcohol, provide different amounts of energy.

	Energy per gram
Carbohydrate	16kJ (3.75 kcals)
Protein	17kJ (4 kcals)
Alcohol	29kJ (7kcals)
Fat	37kJ (9 kcals)



Protein
- Made up of building blocks called amino acids.
- There are 20 amino acids found in protein.
- Eight amino acids have to be provided by the diet (called essential amino acids).

The essential amino acids are isoleucine, leucine, lysine, methionine, phenylalanine, threonine, tryptophan and valine.
In young children, additional amino acids, e.g. histidine and tyrosine, are sometimes considered to be essential (or 'conditionally essential') because they may be unable to make enough to meet their needs.

Recommendations
- 0.75g/kg bodyweight/day in adults.

Sources:
Animal sources: meat; poultry; fish; eggs; milk; dairy food.

Plant sources: soya; nuts; seeds; pulses, e.g. beans, lentils; mycoprotein.

Protein complementation
Different food contains different amounts and combinations of amino acids.

Vegans and vegetarians can get all the amino acids they need by combining different protein types at the same meal. This is known as protein complementation.

Examples are:
- rice and peas;
- beans on toast;
- hummus and pitta bread;
- bean chilli served with rice.

Carbohydrate
All types of carbohydrate are compounds of carbon, hydrogen and oxygen. They can be divided into three main groups according to the size of the molecule.

These three types are:
- monosaccharides (e.g. glucose);
- disaccharides (e.g. lactose);
- polysaccharide (e.g. sucrose).

The two types main of carbohydrate that provide dietary energy are starch and sugars. Dietary fibre is also a type of carbohydrate.

Starchy carbohydrate is an important source of energy.

Starchy foods - we should be choosing wholegrain versions of starchy foods where possible.

Recommendations
- Total carbohydrate - around 50% of daily food energy.
- Free sugars include all sugars added to foods plus sugars naturally present in honey, syrups and unsweetened fruit juice (<5% daily food energy).
- Fibre is a term used for plant-based carbohydrates that are not digested in the small intestine (30g/day for adults).

Fibre
- Dietary fibre is a type of carbohydrate found in plant foods.
- Food examples include wholegrain cereals and cereal products; oats; beans; lentils; fruit; vegetables; nuts; and, seeds.

Dietary fibre helps to:
- reduce the risk of heart disease, diabetes and some cancers;
- help weight control;
- bulk up stools;
- prevent constipation;
- improve gut health.

Fat
Sources of fat include:
- saturated fat;
- monounsaturated fat;
- polyunsaturated fat.

Fats can be saturated, when they have no double bonds, monounsaturated, when they have one double bond, or polyunsaturated, when they have more than one double bond.

Recommendations
- <35% energy, Saturated fat <11% energy.

A high saturated fat intake is linked with high blood cholesterol levels.

Sources:
Saturated fat: fatty cuts of meat; skin of poultry; butter; hard cheese; biscuits, cakes and pastries; chocolate.
Monounsaturated fat: edible oils especially olive oil; avocados; nuts.
Polyunsaturated fatty acids: edible oils especially sunflower oil; seeds; margarine; spreadable fats made from vegetable oils and oily fish.

Dietary reference values (DRVs) are a series of estimates of the energy and nutritional requirements of different groups of healthy people in the UK population. They are not recommendations or goals for individuals.

Reference Intakes are guidelines for the maximum amount of energy (calories), fat, saturated fat, sugars and salt consumed in a day (based on a healthy adult female).

Key terms
Dietary reference values: Estimated dietary requirements for particular groups of the population.
Essential amino acids: 8 of the different amino acids found in proteins from plants and animals that have to be provided by the diet.
Macronutrients: Nutrients needed to provide energy and as the building blocks for growth and maintenance of the body.
Protein complementation: combining different protein types at the same meal to ensure all EAAs are ingested.
Reference Intakes: Guidelines for the maximum amount of nutrients consumed.

Hydration
- Aim to drink 6-8 glasses of fluid every day.
- Water, lower fat milk and sugar-free drinks including tea and coffee all count.
- Fruit juice and smoothies also count but should be limited to no more than a combined total of 150ml per day.

20% of water is provided by food such as soups, yogurts, fruit and vegetables.

The other 80% is provided by drinks such as water, milk and juice.

Drinking too much water can lead to 'water intoxication' with potentially life threatening hyponatraemia.

This is caused when the concentration of sodium in the blood gets too low.

KS4 FOOD AND NUTRITION KNOWLEDGE ORGANISER T2

Micronutrients

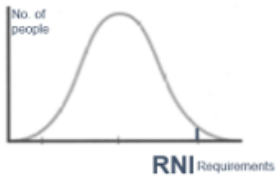
Micronutrients are needed in the body in tiny amounts. They do not provide energy, but are required for a number of important processes in the body.

There are two main groups of micronutrients:
- vitamins;
- minerals and trace elements.

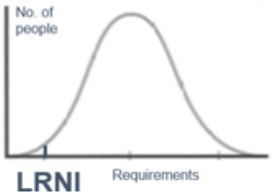
Micronutrients are measured in milligrams (mg) and micrograms (µg) with 1mg = 0.001g and 1µg = 0.001mg.

Micronutrient recommendations

The recommendations for vitamins and minerals are based on the **Reference Nutrient Intake (RNI).**



When looking at low intakes of micronutrients, the Lower Reference Nutrient Intake (LRNI) is used.



For more information, go to: https://bit.ly/36KUnji

Micronutrient recommendations

People have different requirements for each micronutrient, according to their:
- age;
- gender;
- physiological state (e.g. pregnancy).

Vitamins

Vitamins are nutrients required by the body in small amounts, for a variety of essential processes.

Most vitamins cannot be made by the body, so need to be provided in the diet.

Vitamins are grouped into:
- fat-soluble vitamins (vitamins A, D, E and K);
- water-soluble vitamins (B vitamins and vitamin C).

Minerals

Minerals are inorganic substances required by the body in small amounts for a variety of different functions.

The body requires different amounts for each mineral.

Some minerals are required in larger amounts, while others are needed in very small amounts and are called 'trace elements'.

Vitamins

Nutrient	Function	Sources
Vitamin A	Helps the immune system to work as it should and with vision.	Liver, cheese, eggs, dark green leafy vegetables and orange-coloured fruits and vegetables.
B vitamins	Thiamin, riboflavin, niacin, folate, and vitamin B12 have a range of functions within the body.	Different for each B Vitamin.
Vitamin C	Helps to protect cells from damage and with the formation of collagen.	Fruit (especially citrus fruits), green vegetables, peppers and tomatoes.
Vitamin D	Helps the body to absorb calcium & helps to keep bones strong.	Oily fish, eggs, fortified breakfast cereals and fat spreads.
Vitamin E	Helps to protect the cells in our bodies against damage.	Vegetable and seed oils, nuts and seeds, avocados and olives.
Vitamin K	Needed for the normal clotting of blood and is required for normal bone structure.	Green vegetables and some oils (rapeseed, olive and soya oil).

Minerals

Nutrient	Function	Sources
Calcium	Helps to build and maintain strong bones and teeth.	Dairy, calcium-fortified dairy-alternatives, canned fish (where soft bones are eaten) and bread.
Iron	Helps to make red blood cells, which carry oxygen around the body.	Offal, red meat, beans, pulses, nuts and seeds, fish, quinoa, wholemeal bread and dried fruit.
Phosphorus	Helps to build strong bones and teeth and helps to release energy from food.	Red meat, poultry, fish, milk, cheese, yogurt, eggs, bread and wholegrains.
Sodium	Helps regulate the water content in the body.	Very small amounts found in foods. Often added as salt.
Fluoride	Helps with the formation of strong teeth and reduce the risk of tooth decay.	Tap water, tea (and toothpaste).
Potassium	Helps regulate the water content in the body and maintain a normal blood pressure.	Some fruit and vegetables, dried fruit, poultry, red meat, fish, milk and wholegrain breakfast cereals.
Iodine	Helps to make thyroid hormones. It also helps the brain to function normally.	Milk, yogurt, cheese, fish, shellfish and eggs.

Key terms

Micronutrients: Nutrients needed in the diet in very small amounts.
Lower Reference Nutrient Intake (LRNI): is the amount of a nutrient that is enough for only the small number of people who have low requirements (2.5%). The majority of people need more.
Reference Nutrient Intake (RNI): the amount of a nutrient that is enough to ensure that the needs of nearly all the group (97.5%) are being met. The RNI is used for recommendations on protein, vitamins and minerals.

Vitamin D

Vitamin D is a pro-hormone in the body. It can be obtained in two forms:
- ergocalciferol (vitamin D_2);
- cholecalciferol (vitamin D_3).

Vitamin D_3 is also formed by the action of sunlight. Different to most vitamins, the main source of vitamin D is synthesis in the skin following exposure to sunlight. The wavelength of UVB during the winter months in the UK does not support vitamin D synthesis.

Frayer Model Key Words	
Protein	A macronutrient that is essential to building muscle mass.
Fat	A macronutrient which supplies the body with energy.
Carbohydrates	A macronutrient that is required by all animals. It is made in plants by the process of photosynthesis.
Vitamin	Vitamins are split into two categories, water soluble and fat soluble. Fat soluble vitamins (A, D E, and K) dissolve in fat. Water soluble vitamins (the B group and vitamin C) dissolve in water.
Nutritional	Providing or obtaining the food necessary for health and growth.
Energy	The strength and vitality required for sustained physical or mental activity.

KS4 FOOD AND NUTRITION KNOWLEDGE ORGANISER T2

QUIZ

Macronutrients
Macronutrients provide energy. The macronutrients are:
- .
- .
- .

Macronutrients are measured in…… ( ).

Micronutrients are needed in the body in …….amounts. They do not provide……., but are required for a number of important……in the body.

There are two main groups of micronutrients:
- .
- .

Micronutrients are measured in …… (mg) and …… (µg) with 1mg = 0.001g and 1µg = 0.001mg.

Key terms
Dietary reference values:

Essential amino acids:

Macronutrients:

Protein complementation:

Reference Intakes:

Protein
Made up of building blocks called ……..
There are ….. amino acids found in protein.
Eight amino acids have to be provided by the diet (called…….. amino acids).

Sources:
Animal sources:

Plant sources:

Vitamins
Vitamins are nutrients required by the body in small amounts, for a variety of essential processes.

Most vitamins cannot be made by the body, so need to be provided in the diet.

Vitamins are grouped into:
-

-

Protein complementation
Different food…

Vegans and vegetarians can get all the amino acids they need by combining different protein types at the same meal. This is known as protein complementation.

Examples are:
- .
- .
- .
- .
- .

Carbohydrate
All types of carbohydrate are compounds of carbon, hydrogen and oxygen. They can be divided into three main groups according to the size of the molecule.

These three types are:
-
-
-

The two types main of carbohydrate that provide dietary energy are starch and sugars. Dietary fibre is also a type of carbohydrate.

Starchy carbohydrate is an important source of energy.

Starchy foods –

Recommendations
- Total carbohydrate – around……..of daily food energy.
- Free sugars include ……plus sugars naturally present in honey, syrups and unsweetened fruit juice (<5% daily food energy).
- Fibre is a term used for plant-based carbohydrates that are not digested in the small intestine (30g/day for adults).

Fat
Sources of fat include:
saturated fat;
monounsaturated fat;
polyunsaturated fat.

Fats can be saturated, when they have no double bonds, monounsaturated, when they have one double bond, or polyunsaturated, when they have more than one double bond.

Recommendations
<35% energy, Saturated fat <11% energy.
A high saturated fat intake is linked with high blood cholesterol levels.

Sources:

Key terms
Micronutrients:
.

Lower Reference Nutrient Intake (LRNI):

Reference Nutrient Intake (RNI):

Year 10 PRODUCT DESIGN Term 2

What we are learning this term:

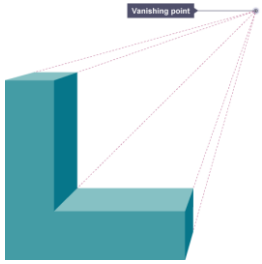
A. One-Point Perspective B. Two-point Perspective C. Isometric Drawing
D. Exploded Drawing E. Oblique Drawing F. CAD G. Orthographic Drawing

Design Strategies Introduction.

Design strategies are used to create technical drawings, to show an object in 3D on a 2D page. Perspective drawings show an object getting smaller in the distance. The rest are done to scale.

A. One-point Perspective Drawing

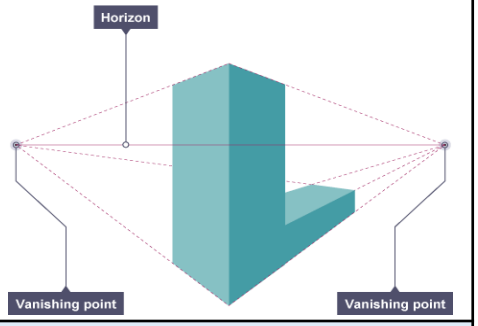
Single-point perspective shows an object from the front in a realistic way. The front view goes back towards a vanishing point on the horizon.



Commonly used by interior designers to a show a view into a room.

B. Two-point Perspective Drawing

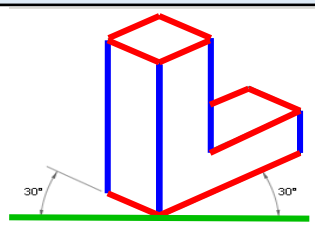
Two-point perspective shows an object from the side with two vanishing points. It gives the most realistic view of a product as it shows the item edge on, as we would see it. It is often used to produce realistic drawings of an object.



Commonly used by architects to show realistic building ideas.

C. Isometric Technical Drawing

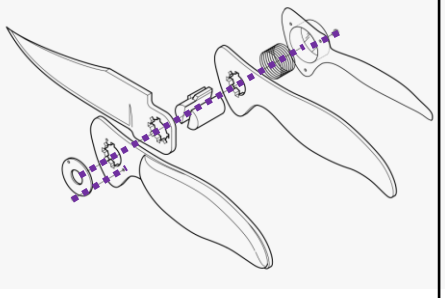
Made up of a series of parallel **vertical lines** and parallel **30-degree lines**. But no **horizontal lines.**



Used by architects and engineers to communicate their ideas to the client and manufacturer.

D. Exploded Technical Drawing

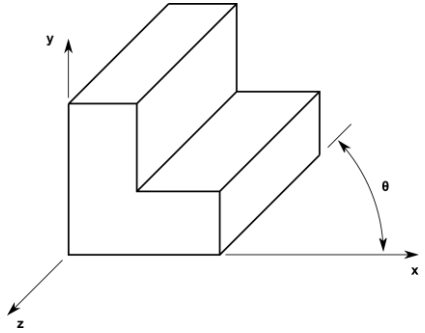
Exploded technical drawing is an Isometric drawing of all the parts and components of an object.



All parts are shown separately so you can see all aspects. **Dashed lines** indicate where everything goes and in what order.

E. Oblique Technical Drawing

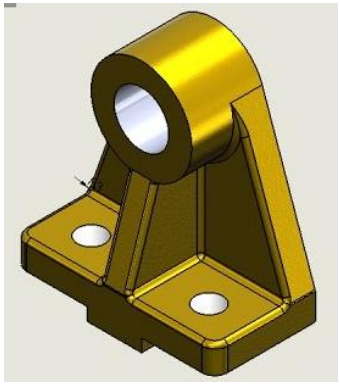
Consists of an object where the front view is drawn flat with height and width of the object draw to the correct lengths. Diagonal lines are drawn at 45-degrees.



Commonly used by engineers for drafting ideas.

F. CAD (Computer Aided Design)

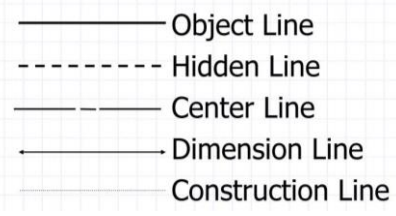
This is designing using a computer using a software such as 2D Design or Solidworks.



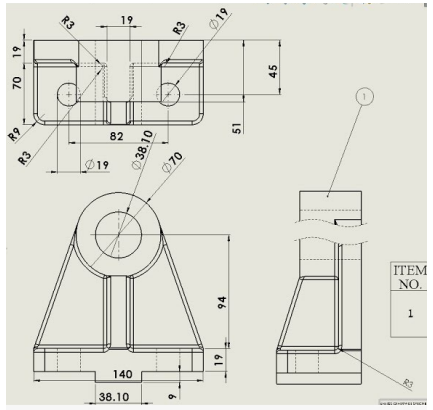
Commonly used to model, test and develop an idea before manufacture.

G. Orthographic Projection – 2D NOT 3D Drawing Strategy!

This shows 2D views of a 3D object from different angles – front, plan and end. Lines are dimensions have specific meaning to avoid confusion.



Commonly used in industry to help the manufacturer understand the design.



Year 10 PRODUCT DESIGN Term 2

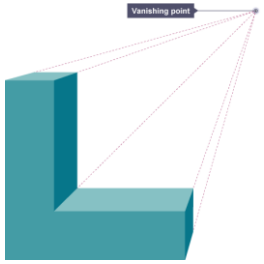
What we are learning this term:

A. One-Point Perspective B. Two-point Perspective C. Isometric Drawing
D. Exploded Drawing E. Oblique Drawing F. CAD G. Orthographic Drawing

Design Strategies Introduction.

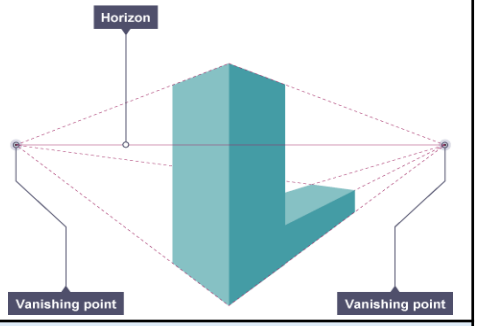
Design strategies are used to create technical drawings, to show an object in 3D on a 2D page. Perspective drawings show an object getting smaller in the distance. The rest are done to scale.

A. One-point Perspective Drawing



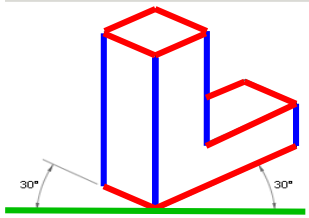
Commonly used by interior designers to a show a view into a room.

B. Two-point Perspective Drawing



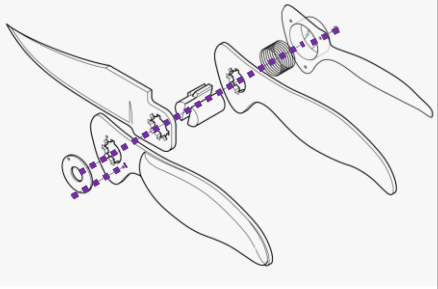
Commonly used by architects to show realistic building ideas.

C. Isometric Technical Drawing



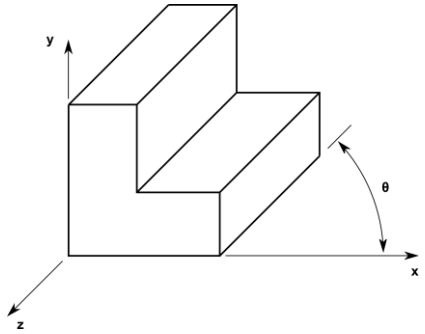
Used by architects and engineers to communicate their ideas to the client and manufacturer.

D. Exploded Technical Drawing



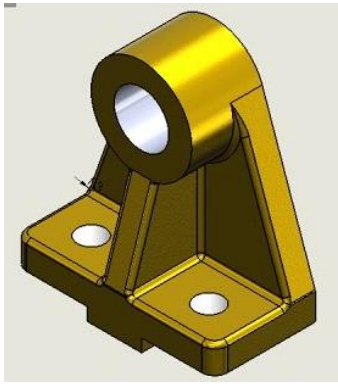
All parts are shown separately so you can see all aspects. **Dashed lines** indicate where everything goes and in what order.

E. Oblique Technical Drawing



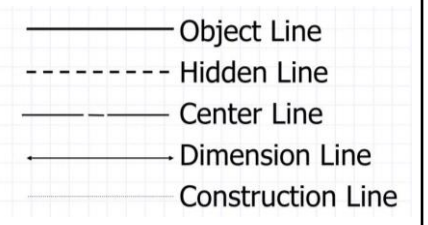
Commonly used by engineers for drafting ideas.

F. CAD (Computer Aided Design)

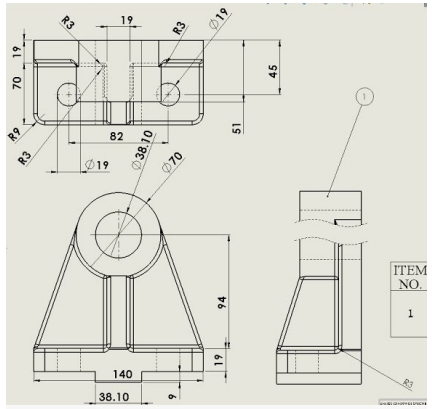


Commonly used to model, test and develop an idea before manufacture.

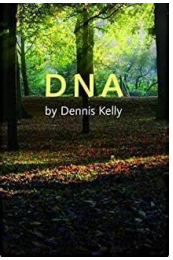
G. Orthographic Projection – 2D NOT 3D Drawing Strategy!

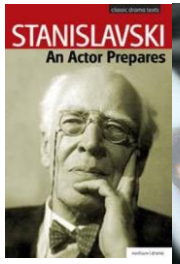


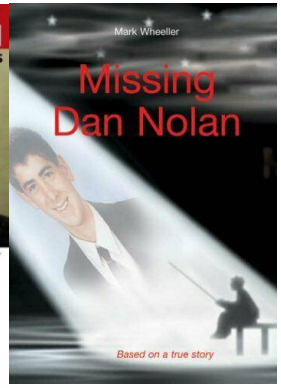
Commonly used in industry to help the manufacturer understand the design.



YEAR 10 BTEC DRAMA KNOWELDGE ORAGNISER – COMPONENT ONE







Splendid Productions

What we are learning this term:
A. Understanding professional works B. What is a professional work C. What is a practitioner D. How do we analyse a performance E. What are physical skills F. What are interpretive skills G. Three different performance styles / genres

A.	*Component 1 – Key focus*

In this component, you will develop your understanding of drama by examining the work of the practitioners: Stanislavski, Splendid Productions and Mark Wheeler. The practitioners cover the genres: Naturalism, Epic Theatre and physical visual storytelling. You will explore the processes used to create performance by working through the processes yourselves. At the same time you will research the job roles and responsibilities within the industry that enable shows to happen.

You will experience a range of work across the discipline of drama by viewing recorded and/or live work. We will aim to go to live shows in Bristol, London and the surrounding area in order to absorb as many different styles as possible.
While this is primarily a theoretical study of the performing arts practical investigations, students will be working at developing practical skills through workshops and links with Component 2 Developing Skills and Techniques in the Performing Arts, to engage in primary exploration of specific repertoire.

G.	Key learning aims from Component 1
Learning aim A: Examine professional practitioners' performance work	**A1: Professional practitioners' performance material, influences, creative outcomes and purpose** Examine live and recorded performances in order to develop understanding of practitioners' work with reference to influences, outcomes and purpose. Focus on thematic interpretation of particular issues and how artists communicate their ideas to an audience. How do the different roles and responsibilities in theatre collaborate to produce shows?
Learning aim B: Explore the interrelationships between constituent features of existing performance material	Processes used in performance ●Responding to stimuli to generate ideas for performance material. ●Exploring and developing ideas to develop material. ●Discussion with performers. ●Setting tasks for performers. ●Sharing ideas and intentions. ●Providing notes and/or feedback on improvements.

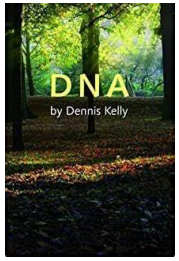
C.	Key question from Assessment objectives	
	1. What are physical skills 2. What are interpretive skills 3. How do we use these skills practically? 4. How do we IMPROVE on these skills?	1. What is a professional work 2. What is a practitioner 3. How do we analyse a performance 4. What are a practitioner's creative intentions

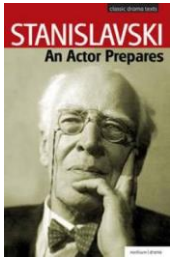
E.	Keywords
Practitioners	A professional theatre maker who creates in a specific style led by a specific theatre ideology.
Performance material	The practical work that a practitioner creates for performance.
Creative Intentions	The ideas behind the choreography, why the choreographer choose to create the work.
Review	Look over your current work and the work of others and be able to review and comment on your own and others practice
Analyse/ Evaluate	Watch and then analyse your own performance and the work of others and giving comments and judgements on what you see
Influences	How the practitioner has been influenced by others, their experiences, their training and how this has affected the work they create.
Physical skills	The physical attributes that an actor uses, stamina, strength, flexibility, control, to dance with technical accuracy.

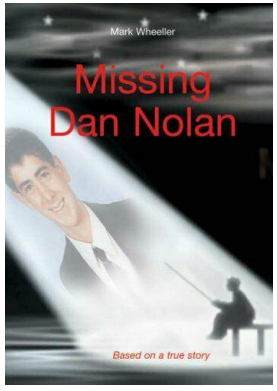
A.	Key question – What is the artistic purpose of a performance work?

When watching a professional performance, the key questions you need to think about are the following…
How do we Explore artistic purpose?
Explore artistic purpose (across all three disciplines/styles) including:
to educate
to inform
to entertain
to provoke
to challenge viewpoints
to raise awareness
to celebrate.

YEAR 10 BTEC DRAMA KNOWELDGE ORAGNISER – COMPONENT ONE







Splendid Productions

What we are learning this term:
A. Understanding professional works B. What is a professional work C. What is a practitioner D. How do we analyse a performance E. What are physical skills F. What are interpretive skills G. Different performance styles / genres

A.	*Component 1 – Key focus*

In this component, you will develop your understanding of drama by examining the work of different practitioners: Stanislavski, Splendid Productions and Missing Dan Nolan. The practitioners cover the genres: Naturalism, Epic Theatre and physical visual storytelling. You will explore the processes used to create performance by working through the processes yourselves. At the same time you will research the job roles and responsibilities within the industry that enable shows to happen.

You will experience a range of work across the discipline of drama by viewing recorded and/or live work. We will aim to go to live shows in Bristol, London and the surrounding area in order to absorb as many different styles as possible.
While this is primarily a theoretical study of the performing arts practical investigations, students will be working at developing practical skills through workshops and links with Component 2 Developing Skills and Techniques in the Performing Arts, to engage in primary exploration of specific repertoire.

G.	Key learning aims from Component 1
Learning aim A: Examine professional practitioners' performance work	**A1: Professional practitioners' performance material, influences, creative outcomes and purpose** Examine live and recorded performances in order to develop understanding of practitioners' work with reference to influences, outcomes and purpose. Focus on thematic interpretation of particular issues and how artists communicate their ideas to an audience. How do the different roles and responsibilities in theatre collaborate to produce shows?
Learning aim B: Explore the interrelationships between constituent features of existing performance material	Processes used in performance ●Responding to stimuli to generate ideas for performance material. ●Exploring and developing ideas to develop material. ●Discussion with performers. ●Setting tasks for performers. ●Sharing ideas and intentions. ●Providing notes and/or feedback on improvements.

C.	Key question from Assessment objectives	
	1. What are physical skills 2. What are interpretive skills 3. How do we use these skills practically? 4. How do we IMPROVE on these skills?	1. What is a professional work 2. What is a practitioner 3. How do we analyse a performance 4. What are a practitioner's creative intentions

E.	Keywords
Practitioners	
Performance material	
Creative Intentions	
Review	
Analyse/ Evaluate	
Influences	
Physical skills	

A.	Key question – What is the artistic purpose of a performance work?

When watching a professional performance, the key questions you need to think about are the following…
How do we Explore artistic purpose?
Explore artistic purpose (across all three disciplines/styles) including:

Year 10 Cambridge National- Media and Sport- Term 2

What we are learning this term:

- ***A. How media can increase exposure of minority sports***
- ***B. How it provides an increase in promotional opportunities***
- ***C. How it educates its audience***
- ***D. How media increases income for sports***
- ***E. How the media inspires people to participate***
- ***F. How it provides competition between sports***

Main assessment objectives

Learning outcome: Understand the positive effects that media can have on sport

A. Key question from Assessment objectives?

Key word	Key definition
Minority sport	A sport that is not very popular
Promotional opportunities	The opportunity to promote a brand or business
Income	Money generated
Participation	Taking part in sport
Exposure	Greater publicity from the media
Media rights	The rights to share media
Investment	Money invested into projects/equipment
Role models	A person looked to by others as an example

A. What sports are minority sports in the UK but maybe not in other parts in the world?

American football- USA
Table tennis- China
Badminton- Asia
Ice Hockey- Canada

C. How might a club get more spectators?

1. Cheap tickets for children or older people
2. Alternative formats of the game

How may the media increase participation?	How might the media educate people?
1. Success in Olympics 2. When certain sports are on- Wimbledon 3. Creation of positive role models	1. Develop a better understanding about rules and tactics

A. Give 5 examples of minority sports in the UK

1. Archery
2. Squash
3. Ultimate frisbee
4. Lacrosse
5. Water polo

A. How can clubs promote themselves through the media?

1. Many cubs now have social media accounts
2. Some football clubs have their own TV channels
3. Increased interaction with fans.

MUTV

G. *How can an increased income improve a sport or club*

Sport(3)	1. Bigger prize money for tournaments 2. More teams in tournaments 3. Higher participation levels
Club *(4)*	1. Build new facilities 2. Invest in new equipment 3. Buy better players 4. Employ more coaches/experts

Key information

Sky sports channels	Skysports Golf Skysorts Cricket Skysports F1
Social media accounts	Real Madrid FC have 200+million followers on Twitter
Educating the audience	Through analysis in highlights
Increase income	Through media rights
Rises in participation	Cycling participation rises around the time of the Olympics
Positive role models	Usain Bolt Nicola Adams Mo Farah
Exposure of minority sports	Increased TV time. Highlights on BBC Sport
MNF	Monday night football provides key analysis to help educate people
Jargon Buster	ITV racing explain specific words related to horseracing
Ashes Zone	Give demonstrations on how to play shots properly and different bowling techniques
Golf swing analysis	Allows you to track your ball and analysis your swing
Serve Analysis	Gives a slow-motion analysis of how to serve effectively

Year 10 Cambridge National- Media and Sport- Term 2

What we are learning this term:

- **A.** ***How media can increase exposure of minority sports***
- **B.** ***How it provides an increase in promotional opportunities***
- **C.** ***How it educates its audience***
- **D.** ***How media increases income for sports***
- **E.** ***How the media inspires people to participate***
- **F.** ***How it provides competition between sports***

Main assessment objectives

Learning outcome: Understand the positive effects that media can have on sport

A. Key question from Assessment objectives?

	Key definition
	A sport that is not very popular
	The opportunity to promote a brand or business
	Money generated
	Taking part in sport
	Greater publicity from the media
	The rights to share media
	Money invested into projects/equipment
	A person looked to by others as an example

A. What sports are minority sports in the UK but maybe not in other parts in the world?

American football- USA
Table tennis- China
Badminton- Asia
Ice Hockey- Canada

C. How might a club get more spectators?

1. Cheap tickets for children or older people
2. Alternative formats of the game

How may the media increase participation?	How might the media educate people?

A. Give 5 examples of minority sports in the UK

1. Archery
2. Squash
3. Ultimate frisbee
4. Lacrosse
5. Water polo

A. How can clubs promote themselves through the media?

MUTV

G. *How can an increased income improve a sport or club*

Sport(3)

Club *(4)*

Key information

	Skysports Golf Skysports Cricket Skysports F1
	Real Madrid FC have 200+million followers on Twitter
	Through analysis in highlights
	Through media rights
	Cycling participation rises around the time of the Olympics
	Usain Bolt Nicola Adams Mo Farah
	Increased TV time. Highlights on BBC Sport
	Monday night football provides key analysis to help educate people
	ITV racing explain specific words related to horseracing
	Give demonstrations on how to play shots properly and different bowling techniques
	Allows you to track your ball and analysis your swing
	Gives a slow-motion analysis of how to serve effectively

Year 10 BTEC Health and Social Care- Component 1: Human Lifespan Development. LAA

What we are learning this term:

A. Key words
B. What are the main life stages
C. What are the 4 areas of growth and development (PIES)?
D. How do Humans develop physically (P)?

A.	Key words for this Unit
Characteristics	Something that is typical of people at a particular life stage.
Life stages	Distinct phases of life that each person passes through.
Growth	Increased body size such as height, weight.
Development	Involves gaining new skills and abilities such as riding a bike.
Gross motor development (**G**)	Refers to the development of large muscles in the body e.g. Legs
Fine motor development **(F)**	Refers to the development of small muscles in the body e.g. Fingers
Language development	Think through and express ideas
Contentment	An emotional state when people feel happy in their environment, are cared for and well loved
Self-image	How individuals see themselves or how they think others see them
Self-esteem	How good or bad an individual feels about themselves and how much they values their abilities.
Informal relationships	Relationships formed between family members
Friendships	Relationships formed with people we meet in the home or in situations such as schools, work or clubs
Formal relationships	relationships formed with non-family/friends – such as teachers and doctors.
Intimate relationships	romantic relationships.

B	What are the main life stages?	
Age Group	**Life Stage**	**Developmental Characteristics and Progress**
0-2 years	Infancy	Sill dependent on parents but growing quickly and developing physical skills.
3-8 years	Early Childhood	Becoming increasingly independent, improving thought processes and learning how to develop friendships.
9-18 years	Adolescence	Experiencing puberty, which bring physical and emotional changes.
19-45 years	Early Adulthood	Leaving home, making own choices about a career and may start a family.
46-65 years	Middle Adulthood	Having more time to travel and take up hobbies as children may be leaving home; beginning of the aging process.
65+ years	Later Adulthood	The aging process continues, which may affect memory and mobility.

C	What are the 4 areas of growth and development (PIES)?
Physical Development (P) 	P = growth patterns and changes in the mobility of the large and small muscles in the body that happen throughout life.
Intellectual Development (I) 	I = how people develop their thinking skills, memory and language.
Emotional Development (E) 	E = how people develop their identity and cope with feelings.
Social Development (S) 	S = describes how people develop friendships and relationships.

D.	How do humans develop physically (P)?
0-2	• Gross Motor Development (G) = life head, roll over, sit unaided, walk holding onto something, walk unaided, climb stairs, kick and throw, walk upstairs, jump. • Fine Motor Development (F) = hold a rattle for short time, reach for an item, pass item from one hand to other, hold between finger and thumb, scribble, build a tower, use a spoon, draw lines and circles, turn page of a book.
3-8	• G = ride a tricycle, catch a ball with two hands, walk backwards and step to the side, bounce a ball, run on tiptoes, ride a bike, catch a ball with one hand, balance along a thin line. • F = hold a crayon to make circles and lines, thread small beads, copy letters and shapes with a pencil, make detailed models with construction bricks, joined up writing, use a needle to sew.
9-18	• Girls = puberty starts at 10-13 years, breasts grow, hips widen, menstruation begins, uterus and vagina grow. • Boys = voice deepens, muscles and strength increase, erections, facial hair, produce sperm. • Both = pubic and underarm hair, growth spurts.
19-45	• Physically mature, sexual characteristics are fully formed, peak of physical fitness, full height, women at most fertile. • Later in the life stage people may put on weight, hair turn grey and men may lose hair, women's menstrual cycle was slow down
46-65	• People may put on weight, hair turn grey and men may lose hair, women's menstrual cycle was slow down. • Women go through the menopause – when menstruation ends and they can no longer become pregnant. • Men may continue to be fertile throughout life but decrease in sperm production in this life stage.
65+	• Women's hair becomes thinner, men may lose most of their hair, skin loses elasticity and wrinkles appear, nails hard and brittle, bones weaken, higher risk of contracting infections disease and illness. • Stamina, reaction time, muscle and senses (hearing, sight, taste) all reduce.

Year 10 BTEC Health and Social Care- Component 1: Human Lifespan Development. LAA

What we are learning this term:

A. Key words
B. What are the main life stages
C. What are the 4 areas of growth and development (PIES)?
D. How do Humans develop physically (P)?

A.	**Key words for this Unit**
Characteristics	
Life stages	
Growth	
Development	
Gross motor development (**G**)	
Fine motor development **(F)**	
Language development	
Contentment	
Self-image	
Self-esteem	
Informal relationships	
Friendships	
Formal relationships	
Intimate relationships	

B	**What are the main life stages?**	
Age Group	**Life Stage**	**Developmental Characteristics and Progress**
0-2 years		
3-8 years		
9-18 years		
19-45 years		
46-65 years		
65+ years		

C	**What are the 4 areas of growth and development (PIES)? Explain them.**
Physical Development (P) 	
Intellectual Development (I) 	
Emotional Development (E) 	
Social Development (S) 	

D.	**How do humans develop physically (P)?**
0-2	
3-8	
9-18	
19-45	
46-65	
65+	

Year 10 BTEC Health and Social Care- Component 1: Human Lifespan Development. LAA

What we are learning this term:

E. How do humans develop intellectually (I)?
F. How do humans develop emotionally (E)?
G. How do humans develop socially (S)?

E. *How do humans develop intellectually (I)?*

Infancy 	At birth brains are already well developed. Infants use all of their senses to learn about the world around them. Infancy is a time of rapid intellectual development. At 3 months infants can remember routines. At 9-12 months infants are developing their memory. At 12 months to 2 years infants understand processes and how things work. Language begins to develop during this stage.
Early childhood 	At 3-4 years of age children become more inquisitive and enjoy exploring objects and materials. They ask lots of questions and enjoy solving simple problems. At 5-6 years old children's memory is becoming well developed. This helps them to talk about the past and anticipate the future.
Adolescence 	During this time abstract thought is developed – thinking logically and solving complex problems are possible by the end of this life stage. Adolescents may find it difficult to understand the consequences of their actions but they are developing empathy – seeing things from another's point of view.
Early and Middle Adulthood 	By these life stages most adults have a good range of general knowledge. They use this knowledge and experience to solve problems that they come across in their personal and work lives.
Later adulthood 	During this life stage people continue to learn and develop intellectually, however, their speed of thinking and memory may decline. This may affect their ability to think through problems and make logical decisions.

F. How do humans develop emotionally (E)?

Infancy and Early Childhood	Adolescence and adulthood
Bonding and Attachment Bonding and attachment describe the emotional ties an individual forms with others. It starts in the first year of life between infants and their main carer because that person fulfils the infants needs which makes them feel safe and secure.	**Self-image and Self-esteem** Self-image is heightened during adolescence because of the physical changes we experience. Our self-esteem can change from day to day based on a variety of factors including employment and health status.
Security For infants and young children, security is mainly the feeling of being cared for, being safe and loved – it is closely linked with attachment.	**Security** Adolescence may feel insecure because of puberty. Adults may feel insecure about relationships, job security of income. Later in life adults may feel insecure about staying in their own home or going into a care home. Feeling secure helps us cope better with everyday situations.
Contentment Infants and young children are content if they have had enough food, love, are clean and dry and all other needs are met.	**Contentment** When people feel discontented with aspects of their life – for example, relationships or work – their emotions can be negatively affected.
Independence Independence is to care for yourself and make your own decisions. Infants are completely dependent on their carer. As children enter early childhood they develop more independence – feed self and get dressed. However, children still need a lot of help from their carer.	**Independence** Adolescence are dependent on their parents but are beginning to enjoy more independence and freedom to make their own choices. Adults enjoy living independently and controlling their own lifestyle and environment. Later in adulthood people become more dependent on others again.

G. How do humans develop socially (S)?

Life Stage	Types of relationships and social development
Infancy	• Solitary Play - From birth to 2 years, infants tend to play alone although they like to be close to their parent or carer; they may be aware of other children but not play with them.
Early childhood	• Parallel Play - From 2 to 3 years, children enjoy playing next to other children but are absorbed in their own game; they are not socialising or playing with other children. • Cooperative or social play – from 3 years upwards, children start to play with other children; they have developed social skills that help them to share and talk together; they often make up games together, such as being a shopkeeper and customer.
Adolescence	• People become more independent and build more informal and formal relationships. • Social development closely linked to emotions. • Often strongly influenced by peers – 'peer group pressure'.
Early adulthood	• Increased independence means greater control of decisions about informal relationships. • People may be developing emotional and social ties with partners and their own children. • Social life often centred on the family but social skills are required to build and maintain formal relationships.
Middle adulthood	• Children have often left home, but there are likely to still be strong family relationships. • Social circles may expand through travel, spending more time on hobbies or joining new groups.
Later adulthood	• Retired by this stage and so may enjoy more social time with family and friends or join new groups. • However, later in the life stage people may begin to feel isolated if they struggle to get out or if partners and friends pass away.

Year 10 BTEC Health and Social Care- Component 1: Human Lifespan Development. LAA

What we are learning this term:

E. How do humans develop intellectually (I)?
F. How do humans develop emotionally (E)?
G. How do humans develop socially (S)?

E.	***How do humans develop intellectually (I)?***
Infancy 	
Early childhood 	
Adolescence 	
Early and Middle Adulthood 	
Later adulthood 	

F.	**How do humans develop emotionally (E)? Explain each.**
Infancy and Early Childhood	**Adolescence and adulthood**
Bonding and Attachment	**Self-image and Self-esteem**
Security	**Security**
Contentment	**Contentment**
Independence	**Independence**

G.	**How do humans develop socially (S)?**
Life Stage	Types of relationships and social development
Infancy	
Early childhood	
Adolescence	
Early adulthood	
Middle adulthood	
Later adulthood	

Year 10 BTEC Health and Social Care- Component 1: Human Lifespan Development. LAA

What we are learning this term:

H. Key words
I. How do physical factors affect development?
J. How does lifestyle affect development?
K. How do social and cultural factors affect development?
L. How do relationships and isolation affect development?
M. How do economic factors affect development?

H	Key words:
Genetic inheritance	Genes the person inherits from their parents
Genetic disorders	Health conditions that are passed on from parent to child through their genes. e.g. cystic fibrosis
Lifestyle Choices	Include the food you eat and how much exercise you do. They also include whether you smoke, drink alcohol or take illegal drugs.
Appearance	The way that someone or something looks
Factor	A circumstance, fact, or influence that contributes to a result
Gender role	The role and responsibilities determined by a person's gender.
Culture	ideas, customs, and social behaviour.
Role models	Someone a person admires and strives to be like.
Social Isolation	Lack of contact with other people
Material possessions	Things that are owned by an individual
Economic	To do with person's wealth and income.

I. How do physical factors affect development?

	Genetic Disorders	Disease and Illness
Physical Development	A person's physical build can affect physical abilities. Inherited diseases may affect strength and stamina needed to take part in exercise.	May affect the rate of growth in infancy and childhood. Could affect the process of puberty. Could cause tiredness and/or mobility problems. Could limit of prevent participation in physical activity.
Intellectual Development	Some genetically inherited diseases may result in missed schooling, or have a direct impact on learning – conditions such as Edward's syndrome impact learning.	School, college, university, work or training could be missed. Memory and concentration could be affected.
Emotional Development	Physical appearance affects how individuals see themselves (self-image), and how others respond to them impacts on their confidence and wellbeing.	May cause worry and/or stress. Individuals may develop negative self-esteem. Could lead to feelings of isolation.
Social Development	Physical characteristics or disease may affect opportunities or confidence in building friendships and becoming independent.	May cause difficulty in having opportunities to socialize with other and build wider relationships.

J. How does lifestyle affect development?

Lifestyle choices include**;** diet, exercise, alcohol, smoking, sexual relationships and illegal drugs, appearance.

Positive lifestyle choices lead to:
- Healthy hair, skin, nails and teeth
- Positive self-image
- Energy and stamina
- Good health
- Emotional security

Negative lifestyle choices lead to:
- Being overweight or underweight
- Lack of energy
- Ill health
- Negative self-image
- Sexually transmitted diseases (STDs)
- Unplanned pregnancy

Our **appearance** includes: body shape, facial features, hair and nails, personal hygiene and our clothing.
Our appearance can affect the way we view ourselves- self-image

Positive self-image:
- Feel good about yourself.
- Healthy hair, skin, nails and teeth
- Big social circle.
- High self-esteem.
- High self-confidence.

Negative self-image
- Low self-esteem
- Low self-confidence
- Can lead to eating disorders e.g. anorexia
- Can lead to anxiety or depression
- Can lead to self-harm
- Negative impact on building relationships- social circle decreases.

Year 10 BTEC Health and Social Care- Component 1: Human Lifespan Development. LAA

What we are learning this term:

H. Key words
I. How do physical factors affect development?
J. How does lifestyle affect development?
K. How do social and cultural factors affect development?
L. How do relationships and isolation affect development?
M. How do economic factors affect development?

H	Key words:
Genetic inheritance	
Genetic disorders	
Lifestyle Choices	
Appearance	
Factor	
Gender role	
Culture	
Role models	
Social Isolation	
Material possessions	
Economic	

I. How do physical factors affect development?

	Genetic Disorders	Disease and Illness
Physical Development		
Intellectual Development		
Emotional Development		
Social Development		

J. How does lifestyle affect development?

Lifestyle choices include**;** diet, exercise, alcohol, smoking, sexual relationships and illegal drugs, appearance.

Positive lifestyle choices lead to:

-
-
-
-
-
-

Negative lifestyle choices lead to:

-
-
-
-
-
-

Our **appearance** includes: body shape, facial features, hair and nails, personal hygiene and our clothing.
Our appearance can affect the way we view ourselves- self-image

Positive self-image:

-
-
-
-
-
-

Negative self-image

-
-
-
-
-
-

Year 10 BTEC Health and Social Care- Component 1: Human Lifespan Development. LAA

What we are learning this term:

K. How do social and cultural factors affect development?
L. How do relationships and isolation affect development?
M. How do economic factors affect development?

K How do social and cultural factors affect development

Development can be influenced by the persons **culture or religion** because it affected their:
- **Values**: how they behave
- **Lifestyle choices**: diet, appearance

Positive affects of a persons culture/religion:	Negative affects of a persons culture/religion:
• A sense of security and belonging from sharing the same values and beliefs with others. • Good self-esteem through being accepted and valued by others	• Feeing discriminated against by people who do not share their religion/culture which leads to low self-image • Feeing excluded and isolated because their needs like diet, are not catered for.

Community refers to: local area where people live, school, religious group or hobby clubs. They have common values and goals.

Belonging to a community:	Not belonging to a community:
• Brings sense of belonging essential for emotional development. • Building and maintaining relationships- social development • Feeling of security. • Increases self-image and self-confidence	• Minimal contact with others- isolation • Anxiety leading to depression • Making negative lifestyle choices • Feeling less secure • Difficulty in building relationships • Slow self-image and self-confidence

Traditionally, men and women had distinctive responsibilities and expectations which for their gender called **gender roles**. However, nowadays UK equality legislation stops people being discriminated against because of their gender.

What happens when people face discrimination because of gender:
- They might be excluded from a group
- They may be refused promotion at work
- They may be expected to carry out a particular role
- They may be paid less.

L How do relationships and isolation affect development?

1	In adolescence, young people often argue with parents because they want more independence- negative affect on family relationships- can lead to isolation from them.
2	In later life, older people might need to rely on their children for support. This then has a positive affect on their development because all their need are catered for.
3	Relationships are important because they provide emotional security, contentment and positive self- esteem.
4	The breakdown of personal relationships can have a negative effect on persons PIES development: Low self-esteem, loss of confidence, stress.
5	Isolation can happen when individuals do not have the opportunity of regular contact with others. They have no one to share their feelings, thoughts and worries with resulting in feeling insecure and anxious.
6	Isolation can happen because they live alone, are unemployed or retired, are discriminated against or have an illness or a disability.
7	People have role models- infants learn by copying others, and adolescence base their identity on their role models. Role models can influence how people see themselves compared to others and their lifestyle chices0 can be positive or negative.

M How do economic factors affect development

Having enough money gives individuals and their families feeling of content and security →	Not having enough money causes stress and anxiety.
Having enough money means that the whole family is eating healthy. →	Not having enough money can mean that the family is not about to eat well balanced diet, and this has a negative effect on their physical development

Elderly people rely on state pension to live which is not enough and have to cut down on travel, shopping, bills, therefore it speeds their aging process and lead to health decline.

Living in good housing with open spaces:	Living in a poor housing with cramped and damp conditions:
• Feeling good about themselves • Be more likely to stay healthy, • Space to take exercise • Feel safe ad secure • Warmth	• Have low self-esteem and self-image • Be more likely to experience ill health • Be lesson likely to exercise • Anxious and stressed.
Material possession like a new phone or coat has a positive effect on the persons development because they might have more friends as they look nicer, high self-image. →	Not having a phone or the newest trainers can have a negative affect in the persons self-image and self-esteem. They might feel isolated from others.

Year 10 BTEC Health and Social Care- Component 1: Human Lifespan Development. LAA

K How do social and cultural factors affect development

Development can be influenced by the persons **culture or religion** because it affected their:
- **Values**: how they behave
- **Lifestyle choices**: diet, appearance

Positive affects of a persons culture/religion:	Negative affects of a persons culture/religion:
•	•
•	•

Community refers to:

Belonging to a community:	Not belonging to a community:
•	•
•	•
•	•
•	•
•	•

Traditionally, men and women had distinctive responsibilities and expectations which for their gender called **gender roles**. However, nowadays UK equality legislation stops people being discriminated against because of their gender.

What happens when people face discrimination because of gender:
-
-
-
-

What we are learning this term:

K. How do social and cultural factors affect development?
L. How do relationships and isolation affect development?
M. How do economic factors affect development?

L How do relationships and isolation affect development?

1	
2	
3	
4	
5	
6	
7	

M How do economic factors affect development

Having enough money….	Not having enough money ……
•	•
•	•

Having enough money means that….	Not having enough money can mean that…
•	•
•	•

Elderly people rely on state pension to live which is not enough and have to cut down on travel, shopping, bills, therefore it speeds their aging process and lead to health decline.

Living in good housing with open spaces:	Living in a poor housing with cramped and damp conditions:
•	•
•	•
•	•
•	•
•	•

Material possession like a new phone or coat has a positive effect on the persons development because…..	Not having a phone or the newest trainers can have a negative affect on…. Because….
•	•
•	•
•	•

Year 10 BTEC Health and Social Care- Component 1: Human Lifespan Development. LAB

What we are learning this term:

N. What are life events?
O. How do people deal with life events?
P. How is dealing with life events supported?

N.	What are life events?
Life Events	Life events are expected or unexpected events that can affect development. Examples include starting nursery, getting married or becoming ill.
Expected Life Events	Expected life events are life events that are likely to happen. Examples include starting primary school aged four and secondary school aged 11.
Unexpected Life Events	Unexpected life events are events which are not predictable or likely to happen. Examples could include divorce and bereavement (the death of a loved one).
Physical Events	Physical events are events that make changes to your body, physical health and mobility. Examples include illnesses such as diabetes and injuries and accidents such as car accidents.
Relationship Changes	Relationship changes could be new relationships such as the birth of a sibling, a new friendship or romantic relationship. Relationship changes can also be changes to existing relationships such as divorce.
Life Circumstances	Life circumstances are different situations that arise in our life that we must deal with. Examples include redundancy (losing a job), moving house or retirement (finishing work in later adulthood).

O.	How do people deal with life events?
Individual	• The effects of life events vary from person to person based on how they deal with their new situation. • Some people react to able to react to life events positively, others find it more difficult due to a range of factors.
Factors	• Factors that may affect how people cope with life events: age, other life events happening at the same time, the support they have, their disposition (their mood, attitude and general nature), their self-esteem, their resilience (how quickly they recover).
Adapting	• Adapt – to adjust to new conditions or circumstances. • Expected on unexpected life events can often force people to make changes to their lives. Individuals must find their own way to adapt to the changes that life throws at them.
Resilience	• Resilience – a person's ability to come to terms with, and adapt to, events that happen in life. • Resilience is stronger in people who have a positive outlook on life, accept that change happens, has supportive family and friends and plans for expected life events.
Time	• Sometimes people need a long time to adapt to unexpected life events. • It can take time for people to move on from and accept difficult changes in their life.

P.	How is dealing with life events supported?
Types of Support	**How this helps individuals deal with life events**
Emotional Support	Emotional support is needed to help individuals deal with all life events – expected and unexpected. Having someone to talk to helps people feel secure and adapt to change. Sometimes individuals can find this support in family and friends or professionals to process difficult life events – such as bereavement.
Information and Advice	Life events, particularly unexpected ones, can cause people to feel like they do not know what to do. Information and advice can help people to have a better understanding of their situation, which allows them to deal with it more successfully. Information and advice help them know where to go for help, the choices than are available to them and how to make healthy choices.
Practical Help	• Financial help – an individual may need money to help them adapt to a life change i.e. money to pay for a stair lift if their mobility has been effected. • Childcare – an individual may need support looking after their children i.e. a lone parent after a divorce that needs to go to work. • Transport – an individual may need support with transport if they have mobility problems i.e. a car could be adapted to support a person who has had an accident and can no longer walk.
Informal Support	Informal support is the support an individual receives from partners, family and friends. It is usually the first form of support an individual experiences after and expected or unexpected life event. Informal support can provide reassurance, encouragement, advice, a sense of security, someone to talk through options with and practical help.
Professional Support	Formal support may be provided by statutory care services (the state), private care services and charitable organizations. Professional support may include counsellors, teachers, careers advisers, occupational therapists, social workers and health specialists. Professional support may be needed to help people with a health condition, regain mobility, deal with life changes and emotions, get advice and information or change their lifestyle.
Voluntary Support	Organizations offering voluntary support are charities, community groups and religious groups. At voluntary support services, many staff are volunteers (they work for free), but they also employ qualified people who are paid by donations. Community groups work at a local level to meet the needs of people living in a specific neighbourhood i.e. foodbanks. Religious groups are formed by people who share the same religious or spiritual beliefs but they help all people in need regardless of their beliefs and background i.e. a church run soup kitchen for the homeless.

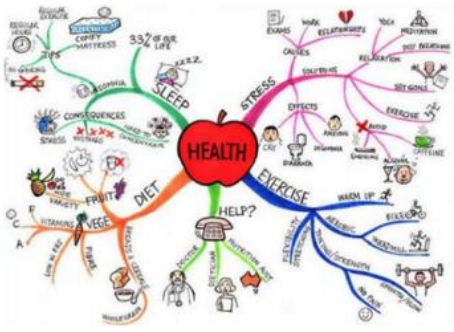
Year 10 BTEC Health and Social Care- Component 1: Human Lifespan Development. LAB

What we are learning this term:
N. What are life events?
O. How do people deal with life events?
P. How is dealing with life events supported?

N.	What are life events?
Life Events	
Expected Life Events	
Unexpected Life Events	
Physical Events	
Relationship Changes	
Life Circumstances	

O.	How do people deal with life events?
Individual	
Factors	
Adapting	
Resilience	
Time	

P.	How is dealing with life events supported?
Types of Support	**How this helps individuals deal with life events**
Emotional Support	
Information and Advice	
Practical Help	
Informal Support	
Professional Support	
Voluntary Support	

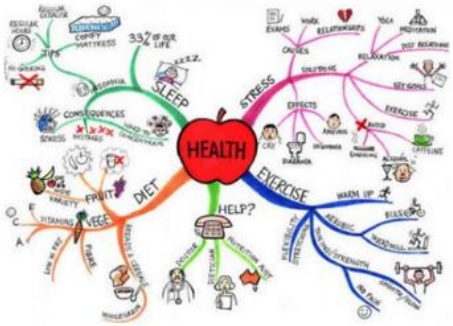
Planning Item	Purpose	Contents	Example
Mood board	Central focus of ideas, in one place. Generate ideas for a client to meet their approval. Used to share ideas and concepts.	Images Colours Text – Fonts, colours, styles, keywords Textures – Fabrics and other materials Digital – Sound and video clips	
Mind Map / Spider Diagram	Generate and outline ideas quickly. Develop and show links between thoughts, aspects and processes. Show a range of ideas and connections between them.	Central node with main theme. Sub-nodes with interconnecting lines/branches. Text. Images can also be used.	
Visualisation Diagram	Plan the layout of a still image in a visual manner. Shows how the finished item may look so that changes can be made if needed. Provides the graphic designer with information needed to create. To show a client what the product will look like.	Multiple images and graphics showing size and position. Colours and colour scheme. Position and style of text. Fonts to be used. Annotations providing more detail.	

CREATIVE IMEDIA – TERM 1 & 2 PLANNING AND REQUIREMENTS

Storyboard	Provide a visual representation of a how a media project will look. Provide a graphical illustration of a sequence of movements. Provide guidance on what scenes to film or create. Help visualise the characters and the scenes.	Images. Locations. Camera shot types and angles. Camera movement. Shot length and timings. Lighting. Sound.	
Script	Identify the location where the action takes place. Identify who will be in the scene. Provide stage directions for actors and production crew. Provide dialogue for actors.	Set locations. Scene descriptions. Scene/stage directions. Camera shot types. Camera movement. Sounds and sound effects. Names of actors/ characters. Dialogue.	

Requirements	Purpose	Content
Client	Clear statement of what is to be created / produced. Provides the developer / creators with an outline of expectations and constraints (timescale).	Statement of product. Purpose of the product. Target Audience Content Timescale Restrictions House Style (Colours/ themes)
Target Audience	Identifies who the final product is intended for. Provides the developer/ creators with the necessary information for them to design the product to appeal to the Target Audience.	Age Gender Location – Local, National, International Ethnicity – Background, Culture, Race, Religion, Language

Research	Definition	Examples
Primary Sources	Information is obtained firsthand from an original source.	Autobiography First hand account Diary Interview Video Footage Photo Official Records
Secondary Sources	Information is obtained second hand where somebody else has created the data.	Biography Second hand account History textbook Magazine Article Report Other people's products News Broadcast

Planning Item	Purpose	Contents	Example
Mood board			
Mind Map / Spider Diagram			
Visualisation Diagram			

Storyboard			
Script			

Requirements	Purpose	Content
Client		
Target Audience		

Research	Definition	Examples
Primary Sources		
Secondary Sources		