

Year 10 Knowledge Organiser Autumn Term



"Knowledge is power. Information is liberating."

Kofi Annan

Contents	Page number
Introduction	Page 3
English	Page 4-11
Maths	Page 12-13
Science	Page 14-27
History	Page 28-32
Geography	Page 33-38
Spanish	Page 39-42
Religious Studies	Page 43-47
Business Studies	Page 48- 53
Art	Page 54-56
Music	Page 57-58
Drama	Page 59-61
Sport	Page 62-64
Construction	Page 65-69
Hospitality	Page 70-72
Sociology	Page 73-74
Health and Social Care	Page 75-78
Photography	Page 79- 81
Study Techniques	Page 82-84

Introduction

At Alsop High School, we know that if you build really good revision strategies from the beginning of the school year, this will help you become a more effective student. This is based on evidence, so we know that if you do it well, it will work. This approach is vital especially in year 10 and year 11..

In this knowledge organiser is all the key knowledge you need for each subject to help you become an expert in each area.

There are exact facts, dates, events, characters, concepts and precise definitions that we need you to remember for each subject in Term 1. We know that doing a little often and on a regular basis will help you to commit this information to memory.

What do I start with and how often should I do this?

You will have a homework task each week for each subject you study. Homework at Alsop will be clearly identified for you on Brom-com and will identify particular parts of this Knowledge Organiser that you must use in order to complete the tasks set by your subject teachers. This will be a combination of application tasks in which you must use the information from the Knowledge Organiser to answer questions. In addition, you should use the revision techniques detailed at the back of the Knowledge Organisers for learning key information.

You must carry your knowledge organiser and with you at all times to support your classwork and your revision.

GCSE English Literature

Term 1a A C	Christmas Carol A: Context		
1. Dickens'	a) Charles Dickens was born on February 7,1812 in Hampshire into a middle-class family.		
Life	b) His dad was imprisoned for debt leading to poverty for the family.		
	c) At the age of 12, Charles was put to work at Warren's Blacking Factory.		
	d) He worked long hours and found this period of his life hellish.		
	e) It made him to readers' attention to the plight of the poor when he later found success as an author.		
	f) Many of his works are about social hardships and inequalities.		
	g) He wrote A Christmas Carol in 1843.		
2. Industrial	a) From 1780, factory owners in Britain began to use coal-fired steam engines to power the machines in big factories,		
Revolution	bringing great fortune.		
	b) People flocked from the countryside to the cities.		
	c) London's population between 1800 and 1900 grew from 1 million to 6 million people.		
	d) This led to over-crowding, hunger, disease and crime.		
	e) Children suffered the most and were exploited by factory owners who forced them to work long hours in dangerous		
	conditions.		
3. Poverty	a) Industrial revolution led to a gap between the rich and poor with many struggling to survive, relying on the		
	generosity of those better off than themselves.		
	b) The 1834 Poor Law Amendment reduced the amount of help available to the poor, creating workhouses.		
	c) Workhouses were created which poor people would have to live and work in, if they were unable to pay for their own housing.		
	d) Conditions in the workhouses were incredibly harsh and designed to humiliate people into not wanting to go there.		
	e) Men, women and children (mostly orphans) lived and worked in the workhouses, which were very crowded –		
	making living conditions unhealthy and unpleasant.		
	f) In A Christmas Carol Scrooge voices his support for workhouses		
4. Class	a) There were still relatively distinct social classes in operation: the nobility, the upper class, the middle class and the		
Divides	working class.		
	b) Life was terrible for the poorest: lack of money resulted in negligible food supply.		
	c) For some working families, money was so tight that they required their children to work in order to survive.		
5. Christmas	a) We now associate Christmas as being a time of seasonal goodwill, love and friendship.		
	b) However, before the Victorian era, there was no Santa Claus, Christmas cards and no holidays from work.		
	c) Writers, such as Dickens, encouraged middle class families to share their wealth and act selflessly.		



Key Vocabulary (Frayer Models) (H)		
WORD	DEFINITION	
24. Omniscient	Knowing everything	
25. Misanthropic	Disliking people in general and having an anti-social	
	attitude	
26. Facetious	To treat something serious with a deliberate lack of care	
27. Caustic	Bitter, sarcastic and scathing tone	
28. Condescension	An attitude of disdainful superiority	
29. Avaricious	To be extremely greedy	
30. Congenial	A pleasant of friendly personality	
31. Supplication	The action of begging for something earnestly or	
	humbly	
32. Benevolence	Well-meaning and kind	
33. Consolation	To comfort after disappointment	
34 Apoplectic	To be overcome with anger	
35. Opulence	To show extreme wealth	
36. Heresy	A belief that goes against the teachings of the Christian	
	church	
37. Penitence	Showing sorrow or regret	
38. Odious	Extremely repulsive	
39. Latent	Hidden or dormant	
40. Illustrious	Well-known and respected	
41. Feign	To pretend to be affected by something	
42. Irrepressible	Uncontrollable	

C: Form and Structure		
12. Novella	a short novel or long short	
	story.	
13. Staves	Stave is another word for	
	"staff." In music, a staff is	
	how music is written.	
14. Exposition	Background information	
	about plot, characters, setting	
	etc.	
15. Antithesis	People or things that oppose	
	each other, Scrooge at the	
	start/Scrooge at the end.	
	Scrooge/Fred	
16. Cyclical	Starts and ends in the same	
Structure	place. Repeats actions or	
	words from start and end	
17. Surface Level	Obvious understanding of the	
Story	story and characters	
18. Symbolic	Understanding that the story	
Level Story	and characters have a much	
	deeper meaning and	
	represent deeper issues in	
	society	



B: Subject Terminology		
6. Allegory	A story that can interpreted to reveal a hidden meaning. Individual symbols often contribute to the allegorical meaning of the novel. E.g. Robinson Crusoe is an allegory of human condition.	
7. Realism	When the tone and style of writing conveys an authentic and believable account of human experience.	
8. Third person limited omniscient Narrator	The narrator only knows the thoughts and feelings of one character.	
9. Symbolism	Symbolism can be an object, person, situation, event or action that has a deeper meaning in the overall context beyond a surface understanding.	
10. Irony	Words are used in such a way that their intended meaning is different from the actual meaning of the words	
11. Characterisation	isation Built up description of character in text. How the character is presented to the reader.	

	E: Plot Summary
	1. Introduced to Ebenezer Scrooge on Christmas Eve. He is a lonely miser obsessed with money.
	2. We learn Jacob Marley, Scrooge's business partner, died exactly 7 years earlier.
19.	3. Scrooge is irritated that Christmas Day seems to be interrupting his business.
Stave	4. Scrooge is visited by his nephew Fred, who invites his uncle for Christmas dinner. Scrooge refuses.
One	5. Scrooge is visited by two charity workers asking for donations. Scrooge refuses and exclaims he wants to be left alone
	6. Scrooge, when he is home, is visited by the Ghost of Jacob Marley – waning him he will be visited by three more ghosts to help him change his ways.
	Scrooge is visited by the Ghost of Christmas Past who takes him to witness his past.
20.	2. Scrooge is taken first to his schoolboy years and he is reminded how his friends would go home for Christmas while he was left at school3. We see him with his sister, who one year took him home for the holidays
Stave	4. Next we are shown Scrooge as a young apprentice working for Fezziwig. Dickens describes the Christmas ball Fezziwig organised for his employees.
Two	5. Finally Scrooge is taken to see his ex-fiancée, Belle. We see the moment when break up, as money has taken over
	6. Scrooge cannot bear to see anymore and struggles with the spirit.
	Scrooge is then visited by the Ghost of Christmas Present. Output Description:
21	2. The spirit shows Scrooge how the Cratchit family celebrate Christmas. Scrooge asked if Tiny Tim will live. The spirit explains unless there changes, he will die.
21. Stave	3. Scrooge is then taken to see how others celebrate Christmas: miners, lighthouse workers, sailors on a ship.4. He is then taken to Fred's house at Christmas, where they are playing games.
Three	5. The spirit then begins to age and from under the spirits robe appear two children: Want and Ignorance.
Tillee	3. The spirit then begins to age and from under the spirits robe appear two children. Want and ignorance.
	1. Scrooge meets the Ghost of Christmas Yet to come.
	2. The spirit takes Scrooge to see a group of businessmen discussing someone who has died.3. Scrooge is taken to see Old Joe, where he is in the process of buying property of the dead man – which have been stolen.
22.	4. Scrooge returns to the Cratchit house where Tiny Tim has now died.
Stave	5. Scrooge is then taken to a graveyard and is shown a grave stone and realises that the stone is for him.
Four	6. Scrooge falls to his knees and begs that he will change his ways.
Toul	o. Scrooge rails to his knees and begs that he will enable his ways.
23.	1. Scrooge wakes up in his own bed.
Stave	2. Scrooge sends a boy to buy the biggest turkey in the shop to give to Bob Cratchit.
Five	3. Scrooge meets one of the charity collectors from earlier and tells him he will give a large donation.
	4. Scrooge goes to Fred's house and is welcomed in. He enjoys the dinner and party.
	5. On boxing day, Scrooge arrives early to work and plays a trick on Bob. He then tells him that he is going to raise his salary and promises to help Bob's struggling family.
	6. Scrooge is described to have completely changed and becomes a 'second father' to Tiny Tim who did not die.

	F: Characters		
43. Ebenezer	a) Scrooge is the lead protagonist of the novella.		
Scrooge	b) He is a miserly owner of a counting house (this would now be called an accountant office)		
	c) Initially greedy, selfish and cold, Scrooge hates Christmas and lacks any form of Christmas spirit.		
	d) He experiences a moral and psychological transformation through his visits from the Ghosts of Christmases Past, Present and Yet to come.		
	e) His reversal, from the anti-Christmas figure to the spirit of Christmas shows clearly the message of hope and forgiveness Dickens intended for his readers.		
43. Bob	a) Scrooge's loyal clerk.		
Cratchit	b) He is very poorly treated by his boss.		
	c) His large family lives in cold and poverty.		
	d) Bob is a prime example of the virtues of Christmas and is the opposite of Scrooge.		
	e) He is also a symbol of forgiveness – he toasts Scrooge, despite his horrible work conditions.		
	f) In the face of Scrooge's eventual remorse, is open and accepting rather than bitter.		
44. Jacob	a) In the living world, Ebenezer Scrooge's equally Greedy partner.		
Marley	b) Marley died seven years before the narrative opens.		
	c) He appears to Scrooge as a ghost condemned to wander the world bound in heavy chains.		
	d) Marley hopes to save his old partner from suffering a similar fate.		
45. Fred	a) Scrooge's nephew.		
	b) A genial man who loves Christmas.		
	c) He invites Scrooge to his party each and every year, only to be refused by his grumpy uncle,		
	d) Fred is Scrooges only living relative.		
46 The	a) The first spirit to visit Scrooge.		
Ghost of	b) The Ghost of Christmas Past is a curiously childlike apparition with a glowing head.		
Christmas	c) He takes Scrooge on a tour of his past Christmas experiences.		
Past	d) The spirit uses a cap to dampen the light emanating from his head.		
46. Fan	a) Scrooge's sister and Fred's mother.		
	b) She is deceased at the time of the story, but in the vision of the Ghost of Christmas Past, she comes to visit Scrooge in the deserted schoolroom when he is a boy and brings him the happy		
	news that she is taking him home.		
	c) She is a symbol of the loving kindness of Christmas time and her relationship shows Scrooge hasn't always been a miser.		
48. Fezziwig	a) The jovial merchant with whom the young Scrooge apprenticed.		
	b) Fezziwig was renowned for his wonderful Christmas parties.		
	c) Scrooge was treated with kindness by Fezziwig		
49. Belle	a) A beautiful woman who Scrooge loved deeply when he was a young man.		
	b) Belle broke off their engagement after Scrooge became consumed with greed and the lust for wealth.		
	c) She later married another man and had children.		
	d) Scrooge finds it painful to see the life Belle went on to have without him.		
50. Mrs	a) Mrs Cratchit fills her home with the spirit of Christmas.		
Cratchit	b) Her clothes reflect her poverty, but she tries to make them festive by wearing ribbons.		
	c) Initially does not want to toast Scrooge but does after listening to her husband's compassion.		
51. Martha	a) Martha is the Cratchit's eldest daughter.		
Cratchit	b) She works in a milliner's shop. (A milliner is a person who designs, produces and sells hats.		
	c) She symbolises the young women who are exploited by factory workers as she has to work long hours – even on Christmas Day.		

F: Characters		
53. Tiny Tim	 a) The crippled son of Bob Cratchit, he is presented as vulnerable and physically weak by Dickens. b) He is a symbol of suffering, but also Tim is the merriest, bravest character of all, always reminding others of the spirit of Christmas. c) The thought of Tiny Tim's death, and its confirmation in the vision of the Ghost of Christmas yet to Come, fills Scrooge with regret. d) Saved by Scrooges generosity on in Stave 5. 	
54. The Ghost of Christmas Present		
55. The Ghost of Christmas Yet to Come	a) The Ghost of Christmas Yet to Come is the third and final spirit to visit Scrooge. b) He is a silent phantom that is clad in robes (he rather resembles the common characterisations of 'Death') c) He presents Scrooge with an ominous view of his own death: not one person cares that Scrooge has died.	

	G: Key Quotations and	Themes
	Key Quotation	Info/ Analysis
56. Stave one:	a.) Hard and sharp as flint	Simile to convey the negative description of Scrooge at start.
Marley's Ghost	b.) Solitary as an oyster	Simile to convey his lone existence and hint that there is potentially something valuable within
	d.) "I don't make myself merry at Christmas, and I can't afford to make idle people merry."	Shows his unsympathetic attitude to the poor ('idle') people
	e.) "It's enough for a man to mind his own business, and not to interfere with other people's."	He is obsessed with business and money.
	f.) "I wear the chain I forged in life" Jacob Marley	A warning for Scrooge: Marley created his own eternal punishment through his greed.
	g.) "There is no light part of my penance" Jacob Marley	Penance = Punishment
57. Stave two:	a.) From the crown of it's head there sprung a bright clear jet of light.	Refers to the Ghost of Christmas Past. The light represents truth and enlightenment.
Ghost of Christmas	b.) "Your reclamation, then. Take heed!" Ghost of Christmas Past	Reclamation = recovery/ change. Take heed = Listen and learn
Past	c.)"Your lip is trembling," said the ghost. "And what is that upon your cheek?"	Scrooge visits his old schoolhouse and shows emotion (self pity)
	d.) A solitary child, neglected by his friends, is left there still.	Description of Scrooge as a child. How has his childhood affected him?
	e) .0 "He has the power to render us happy or unhappy [] The happiness he gives is quite as much as if it cost a fortune."	Scrooge speaking of Fezziwig's generosity. He realises how an employer can affect his employees.
	f.) "I have seen your nobler aspirations fall of one by one, until the master passion; Gain, engrosses you"	Scrooge's ex-fiancée (Belle) when she leaves him because he is obsessed with 'Gain'.
	g.) "Remove me!" Scrooge exclaimed. "I cannot bear it!"	Scrooge, just before extinguishing the ghost's light (he can't bear the truth)
58.Stave three:	a.) Scrooge entered timidly and hung his head before the spirit.	Scrooge is more subdued before he meets the second ghost (Ghost of Christmas Present)
Ghost of Christmas	b.) "Oh no, kind spirit! Say he will be spared"	Scrooge shows concern and sympathy for Tiny Tim.
Present	c.) "To hear the insect on the leaf pronouncing on the too much life amongst his hungry brother in	The Ghost reminds Scrooge of his earlier words about decreasing the population of the poor. He compares
	the dust!"	Scrooge to an insect.
	d.) "I am sorry for him [] Who suffers by his ill whims? Himself, always."	Fred discusses his Uncle Scrooge with the family.
	e.) Uncle Scrooge had imperceptibly become so gay and light of heart	Scrooge is delighted that his family even speak of him.
	f.) "This boy is ignorance. This girl is Want. Beware them both."	The ghost warns Scrooge with personification/ symbols of mankind's faults
59.Stave four:	a.) Plundered and bereft, unwatched, unwept, uncared for, was the body of this man	Description of the man on the deathbed.
Ghost of Christmas	b.) Avarice, hard dealing, griping cares? They have brought him to a rich end, Truly!	Scrooge's ironic statement about the dead man, before he realises that he is looking at himself.
Yet to Come	c.) "Are these shadows of the things that Will be, or are they the shadows of the things that May be only?"	Scrooge asks the ghost if it's too late for him to transform and alter his future.
	d.) "Men's courses will foreshadow certain ends"	Scrooge realises that his past behaviour will determine his future.
60.Stave five	e.) "I don't know how long I have been among the spirits. I don't know anything. I'm quite a baby."	Scrooge discards logic and is now carefree. He is a transformed character.
	f.) Scrooge regarded everyone with a delighted smile.	He spreads good-will instead of fear and hatred.

Term 1a. English Language Paper 1 Q5: Creative Writing Language Methods	
1. Metaphor- Where something is symbolic of something else. "He is a walking dictionary!"	9. Adverb- part of speech that provides greater description to a verb, adjective, another adverb, a phrase, a clause, or a sentence "quietly he walked"
2. Simile- using' like' or 'as' to compare two things "solitary as an oyster"	10. Superlative- usually used when comparing the attributes of someone or something to others, either in a collective group or among several individuals. Often end in 'est' Mrs. Phillips is the nicest teacher among the staff.
3. Personification- Giving an inanimate object any human qualities. "The sun hid behind the clouds"	11. Imperative- An imperative sentence is a type of sentence that gives instructions or advice, and expresses a command, an order, a direction, or a request. <i>Do your work!</i>
4. Repetition- A repeated idea/ phrase. "Please, please listen"	12. Noun phrase- A noun phrase is a group of words that work together to name and describe a person, place, thing, or idea. <u>The quick, brown fox jumped over the lazy dog</u>
5. Pathetic fallacy- is a specific type of personification when a writer attributes human emotions to things that aren't human, such as objects, weather, or animals. It is often used to make the environment reflect the inner experience of a narrator or other characters. "The flowers drooped with sadness."	13. Appositive phrases-an appositive is a noun or noun phrase that renames another noun right beside it. The appositive can be a short or long combination of words. It is always separated by commas. The insect, a cockroach, is crawling across the kitchen table. The insect, a large cockroach, is crawling across the kitchen table. The insect, a large cockroach with hairy legs, is crawling across the kitchen table.
6. Noun- A naming word (a person, place or thing) (Scrooge, London, candle)	14. Past participle verbs- a past participle indicates past or completed action or time. It is often ends in 'ed' <i>Jump- jumped, sleep-slept, dance-danced</i> .
7. Verb- a word used to describe an action, state, or occurrence (walked, sleep, jump) 8. Adjective- A describing word- describes a noun (colour,	15. Present participle verbs- present participle can be used with the auxilliary verb 'to be' to form the continuous tense. It always takes the 'ing' <i>Jump- jumping</i> , <i>sleep-sleeping</i> , <i>dance-dancing</i> .
shape, size and texture are most common)	16. Extended metaphor- a metaphor that is developed in some detail All the world's a <u>stage</u> , And all the men and women merely <u>players</u> . They have their <u>exits</u> and their <u>entrances</u> , And one man in his time <u>plays many parts</u> ,

Narrative Voice: the perspective the story is told from

- **17. First person-** A character within the story is telling the story. *I watched as the boat sank. I felt a mixture of relief and guilt.*
- **18. Second person-** Not commonly used by writers. The personal pronouns *you* and *your* are used throughout. *You watch as the boat slowly sinks. You feel relief mixed with guilt.*
- **19. Third person-** The story is being told by the voice of someone who is not a character in the story. *George watched as the boat slowly sank. He felt relief mixed with guilt.*
- **20. Omniscient third person-** The story is being told by a voice who shows they know more than the characters in the story the narrator is all knowing. *George watched as the boat sank. He felt relief mixed with guilt. Six miles away a group of fishermen watched the horizon, looking for signs of the storm they could feel in the air.*
- **21. Limited third person-** only knows the thoughts and feelings of one character. The Dursleys hadn't even remembered that today happened to be Harry's twelfth birthday. Of course, his hopes hadn't been high; they'd never given him a real present, let alone a cake but to ignore it completely...

22. Todorov's Narrative Structure:

- a. Equilibrium
- **b.** Disruption
- **c.** Quest/journey
- d. Climax
- e. Resolution/restoration of equilibrium/new normal

Narrative Structure-the order and manner in which a narrative is presented to a reader			
23. Linear- starting at the beginning, moving to the middle and proceeding to the end of the	26. Exposition- background information about characters, setting, plot	29. Climax- point of highest tension and drama, or it is the time when the action	32. Flashback- set in a time earlier than the main story.
story.		starts	,
24. Non-linear-events are portrayed out	27. Equilibrium- where everything is balanced	30. Resolution - The story begins to slow	33. Cliff-hanger- leaving the audience
of chronological order	and in a routine	down and work towards its end.	in suspense and anxious
25. Cyclical- ends in the same place it began	28. Disruption- where a problem changes the	31. Foreshadowing- to suggest the	34. Withholding information-
	routine	happening of a future event	deliberately ambiguous or unclear

AQA English Language Paper 1: Exploration of Creative Reading and Writing

Section A Overview and Suggested Approaches

- 3. Question 1: List 4 things. 5 minutes. 4 marks.
- a. Read the question
- b. Draw a box around the correct line numbers
- c. Answer in full sentences
- d. One answer per line
- e. Must focus on the question

- Question 2: Analysis of Language. 10 minutes.
 8 marks
 - a. Underline key words in the question.
 - Read the mini extract and underline any words, phrases and sentences that stand out.
 - c. Write the methods next to the things you have identified in (b).
 - d. Write 2 detailed analytical paragraphs.

- 2. Question 3: Analysis of Structure. 10 minutes. 8 marks
 - a. Summarise the start of the extract into around 5 words.
 - b. Summarise a key moment into around 5 words
 - c. Summarise the ending into around 5 words.
 - d. Write 3 analytical paragraphs.

- 4. Question 4: Evaluate. 30 minutes. 20 marks
- a. Underline key words in the question.
- b. Think of 2-3 synonyms for the key words.
- c. Draw a box around the correct line numbers.
- d. Underline any words, phrases and sentences that stand out to you.
- e. Write the methods next to the things you have identified in (d).
- f. Plan. How does the evidence selected support or challenge the statement.
- g. Write 3-4 evaluative paragraphs.

5. Intend	5. Intended Effects. Feels. Imagines. Thinks. Understand. Learns. Realises.			
a)	Entertain	g) Vicarious pleasure		
b)	Intrigue	h) Curiosity		
c)	Sympathy	i) Envious		
d)	Empathy	j) Establish		
e)	Admiration	k) confirm		
f)	Disdain	I) Criticise		



6. Language Methods	
a) Noun- A naming word (a person, place or thing) (Scrooge, London, candle)	k) Extended metaphor- a metaphor that is developed in some detail All the world's a <u>stage</u> , And all the men and women merely <u>players</u> . They have their <u>exits</u> and their <u>entrances</u> , And one man in his time <u>plays many parts</u> ,
b) Noun phrase - A noun phrase is a group of words that work together to name and describe a person, place, thing, or idea. <i>The quick, brown fox jumped over the lazy dog</i>	l) Personification- Giving an inanimate object any human qualities. "The sun hid behind the clouds"
c) Adjective- A describing word- describes a noun (colour, shape, size and texture are most common)	m) Pathetic fallacy- is a specific type of personification when a writer attributes human emotions to things that aren't human, such as objects, weather, or animals. It is often used to make the environment reflect the inner experience of a narrator or other characters. "The flowers drooped with sadness."
d) Verb- a word used to describe an action, state, or occurrence (walked, sleep, jump)	n) Emotive language- when certain word choices are made to evoke an emotional response. Abandoned children found in filthy, flea-infested flat
e) Adverb- part of speech that provides greater description to a <u>verb</u> , <u>adjective</u> , another adverb, a phrase, a clause, or a sentence "quietly he walked"	o) Rhetorical questions- a question that's asked for effect with no answer expected. <i>How do you want people to remember you?</i>
f) Pronoun- a word that replaces a noun in a sentence. <i>I, you, we, our, they, he, she</i> .	p) Triplet- three points to support an argument. Usually adjectives. <i>Safer streets means comfort, reassurance and peace of mind for you, your family and your friends.</i>
g) Alliteration- a number of words, having the same first consonant sound and occur close together in a series. From forth the fatal loins of these two foes	q) Juxtaposition- when things are placed side by side for comparison, often to highlight the contrast between them. It was the best of times, it was the worst of times
h) Imperative- An imperative sentence is a type of sentence that gives instructions or advice, and expresses a command, an order, a direction, or a request. Do your work!	r) Repetition- repeating sounds, words, phrases, or full sentences for deliberate effect. <u>You have to make yourself louder and you have to make yourself heard.</u>
i) Simile- using' like' or 'as' to compare two things "solitary as an oyster" j) Metaphor- Where something is symbolic of	s) Semantic field- a collection of words which are related to one another. War, fight, armed, battle t) Symbolism- something beyond the literal
something else. "He is a walking dictionary!"	meaning. Dove=peace. Red=warning, danger

7. Structural Methods	
a) Exposition- background information about characters, setting, plot. He is lonely and longs for friends	k) Withholding information- deliberately ambiguous or unclear
b) Zoom- Zoom out, and you display the big picture. Zoom in, and you show details. <i>Zoom infacial expressions and details, zoom out setting etc.</i>	I) Cyclical- ends in the same place it began
c) Shift in focus- the change of focus in or between paragraphs Mother to a son, weather to a person etc.	m) Inner thoughts- the thoughts and feelings of a character. We discover things about their personalities and feelings, which sometimes helps us understand the character's actions. "Oh hi, Susan. So nice you could come." Guess invitations weren't necessary, since you didn't get one and came anyway.
d) Cliff-hanger- leaving the audience in suspense and anxious. Do they survive?	
e) Perspective- who is telling the story and how they feel.	
f) Foreshadowing- to suggest the happening of a future event. Hinting that a character will due from the start.	
g) Flashback- set in a time earlier than the main story.	
h) Flashforward- takes the narrative forward in time from the current point of the story.	

i) Contrast- he difference between two objects ,

j) **Gradual reveal-** to slowly reveal information across the text. *Sad and find out he dying at the*

people or places. Brave/scared

GCSE Math's



Alsop Maths Knowledge Organiser

We believe every student can be successful at Mathematics, but this takes effort!

- Your Maths homework every week is to complete your Sparx homework set by your teacher. This will be based on the topics you are currently doing in class, and topics you have learned previously.
- This is important because **retrieval practice** helps us to remember things we learned a while ago, that we might otherwise forget!
- The next page has the topics you will learn this term and the topic codes to help you find it on Sparx to watch helpful videos, or use Independent Practice to complete some extra questions!
- The **Building Blocks** are the information you need to know to understand the task properly. This might be something you've learned in school (maybe last year!)

How do I log in?

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Rewards

- We have made special Reward Stamps for your Sparx Maths Homework
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- · There will also be extra prizes for students who complete the extra XP Boost activities, and for the best classes!

Is there any help?

- If you need help to complete your homework you can ask your teacher in class, this is why you have all week to complete it
- If you need access to a computer you can use the library before school, at break and lunch, and after school.
- There is also a Sparx Homework Club every week before the hand in deadline if you need more help. Ask your teacher for more details



ALSOP HIGH SCHOOL



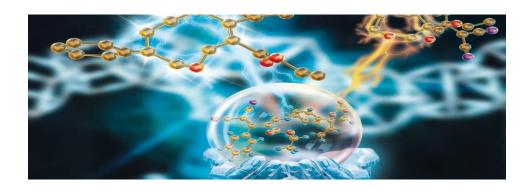






Block	Unit	Topics	Topic Code	Building blocks	Topic Code
		Percentage change with a calculator	U671	Percentage change with a calculator	U671
Percentages	Repeated percentage	Finding original values in percentage calculations	U286	Finding original values in percentage calculations	U286
rercentages	change	Compound interest calculations	U332		
		Growth and decay	U988		
		Finding the surface area of pyramids	U871	Finding the surface area of cubes and cuboids	U929
		Finding the surface area of cones	U523	Finding the surface area of prisms	U259
	Surface area	Finding the surface area of spheres	U893	Finding the surface area of cylinders	U464
		Finding the surface area of frustums*	U334		
Surface area and volume		Finding the surface area of composite shapes*	U561		
Surface area and volume		Finding the volume of pyramids	U484	Finding the volume of cubes and cuboids	U786
		Finding the volume of cones	U116	Finding the volume of prisms	U174
	Yolume	Finding the volume of spheres	U617	Finding the volume of cylinders	U915
		Finding the volume of frustums*	U350		
		Finding the volume of composite shapes*	U543		
	Linear simultaneous equations	Solving simultaneous equations using elimination	U760	Solving equations with two or more steps	U325
Simultaneous equations		Solving simultaneous equations using substitution	U757	Solving equations with the unknown on both sides	U870
Simultaneous equations		Solving simultaneous equations graphically	U836	Constructing and solving equations	U599
		Constructing and solving simultaneous equations	U137		
		Changing the subjects of formulae with two or more steps	U181	Changing the subjects of formulae with one step	U675
		Changing the subject when the subject appears more than	U191	Solving equations with two or more steps	U325
Formulae	Rearranging formulae			Solving equations with the unknown on both sides	U870
Torridae	ricarranging romana			Solving equations with the unknown in the denominator	U505
				Expanding and factorising brackets	U179, U768, U365
		Understanding sin, cos, tan	U605	Calculating with roots and powers	U851
		Finding unknown sides in right-angled triangles	U283	Solving equations with two or more steps	U325
Trimonomotor	Right-angled trigonometre	Finding unknown angles in right-angled triangles	U545	Changing the subjects of formulae with two or more steps	U181
Trigonometry	riigiic-aligieu (rigoliollietry	Using the exact values of trigonometric ratios	U627	Angles in triangles	U628
		Angles of elevation and depression*	U967	Measuring and drawing bearings	U525
		Calculating with trigonometry and bearings*	U164		
Canadanadiana	Constructions and local	Constructing loci	U820	Constructing bisectors of angles	U787
Constructions	Constructions and loci			Constructing perpendicular bisectors and lines	U245

SPARX codes beginning with an M = Key Stage 3 content, Q = Fundamentals and U = GCSE content. You will need to ensure that you choose the correct curriculum from the drop-down menu in 'Independent Learning' on SPARX



GCSE Combined Science

	KS4 Knowledge organiser Electricity B								
1. Electron	2. Coulomb	3. Potential difference	4. Resistance						
Sub-atomic particle that carry a	Unit of electric charge, symbol C	A measure of the energy transferred	Ratio of the potential difference						
negative charge		per unit of charge as charges move	across an electrical component to the						
		between two points in a circuit.	current through the component.						
		(Voltage between two point)	Symbol R, unit ohms						
5. Voltmeter	6. Parallel circuit	7. Series circuit	8. Ammeter						
Device that measures potential	Electric circuit in which the current	Electric circuit in which all	Device that measures electric current						
difference	divides into two or more paths	components are connected one after							
	before combining again	the other in a single line							
9. Directly proportional	10. Independent variable	11. Ohms law	12. Ohmic conductor						
A relationship of the form y	Quantity in an experiment that is	The current in the resistor is (at a	A resistor that obeys ohm's law at a						
proportional to x. plotting a graph of	changed or selected	constant temperature) is directly	constant temperature						
	changea or selected	constant temperature) is directly	constant temperature						
y against x will produce a straight line	changed of selected	proportional to the potential	constant temperature						
y against x will produce a straight line through the origin	changed of selected		constant temperature						
	14. Dependent variable	proportional to the potential	16. Thermistor						
through the origin		proportional to the potential difference across it	·						
through the origin 13. Diode	14. Dependent variable	proportional to the potential difference across it 15. Light dependent resistor	16. Thermistor						
through the origin 13. Diode Has a low resistance if it is connected	14. Dependent variable Quantity in an experiment that is	proportional to the potential difference across it 15. Light dependent resistor A component with a resistance that	16. Thermistor Component with a resistance that						
through the origin 13. Diode Has a low resistance if it is connected one way around in a circuit or a very	14. Dependent variable Quantity in an experiment that is measured for each change in the	proportional to the potential difference across it 15. Light dependent resistor A component with a resistance that decreases as the intensity of light	16. Thermistor Component with a resistance that decreases as its temperature						

		Section A Electric current		Section B Series and parallel		Section C Investigating circuits
1	5	,		Series circuits - Components are connected next to each other to form a single loop	30	A circuit can be used to investigate the resistance of a component
		o switch (open) lamp	20	There is the same amount of current through each component	31	The component can be connected between two terminals of the circuit
		— V voltmeter				
		— I → battery — A — ammeter	21	The total potential difference of the power supply is shared between the components.	32	An ammeter is connected in series to measure the current in the circuit
		diode thermistor		The total resistance of two components is the sum of the resistance of each component.	33	A voltmeter is connected in parallel to the component to measure the potential difference
		variable resistor LDR	23	$R_{total} = R_1 + R_2$	34	The resistance can then be calculated Resistance (R) = Potential difference (V)
			24	Adding resistors in series increases the total resistance		Current (I) The current can be changed by altering the
1	6	Electric charge (Q) = current (I) x time (t) Q = It	25	<u>Parallel circuits</u> – Components are connected in parallel to each other	35	resistance of a variable resistor
1	7	A voltmeter is always connected in parallel to a component	26	The potential difference across each component is the same		
			27	The total current through the whole circuit is the sum of the currents through the separate components	36	Circuits can be simplified by replacing all of the components with a single resistor. The single resistor needs to have the equivalent resistance of the components in the circuit

18	Potential difference (V) = current (I) x resistance (R) V = IR	28	The total resistance of two resistors is less than the resistance of the smallest individual resistor	
		29	Adding resistors in parallel decreases the total resistance	

	Section D Circuit components		Section E Required practical I-V characteristics
37	The current through an ohmic conductor (at a constant temperature) is directly proportional to the potential difference across the resistor. This means that the resistance remains constant as the current changes.	43	Investigation, using diagrams to construct circuits, the I-V characteristics of a filament lamp, a diode and a resistor at a constant temperature
39	I-V graph of an ohmic conductor The resistance of a filament lamp increases as the temperature of the filament increases.	44	A resistor at a constant temperature Circuit Graph Current Potential difference
40	I-V graph of a filament lamp (a non-ohmic conductor)	45	Circuit Graph Current Potential difference

41	When a filament lamp gets hot the free moving electrons	46	A Diode	
	move faster and the metal ions in the filament vibrate more, taking up more space.		Circuit	Graph
42	As the atoms take up more space, the electrons collide with		Circuit	σιαμι
	them more often, so the resistance and the temperature			Current 1
	increases.			
				Potential difference

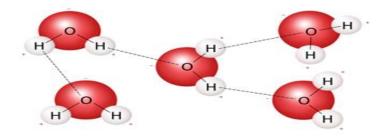
	Section F Required practical Resistance of a wire		Section G Control circuits
47	The resistance of a wire can be calculated using the equation: Resistance (R) = Potential difference (V) Current (I)	53	A thermistor can be used to turn on a heater when it gets cold, act as a fire alarm or keep a fish tank from becoming too cold.
48	Circuit	54	A thermistor is made from a semi-conductor. A semi-conductor is neither a good conductor or an insulator. When a semi-conductor is heated it can conduct more easily
	resistance		A thermistor is made from a semi-conductor. A semi-conductor is neither a good conductor or an insulator. When a semi-conductor is heated it can conduct more easily
		56	The resistance of a thermistor decreases as the temperature increases
49	As the length of the wire increases the resistance increases	57	A light-dependent resistor can be used by cricket umpires to decide whether it is too dark to carry on playing safely

	50	Temperature affects the accuracy of this experiment. As more current passes through the wire it gets hotter and this alters the resistance. It is important to avoid increasing the thermal energy store of the wire.	58	When it is light the resistance of an LDR is low, when it is dark the resistance of an LDR is high
Ī	51	Adding resistors in series increases the total resistance	59	A diode only allows current to flow in one direction
Ī	52	Adding resistors in parallel decreases the total resistance	60	Current passes easily through a diode when it is conducting

	Atomic structure and the periodic table B									
1 Period	2 Properties	3 Electrical Conductor	4 Metalloids-							
The name given to a row in the periodic table.	is a characteristic of a particular substance that can be observed in a chemical reaction	-	elements that forms a simple substance having properties intermediate between those of a typical metal and a typical non-metal.							
5 Inert	6 Alkali metal	7 Halogen	8 Transition metal-							
a substance that is not generally reactive	The elements in Group 1 of the periodic table.	are five non-metallic elements found in group 7 of the periodic table. The term "halogen" means "salt-former"	metals that have high melting points and densities, and are strong and hard. They form coloured compounds and act as catalysts.							

	Section A Section B		Section B Section C				Section D		
9	1. Periodic table a table of the	12	Dmitri Mendeleev -Russian chemist, developed the periodic	18	Physical properties		20		
	chemical elements		table 1869		Metals	Non-		ZnNa	
	arranged in order	13	Mendeleev's periodic table			metals		Mg Ca Fe	
	of atomic number,		Ordered by increasing Ar, some		Lustrous (reflecting	Dull		E	
	usually in rows, so		elements switched according to		light evenly)			Se	
	that elements with		their properties		Good electrical	Poor		Cr	
	similar atomic				conductivity	conductor			
	structure (and					s of			
	hence similar					electricity			

	chemical	1		14	Chemical properties Includes		Good conductors of	Poor		
			1	14	reaction with acid and formula of		heat	thermal		H E
	properties) appear	Li	2 shells		oxide		neat	conductivi		3 4 Li Be Romic Number 6 metals B C N O F I
	columns.		2 alaalla		Oxide					Symbol S
	Columns.	Na	3 shells				High donaite	ty		Na Ng Average Romc Mase 12.011 Australia Sign P S CI Vision Registers
		V.	4 shells				High density	Low		10 10 10 10 10 10 10 10
			4 3116(13				NA-UI-II	density		
		Rb	5 shells				Malleable and	Brittle		37 38 39 40 41 42 43 44 45 45 46 47 48 49 49 50 51 53 53 1 8
		13	Siletts				ductile	1		55 56 * 71 72 72 73 74 75 75 75 75 75 80 81 81 81 82 83 84 85 86 86 86 86 86 86 86 86 86 86 86 86 86
		Cs	6 shells				High tensile strength	Low or no		
		- 22					(ability to resist a	tensile		Fr Ra ** Lr Rf Db Sg Bh Hs Mt Ds Rg Cn Nh Fl Mc Lv Ts 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10	Groups Columns in	I Fr	7 shells	15	Physical properties Includes		force trying to pull it	strength	21	Metals lose electrons forming positive ions . Group
10	the periodic table,			13	melting point and density.		apart)			1, lose 1 electron so + ion. Group 2, 2 electrons, 2+
	tell you the				meranig perine and denoity.					ions
	number of			16	Gaps in Mendeleev's periodic	19	Chemical properties.		22	lons - an atom or molecule that carries an electric
	electrons in the				table		onemical properties.			charge.
	outer shell.				Mendeleev left gaps where no		a. Chemical properties of	metals are a		9.13.851
	Elements in a				known element fitted and		result of reacting with ox			
	group behave				predicted these would be filled		(oxygen forms oxides)	ygerr arra acras		
	similar to other				with newly discovered elements		(oxygen forms oxides)			
	elements in that			17	Ekaaluminium .An element that		b .Metals react with acids	to form salts	23	Non- metals gain electron form metals and form
	group.				Mendeleev thought would fill a		b .ivictals react with acid.	o to form saits .		negative ions. Chloride takes in one electron so 1
11	Periods Rows in				gap. He predicted its properties,					Oxygen 2 so 2- ions.
11	the periodic table,				which matched gallium when					,,,
	tell you the				discovered.1932					
	number of									
	electron shells									
	election silens				<u> </u>					





	Section E		Section F	Section G			Section H		
24	Group 0 or Nobel gases.	32	React vigorously with water	38	They are non-metals	46	Trends in reactivity of group 1 and 7 are opposite to each other.		
25	All unreactiv e because all have 8 electrons in their outer shell	33	Form an alkali solution	39	They react vigorously with alkali metals 7.	47	Group 1 reactivity increase down the groups as its easier to lose the outer electron.		
26	All gases	34	They have similar chemical properties as they lose one electron from the outer shell	they form slats when they react with metals.		48	Group 7 reactivity decrease down the groups as its harder to pull in the extra electron.		
27	Boiling points increase as you go down the group.	35	This forms a stable electron structure .	41	They react with non-metals to gases and liquids such as acids (hydrochloric acid HCI)	49	Trends across the table move from metal to non-metals		
28	Exists as single atoms -monatomic.	36	They form 1+ ions	42	Halides Compounds made from Group 7 elements.				
29	They are very stable and have no movement of electrons	37	Li least reactive	43	A more reactive halogen can displace a less reactive halogen from solutions of its salts	50	Trends across and down depends on the electron arrangement		
30	The size of the atom increases as you go down the group as does the boiling point.		Na Group 1	44	They form 1- ions	51	Knowing the position of an element in the table allows to predict its behaviour.		
31	NOBEL GASES 2 He 10 Ne 18 Ar 36 Kr 54 Xe 86 Rn		Rb Cs Charge is +1 most reactive loses 1 electron easily	45	F CI Br Charge is -1 I least reactive has great difficulty attracting electrons				

KS	n Part A	
1. Interdependence	2. Abiotic Factor	3. Competition
The way in which the organisms in an area depend on each	A non-living factor that influences	Often two or more different organisms may compete for
other, for food, shelter, protection and so on.	what can live where	the same resource such as food, water or light.
4. Sampling	5. Adaptation	6. Extremophile
Estimating the population of organisms in an area by randomly dropping a quadrat several times, finding the average number of organisms present and scaling up your answer	Features that organisms have that help them survive in their environment	Organisms that can survive very extreme environments

	Section A Ecosystems		Section B Predator-Prey Cycles		Section C Abiotic Factors
7	Ecosystem - An area in which the interactions between all the living organisms and the all the physical factors forms a stable relationship needing no external input.	11	Predator-prey cycles As the number of prey animals increases, the number of predators increase. The predators over-predate the prey leading to a fall in prey numbers which causes the number of predators to go down as there is less food. The number of prey increases again because fewer are being eaten.	13	Abiotic factor -A non-living factor that influences what can live where. E.g. light intensity
8	Population -The members of one particular species within an ecosystem.	12	Parasitism A feeding relationship in which a parasite feeds off its host, causing harm to the host but (normally) not killing it. E.g. fleas, mistletoe	14	Changes to abiotic factors -If an abiotic factor changes e.g. temperature increasing due to global warming, organisms may no longer be well adapted to where they live and may die out.

9	Habitat- A particular area within an ecosystem.		Out of phase-predator lags behind prey.	15	Biotic factor - A living factor that influences what can live where. E.g. disease
10	Self-supporting -all the requirements for an organism to grow and survive are present			16	Competition - Often two or more different organisms may compete for the same resource such as food, water or light.
				17	Distribution -how living organisms are dispersed over an ecosystem
	Section D Competition		Section E Sampling		Section F Adaptations
18	Interspecific competition-competition between different species	22	Abundance - The number of members of one species in an ecosystem	26	Extremophiles - these can survive very high temperatures, high salt concentrations and high pressures.
19	Intra specific competition-competition between individuals of the same species.	23	Random sampling - Estimating the population of organisms in an area by randomly dropping a quadrat several times, finding the average number of organisms present and scaling up your answer.	27	Plants adapted to survive in dry conditions have reduced surface area, lots of water storage and a large root network.

20	Plants compete for light, space, water	24	Quadrat - A metal square used to help	28	Plants adapted to cold climates have small
	and mineral ions.		find the number of small organisms		leaves and grow close to the ground.
			living in an area.		
21	Animals compete for food and water,	25	Belt transect - A way to study how the	29	Plants adapted to hot climates have a small
	mates and territory.		population of a species changes as		surface area and a thick waterproof cuticle.
			you move through an area but		
			counting the organisms in a quadrat	30	Epiphytes are adapted to live above the
			at regular intervals.		ground.

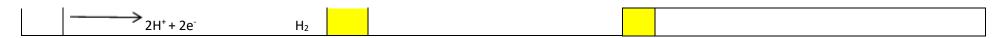
	KS4 Knowledge Organiser Waves								
1.Frequency	2.Reflecti on	3 Speed of a wave	4.Electromagnetic spectrum	5 Infrared radiation	6.Transmitter	7.Fibre optic cable			
is the number of waves produced by a source each second. It is also the number of waves that pass a certain point each second. The unit of frequency is the hertz (Hz)	states that the angle of incidence is equal to the angle of reflection.	is the speed at which a wave travels using the frequency of the waves and the wavelength to calculate it.	is a continuous range of wavelengths. The types of radiation that occur in different parts of the spectrum have different uses and dangers, which depend on their wavelength and frequency.	is the part of the invisible spectrum that is contiguous to the red end of the visible spectrum and that comprises electromagnetic radiation of wavelengths from 800 nm to 1 mm.	is a set of equipment used to generate and transmit electromagnetic waves carrying messages or signals, especially those of radio or television	is a cable consisting of one or more thin flexible fibres with a glass core through which light signals can be sent with very little loss of strength			

Section A		Section B		n C	Section D		
A wave is a transfer of energy. Its wave speed is the seen of that energy transfer over a distance.	13	Reflection -Light waves reflect from surfaces. When waves reflect, they obey the law of reflection.	18	wave speed = frequency × wavelength Wave speed (cm/s) Frequency (Hz) Wavelength (cm)	21	Refraction from a prism White light can be split up using a prism to form a spectrum. The light waves are refracted as they enter and leave the prism. The shorter the wavelength of the light, the more it is refracted. As a result, red light is refracted the least and violet light is	
Wave speed = frequency xwavelength $v=fx\lambda$ where:		angle of incidence angle of reflection A ray diagram	19	Ripple tank		refracted the least and violet light is refracted the most, causing the coloured light to spread out to form a spectrum.	
v is the wave speed in metres per second, m/s f is the frequency in hertz, Hz λ (lambda) is the wavelength in metres, m	14	-Light waves change speed when they pass across the boundary between two substances with different densities, such as air and glass.		Notice rule: Wooden rule: White card		THE ELECTROMAGNETIC SPECTRUM THE EL	
	of energy. Its wave speed is the seen of that energy transfer over a distance. Wave speed = frequency xwavelength $v=fx\lambda$ where: v is the wave speed in metres per second, m/s f is the frequency in hertz, Hz λ (lambda) is the wavelength in	A wave is a transfer of energy. Its wave speed is the seen of that energy transfer over a distance. Wave speed = frequency xwavelength v= f x λ where: v is the wave speed in metres per second, m/s f is the frequency in hertz, Hz λ (lambda) is the wavelength in	A wave is a transfer of energy. Its wave speed is the seen of that energy transfer over a distance. Wave speed = frequency xwavelength v= f x λ where: v is the wave speed in metres per second, m/s f is the frequency in hertz, Hz λ (lambda) is the wavelength in Reflection -Light waves reflect from surfaces. When waves reflect, they obey the law of reflection. Refraction -Light waves change reflect, they obey the law of reflection.	A wave is a transfer of energy. Its wave speed is the seen of that energy transfer over a distance. Wave speed = frequency xwavelength v= f x λ where: v is the wave speed in metres per second, m/s f is the frequency in hertz, Hz λ (lambda) is the wavelength in 13 Reflection -Light waves reflect from surfaces. When waves reflect, they obey the law of reflection. 19 Refraction -Light waves change speed when they pass across the boundary between two substances with different densities, such as air and glass.	A wave is a transfer of energy. Its wave speed is the seen of that energy transfer over a distance. Wave speed = frequency xwavelength v= fx λ where: v is the wave speed in metres per second, m/s f is the frequency in hertz, Hz λ (lambda) is the wavelength in Reflection -Light waves reflect from surfaces. When waves reflect, they obey the law of reflection. Wave speed = frequency (Hz) Wavelength (cm) Wave speed (cm/s) Frequency (Hz) Wavelength (cm) Ripple tank	A wave is a transfer of energy. Its wave speed is the seen of that energy transfer over a distance. Wave speed = frequency xwavelength V= f x λ where: v is the wave speed in metres per second, m/s f is the frequency in hertz, Hz λ (lambda) is the wavelength in Reflection -Light waves reflect from surfaces. When waves reflect, they obey the law of reflection. Wave speed (cm/s) Frequency (Hz) Wavelength (cm) Ripple tank Wave speed (cm/s) Frequency (Hz) Wavelength (cm) 22 Ripple tank	

	Transverse waves In transverse waves, the oscillations are at right angles to the direction of travel and energy transfer.	15	A wavefront is a line that joins up all the points on a wave which are moving up and down together at the same time.	20	Cable to power europhy Strong Vibration generator Vibration	24	Gamma waves have a very high frequency. Gamma radiation cannot be seen or felt. It mostly passes through skin and soft tissue, but some of it is absorbed by cells. X-rays have a lower frequency than gamma radiation. They cannot be seen or felt, mostly pass through skin and soft tissue, but they do not easily pass through bone or metal.
-	In Longitudinal waves, the oscillations are along the same direction as the direction of travel and energy transfer.	16	Wave dependence -The proportion of the waves energy that is reflected, refracted or absorbed is dependent on wavelength	17	Refraction of electromagnetic waves -Electromagnetic waves are refracted when they enter a medium where the wave velocity is differentDifferent substances refract the wavelength in different	25	Uv- shorter wavelength than violet Uses – sunbeds/ fluorescent lights/ safety markings/ helps make vit D in the body Dangers-wrinkles/ sunspots/ aging and skin cancer Infrared- longer wavelength than red Uses – emitted by warm objects, cooking/ see things in the dark(thermal imaging
-	period = 1 f requency	12	T = 1 F period, T, in seconds, s frequency, f, in hertz, Hz		ways		cameras) / remote controls Dangers-none

	KS4 Knowledge Organiser	Chemical Changes B				
1. Salt formation	2. Acid	3. Alkali	4. Neutralisation			
Acids react with some metals to	Solution with a pH of less than 7	A soluble base that produces	A reaction that takes place when an acid			
produce salts		OH- ions in water and base react				
5. Solubility	6. Indicator	7. pH scale				
The ability of a substance to	Measures the strength of an acid or an	A scale to show whether a substance is acidic, neutral or alkaline				
dissolve in a liquid	alkali					
8. I	onisation (HT)	9. Concentration (HT)				
The addition or removal of electrons	from an atom leaving it charged	The amount of chemical dissolved in a certain volume of solution.				

11	To make a crystallised salt from magnesium and sulphuric acid:	18	Acids are neutralised by metal carbonates to produce salts, water and carbon dioxide.	23	Stage 2 Filter off excess solid leaving the salt solution
12 13 14	Excess magnesium needs to be added to the acid The solution needs to be filtered into a crystallising dish The solution needs to be concentrated by	19	The particular salt produced in any reaction between an acid and a base or alkali depends on the acid used the positive ions in the base,	24	Stage 3 Leave the filtrate to evaporate in an evaporating dish. A dry solid salt will be produces.
15	evaporation, the salt will then crystallise Magnesium + sulphuric acid Magnesium sulphate + hydrogen Mg + H ₂ SO ₄ MgSO ₄ + H ₂	20	alkali or carbonate Hydrochloric acid produces chlorides, nitric acid produces nitrates, sulfuric acid produces sulfates	25	Metal + acid metal salt + hydrogen
16	(HT) When making magnesium salt from magnesium, this reaction happens: Mg + 2H ⁺ Mg ²⁺ + H ₂ The half equations are: Mg – 2e ⁻ Mg ²⁺	21	Sodium hydroxide + hydrochloric acid Sodium chloride + water	26 27 28	→ Metal oxide + acid metal salt + water → Metal hydroxide + acid metal salt + water → Metal carbonate + acid metal salt + water water + carbon dioxide



Secti	on D – pH and neutralisation	Section	n E – Strong and weak acids (HT)
29	Acids produce hydrogen ions (H ⁺) in aqueous solutions.	35	A strong acid is completely ionised in aqueous solution.
30	Aqueous solutions of alkalis contain hydroxide ions (OH ⁻)	36	Examples of strong acids are hydrochloric, nitric and sulfuric acids.
31	The pH scale, from 0 to 14, is a measure of the acidity or alkalinity of a	37	A weak acid is only partially ionised in aqueous solution
	solution, and can be measured using universal indicator or a pH probe.		
32	A solution with pH 7 is neutral. Aqueous solutions of acids have pH values	38	Examples of weak acids are ethanoic, citric and carbonic acids.
	of less than 7 and aqueous solutions of alkalis have pH values greater than		
	7.		
33	1 2 3 4 5 6 7 8 9 10 11 12 13 14	39	For a given concentration of aqueous solutions, the stronger an
	←		acid, the lower the pH.
	ACID NEUTRAL BASE	40	As the pH decreases by one unit, the hydrogen ion concentration
			of the solution increases by a factor of 10.
			Acid concentration is not the same as H ⁺ ion concentration. A
			concentrated solution of weak acid still has a low concentration of
			H⁺ ions.
		<u>42</u>	Concentration is measured in mol/dm ³ or g/dm ³
34	In neutralisation reactions between an acid and an alkali, hydrogen ions	<u>41</u>	
34	react with hydroxide ions to produce water. This reaction can be	41	
	represented by the equation: H ⁺ (aq) + OH ⁻ (aq)		
	represented by the equation. If (aq) + Off (aq)		

GCSE History



	Nazi Germany Key Dates				
Nazi Rise to Power		Nazi Control & Propaganda			
1	1920	Anton Drexler founds the German Worker's Party	14	1933	Nuremberg rallies held annually from now on.
2	1920	The SA (Sturmabteilung) forms, these were the party militia known as Stormtroopers	15	April 1933	The Gestapo – Nazi secret police – is formed.
3	July 1921	Hitler replaces Drexler as leader of the National Socialist German Workers Party (NSDAP)	16	March 1935	Hitler publicly announced that the German Army was to be expanded. Conscription was introduced.
4	1924 - 1929	The Nazi Party had little support in these years	17	1936	Hitler Youth becomes compulsory
5	April 1925	The SS (Schutzstaffel) formed as Hitler's bodyguards. Later became the party militia	18	August 1936	Start of the Berlin Olympics where Hitler demonstrates the 'progress' Germany has made.
6	1929	Wall Street Crash causes a worldwide depression but support for the Nazis increases	19	September 1935	Nuremberg Laws introduced reducing Jews to second-class citizens.
7	July 1932	The Nazi party gains 37.4% of the vote in the Reichstag elections - becomes largest party	20	1937	Concentration camps set up for political prisoners and 'habitual criminals'.
8	30 th January 1933	Hitler appointed Chancellor by Hindenburg.	21	9-10 th November 1938	Kristallnacht – the Night of Broken Glass in which Jewish businesses, homes and synagogues targeted and attacked.
	From Democracy to Dictatorship			Second World War	
9	27 th February 1933	The Reichstag Fire – Communists are blamed and therefore banned.	22	February 1942	Albert Speer was appointed Minister of Armaments and War Production.
10	22 nd March 1933	The first concentration camp at Dachau opened with arrival of 200 prisoners.	23	18 February 1943	Goebbels announced 'Total War'.
11	23 rd March 1933	The Enabling Act gives Hitler the power to make laws without consulting the Reichstag.	24	20 July 1944	Failed bomb plot.
12	30 th June 1934	Night of the Long Knives – 150 leaders of the SA, including Ernst Rohm were executed.	25	October 1944	Hitler ordered the creation of the Volkssturm.
13	August 1934	President Hindenburg dies. Hitler becomes Fuhrer.	26	30 April 1945	Hitler committed suicide.

27. Adolf Hitler Leader of the Nazi Party from 1921 and



mastermind of its extremist policies.

28. Paul von Hindenburg A general who led the

Imperial German Army during WW1. President from 1925 until his death in 1934.

Key People



32. Joseph

Goebbels

politician,

Nazi

the SA and later its commander. Was executed on the Night of the Long Knives in 1934.

30. Heinrich
Himmler
Leader of
the SS, one
of the most
powerful
men in Nazi
Germany and architects

of the Holocaust.



34.

most
powerful
figures in
the Nazi Party and
Hitler's second in
command.



Minister of Propaganda and one of Hitler's closest and most devoted associates.

33.

Albert
Speer
Leader of
the
German
war
economy
from 1942.



Cardinal
Galen
Delivered
three
famous
sermons in
1941 against the Nazi
Party. Survived but virtual
house arrest 1941-5.



Key Words			
36	Opposition	Resistance or dissent, expressed in action or argument.	
37	Mein Kampf	Book written by Hitler and meaning 'My Struggle'.	
38	Anti-Semitism	Hostility to, prejudice, or discrimination against Jews.	
39	Propaganda	Information, especially of a biased or misleading nature, used to promote a political cause or point of view.	
40	Dictatorship	A country governed by a dictator.	
41	Police State	A state controlled by a political police force that secretly supervises the citizens' activities.	
42	One Party State	One political party forms and runs the government.	
43	Concentration Camp	Camp for political prisoners or minority groups who are confined for state security, exploitation, or punishment.	
44	Censorship	The suppression or prohibition of parts of books, films, news, etc. that are considered obscene, politically unacceptable, or a threat to security.	
45	Untermenschen	The Nazi word for so-called sub-human people, notably the Jews.	
46	Fuhrer	German word meaning "leader" or "guide".	
47	Kinder, Küche, Kirche	Hitler believed women's lives should revolve around the three 'Ks meaning children, kitchen, church.	
48	Lebensborn	The goal of raising the birth rate of Aryan children by people classified as 'racially pure' and 'healthy'.	
49	Communist	People who believe all the people should own the wealth, rather than rich individuals or groups.	
50	Aryan Supremacy	Belief that an Aryan race (white, blonde, blue eyed) is a distinct and superior racial group.	
51	Lebensraum	The Nazi policy of taking land from other countries to gain extra 'living space' to keep the German people healthy and wealthy.	
52	Gestapo	The secret police in Nazi Germany.	
53	Persecution	Hostility and ill-treatment.	
54	Boycott	To refuse to have dealings with something or someone or refuse to buy a product as a protest.	
55	Einsatzgruppen	The mobile killing squads that carried out mass murders in the east after 1939.	
56	Ideology	A system of ideas and ideals which form political theory and policy.	
57	Ghetto	An enclosed area in a city where the Nazis forced Jews to live after 1939.	

Making of America – Timeline of Events

	Enquiry 1 – What tensions arose as the USA grew, 1789 – 1838?		
1789	George Washington became the first President of the USA. USA begins expansion into NW and SW territories		
1793	Invention of the cotton gin by Eli Whitney – speeds up prep of raw cotton creating a higher demand for slavery		
1794	Native Americans defeated at the Battle of Fallen Timbers		
1795	Treaty of Greenville sees indigenous people give up vast areas of land to the White Americans		
1803	Louisiana Purchase . Thomas Jefferson purchased it from French for \$15 million. Each acre cost \$0.28 and it doubled the size of the USA. Jefferson sold off land cheaply in parcels of 640 acres		
1804	Lewis and Clark set out to explore the West going up the Missouri River into the Rocky Mountains. A Native American called Sacagawea acted as their guide		
1820	Missouri Compromise – sought to keep balance between slave and non-slave states. Compromise said slavery only be allowed in Missouri and in areas south of its border.		
1830	Indian Removal Act – This marked out land for 'Indians' in the west. Five 'Civilised' Tribes like the Choctaw, Chickasaw and Creek moved west.		
1835-42	Second Seminole War – cost the USA \$40-60 million. The USA were defeated but then captured and killed the Seminole War Chief, Osceola.		
1838	Trail of Tears saw 18,000 Cherokee forced marched to 'Indian' territory – 4,000 died of cold, hunger or disease		

	Enquiry 2 – Visions – How did different groups see the American West, 1839-60?		
Pre-emption Act – In Oregon meant a farmer who built a house and cleared trees had first opportunity to buy surrour encouraged many people to go west.			
1844	Joseph Smith, Mormon Leader, who wanted to be US President, was shot dead by a mob. Henry Sager began the move to Oregon with his six children and pregnant wife. Both Henry and Naomi died on the journey. Daughter Catherine broke her leg.		
c. 1845	Journalists and politicians began to speak of the 'Manifest Destiny'.		
1847	Mormons settle at Salt Lake City, Utah led by their new leader Brigham Young 'the American Moses'.		

1848/49	California Gold Rush – 50,000 move west in search of gold. Others like Levi Strauss make a fortune selling goods to the miners. Eventually, mining would become big business.	
1850	Utah became a US territory. Brigham Young was its first governor. California became a state. Clay Compromise said California could be 'free state' if other new states could vote themselves if they wanted slavery.	
1851	Harriet Beecher Stowe published Uncle Tom's Cabin – told horrors of slavery – sold 2 million copies. Fort Laramie Treaty – white settlers could establish forts and safe routes across Plains – in return US government would pay indigenous tribes \$50,000 a year and protect hunting grounds.	
1854	Kansas-Nebraska Act said new states could vote themselves on whether to allow slavery. Led to violence in Kansas with over 200 being killed – 'Bleeding Kansas'.	
1855	US gov't signed treaty with Yakima tribes of Oregon territory. US gov't promised not to settle on lands for 2 years, but colonists settled there after only 12 days. Led to violence and by 1858 the Yakima lost 90% of their lands. 24 of their chiefs hung or shot.	
1856	James Buchanan (Democrat) elected President – wanted to spread slavery north of Missouri Compromise line.	
1858-59	Pike's Peak Gold Rush. Gold was discovered – more than 100,000 people made the journey to Kansas.	
1860	Abraham Lincoln is elected President of the USA – 'Honest Abe' promised to end slavery to preserve the Union between N and S. This triggers Civil War – it led to secession of South Carolina and other southern states.	

Enquiry 3 – The Civil War and its aftermath, 1861-1877 Enquiry 4 – Settlement and Conflict on the Plains, 1861-77

Outbreak of the American Civil War between North and South

Limited phase of Civil War – Black men were not initially allowed to join the North's Army

Little Crow's War – Dakota people starving triggers the conflict. 38 Dakota hanged Boxing Day

Sea Islands off coast of South Carolina was freed from slavery – 10,000 enslaved people freed.

First black regiment of formerly enslaved people formed in South Carolina.

Lincoln approves the Pacific Railroad Act to link east and west.

Homestead Act passes – 160 acres of land on Plains for small fee if farmed for 5 years.

Emancipation Proclamation issued. This is the **order** to free enslaved people. Emancipate = to free.

Total War phase of Civil War. First black regiment. Black men could not become officers and often did hardest jobs and were paid less.

1864	Sand Creek Massacre – Chivington's troops storm Black Kettle's camp – 105 Cheyenne killed.	
1865	End of the Civil War, 'Presidential Reconstruction' leads to creation of 13 th Amendment which ends slavery – assassination of Lincoln halts 'Reconstruction'. President Andrew Johnson said Reconstruction finished – Black Codes begin e.g. can't own/ rent farmland.	
1866-68 Red Cloud's War – White settlers discovered gold in Montana – the Bozeman trail set up – broke 1851 Fort Laramie Treaty. Red of Lakota) won many battles. Ended by the 1868 Fort Laramie Treaty gave Lakota land including Black Hills of Dakota.		
1866-70	Radical Reconstruction – Freedmen's Bureau made permanent, 14 th Amendment gives civil rights to all, 15 th Amendment guarantees the vote to all male Americans.	
1866	John Iliff begins to rear cattle on the Plains. Goodnight-Loving Trail set up to drive Texas Longhorn North.	
1867	First cow town set up by Joseph McCoy at Abilene in Kansas. Others were Wichita, Dodge City.	
1868	Andrew Johnson lost the election and ex Union general Ulysses S Grant became President	
1869	Transcontinental Railroad finished – east-west linked – joined at Promontory Point, Utah.	
1870-77	Reconstruction loses its way – Black voting rights not protected (literacy tests), rise of White League and KKK, many Black people work as 'sharecroppers'. Reconstruction ends in 1877.	
1876-77	Great Sioux War which included the Battle of Little Bighorn.	

Enquiry 5 – American Cultures, 1877-1900		
1877	Benjamin Singleton begins the Exodusters – black people moving west onto the Plains (Homesteads)	
1881 Sitting Bull (Lakota Chief) surrenders – Lakota forced to live in Standing Rock reservation		
1882	2 Booker T. Washington sets up a school (Tuskegee Institute) for black students	
1883	White Americans form the 'Friends of the Indian' group	
1887	Dawes Act – land offered to indigenous peoples in return for giving up tribal lands	
1890	Wounded Knee massacre and Ghost Dance movement	
1890s	Jim Crow Laws passed bringing about segregation – governments in south run by 'Redeemers'	
1894	President Cleveland sent soldiers to break strike of Pullman Railroad Car Company – violent – 26 workers shot	
1900	By 1900 , big business was very powerful. E.g. Bonanza farms, cotton, mining industries. Many had migrated to the USA in the 1890s – 600,000 from Italy alone.	

GCSE Geography

The Challenge of Natural Hazards

1. What are Natural Hazards?

Natural hazards are physical events such as earthquakes and volcanoes that have the potential to do damage to humans and property. Hazards include tectonic hazards, tropical storms and forest fires.

What affects hazard risk?

Population growth
Global climate change
Deforestation
Wealth - LICs are
particularly at risk as they
do not have the money to
protect themselves



3. Earthquakes and Volcanoes

Volcanoes

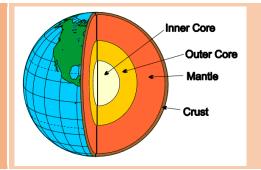
- **Constructive** margins Hot magma rises between the plates e.g. Iceland. Forms Shield volcanoes.
- Destructive margins an oceanic plate subducts under a continental plate. Friction causes oceanic plate to melt and pressure forces magma up to form composite volcanoes e.g. the west coast of South America.

Earthquakes

- **Constructive** margins usually small earthquakes as plates pull apart.
- **Destructive** margins violent earthquakes as pressure builds and is then released.
- Conservative margins plates slide past each other. They catch and then as pressure builds it is released e.g. San Andreas fault.

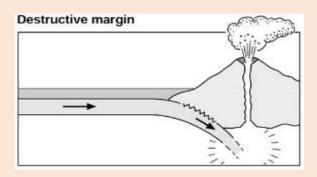
2. Structure of the Earth

The earth has 4 layers
The core (divided into inner and outer), mantle and crust.

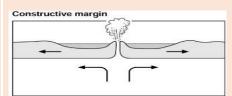


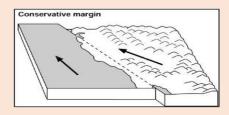
The crust is split into major sections called **tectonic plates**.

There are 2 types of crust: **Oceanic** (thin and younger but dense) and **Continental** (old and thicker but less dense). These plates move due to convection currents in the mantle and, where they meet, tectonic activity (volcanoes and earthquakes) occurs..



Plates either move towards each other (destructive margin) away from each other (constructive) or past each other (conservative).





4. Effects of Tectonic Hazards

Primary effects happen immediately. Secondary effects happen as a result of the primary effects and are therefore often later.

of the primary cheets and the therefore often later.		
Primary - Earthquakes	Secondary - Earthquakes	
 Property and buildings destroyed. People injured or killed. Ports, roads, railways damaged. Pipes (water and gas) and electricity cables broken. 	 Business reduced as money spent repairing property. Blocked transport hinders emergency services. Broken gas pipes cause fire. Broken water pipes lead to a lack of fresh water. 	
Primary - Volcanoes	Secondary - Volcanoes	
 Property and farm land destroyed. People and animals killed or injured. Air travel halted due to volcanic ash. Water supplies contaminated. 	 Economy slows down. Emergency services struggle to arrive. Possible flooding if ice melts Tourism can increase as people come to watch. Ash breaks down leading to fertile farm land. 	

5. Responses to Tectonic Hazards

Immediate (short term)	Long-term
- Issue warnings if possible.	- Repair and re-build properties and
- Rescue teams search for	infrastructure.
survivors.	- Improve building regulations
- Treat injured.	- Restore utilities.
- Provide food and shelter, food	- Resettle locals elsewhere.
and	- Develop opportunities for recovery of
drink.	economy.
- Recover bodies.	- Install monitoring technology.

6. Comparing Earthquakes – Nepal and Japan

Nepal. April 2015. Magnitude 7.8.

Japan March 2011 Magnitude 9.0

Primary Effects

9000 deaths 23000 injured Over 500,000 homes destroyed Historic buildings including Dharahara Tower fell 26 hospitals and 50% of schools destroyed

Just under 16,000 deaths 26,000 injured 130,000 displaced Damage – 332,395 buildings, 2,126 roads, 56 bridges and 26 railways were destroyed or damaged. 300 hospitals were damaged 4.4 million households were left without electricity in North-East Japan.

Secondary Effects

Avalanche on Mount Everest killing 19 people. Loss of income from tourism (which was 8.9% of Nepal's GDP).

Rice seed stored in homes was ruined as homes collapsed. This caused food shortages.

10m Tsunami waves devastated coastal towns 18.00 deaths Explosion at Fukushima nuclear power plant US\$235 billion

Immediate Responses

Nepal requested international help. UK's DEC raised \$126 million. Red Cross-tents for 225,000 people. UN and WHO distributed medical supplies to the worst districts.

Facebook launched a safety feature so people could indicate they were safe.

Search & Rescue teams from Japan and abroad. 100 000 members of the Japanese Self-Defence Force worked for several days, yet no survivors found.

500 000 evacuated to higher ground before tsunami

Long term responses

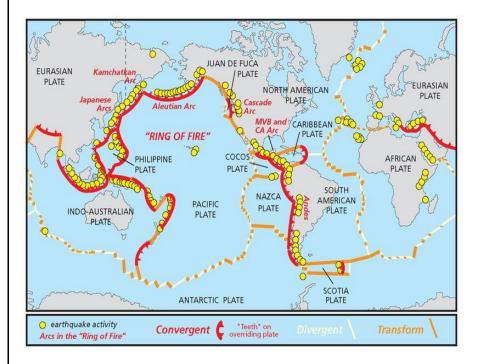
Rebuilding.

World Heritage Sites reopen June 2015. Longer climbing season.

Reconstruction Design Council devised a long-term plan budget US\$150 billion Upgraded tsunami warning system.

9. Distribution of tectonic activity

Along plate boundaries.
On the edge of continents.
Around the edge of the Pacific.



7. Global atmospheric circulation

At the equator, the sun's rays are most concentrated. This means it is hotter.

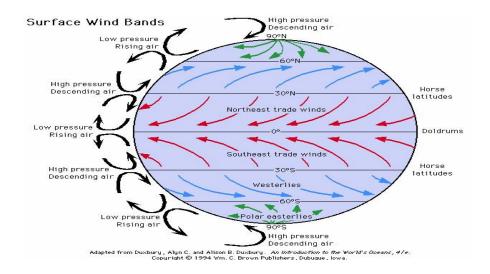
This one fact causes global atmospheric circulation at different latitudes.

High pressure = dry Low pressure = wet

As the air heats it rises – causing low pressure. As it cools, it sinks, causing high pressure. Winds move from high pressure to low pressure. They curve because of the **Coriolis** effect (the turning of the Earth)

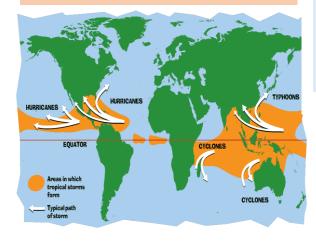
8. Reducing the impact of tectonic hazards

Monitoring	Prediction
Seismometers measure earth movement. Volcanoes give off gases.	By observing monitoring data, this can allow evacuation before event.
Protection	Planning
Reinforced buildings and making building foundations that absorb movement. Automatic shut offs for gas and electricity.	Avoid building in at risk areas. Training for emergency services and planned evacuation routes and drills.



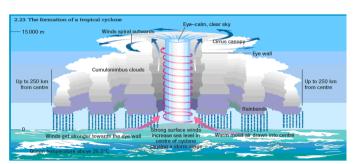
1. Tropical Storms

Occur in low latitudes between 5° and 30° north and south of the equator (in the tropics). Ocean temperature needs to be above 27° C. Happen between summer and autumn.



2. Sequence of a Tropical Storm

- 1. Air is heated above warm tropical oceans.
- 2. Air rises under low pressure conditions.
- 3. Strong winds form as rising air draws in more air and moisture causing torrential rain.
- 4. Air spins due to Coriolis effect around a calm eye of the storm.
- 5. Cold air sinks in the eye so it is clear and dry.
- Heat is given off as it cools powering the storm.
- 7. On meeting land, it loses source of heat and moisture so loses power.



3. Extreme weather in the UK

Rain – can cause flooding damaging homes and business.

Snow & Ice – causes injuries and disruption to schools and business. Destroys farm crops.

Hail – causes damage to property and crops.

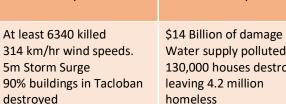
Drought – limited water supply can damage crops.

Wind – damage to property and damage to trees potentially leading to injury.

Thunderstorms – lightening can cause fires or even death.

Heat waves – causes breathing difficulties and can disrupt travel.

UK weather is getting more extreme due to climate change. Temperatures are more extreme and rain is more frequent and intense leading to more flooding events. Since 1980 average temperature has increased 1 degree and winter rainfall has increased.



4. Typhoon Haiyan, Philippines, November 2013

Water supply polluted 130,000 houses destroyed, leaving 4.2 million homeless Public Order – Looting Airports unusable for supplies

Secondary Effects

Immediate Responses

Habitats & Crops

destroyed

Primary Effects

1,069 emergency shelters set up in public buildings. Disaster Emergency Committee helped 3,316,500 people outside these centres by providing aid.

UK aid charities provided shelter, food and medical supplies.

UN appeal raised \$300 million.

Long-term Responses

Typhoon warning systems have been improved.
People are now better educated about how to respond.

5. UK Extreme Weather Event: Beast from the East

February 28th to March 2nd 2018 Polar Vortex & Storm Emma

Flood

Social Effects

3 deaths.

19000 homes flooded across Northern England.

100,000 homes affected by power cuts.

More than 40 schools in Cumbria were closed. Appointments in many hospitals in Cumbria were cancelled as hospitals had no mains electricity.

Economic Effects

Caused £500 million damage in Cumbria.

Landslides and flooding closed some main roads and many bridges were damaged causing extra transport costs for businesses.

The rail route between England and Scotland was closed due to flooding.

Environmental impacts

Large amounts of soil were washed into the rivers, with millions of tonnes of silt transported by rivers and deposited on floodplains

Management strategies

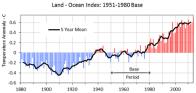
Met Office issued weather warning Environment agency issued flood warning Soldiers took supplies to remote areas in the Lake District.

The government gave £50 million to repair damage in Cumbria and Lancashire.

The Cumbria Flood Recovery Fund 2015 helped families who had little insurance .

6. Climate Change – natural or human?

Global Temperature, 1880 - 2014



Source: Goddard Institute for Space Studies (GISS) and Climate Research Unit (CRU), prepared by ProcessTrends.com, updated by globalissues.org

Evidence for climate change shows changes before humans were on the planet. So some of it must be natural. However, the rate of

change since the 1970s is unprecedented. Humans are responsible – despite what Mr Trump says!

7. Causes

Natural

- Orbital changes — The sun's energy on the Earth's surface changes as the Earth's orbit is elliptical its axis is tilted on an angle.

- Solar Output sunspots increase to a maximum every 11 years.
- Volcanic activity volcanic aerosols reflect sunlight away reducing global temperatures temporarily.

Human

- Fossil fuels release carbon dioxide with accounts for 50% of greenhouse gases.
- Agriculture accounts for around 20% of greenhouse gases due to methane production from cows etc. Larger populations and growing demand for met and rice increase contribution.
- **Deforestation** logging and clearing land for agriculture increases carbon dioxide in the atmosphere and reduces ability to planet to absorb carbon through photosynthesis.

8. Evidence for Climate Change

The Met Office has reliable climate evidence since 1914 – but we can tell what happened before that using several methods.

Ice and Sediment Cores

- Ice sheets are made up of layers of snow, one per year. Gases trapped in layers of ice can be analysed. Ice cores from Antarctica show changes over the last 400 000 years.
- Remains of organisms found in cores from the ocean floor can by traced back 5 million years.

Pollen Analysis

- Pollen is preserved in sediment. Different species need different climatic conditions.

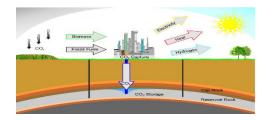
Tree Rings



- A tree grows one new ring each year. Rings are thicker in warm, wet conditions
- This gives us reliable evidence for the last 10 000 years.

Temperature Records

- Historical records date back to the 1850s. Historical records also tell us about harvest and weather reports.



9. Effects of Climate Change	
Social	Environmental
 Increased disease eg. skin cancer and heat stroke. Winter deaths decrease with milder winters. Crop yields affected by up to 12% in South America but will increase in Northern Europe but will need more irrigation. Less ice in Arctic Ocean increases shipping and extraction of oil and gas reserves. Droughts reduce food and water supply in sub-Saharan Africa. Water scarcity in South and South East UK. Increased flood risk. 70% of Asia is at risk of increased flooding Declining fish in some areas affect diet and jobs. Increased extreme weather Skiing industry in Alps threatened. 	 Increased drought in Mediterranean region. Lower rainfall causes food shortages for orangutans in Borneo and Indonesia. Sea level rise leads to flooding and coastal erosion. Ice melts threaten habitats of polar bears. Warmer rivers affect marine wildlife. Forests in North America may experience more pests, disease and forest fires. Coral bleaching and decline in biodiversity.

10. Managing Climate Change	100 100 100 100 100 100 100 100 100 100	
Mitigation		Adaption
 Alternative energy production will reduce CO2 production. Planting Trees – helps to remove carbon dioxide. Carbon Capture – takes carbon dioxide from emission sources underground. International Agreements e.g. the Paris Climate Agreement. 	is stored	 Changes in agricultural systems need to react to changing rainfall and temperature patterns and threat of disease and pests. -Managing water supplies – eg. by installing water efficient devices and increasing supply through desalination plants. - Reducing risk from rising sea levels would involve constructing defences such as the Thames Flood Barrier or restoring mangrove forests, or raising buildings on stilts.

GCSE Spanish





Describing a photo

A. To start off:

En la imagen... In the image
En la foto ... In the photo
Hay... There is/ are
Veo... I see
Se puede ver... You can see

Se puede ver... You can see La foto muestra... The photo shows...

B. Be specific!

En primer plano... In the foreground In the background A la izquierda.. to the left to the right close to Delante de.. In front of

C.)Weather

Hace sol it's sunny
Hace buen tiempo it's nice weather
Hace mal tiempo It's bad weather
Está lloviendo it's raining
Está nublado it's cloudy

D.) What's there?

Un hombre/una mujer a man/woman
Unas personas some people
Mucha gente lots of people
Unaus edificios some buildings
Unos árboles some trees
Una escena de... a scene of

E.) Describing people

Parece(n)... he/she/they seem(s)
Contento/a(s) happy
Triste(s) sad
Cansado/a(s) tired
Enfadado/a(s) angry

F.) What are they doing?

Está(n) hablando They are talking
Está(n) discutiendo They are arguing
Está(n) sonriendo They are smiling
Está(n) riendo They are laughing
Está(n) trabajando They are working
Está(n) jugando They are playing

G.)Opinion phrases

Creo que...
I think that

Pienso que...
I think that...

Imagino que...
I imagine that...

Supongo que...
I presume that...

Diría que... I would say that

Me parece que It seems to me that..

Me recuerda a... It reminds me of...

H.)Do you like it?

(No) Me gusta la foto
I (don't)like the photo

porque/ya que/dado que
because

es (it is...)

está llena de... (it is full of)

e.g. bonita (pretty)
e.g. color (colour)

Numbers

0 cero	15 quince	30 treinta
1 uno	16 dieciséis	40 cuarenta
2 dos	17 diecisiete	41 cuarenta y uno
3 tres	18 dieciocho	50 cincuenta
4 cuatro	19 diecinueve	52 cincuenta y dos
5 cinco	20 veinte	60 sesenta
6 seis	21 veintiuno	63 sesenta y tres
7 siete	22 veintidós	70 setenta
8 ocho	23 veintitrés	75 setenta y cinco
9 nueve	24 veinticuatro	80 ochenta
10 diez	25 veinticinco	86 ochenta y seis
11 once	26 veintiséis	90 noventa
12 doce	27 veintisiete	97 noventa y siete
13 trece	28 veintiocho	
14 catorce	29 veintinueve	

Large Numbers

100 cien	600 seiscientos
200 doscientos	700 setecientos
300 trescientos	800 ochocientos
400 cuatrocientos	900 novecientos
500 quinientos	

1,000	mil
1,000,000	un millón
1.000.000.000	mil millones

Days and dates

domingo

- Remember that the days of the week are written with small letters in Spanish.
 lunes, martes, miércoles, jueves, viernes, sábado,
- The same is true of the months.
 enero, febrero, marzo, abril, mayo, junio, julio, agosto, septiembre, octubre, noviembre, diciembre
- To say the date, simply use el + number + de + month.

el cuatro de septiembre, el veintidós de mayo

Greetings and ages

¡Hola!	Hello!
¡Buenos días!	Hello/Good morning!
¡Buenas tardes!	Good afternoon!
¡Buenas noches!	Good evening/night!
¡Adiós!	Goodbye!
¡Hasta luego!	See you later!
¡Buenas noches!	Good night!
¿Qué tal?	How are you?
Bien, gracias.	Fine, thanks.
¿Cuántos años tienes?	How old are you?
Tengo dieciséis años.	I'm sixteen.
¿Y tú?	And you?

Time

There are two ways of telling the time in Spanish: the traditional 12-hour clock method and the 24-hour clock method, which is often used in Spanish, particularly to discuss travel times.

 To say what time it is using the traditional 12-hour clock, start with Son las...



 As in English, when using the 24-hour clock, use numbers such as trece, dieciocho, etc.:

a las veinte diez at 20.10
A mediodia. At midday.
A medianoche. At midnight.
Es la una. It's one o'clock.

 To ask the time: ¿Qué hora es? What time is it? / What's the time?

Interrogatives

¿Quién?	Who?	
¿Cuándo?	When?	
¿Cómo?	How?/What like?	
¿Por qué?	Why?	
¿Cuánto?	How much?	
¿Cuántos? ¿Cuántas?	How many?	
¿Qué?	What?	
¿Cuáles?	Which?	

Conjunctions

У	and
pero	but
0	or
porque	because
donde	where
cuando	when

Intensifiers

bastante	quite
más	more
muy	very
menos	less
demosiado	too

Adverbs of frequency

nunca	never
raramente	rarely
de vez en cuando	from time to time
normalmente	normally
a veces	sometimes
frecuentemente	often
siempre	always

Theme 1

Foundation Vocabulary

Words that are highlighted in grey in this list are words that may be useful, but you won't need to know them for the exam.

1.1G ¿Cómo es?

¿cómo? how? el/la abuelo/a grandfather/ grandmother el/la actor/actriz actor/

actress alto/a tall azul blue

bajo/a short, low bastante quite, quite a lot, enough

blanco/a white el/la cantante singer casi almost nearly

el/la chico/a boy/girl

el cine cinema con with

> corto/a short creer to think believe delgado/a slim, thin

dos two Ia familia family

famoso/a (adj.) famous

feo/a ualv la foto photo

las gafas glasses

el/la gato/a cat aordo/a fat

> gris grey el grupo group

guapo/a good-looking hay there is, there are

el/la hermano/a brother/

el/la hijo/a son/daughter

el hombre man

joven young largo/a long

llamarse to be called la madre mother

el metro metre

moreno/a brown dark la mujer woman

la música music negro/a black el nombre name

el ojo eye

el padre father el pelo hair pequeño/a small

el/la perro/a dog poco/a little, bit

> que that, which, who recordar to remember rolo/a red

rubio/a fair, blond(e) ser to be también also, as well

la tele TV. telly tener to have yo I

1.1F ¿Qué tipo de persona eres?

el/la amigo/a friend animal (adj.) animal artistico/a artistic bueno/a good

las ciencias science cinco five

In clase class cuando when

deportivo/a (of) sports difficil difficult divertido/a fun, eniovable

especialmente especially

estar to be

el/la estudiante student fácil easy

> fellz happy fuerte strong general general aracioso/a funny

austar to like (lit. to please) hoy today

independiente independent el instituto secondary school listo/a clever

muv verv nervioso/a nervous otro/a other, another

pensar to think perezoso/a lazy pero but

la persona person la personalidad personality

porque because práctico/a practical responsable

responsible serlo/a serious simpático/a nice, friendly

la situación situation trabajador(a) hard-working tranquilo/a quiet, peaceful

1.2G Las relaciones familiares

activo/a active bien well las compras shopping cuidar to care for, look

after el deporte sport discutir to discuss.

arque el elercicio exercise este/esta this

el estadio stadium

el fin de semana weekend

el fútbol football hacer to do, make hago Ido/make

ir to go llevarse blen/mal con to get on well/badly

Ia madrastra stepmother mucho/a much, a lot la noche night

el padrastro stepfather

la paella paella (rice dish usually with seafood) pelear(se) to fight

el/la primo/a cousin

respetar to respect el restaurante restaurant el sábado Saturday

salao I ao out el/la tío/a aunt/uncle

va he/she/it goes las vacaciones holidays vals you (plural) go

vamos we go van they go vas you (singular) go voy I go

1.2F Los amigos

a veces sometimes algo something alli there

el año year casarse to get married

el/la compañero/a colleague, (school) friend

común common la confianza confidence.

el contacto contact

la definición definition

el día dav diferente different divorciarse to get divorced

escuchar to listen (to) fatal terrible

la frecuencia frequency aenial great

guardar to keep hablar to speak, talk

la idea idea levantarse to get up meior better, best

la opinión opinion paciente patient parecerse a to look like pasar to pass, spend ponerse to put on, to become

preocupar(se) to worry

el problema problem próximo/a next qué what

> raramente rarely raro/a strange, odd,

la relación relationship

el secreto secret slempre always tarde late

rare

temprano early el texto text

> el tlempo time, weather todo/a all, every

2.1G La vida sana

a pie on foot el (fem.) aqua water

el balle dance

el baloncesto basketball behen to drink

la bicicleta bicycle

el bocadillo sandwich

la cama bed

el campo country. countryside

la carne meat

cerca close, near el club club

comer to eat

la comida food, meal comprar to buy ¿cuándo? when? dar to give demasiado too, too

much el desayuno breakfast

el domingo Sunday ¿dónde? where?

la ensalada salad el equipo team,

equipment evitar to avoid favorito/a favourite

la fruta fruit

el gimnasio gym importante important

el jueves Thursday jugar to play

la manzana apple el mar sea

el martes Tuesday el mercado market

el miembro member montar to ride, set up

nadar to swim la narania orange

el pan bread

el paseo stroll, walk el pescado fish

la piscina swimming pool

el pollo chicken poner to put ¿por qué? why?

preferir to prefer preparar to prepare

el producto product ¿qué? what? querer to want, love

rápido/a fast, quick

la sal salt

la semana week la tarde afternoon. evening

tener cuidado to take care, be careful

tener hambre to be hungry tener que to have to

tener sed to be thirsty tener sueño to be sleepy, fired

tomar to take, eat, drink, have

la uva grape el vaso glass, tumbler vegetariano/a

vegetarian la(s) verdura(s) vegetables la vez time occasion

vivir to live el zumo juice

2.1F ¿Estás en forma?

la actividad activity andar to walk

el beneficio benefit el caballo horse

la calle street el caramelo sweet

correr to run

costar to cost.

divertirse to enjoy

dormir to sleep

encontrar to find

equilibrado/a

balanced

expect

frio/a cold

delight)

oneself, to have fun

empezar to start, begin

encantar to love (lit to

entender to understand

entrenar(se) to train

esperar to wait, hope

el estudio study, studio

físico/a physical

fumar to smoke

la grasa grease, fat

el jamón ham

agnar to earn, win

la hamburguesa burger

el kllómetro kilometre

wear, lead

malo/a bad

mental mental

el montón load, lot

mostrar to show

la natación swimming

el/la niño/a child, little boy/

normalmente normally

nosotros/as we us

llevar to take, carry,

cuatro four

el diente tooth

la dieta diet

caro/a expensive, dear cerrar to close, shut claro clear, of course

poder to be able contar to tell, count

el precio price la copa cup, wine glass, probar to try, test, trophy sample

la salud health sano/a healthy

sin without el supermercado

nunca never

el partido match, game

pedir to ask for, order

permitir to permit,

las patatas fritas chips,

perder to lose

allow

el parque park

supermarket terrible terrible

la variedad variety volver to return, go

2.2G Salir a comer

alemán / alemana German

aquí here

el café coffee chileno/a Chilean

el/la cliente client, customer cubano/a Cuban

deber to owe (must)

el dulce sweet europeo/a European

francés/francesa French fresco/a cool, fresh

grande big

el (fem.) hambre hunger el huevo egg Ideal ideal

> inglés/inglesa English la leche milk

el lugar place más more most menos less, least

mexicano/a Mexican el plato plate, dish porfavor please rico/a rich, tasty

Theme 1 **Foundation Vocabulary**

servir to serve solo only las tapas bar snacks típico/a typical el tomate tomato el/la turista tourist venir to come

el vino wine 2.2F Tipos de dietas

ayudar to help el azúcar sugar cada each, every complicado/a complicated consistir to consist el corazón heart

durante during España Spain estricto/a strict Europa Europe

la falta lack, shortage frito/a fried el futuro future

intentar to try el/la Internet Internet lo que what luego then

el/la médico/a doctor el medio ambiente environment

> mediterráneo/a Mediterranean

menor younger, smaller ninguno/a none. not any

la oficina office el peso weight

la planta planta

la proteína protein quedarse to stay

el régimen diet

la región region

la revista magazine sacar to take out, (get)

seguir to follow el sur south

el tipo type tonto/a silly, stupid

trabajar to work vegano/a vegan el/la veterinario/a vet la vida life

3.1G El día escolar

amarillo/a yellow la camisa shirt la corbata tie la chaqueta jacket el dibujo art, drawing la educación education la falda skirt

aburrido/a boring

la geografia Geography la historia History el horarlo timetable.

schedule el idioma language la informática ICT

la lenaua language la literatura literature

marrón brown las matemáticas Maths el pantalón trousers

primero/a first el recreo break, break

la religión religion, R.E. terminar to finish

la tutoría tutorial tutor group, form period último/a last, latest

el uniforme uniform verde areen

el zapato shoe

3.1F En el instituto

agradable pleasant el/la alumno/a pupil el ambiente atmosphere anterior previous apoyar to support la asignatura subject la biblioteca library bonito/a pretty, lovely correcto/a correct los deberes homework

donde where duro/a hard explicar to explain la Instalación facility Interesante interesting

levantar to raise

el libro book el lunes Monday Ia mano hand

Ja mesa table, desk moderno/a modern

el móvil mobile (phone) nada nothing necesitar to need

nuevo/a new el ordenador computer, PC

el pasillo corridor

el patio yard, patio, playground peor worse, worst privado/a private

el/la profesor(a) teacher Ja silla chair sin embargo however traer to bring usar to use

útil useful el viernes Friday

3.2G Las opciones a los 16 años

antes before aprender to learn aprobar to pass (ie. exam) apropiado/a appropriate, suitable

el/la artista artist el bachillerato Baccalaureate (equivalent to A levels) buscar to look for,

search for el/la camarero/a waiter/ waitress

como as, like la compañía company la construcción building,

construction

el curso course

la decisión decision después after dieciséis sixteen

el dinero money diseñar to design doce twelve

el/la electricista electrician el/la enfermero/a nurse

> entrar (en) to enter entre between, among escoger to choose escribir to write estudiar to study

el euro euro

el examen exam

la experiencia experience extranlero/a foreign

la formación training habrá there will be

la hora hour, time

el hospital hospital

incluir to include laboral (of) work leer to read limpiar to clean

me gustaría. I would like mientras while

la nota grade, mark obligatorio/a

compulsory

optativo/a optional to, for para

el paro unemployment el/la peluquero/a

hairdresser perfecto/a perfect

el periódico newspaper

el/la periodista journalist pocos/as few

el/la policia police officer por eso so, therefore posible possible

la pregunta question

la profesión profession

el programa programme

la recepción reception el/la recepcionista receptionist

la ropa clothes

septiembre September el sitio web website

la tecnología technology

la tienda shop, tent el trabajo work, job

el turismo tourism

la universidad university viajar to travel

3.2F Los trabajos

el/la abogado/a lawyer el accidente accident aceptar to accept

el aeropuerto airport

el artículo article

el aspecto aspect. appearance

el banco bank

la caja box, till

la carrera career, degree course, race

la casa house, home

el centro centre

cerca de near to

la cludad city, town cómodo/a comfortable

comprensivo/a understanding

contento/a happy. glad, pleased

la cosa thing

crear to create de moda fashionable

describir to describe la desventaja disadvantage

el/la empleado/a employee enfermo/a ill, sick enojado/a angry enseñar to teach, show

> el estrés stress estupendo/a great, brilliant

la experiencia laboral work experience

la fisica physics la gente people

arltar to shout

hacer preguntas to ask questions

hasta until hermoso/a beautiful

la información information

el/la ingeniero/a engineer

interesar to be interested in

el/la lefe/lefa boss

la medicina medicine mil thousand mismo/a same

el mundo world

el museo museum

las noticias news

la novela novel

la obra work (of art, literature)

la opción option pagar to pay

el papel role, paper

la película film presentar to present. introduce

la presión pressure proteger to protect

resolver to solve el salario salary

salir to leave, go out seguro/a safe, sure, secure

sentir(se) to feel

la serie series

el teatro theatre, drama tener éxito to be successful

el traje suit costume

el viaje journey

el vuelo flight

Spanish is a language with grammatical genders, so some of the words in this list have a masculine and feminine form, which are used for referring to different people. You will not be marked down in the exam for your preferred ways of referring to yourself and others through the use of pronouns, gendered language and grammatical agreements.

GCSE Religious Studies



Christianity: Beliefs, Teachings and Practices Knowledge Organiser

Number	Key Terminology	Definition
1	Ascension	The event 40 days after the Resurrection, when Jesus returned to God, the Father in heaven.
2	Atonement	The reconciliation between God and humanity that was sealed by the sacrificial death of Jesus.
3	Baptism	The sacrament through which people become members of the Church. It is a rite of initiation
4	Bible	Sacred book for Christians containing both the Old and New Testaments.
5	Catholic	A branch of Christianity based in Rome and led by the Pope.
6	Christ	Literally means 'Anointed One' in Greek. Christians believe Jesus to be the Christ.
7	Christian	Someone who believes in Jesus Christ and follows the religion based on his teachings.
8	Crucifixion	The Roman method of execution by which criminals were fixed to a cross.
9	Denomination	A distinct group within the Christian faith, with its own organisation and traditions.
10	Eucharist	The part of the mass when the sacrificial death and resurrection of Jesus are remembered using bread and wine.
11	Evangelism	Preaching the gospel to convert people to the Christian faith.
12	Evil	The opposite of good. A force that is seen in many traditions as destructive and against God.
13	The Father	The first person of the Trinity, the creator of the universe.
14	God	The supreme being.
15	Grace	The unconditional and generous love that God shows to people who do not deserve it.
16	Heaven	The state of being with and enjoying eternity with God.
17	Hell	The place of eternal suffering or the state after death of separation from God for those who want no relationship with him.
18	Holy Communion	Another name for the Eucharist when the death and resurrection of Jesus are remembered.
19	Holy Spirit	The third person of the Holy Trinity. Christians believe that the Holy Spirit is present and inspires them.

20	Incarnation	Literally 'in flesh'. The doctrine that God took the human form as Jesus.
21	Judgement	When God decides whether each person should receive eternal life or eternal punishment.
22	Just	This refers to the nature of God as one who treats each individual human being fairly and equally.
23	Mission	It refers to the duty of Christians to spread the gospel (the good news about Jesus).
24	Omnibenevolent	The belief that God is all loving.
25	Omnipotent	The belief that God is all powerful.
26	Orthodox	A branch of Christianity mainly, but not entirely practised in Eastern Europe.
27	Original Sin	The traditional belief still held by some Christians that human nature is basically flawed, and so humans have a tendency to go against God's will.
28	Persecution	Throughout the centuries and still in some part of the world Christians face punishment and even death for adherence to their faith.
29	Prayer	Communicating with God through words of praise, thanksgiving or confession, or requests for his help or guidance. Listening to and speaking to God.
30	Protestant	A branch of Christianity. There are many Protestant denominations but they agree on the central belief that the Bible is the only authority for Christians.
31	Reconciliation	The process of restoring harmony after relationships between people have broken down. It is also a specific sacrament in the Roman Catholic and some Anglican Churches.
32	Resurrection	The event celebrated on Easter Day of Jesus rising from the dead. It is the central belief of Christianity.
33	Sacrament	The outward and visible sign of an invisible and spiritual grace.
34	Salvation	Saving the soul and deliverance from sin and admission to heaven brought about by Jesus.
35	Sin	Behaviour which is against God's laws and wishes/against principles of morality. A thought, word or action which is wrong, which people know is wrong and which people freely choose.
36	The Son	The second Person of the Trinity. This is Jesus, in whom God became incarnate.
37	Son of God	A title used for Jesus, it denotes the special relationship between Jesus and God.
38	Suffering	When people have to face and live with unpleasant events or conditions.
39	Trinity	The belief that there are three Persons in the One God. The Father, Son and Holy Spirit are separate, but are also one being.
40	Worship	Offering to God the praise that he is due. This may be done in public or in private worship.

Key Ideas - Beliefs and Teachings			
	Nature of God	- Christians believe in one God who is the creator of the world and who sustains all that exists.	
41	indiale of bod	- God is omnipotent, omni-benevolent and just.	
		- The Problem of Suffering asks: If God is all these things why does suffering exist?	
		- Christians believe God is three persons in one. This idea is called the Trinity.	
		- Each person of the Trinity is fully God but the three persons of the Trinity are not the same.	
42	The Trinity	- The Father is the creator of all life.	
		- The Son is Jesus Christ who is both fully human and fully God.	
		- The Holy Spirit is the unseen power of God at work in the world.	
		- Christians believe that God was incarnated (born) in human form as Jesus Christ.	
43	Incarnation	- Mary became pregnant by the Holy Spirit and gave birth as a virgin - for Christians this is proof of Jesus' status	
		as the son of God.	
		- Christmas is the festival that celebrates the incarnation.	
		- Jesus travelled to Jerusalem to preach and he was sentenced to death by Pontius Pilate.	
	Crucifixion	- Jesus was then nailed to a cross where he died.	
44		- In his last moments Jesus was able to forgive those who were killing him showing Christians how important	
		forgiveness is.	
		- This event is remembered on Good Friday.	
		- Three days after Jesus died on the cross Christians believe he rose from the dead - this is the resurrection.	
45	Resurrection	- Early on the Sunday three women visited his tomb expecting to find his body but it was not there.	
	Resurrection	- After his resurrection Jesus appeared to his disciples and told them to spread the word of God.	
		- This event is celebrated on Easter Sunday.	
		- Forty days after he rose from the dead Jesus ascended into heaven.	
46	Ascension	A belief in resurrection and ascension:	
	Ascension	- Shows life after death is real.	
		- Assures Christians they will rise again after death and live on in the afterlife.	
		- Leads Christians to try and lead a good life.	
		- Christians believe you are judged after death and how well or badly you have lived and treated others decides if	
		you go to heaven or hell.	
	Sin and Salvation	- Sin is any action or thought that goes against God's will, Christians can look in the Bible for advice on what is a	
47		sin e.g. murder and adultery.	
		- God gave humans free will but they should use that freedom to make good choices and not sin.	

	- Salvation is the idea that Jesus's crucifixion saves human beings from eternal damnation.
	- The death of Jesus made up for original sin - the idea that we were all damned by Eve's choice to disobey God -
	it allows us to atone for sins and reach eternal life in heaven.

Key Ideas - Christianity Practices		
48	Worship	Liturgical Worship - This formal and traditional style of worship takes place in a church and is led by a priest. - Formal, set prayers are read out. Non-liturgical Worship - Also takes place in a church but less formal. - No set prayers, instead people take turns to preach and read from the Bible. - Can be modern and appealing to young people.
49	Prayer	 Prayer means communicating with God, either silently or out loud, sometimes through song. It is one of the most important parts of the spiritual life of a Christian and enables them to have a personal relationship with God. Intercessions are prayers made on behalf of others. Set prayers are written down and used in liturgical worship. Informal prayer is off-the-cuff and often used in non-liturgical worship.
50	Eucharist	 In the Eucharist a priest consecrates (blesses) bread and wine and the congregation then receives these. Catholics believe the Holy Spirit transforms the bread and wine into Jesus' body and blood. Anglicans believe the bread and wine are symbolic. Christians take part in this ritual to remember the sacrifice Jesus Christ made for them by being crucified on the cross.

51	Baptism	Infant Baptism This is a formal service welcoming a new child into the Christian church. Holy water is sprinkled over the baby's head. All Catholics baptise their children soon after birth to ensure they go to heaven. Believer's Baptism A believer's baptism welcomes someone into the church who is old enough to decide themselves. They are submerged in a pool of holy water. They make promises to stay away from evil. Baptists only practice this type of baptism.
52	Pilgrimage	- A pilgrimage is a journey made by a Christian to a holy site Catholics go on pilgrimage to Lourdes where a vision of Mary was once seen, they believe the water there has healing effects.
53	Festivals	Christmas - Christmas celebrates the incarnation (birth) of Jesus Christ - Christians give gifts to commemorate the gift of God sending his own son to the world Easter - Easter celebrates the resurrection of Jesus Christ - Christians celebrate by saying "he is risen".
54	Evangelism	Christians have a duty to evangelise (tell others of the word of God). An example is the Alpha Course which is an educational course that tells people more about the life of Jesus.
55	Church in the Community	Christians also have a duty to help others in the local community. Two examples of this are Street Pastors who help drunk people at night and Food Banks that provide food to people in poverty.
56	Reconciliation	- Christians across the world play an important role in reconciliation (seeking to restore friendly relations after a conflict or falling out) - An example is Coventry Cathedral which was bombed during World War II but now seeks to create peace and reconciliation elsewhere in the world. The World Council of Churches also works to help after conflict In some places Christians face persecution where they are treated badly for their faith. Churches around the world work together to try and overcome this.

BTEC Tech Award Enterprise

Component 1: Exploring Enterprises

		Enterprises		
A1: Size and features of SMEs				
1	Enterprise	An organisation that carries out one or more activities, such as being involved with goods, services or both.		
2	SME	An SME is a Small or Medium Enterprise		
3	Micro Enterprises	These are run by ONE owner, and employ up to 10 people		
4	Small Enterprises	These are run by ONE OR MORE owners, employing between 11-49 people		
5	Medium Enterprises	These are run by ONE OR MORE owners, employing between 50-249 people		
6	Operation locations	SMEs can operate from an office, shop, owner's home, customer's house (e.g mobile hairdresser) or online.		
7	Sole trader	Legal owner of an enterprise Keep all profits, but also responsible for losses If they cannot pay bills, they can be declared bankrupt, as they have unlimited liability		
8	Partnership	Two or more people who legally own the enterprise, who have unlimited liability Responsibility of business decisions is shared, along with profits and debts		
9	Private Limited Company	Have their own legal identity and are separate enterprises from their owners. This means they have limited liability Boards of directors and the owners of a limited company do not always run it – they may invest in private shares while other people are responsible for the daily operations of the enterprise.		
10	Social enterprise	Can take any of the above types of ownership but aim to use some of their profits to improve society and support the environment		
11	Features of SMEs	run by a single individual or small team of people		
		physical location and/or online operation		
		sole employment or as part of a hobby/side hustle		
		existing in one or more sectors of the economy		
		A2 Markets, sectors, models and industries in which enterprises operate		
12	Markets	Business to Business (B2B) Business to Customer (B2C)		
13	Sector	The UK economy is broken down into many different sectors that provide goods or services.		
14	Goods	Goods are physical (tangible) products that can be touched eg, phone, house, clothing, food		

15	Services	Services are non-physical (known as intangible) parts of the product offering that meets a customer's need e.g. Pet grooming, removal services, banking, hairdressing
16	Models	 Bricks and clicks – have a physical presence and operate online Flips – use catalogues to sell their products eg IKEA, e-commerce – only sell items online hybrid – a combination of the above the models
17	Industries	Retail; Wholesale; construction; entertainment; sports; hospitality; finance; information technology; health, well being and beauty.
		A3 Aims and activities of enterprises
18	Aim	Something you plan or hope to achieve in the long term
19	Making a profit	When more money is made than is lost over a period of time
20	Surviving	Many start-up businesses will have their first aim being survival, while they attract customers, builder their reputation, and learn what works.
21	Expanding	Growing from Micro to Small, Small to Medium etc. as being a larger enterprise can result in higher profits Examples include; moving to a new location, increasing customers/sales, moving into new markets, offering additional services
22	Maximise sales	Trying to make as many sales as possible, making sure each sale brings in as much revenue as possible.
23	Being ethical	To attract customers and create a positive image of the company, they might use Fair Trade materials, enhance working conditions and pay for staff, and pay their suppliers on time.
24	Satisfying customers	By meeting their needs and keeping them happy so they return to the business to buy again (repeat customers). Also satisfied customers will share this will their friends and families which might lead to increased sales.
25	Providing a social	Social enterprises can provide a social service by:
	service	Fundraising for local charities or causes
		 Sponsorship can provide much needed income (using the enterprise's profits)
		Community work is provided
26	Develop new products	Enterprises need to continually develop and produce goods and services to meet the changing needs the market. If enterprise do not do this, they risk losing customers to their competitors which results in a decrease in sales.
27	Attract new customers	Enterprises need to continually attract new customers to increase their sales. This can be done through advertising to raise awareness of the products/services and promotions and offers.
28	Retain existing	Existing customers need to be retained so that they make additional future purchases. This can be done by meeting their needs
	customers	and keeping them happy by providing good value for money products/services and good quality customer services. Advertising and promotions will also help to remind customers that they are there.

Carefully manage their	Managing finances means that costs will not spiral out of control. Enterprises must operate within their budgets to keep costs as
finances	low as possible without affecting the quality. Also ensuring bills are paid on time so that supply is not affected. If finance is not
	managed it could lead to loss of customers, revenue and profit.
Carefully manage their	Managing people is essential to achieving aims. Employing the right staff who understand the business' aims is important as
people	they will provide the best customer service. If you have too many staff or the right staff are not employed this may increase the
	costs for the enterprise and affect its ability to operate efficiently.
Carefully managing	Technology is essential in helping to meet the needs of customers. Enterprises will use technology to communicate with
technology	customers through information on websites, faster shipment of orders over larger areas, and social media sites that enable the
	enterprise to market their goods/services to larger populations quickly and conveniently.
Failing Enterprises	Enterprises may fail due to:
	Not listening to customers
	Not planning for future growth
	Not having a USP
	Not adapting to suit customer needs
	 Try to expand too quickly – can't meet customer demand
Impact of failure	Failure to manage their resources could lead to:
	 Staff losing their wages or salaries they need to survive so entrepreneurs have a duty towards them
	Customers may lose the goods or services they once relied upon
	The reputation of the entrepreneur may suffer if failure was avoidable
	A4 Skills and characteristics of entrepreneurs
Reasons for Start-	Make a difference, be your own boss, being made redundant , pursuing a hobby that can pay, have flexibility
up	
Entrepreneurial skills	These include: knowledge of industry/sector, technical, interpersonal, communication and presentation, planning and
	researching, time management, negotiation, prioritising tasks, problem solving, managing risk, leadership and teamwork
Entrepreneurial	These include: focus, passion, versatility, motivation and dedication, inventiveness, proactiveness, confidence, flexibility and
characteristics	adaptability, resilience and willingness to risk adversity, self-reliance, optimism, vision, resourcefulness, creativity and the
	capacity to inspire
	B1 Market research methods
Market Research	The process of finding information on the market, customers and competitors to help design products and services.
Primary research	This is information or data that is collected 'first hand' by using questionnaires, visits or observation, interviews or focus groups,
	or surveys.
Questionnaire	A set of questions that a respondent is asked about a particular topic.
	This is a process of collecting, analyzing and interpreting the responses from a set of questions
	Carefully manage their people Carefully managing technology Failing Enterprises Impact of failure Reasons for Start-up Entrepreneurial skills Entrepreneurial characteristics Market Research Primary research

41	Visits an or	This involves watching and recording how customers or competitors behave in situations in a structured way.	
1	observations	This involves matering and resortant more easierners or competitors senate in situations in a structured may.	
42	Mystery shopper	Someone who is employed to visit an enterprise pretending to be a genuine customer.	
43	Focus group	This is a group interview involving people who have similar traits or experiences, who participate in a discussion so the	
	0 1	enterprise can get their thoughts and opinions.	
44	Quantitative data	Research in which the answers are based on numerical and statistical data.	
45	Qualitative data	Research in which the answers are based on individual customer responses and open-ended questions.	
46	Secondary research	Research which uses existing research from third parties. Sources can include, online research, company materials, market	
		reports and government reports.	
		B2 Understanding customer needs	
47	Customer needs	Are the wants or requirements a customer has for goods or services.	
48	Anticipating customer	This means working out: how many customers are likely to buy from the enterprise; the market the enterprise operates within;	
	needs	when customers are likely to buy; and what customers are likely to buy.	
49	Customer	These are what a customer expects to receive from an enterprise. For example, good value products, rapid response to	
	expectations	enquiries, clear and honest information, after sales service.	
		B3 Understanding competitor behaviour	
50	Competitor behaviour	Enterprises need to understand the market by anticipating and identifying competitor behaviour, producing products to	
		market that are different from competitors, identifying features of the competitor.	
51	Unique selling point	This is the feature of a good or service that makes it different from competitors.	
52	Competitive	This means being compared to a competitor that sell similar goods and services and being perceived as better than them by	
	advantage	customers. This can be achieved through:	
		Price	
		Quality	
		Availability	
		Customer service	
		Unique features and selling points	
		Convenience	
		Loyalty	
53	Loyalty	This is when a customer returns to an enterprise to continue buying goods or services. They may gain an additional reward for	
doing so.			
B4 Suitability of market research methods			

54	Suitability of market	Enterprises need to consider whether the information gathered through market research is useful and whether there are
	research method	alternative methods that could provide better information for them about the market, customers and competitors.
55	Factors to consider	Enterprises should consider the following factors when conducting market research:
		the size of the enterprise
		cost of research
		time
		human resources available
		C1 PEST (Political, Economic, Social, Technological) analysis
56	Political factors	Political factors include:
		o governmental changes
		o new regulations
		o changes in taxation
57	Economic factors	Economic factors include:
		o consumer confidence in the economy
		o growth/recession
		o level of employment
		o cost of borrowing
		o cost of energy
58	Social Factors	Social factors include: changing consumer behaviour and trends
59	Technological factors	Technological factors include:
		o social media
		o energy efficiency
		o technological trends
		o costs of marketing and selling.
		C2 CWOT (Strongthe Weeknesses Opportunities Threats) and heigh
60	CI II	C2 SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis
60	Strengths	Internal factors and include:
		effective planning and financing
		marketing and promoting the enterprise
		location
		reputation

		 unique selling point (USP) strong branding competitive advantage
61	Weaknesses	Internal factors and include: unforeseen human resources costs (i.e. staff illness) lack of investment poorly performing product/service competitive disadvantage
62	Opportunities	External factors and include: growing market trends; developments in technology; gaps in the market; government policy changes; loans and grants; funding; events/holidays; development of additional products and services; adaptations to existing market offering; developing adapted marketing strategies; amendments to staffing; alternative investment decisions.
63	Threats	External factors and include: competitors; supplier problems; developments in technology; government policy; lack of funding; market changes.

GCSE Art



GCSE YR10 Art Knowledge Organiser Autumn Term Nature and Portraiture

	Key Concepts-Key Definit	ions
1.	Realistic drawing	Realistic drawing is what most people think of when they think of drawing - capturing what we see with our eyes and representing the three-dimensional world onto a two-dimensional surface using the elements of art such as line, shape, colour, value, texture, space, and form
2	Illustration	An illustration is a drawing, painting or printed work of art which explains, clarifies, illuminates, visually represents, or merely decorates a written text. It can simply be a picture illustrating a book, newspaper, etc
3.	Tonal range	In art, tonal range is the range from light to dark of an object or of an entire drawing or painting.
4.	Form in drawing and painting.	The illusion of three-dimensional form is conveyed through the use of lighting and shadows, and the rendering of value and tone.
5.	Mark Making	Marks made with media to show the texture or surface of something e.g furry, smooth
6.	Mixed Media	Mixed media is a term used to describe artworks composed from a combination of different media or materials.
7.	Colour Blending	Blending is a term used often in art, particularly in painting and drawing. It is the technique of gently intermingling two or more colours or values to create a gradual transition.
8.	Translucent colour	Transmitting light, but not clearly enough to be transparent. A translucent object causes enough diffusion of light that an object or image on the other side of it can only be seen indistinctly. Frosted glass is translucent.
9.	Observational Drawing	To record (look closely) a subject as accurately as possible.
10.	Biro pen drawings	A Biro is a pen with a small metal ball at its tip which transfers the ink onto the paper.
11.	Watercolour painting	Watercolour, also aquarelle, is a painting method in which the paints are made of pigments suspended in a water-based solution.

	Art History Key terms	
12.	Realism	A mid nineteenth century artistic movement characterised by subjects painted from everyday life in a naturalistic manner; however the term is also generally used to describe artworks painted in a realistic almost photographic way. Key artists; Jean Francois Millet, Winslow Homer, Gustave Courbet, Honore Daumier.
13.	Photorealism	Photorealism is a painting style that emerged in Europe and the USA in the late 1960s, characterised by its painstaking detail and precision. Key artists; Chuck Close, Richard Estes.
14.	Natural Form	A natural form is the original form of an object in nature. Example: A flower in the garden unpicked is in its natural form. It is also used in terms of art as the items nature gives us used artistically to represent different things.
15.	Botanical Illustration	A very detailed drawing or painting of a plant form
16	Scientific Illustration	Artists draw or render images of scientific subjects in an accurate way to inform and communicate. A scientific illustrator must use technical art and aesthetic skills in combination with scientifically informed observations and research to make accurate representations of the subject.
17.	Portrait	A portrait is a representation of a particular person. A self-portrait is a portrait of the artist by the artist
18.	Portraiture	The art of painting or taking portraits; a portrait; a likeness; a resemblance copied from a photograph or model.

Nature and Portraiture - Hist	corical context
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- 19. **Portraiture** is a very old art form going back at least to ancient Egypt, where it flourished from about 5,000 years ago. Before the invention of photography, a painted, sculpted, or drawn portrait was the only way to record the appearance of someone.
- **Nature**; Naturalist sculpture predates naturalist painting by several centuries. Ever since the great exponents of Greek sculpture succeeded in replicating the human body, they laid a claim to achieving the first form of naturalism in art.
- 21. Botanical art and illustration combine art and science. Artists aim to record accurate information about the shapes, structures, colours, life cycle and
 - habits of unique species of plants and flowers while also providing a pleasing image. Links with Botanical Illustrators; Ernst Haeckel, E.A. Seguy and Evelyn Binns.
- **22. Ernst Heackel;** (16 February 1834 9 August 1919) was an influential <u>German zoologist</u>, <u>naturalist</u>, and <u>artist</u>. He was also a physician, but in those fields he is not regarded as particularly notable.
- Haeckel discovered, described and named thousands of new species, mapped a tree of life relating all life forms. The published Haeckel
 - includes over 100 detailed, multi-colour illustrations of animals and sea creatures.

	Mark Powell		
24.	Mark Powell born originally in Leeds; is a London based artist who reuses old documents and envelopes as canvases to produce incredible drawings.		
25.	He is famous for his use of nothing but a simple Bic Biro ballpoint pen to create incredibly detailed portraits of the elderly.		
26.	His sketches using only a Biro pen as he states it is the most simple readily available tool to hand. He wants to inspire people to draw without spending money on art and craft materials. His tip is 'to always remember to work from light to dark with the pen'.		
27.	By recycling envelopes and antique documents he is in some way preserving a bit of history and the tales behind the sender. He finds that each background he works on is different and the technique differs on each. Some take ink better than others, some are thicker than others.		
Sus	annah Blaxill		
28.	Susannah Blaxill is a botanical artist. Blaxill was born and currently lives in Australia, but lived in England for about 17 years, where she became a member of the Society of Botanical Artists.		
29.	Blaxill is internationally recognised as a leading artist specialising in watercolour, pencil and charcoal drawings.		
30.	From an empty field behind a small cottage in East Anglia, Blaxill gradually created a small garden of one acre, planting trees, shrubs, perennials, bulbs,		
	vegetables and fruit. She was entranced by plant form and spent many hours observing and considering carefully the plants that she grew.		



31.	An American botanical artist, Hannah Klaus Hunter is a native of New York and spent most of her adult life in northern California until relocating		
	in 2019 to Washington.		
32.	A practicing artist since 1983, She currently works in printmaking and collage. Her pieces involve a variety of materials and have been		
	exhibited widely, both in the United States and abroad.		
33.	She creates work infused with the colours, textures, and wild, uninhibited compositions found in nature. As a child, Hannah enjoyed spending		
	time in her father's		
	vegetable garden, where she studied the colours and shapes she found there		
34.	Her brilliant portfolio ranges from printmaking to collage using a range of materials. Hannah works with a combination of monoprinting, eco		
	printing and collage.		

GCSE Music



		GCS	E Musical Elements Knowledge Organiser		
A –	A – MAD TSHIRT Elements and Keywords				
		Definition			
1.	M	Melody: the tune	Keywords: ascending, descending, conjunct, disjunct, repetition, sequence, ornamentation (trill, acciaccatura, appoggiatura, upper mordent, lower mordent, turn, glissando), additive melody, scalic, triadic, arpeggio, blue notes, chromatic, diatonic, improvisation, ostinato, riff, motif, passing notes		
2.	Α	Articulation: how a note is played	Keywords: legato, staccato, accent, pizzicato, arco, syllabic, melismatic, phrasing		
3.	D	Dynamics: the volume	Keywords: fortissimo, forte, mezzo forte, mezzo piano, piano, pianissimo, crescendo, diminuendo, terraced dynamics, sforzando		
5.	Т	Tempo: the speed	Keywords: presto, allegro, moderato, andante, adagio, largo, accelerando, rallentanto, bpm, rubato		
6.	S	Structure: the layout of a piece	Keywords: introduction, verse, chorus, middle 8, outro, breakdown, mix in, mix out, binary form, ternary form, 12 bar blues, symphony, movement, sonata form, recitative, cadenza, concerto, strophic, rondo		
7.	Н	Harmony: how notes sound when they are playing together	Keywords: consonant, dissonant, tonality, major, minor, modal, atonal, cadence (perfect, plagal, imperfect, interrupted), tonic, dominant, modulation, relative major, relative minor, pedal, basso continuo, 7 th chords, diminished, sharp, flat, natural, accidental, suspension, Tierce de Picardie		
8.	I	Instruments: the instruments and sounds you can hear	Keywords: strings, woodwind, brass, percussion, keys, sonority, timbre, guitar and electronic effects (flanger, phaser, chorus, wah wah, distortion, reverb, panning, vocoder), orchestra, band, choir (mixed voice – SATB, children/female voices – SSAA, male voices – TTBB), falsetto, mute, portamento		
9.	R	Rhythm: the pattern or long and short notes	Keywords: pulse, time signature/metre, syncopation, dotted rhythm, triplet, hemiola, skank, bubble, anacrusis, clave, pause, scotch snap, swung		
10.	Т	Texture: the different layers in the music	Keywords: melody and accompaniment, a cappella, polyphonic, call and response, homophonic, canon, contrapuntal, unison, octaves, monophonic, heterophonic, imitation, layering		

B - Note Names, Symbols, Duration & Rests				
	Note	Name	Duration	Rest
11.	O	Semibreve	4 beats	
12.	0	Minim	2 beats	
13.		Crotchet	1 beat	*
14.	\	Quaver	½ beat	7
15.	A	Semiquaver	¼ beat	7

C – S	C - Staff Notation				
16.	Stave – the 5 lines we write music on				
17.	Treble clef – tell us we're using the higher notes on the stave	6			
18.	Notes on the lines: Every Good Boy Deserves Football	E G B D F			
19.	Notes in the spaces: FACE in the space				

Areas of Study

Area of Study 1: Western Classical Tradition 1650-1910

- The Coronation Anthems and Oratorios of Handel.
- The Orchestra Music of Haydn, Mozart and Beethoven.
- The piano music of Chopin and Schumann.
- The Requiem of the late Romantic period.

Area of Study 2: Popular Music

- The Music of Broadway 1950s-1990s
- Rock Music of 1960s and 1970s
- Film and Computer Gaming Music 1990s-Present
- Pop Music 1990s-Present

Area of Study 3: Traditional Music

- Blues music from 1920-1950
- Fusion Music incorporating African and/or Caribbean
 Music
- Contemporary Latin Music
- Contemporary Folk Music of the British Isles

Area of Study 4: Western Classical Tradition Since 1910

- The Orchestral Music of Copland
- British Music of Arnold, Britten, Maxwell-Davies and Tavener
- The Orchestral Music of Zoltan Kodaly and Bela Bartok
- Minimalist Music of John Adams, Steve Reich and Terry Riley

BTEC Performing Arts



	1A Key Terms		
1.	Assignment	A task or a piece of work allocated to someone as a job or a course of study.	
2.	Naturalism	Naturalism refers to theatre that tries to create a perfect illusion of reality by use of a range of dramatic and theatrical strategies.	
3.	Practitioner	A theatre practitioner is a person or theatre company that creates practical work or theories to do with performance and theatre.	
4.	Interrelationship	The relationship or connection between multiple things.	
5.	Motif	A motif is a symbolic element that repeats throughout the drama, it could be a repeated movement, music or a visual component.	
6.	Professional repertoire	A collection of works an artist or a company can perform professionally.	
7.	Context	The factors surrounding a text that help us to understand it; the background events that help to explain something.	
8.	Constituent	Being part of a whole.	
9.	Genre	The genre of a performance refers to the type of story being told, and the style refers to how the work is presented on stage. A genre or style can help to give performers a framework to shape the devised work.	

		2B Key Knowledge
9.	Mark Wheeller	Contemporary playwright. He wrote the play Too Much Punch for Judy and is one of the most studied contemporary playwrights due to his plays being studied and performed in schools and colleges.
10.	Verbatim theatre	Verbatim theatre is based on true events, containing testimonials from real people involved. A form of documentary theatre.
11.	Creative intentions	Refers to the purpose of the play, in other words it's what the performer intended to achieve within their performance. Actors can convey this using different techniques.

12.	Director	Theatre directors set their artistic vision for a play, including selecting the cast, collaborating with designers, blocking the play's
	Director	movements, leading rehearsals, and monitoring the production's pacing.
13.	Stage manager	A person responsible for the technical details of a theatrical production, assisting the director during rehearsal, supervising the
	o ange manager	lighting, costuming, setting, prompting, etc., and assuming full responsibility for the stage during a performance of a play.
14.	Sound technician	A sound technician's role is to assemble, operate and maintain the technical equipment used to produce sound. They will identify
		the sound requirements for a given task or situation and perform the appropriate actions to produce this sound.
15.	Testimonials	Testimonials are statements from those involved or who knew the people involved.
1.6	- M	Weither by Meyl Wheeller this vices of corbeting the street was inspired by the tracic system of May 20 1002 and the street of corporate
16.	Too Much Punch for	Written by Mark Wheeller, this piece of verbatim theatre was inspired by the tragic events of May 20 1983 and the story of a young girl
	Judy	who kills her sister in a drink-drive incident. Ten years later, 'Judy' goes on to kill someone else in a road collision, this time with not only alcohol but cannabis in her system.
17.	Themes of Too Much	The themes of the play are: drink driving, loss, grief, young adulthood.
	Punch for Judy	
18.	Bertolt Brecht	Brecht was a German theatre practitioner and playwright who developed the idea of epic theatre.
19.	Epic theatre	A style of theatre developed by Brecht. He wanted to make the audience think and not passively watch, so he used a range of devices
		to remind them they were watching theatre and not real life.
20	Essence machine	An essence machine is used to physically and vocally represent a key idea or situation.

	Term 1b Key Terms			
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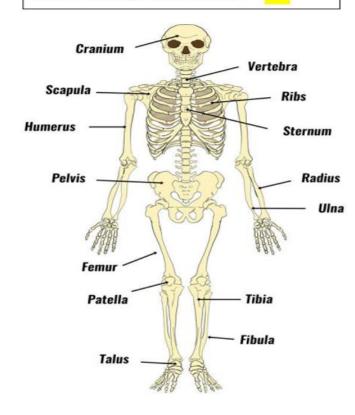
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20	Essence machine	An essence machine is used to physically and vocally represent a key idea or situation.

NCFE Sport, Exercise and Fitness

1



NCFE: Health and Fitness



2 Functions of the skeletal system

- Support
- Movement
- Protection of vital organs
- Storage of minerals
- Blood cell production
- Shape.

Types of bones

- · Long humerus, femur
- · Flat ribs, sternum
- Irregular vertebrae
- Short carpals, tarsals
- Sesamoid patella.

Joint Actions

- Flexion
- Extension
- Rotation
- Adduction
- Abduction

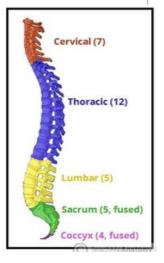


Joints- where two or more bones meet.

- Fixed joints skull, pelvis
- Slightly moveable joints spine
- Synovial joints
 pivot vertebrae
 condyloid wrist
 saddle thumb
 gliding clavicle
 ball and socket shoulder

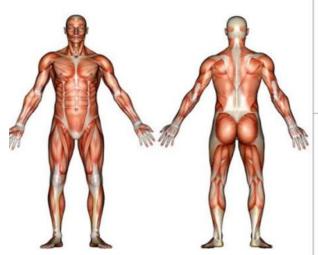
The appendicular skeleton- this consists of 126 bones which are located at the extremities of the body.

The axial skeletonthis consists of 80 bones which are located in the upper central part of the body.



NCFE: Health and Fitness

7



You must be able to locate the following: Deltoid, Trapezius, Latissimus Dorsi, Pectoralis Major, Biceps, Triceps, Rectus Abdominis, Gluteus Maximus, hip flexors, Quadriceps, Hamstrings, Gastrocnemius and Soleus.

8 Types of Muscles

Cardiac:

- found in the heart
- oxygen dependent, involuntary
- -aids blood flow through the heart.

Smooth:

- -found in multiple locations including digestive tract, blood vessels, and lungs, contracts in all directions
- -can work without oxygen, involuntary
- -aids digestion, helps the distribution of blood.

Skeletal:

-found around the body -can work with or without oxygen, works voluntarily -aids with movement.

9

Muscle Movement and Contraction

In an antagonistic muscle pair as one muscle contracts the other muscle relaxes or lengthens. The muscle that is contracting is called the **agonist** and the muscle that is relaxing or lengthening is called the **antagonist**.

Isotonic- these occur when a muscle contracts and changes length. There are two types:

Isotonic concentric contraction – this involves the muscle shortening.
Isotonic eccentric contraction – this involves the muscle lengthening whilst it is under tension.

Isometric contraction – this involves a muscle producing tension but staying the same length. This occurs when the body is fixed in one position.

10

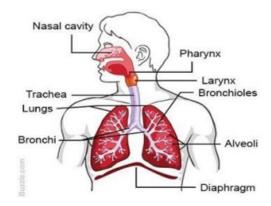
Muscle Fibre Types

Type 1 (slow twitch fibres)

Type 2 (fast twitch fibres)

NCFE: Health and Fitness

11



Inspiration (breathing in)- The diaphragm contracts and moves downwards. The intercostal muscles contract and move the ribs upwards and outwards.

Expiration (breathing out)- The diaphragm relaxes and moves back to its domed shape. The intercostal muscles relax so the ribs move inwards and downwards under their own weight.

12

Gaseous Exchange

Gaseous exchange occurs at the alveoli in the lungs and takes place by diffusion. The **alveoli** are surrounded by capillaries so oxygen and carbon dioxide diffuse between the air in the alveoli and the blood in the capillaries.

Diffusion is the movement of gas from an area of high concentration to an area of low concentration.

eatures of the alveoli that ssist gaseous exchange

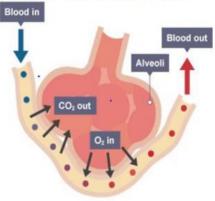
- moist, very thin walls (one cell thick)
- provide large surface area for gaseous exchange to occur
- short diffusion distance
- surrounded by capillaries

14 Lung Volumes

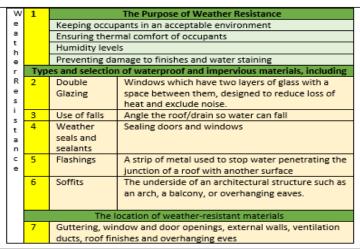
Tidal volume is the amount of air breathed in with each normal breath.

Residual volume is the amount of air left in the lungs after a maximal out breath.

Vital capacity is the total amount of air exhaled after maximal inhalation.



BTEC Construction



S	The	purpose of sustainability
u	17	Reduction in building energy use
s		Conserving finite resources
t		Reducing CO2 emissions to the atmosphere
a		Reducing pollution and wastage
i	Met	hods of ensuring sustainability:
n a	18	 orientating buildings for light and heat in the UK
ь		 reducing the use of greenfield sites and
i		improving the re-use of brownfield sites
1		 recycling waste materials into new products
i		 using low embodied energy materials and
t		green renewable natural materials
У		 using local suppliers
		 utilising prefabrication of elements and
		reducing wastage of construction materials.
	Mat	erials
	19	hemp, lime (as rendering finishes)
		sheep's wool (as insulation)
l		straw (for the construction of walls)
		 timber (such as cedar cladding or softwoods
		in timber framing)

aluminium (as guttering and downpipes)

20.	Pointing is the finish that is applied
to i	mortar (provides the bond between
lay	ers of bricks and blocks) once bricks
hav	ve been laid. There are four main



Walls ties should be put in every 900mm horizontally and 450mm vertically.



21. Wall ties are used to connect two halves of a cavity wall together. They stop the wall from moving

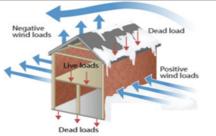
450mm 450mm

22. A weep, a weep hole, or a weep-brick is a small opening that allows water to drain from within an assembly. Weeps are located at the bottom of the object to allow for drainage:

	Strength and st a building		
	Name	Description	Example
23	Impact/live load	This is when something hits a building or falls on it	Rain, wind and snow
24	Dead load	These are loads that do not move such as the weight of the building itself	Walls, floors, windows and roofs
25	Dynamic load	These are the loads that can change during the use of a building	Weight of people and furniture

26 The strength of a material is calculated by working out how much pressure it can take.

The pressure is measured in Newtons (N)



27 A building is usually divided up into sections.

These are called fire compartments

If there is a fire in one compartment, it will not affect other compartments. Stops the spread of fire through a building.

Fire barriers include: Sprinklers , Fire walls, Fire resistant doors - made from steel

Door closures, Separate floors made out of concrete

l	ducts, roof finishes and overnanging eves					
F			Fire resistance materials including			
i	8	Plasterboard	board made of plaster set between two sheets of paper, used especially to form or line the inner			
r	_	_	walls of houses.			
e	9	Concrete	a building material made from a mixture of broken stone or gravel, sand, cement, and water,			
r			which can be spread or poured into moulds and forms a mass resembling stone on hardening.			
e	10	Blockwork	Blocks of concrete, cement, or similar material in a wall or other structure.			
s	11	Intumescent paint	a coating that reacts to heat by swelling in a controlled manner to many times its original			
i			thickness, producing a carbonaceous char formed by a large number of small bubbles that act as			
5			an insulating layer to protect the substrate.			
t	Fire-	resistance techniques:				
а	12	Fire compartments and	French			
n						
c		separating floors, door				
e		closes, fire resistant				
		doors				
			Ministra			
	13	Fire escapes	a staircase or other apparatus used for escaping from a building on fire.			
	14	Refuge areas	a location in a building designed to hold occupants during a fire or other emergency, when			
			evacuation may not be safe or possible. Occupants can wait there until rescued			
	15	Cavity fire barriers	In a concealed, hollow construction, a material or member which fills or seals the open			
			construction to prevent or retard the spread of fire.			
	16	Fire alarm systems,				
		smoke detections and				
		sprinkler system				
		-				

	28	The purpose of insulation				
Т		reduction of he	reduction of heat loss from a building			
h		reduction of energy use and costs				
е		prevention of th	prevention of the loss of heated air through gaps within a building or structure			
r		and providing a	n acceptable U-value in accordance with regulations			
m			Types of insulation			
а	29	Sheep's wool	Made from sheep wool fibres that are either mechanically held			
ı			together or bonded using recycled polyester adhesive to form			
			insulating batts, rolls and ropes. Natural wool insulation is			
1			effective for both thermal and acoustic insulation			
n	30	mineral wool	Mineral wool is any fibrous material formed by spinning or			
s u			drawing molten mineral or rock materials such as slag and ceramics.			
Ι	31	glass fibre	A strong plastic, textile, or other material containing embedded			
а		J	glass filaments for reinforcement.			
t	32	cellulose	An insoluble substance which is the main constituent of			
İ			plant cell walls and of vegetable fibres such as cotton			
0	33	foam	Spray foam insulation can be blown into walls, onto concrete			
n			slabs, on attic surfaces, or under floors to insulate and reduce air			
			leakage.			
			Types of thermally resistant materials			
	34	aerated	An innovative type of concrete containing around 80 percent air.			
		lightweight	These special concrete blocks have several advantages: They're			
		concrete	strong, light and provide better sound and thermal insulation			
		blocks	than conventional blocks.			
	35	Timber	Wood prepared for use in building and carpentry.			
	36	Light weight	A pre-blended, dry bagged lightweight screed for weight			
		screeds	reduction and thermal insulation on floors and roofs.			
	Location of insulation including;					
	37	cavity	used to reduce heat loss through a cavity wall by filling the air			
		insulation	space with material that inhibits heat transfer. This immobilises			
			the air within the cavity (air is still the actual insulator),			
			preventing convection, and can substantially reduce space			
			heating costs.			
	38	wall	Involves fixing a layer of insulation material to the wall, then			
		insulation	covering it with a special type of render (plasterwork) or			
		_	cladding.			
	39	roofing	A board-type product, usually of low or medium density, made			
		insulation	of mineral fibres, cellular glass, foamed plastic, lightweight			
			concrete, wood fibreboard,, one or both sides of which may be			
			faced with another material; provides thermal insulation in a			
			roofing system.			
	40	flooring	Carpet, rugs and laminate flooring can all act as insulation			
		insulation				
	41	double	Windows which have two layers of glass with a space between			
		glazing	them, designed to reduce loss of heat and exclude noise.			
	42	draught strips	a narrow piece, comparatively long and usually of uniform			
			width: a strip of cloth, metal, land,			

43		The purpose of sound insulation	
	✓ Resisting the passage of s	ound through a structure	
	✓ preventing nuisance and		
	✓ reducing external infrastr	ructure noise	
	√ reducing aircraft noise		
Typ wal		an be located in floors, walls, ceilings between adjacent rooms and flats/party	
44	Triple glazing	Made up of three panes of glass instead of one or two. The cavity between each pane of glass is usually filled with an inert gas – such as argon, xenon or krypton.	
45	Heavy-density block work	Consists of cement, sand and various aggregates, such as barite, magnetite, iron or lead pellets	
46	Sound insulation quilt	To achieve a high level of noise insulation, create a timber or metal stud wall and fill between the studs with a mineral wool such as Superglass or Rockwool guilt	
47	Plaster board layers	Consists of layers of paper that has been bonded to gypsum plastered core and is used mainly in the construction of wall	
48	Flooring mats and carpeting	There thickness and weave acts as insulation – absorbing the sound	
49	Acoustic ceilings	Tend to be made from fibrous materials that absorb sound energy, unlike plaster	
		and gypsum ceilings. They do not necessarily reduce the transmission of sound between spaces, rather they reduce the amount that reflects back into the space and so can be used to tailor the acoustic character of a space.	
Th	e purpose of sustainability		
Th 50		53 Slump Testing Checks the ratio of water and cement in wet	
-	Conserving finite resources	^ %	
	Reducing carbon emissions to t	the Concrete Mixture	
	atmosphere		
B. 6	Reducing pollution and wastag		
51	ethods of ensuring sustainability:	ordendary of the standard	
51	 orientating buildings for light the UK 	and neat in	
	reducing the use of greenfield	d sites and	
	improving the re-use of brown	and this	
	recycling waste materials into	o new 50% to 75% Best	
	products	To Thin	
	ousing low embodied energy m	naterials The MET WAT RIGHT! THE PAY	
	and green renewable natural meusing local suppliers	naterials	
	•utilising prefabrication of eler	ments and 54. Compression testing – checks that the hardened concrete is strong enough t	
	reducing wastage of construction		
	materials.	— Crene end crene tower	
	aterials		
52		ches)	
	 sheep's wool (as insulation) straw (for the construction of 	55 · 1	
	ostraw (for the construction of timber (such as cedar claddin)	The state of the s	
softwoods in timber framing)		Situate	
aluminium (as guttering and downpipes)			
		well	
Timb	per is used in structures such as buil	ding frames and roof trusses, as well as in	
	_	s types of timber is tested. Timber is then	
	2	ess grading and strength grading. The letter C	
		wood. D means deciduous or the wood is hard.	
25 tir	mber is a softwood with a strength	of 25 Newtons. A D30 timber is a hardwood	

Topic A.2 Construction knowledge organiser – Common structural forms for low-rise construction

Key	Words	
1	SIPS	Structurally Insulated Panels – insulated timber panels that
		are strong enough to take loads
2	Timber-framed	Frame made of softwood and faced (or covered with
	construction	plywood. Commonly used in houses.
3	Lateral restraint	When movement of building elements is stopped sideways.
4	Box frame	If both walls and floors are made using reinforced concrete,
	construction	series of 'boxes' are formed.
5	Load bearing	(especially of a wall) supporting much of the weight of the
		overlying parts of a building or other structure.
6	Claddings	A covering or coating on a structure
7	Render	A type of plaster finish used on external as well as internal
		walls. It can improve a building's insulation,
8	Pointing	Filling the joints in brickwork with mortar to improve
		appearance and weather proofing
9	Aesthetics	The appreciation of beauty or the appearance of something
10	Shingles	A roofing material, generally made of cedar wood
11	uPVC cladding	A covering made of unplasticised polyvinyl chloride

Tra	ditional cavity wall construction
12	In a traditional cavity wall construction.
13	the walls and foundations are usually the loadbearing elements of the construction.
14	the external walls are normally constructed as cavity walls while internal walls are solid or partition walls.
15	the external cavity walls have an outer skin of brickwork and an inner skin of block work.
16	the outer skin can also be rendered to provide extra insulation.

Tim	Timber-framed construction		
17	Commonly used in houses.		
18	The frames are made of softwood and face (or covered) with plywood.		
19	Loadbearing timber walls are made up of small timbers called studs		
20	Short timber pieces called noggins are placed between them to give stability.		

Cross wall section		Cav	vity
	Concre block -	te	Thermalite block
it	Render —	-	Cavity Plaster board
's. :e,		Outside	Inside

The most common parts of timber-framed buildings and their functions are:		
21	Damp- proof course	Moisture can penetrate the building from the foundations or under the floor A dpc stops moisture coming in from the foundations.
22	Finishes	Timber-framed buildings can even be given the look of a traditional building with a brickwork finish. These finishes are attached to the timber frame using flexible wall ties
23	Insulation	Is provided between the timber studs – tied so there is no gaps.
24	Lintels	A small beam above where openings are provided for window and doors. Directs rainwater away and add strength.
25	Studs	The timber frame is made of a number of upright timbers called studs.
26	Moisture resistance	A polythene sheet, called a vapour check, is built in between the internal wall and the insulation to stop moisture penetration.
27	Plywood sheets	These are attached to the external walls to provide bracing

Cro	ss-wall construction
28	The front and back of the building is
	constructed as non-loadbearing
29	While load bearing walls are at right angles
	to these walls
30	This lead to the name cross wall
31	The floor between these cross-walls is
	connected to all four wall and provides
	lateral restraint
32	There can be problems where the non-
	loadbearing claddings and the cross walls
	meet, as these junctions might not be
	weatherproof

Stru	icturally insulated panels						
33	They have a central layer of insulation, with plywood face on each side.						
34	SIPS construction is similar to timber framed construction, but is faster and large panels can be made to speed up the process.						
35	The method provides a light frame, is thermally efficient and helps to reduce site waste.						
36	Because the panels are wooden, fire resistance could be an issue.						
37	Finishes can be applied directly to the panels.						
38	These include exterior brickwork, blockwork, tiling and rendered finishes as well as more suitable finishes such as timber cladding and hemp rendering						

Topic B.1/B.2 Construction knowledge organiser – Pre-construction and ground works

Key	Key Words						
1	Preconstruction	The various activities that must be done before work can begin on site					
2	Sub-structure groundworks	These works are activities that need to be completed below the ground e.g. adding a gas pipe					
3	Hazard	Is something that has the potential to cause harm, such as the collapse of the sides of excavation					
4	Risk	IS the results of any accident or event that happened because of the hazard, such as a broken arm resulting from the collapse of the excavation					
5	Foundations	Usually poured concrete that provides stability by spreading the building load over a large area					
6	Musculoskeletal	To do with the human frame and muscles that function to give movement					

	Desk based pre-construction - before work start on site, a range of activities need to be carried out					
7	Legal requirements e.g. health and safety plan, method statements and risk assessment.					
8	A scaled site layout plan is prepared. This needs to show site accommodation such as site offices and material storage and toilets for staff					
9	A document showing the programme of work – also helps to plan delivery of resources and materials					
10	Resources and materials are brought					
11	Safety signs are set out and statutory notices are organised					
12	Road crossings for plant and deliveries and traffic management are planned					

Haz	Hazards associated with groundworks							
	Hazard		Risk		Control measure			
13	Gas		Injury or death		Avoiding services such as the gas mains			
14	Collapse of the sides of the excavation		Injury or death		Trench support such as timbering is provided to hold back the sides of the excavation			
	(could be due to soil type)				Physical barriers can be put in place to stop machinery or people putting pressure on weak ground near the edge of the excavation			
					A different method could be used, such as trench fill foundation, which lets foundations be excavated and poured immediately, giving the soil no time to loosen.			
15	Presence of ground water		Flooding or drowning		Pumping out excess water			
16	Confined space		Crushing or musculoskeletal injuries		Using appropriate PPE and reducing the amount of work done in confined spaces			
17	Existing services such as gas mains, water pipes, or electricity cables		Injury, flooding, death or power outages		Locate and protect all existing services before work begins			
18	Proximity of excavation plant		Injury or death		Barriers stop moving machinery from going too close to excavation			

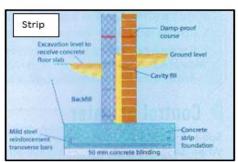
Pre-co	Pre-construction work on the site						
20	First, the site is cleared of vegetation and trees.						
21	Any existing structures are knocked down.						
22	Then any existing services (water, gas, electricity) are protected from damage by the building work						
23	Next, access and egress (exit) routes into and out of the site are constructed						
24	Finally, the site is set up, providing site accommodation and temporary services including temporary lighting and roads.						
24	Security arrangements are also installed at this point, including fences and gates						

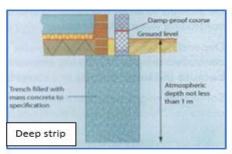
Control of water					
1	Sub-soil water is the water present below ground (ground water)				
2	By law the sub-soil water must not be allowed to enter the building and damage it.				
3	Sub-soil water and surface water might just need to be controlled temporarily during excavation. This is called simple sump pumping, because the water collects in a pool and is then pumped out.				
4	Some sites night <u>need</u> permanent control of sub- soil water. This is known as land drainage.				

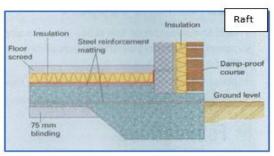
Eart	Earthwork support							
5 This is the support of the sides of excavati								
6	There are different methods earthwork support depending on the needs of the site and the type of the soil including:							
7 Steel trench sheets								
8 Timbering								
9 Hydraulic trench supports								
10	O Aluminium walling							

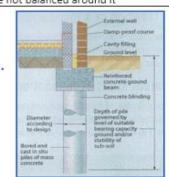
Fou	Foundations					
11	A foundation is designed and constructed to safely transmit the loads of the building to the ground or sub-soil.					
12	They should be able to support the loads of the building for its lifespan					
13	The kind of foundation used depends on the load, type of structure, site requirements and the type of soil.					

	Type of foundation		Uses		Advantages		Disadvantages
14	Strip	19	Commonly used in low rise construction such as houses where the soil has the right strength	24	 Traditional well-known method Involves doing brickwork and blockwork in trenches Cheap 	29	Might take longer Can be hazardous as the soil can get loosened Might need trench support
15	Deep strip	20	Used for similar types of buildings, quick to construct	25	No brick or blockwork needs Faster method of construction	30	Could be more expensive
16	Raft	21	Used where soil does not have the same strength or where heavy loads are expected	26	Provides good foundation where soil is variable Can be used as a floor Can be used to fit in services	31	Expensive to construct Can crack if not constructed correctly Needs formwork
17	Short bored piles	22		27	Provides foundations when the soil is weak Quick to construct	32	Expensive to construct Construction causes a lot of noise
18	Pad foundations	23		28	Provides foundations for heavy loads Quick to construct	33	Needs formwork Can move if loads are not balanced around it









Short bored piles

BTEC Hospitality

	Key words	AC 1.1 Structure of the hospitality and catering Industry			
1	Hospitality	friendly and generous treatment of guests and strangers.			
2	Customer	the person/people who book/receive the service, e.g. hotel guests			
2	(Guest/Clie	the <u>persony people</u> who <u>booky receive</u> the service, e.g. <u>noter guests</u>			
	nt)				
3	Service	to do/provide something for someone else, this can be paid for or done for free			
3	Service	depending on the business, e.g. hospitals provide free healthcare services.			
-	- ·	Restaurants provide food service that customers pay for.			
4	Business	the <u>buying</u> and <u>selling</u> of goods/services to <u>make money</u> , e.g. airports make money			
		from flight ticket sales/meals.			
5	Accommod	a room, group of rooms, or building in which someone may live or stay.			
	ation				
6	Catering	offering facilities to people, especially the <u>provision</u> of <u>food and beverages.</u>			
7	Tioser establishment which provides <u>inexpensive</u> rood and roughing for specific gro				
		people, e.g.: students, workers, or travelers.			
8 Hotel an establishment providing accommodation, meals, and other services		an establishment providing <u>accommodation</u> , <u>meals</u> , and <u>other services</u> for <u>travelers</u>			
		and tourists.			
9	Guest	a <u>private house</u> offering <u>accommodation</u> to paying guests, <u>smaller business</u> than			
	House	hostels and hotels			
10	Corporate	a large company or group			
11	Networking	ng to meet and share ideas with people			
12	Event	organising of large events such as festivals, conferences, ceremonies, weddings,			
	Manageme				
	nt	•			
13	Advertising	to promote or make people aware			

27	AC1.1 Types of Establishments		Examples
28			Guest houses, hotels, B&Bs, hostels, and holiday parks. Restaurants, Bars, Cafés, Fast Food Restaurants, Deli/Sandwich Shops,
	Tor prontymake money		Airports, Trains, Coaches and Ships/Ferry
29	Non-Commercial	33	catering in business and industry, education, healthcare and the armed
	Not for profit		forces. These can be both residential and non-residential.
30	Residential	34	includes guest houses, hotels, B&Bs, hostels, and holiday parks
	You can sleep there		
31	Non-Residential	35	Restaurants, Bars, Cafés, Fast Food Restaurants, Deli/Sandwich Shops,
	No accommodation there		Airports, Trains, Coaches and Ships/Ferry

27	AC1.1 Types of Establishments		Examples
28	Commercial For profit/make money		Guest houses, hotels, B&Bs, hostels, and holiday parks. Restaurants, Bars, Cafés, Fast Food Restaurants, Deli/Sandwich Shops, Airports, Trains, Coaches and Ships/Ferry
30	Non-Commercial Not for profit		catering in business and industry, education, healthcare and the armed forces. These can be both <u>residential</u> and <u>non-residential</u> .
32	Residential You can sleep there		includes guest houses, hotels, B&Bs, hostels, and holiday parks
34	Non-Residential No accommodation there	35	Restaurants, Bars, Cafés, Fast Food Restaurants, Deli/Sandwich Shops, Airports, Trains, Coaches and Ships/Ferry

	Establishment		
27	S		
37	Hotel	=	The style of food and level of service will depend on standard of hotel
20	Dan		
38	B&B, Guesthouse	=	Maybe themed. Breakfast, Half board or full board. Family run
39	Motel, Holiday Park	=	Lower standard than hotels, food is often buffet style. Corporate (Butlins) or independently run
40	Restaurant	=	Different types e.g. Italian, Gourmet, fine dining. Styles of service vary depending on cost and type of food being served.
41	Cafe	=	Varies from 'greasy spoon'. Tea rooms or coffee shop. Serving snacks and full meals.
42	Fast food	11	KFC, McDonalds or independent. Limited menu, low cost, eat in or take away. Disposable packaging
43	Take away	=	Food cooked to order. Take away/ Delivered or some may be attached to restaurant to eat in
44	Public houses		Corporate (Weatherspoon) or independent. May serve 'basket' meals, sandwiches or table service meals
45	Bars	=	More cosmopolitan, maybe themed. Table service or eat at the bar.
46	Hospital	Ш	Budget controlled by NHS. Food for different patients' needs: soft meals, vegan, religion, low fat or sugar.
47	School Meals	Ш	Strict guidelines on what can be served to U16. Oily fish 1 x week, chips max 2x week.
48	Meals on Wheels	=	Meals provided by volunteers to people unable to cater for themselves.
49	Care Homes		Needs of clients catered for, soft food, vegan, religion, low fat etc. Some residents need help with feeding
50	Armed Services	=	Mass catering, camps on active service. Canteens at bases. High energy, nutritionally balanced.
51	Prisons	=	Tight budget. Food prepared by inmates

6 9			Hotel Star rating
7	1*/2* Hotel	73	Very basic, often in city centres where accommodation is in high demand or on the outer skirts of popular holiday resorts. Rooms have a bed, wash facilities and somewhere to hang clothes. Limited staff, no concierge/porter service. Won't have fridge/minibar. Designated eating area. Limited menu, some may serve evening meals. Not very expensive.
7	3* Hotel	74	Clean and basic, Bed. Possibly small fridge and TV, not likely to have modern technology or facilities. Often near airports or city centres for commuters. Popular brands: Travelodge, Premier Inn, Ibis. One restaurant, for breakfast and evening meals/snacks. Menu will be limited. Limited staff on reception, uniform basic e.g. polo shirt and skirt/trousers with company logo. Self-checkout facility/key drop off (less personal but cost effective).
7 2	4*/5* Hotel	75	Well decorated, spa facilities such as pool, spa, steam/sauna rooms, massage treatments, concierge service, 24hr room service, complimentary mini bar, well maintained public areas, gardens, multiple choices of onsite restaurants/bars, porter service (carrying luggage), well-staffed reception desk, modern facilities and technology in rooms e.g. docking stations, TVs, Jacuzzi bath. Staff uniform quite formal, shirt and trousers/skirt or a suit.

76			Standards of service
77	Michelin guides	81	Anonymous inspectors visit unannounced.
			Have a meal & write a review. Award stars
			for excellence
78	AA guide	82	Inspectors visit. Have a meal & write a
			review. Award rosettes for restaurants. 🥮
			Stars for hotels
79	Good food guide	83	The public who have visited the
			establishment fill in a review. Then compiled
			into a guide. Awards points for excellence
80	Online/ written reviews	84	Anyone can post reviews. This gives an
			average score. There are guidelines to
			prevent false reviews.

92	AC1.2		Kitchen Brigade
93	Head Chef	=	Person in charge of the kitchen and menu
94	Sous Chef	=	Second in command in charge of staff and food production
95	Sauce Chef	=	Le Saucier –prepares sauces, stews & hot hors d'oeuvres (3rd in charge)
96	Larder Chef	=	Le garde manger – responsible for cold foods, salads, appetisers,
97	Pastry Chef	=	Le Patissier – responsible for baked goods & desserts
98	Vegetable Chef	=	L'entremetier- prepares hot appetisers, soups, vegetables, pasta, side dishes
99	Other Station	=	Poisonnier- fish Legumier- vegetables potager-soups Boulanger-baker
	Chefs		Boucher-Butcher Glacier-chilled desserts Friturier-fry chef Grillardin-Grill
			chef
100	Commis Chef	=	Chef in training, helps in all areas of kitchen to gain experience.
101	Kitchen	=	Wash up, fetch & carry, prep vegetables. Train to be Commis chef
	Assistant		
102	Kitchen Porter	=	Washing dishes, cleaning kitchen, fetch & carry.

85	Types of Service		
86	Counter	89	Cafeteria, Self-service, Fast food, Take
			away, Buffet, Carvery
87	Table	90	Gueridon, Plate, Family & Silver service
88	Personal	91	Travel, Tray & Vending service

113	AC1.2		Restaurant Staff
114	Restaurant Manager	118	In overall charge. Staff rotas. Takes bookings, relays information to Head chef
	(Maitre d'Hote)		
115	Head Waiter(ess)	119	2 nd in charge. Greets & seats guests, Deals with complaints
116	Wine waiter	120	Serves wine & helps customers select wine to match food.
	(Sommelier)		
117	Wait staff	121	Set & clear tables, serve customers.

135	Personal attributes of H&C
	staff
136	Patience
137	Team player
138	Self-motivation
139	Initiative
140	Honesty
141	Personal presentation & hygiene
142	Polite, Pleasant manner
143	Calm, controlled
144	Organised

Costs for an establishment			
Food costs	159	Ingredients, pre made foods, bar food and drinks, food and drinks for staff	
Materials costs	160	Soap, loo roll, menus, order pack, cleaning materials, flowers	
Personnel costs/wages	161	Chefs, kitchen assistants, bar staff, wait staff, managers, casual staff	
Overhead costs	162	Heating, furniture, maintenance of equipment, curtains, carpet.	

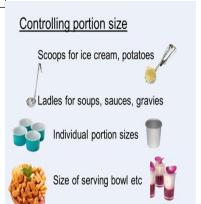
176	AC1.4 Benefits of portion control
177	Keeps food costs down
178	Reduces waste /leftovers
179	Keeps losses in food production and serving to a minimum
180	Offers a consistent portion size to all customers
181	Ensures a consistent profit

182

163	AC1.4 Factors affecting success	
164	Costs	
165	Economy	
166	Environment	
167	Technology	
168	Cooking techniques	
169	Competition Customer Service	
170		
171	Trends	
172	Political factors	
173	Media	
174	Name	
175	Location	

145	AC1.3		Employment contracts
146	Full time 150 (36hrs+)		Work a set amount of hours over week and weekends. Entitled to sick, holiday & maternity
	Permanent		pay
147	Part time	151	Work at busiest times of the week/weekend.
	(4 - 16hrs)		Entitled to sick, holiday & maternity pay (in
	Permanent		proportion to hours worked)
148	Temporary	152	Employed for specific time e.g.
			Easter/Christmas. Not entitled to sick, holiday
			or maternity pay if worked for <2 yrs.
149	Casual	153	May work for agency to work at specific
			functions or cover staff absence.
			Not entitled to sick, holiday or maternity pay if
			work for <2 yrs.





GCSE Sociology

Key introductory terms

Sociology	The study of society. Sociologists look at a range of factors in someone's social world.
Society	A social grouping that shares the same geographical territory and has the same political authority and expectations.
Culture	The whole way of life of a group of people in society e.g. clothes, food, music.
Norms	These define appropriate and expected behaviour in different certain settings e.g. classroom, cinema, restaurant.
Values	Ideas and beliefs that people have about what is desirable and worth striving for e.g. privacy & respect
Socialisation	Learning the norms and values of your culture and society.
Primary socialisation	This takes place in early childhood and is where we learn basic behaviours and skills we need. Family are responsible.
Secondary socialisation	This takes place in later childhood and beyond, learn norms, values and culture. Agencies include education and media.
Nature	The idea that behaviour and characteristics are innate (we are born with them) and due to biology.
Nurture	The idea that behaviour and characteristics are learnt from our environment (sociologists believe this)
Social structures	These form society's framework and set limits and guide behaviour e.g. family, class.
Social processes	The ways that humans are affected by their interactions with others in society e.g. racism.
Social issues	These form society's framework and set limits and guide behaviour e.g. family, class.
Status	A person's social standing or position in society. This can be affected by gender, age, class etc.

Functionalist approach

Key sociologist: Durkheim

- *Society is positive and is in harmony
- *There is value consensus everyone agrees on what is important
- *Society is like a human body, we need all parts of it to be able to function
- *Agencies such as family, education and crime all help to keep society running smoothly and these are positive
- *No group in society has more power than another group
- But... Functionalists are accused of viewing society too positively.

Marxist approach

Key sociologist: Karl Marx

- *Society is negative and is based on conflict
- *Capitalism creates a divide between two social classes
- *The ruling class (bourgeoisie) own the businesses and exploit the working class (proletariat) for profit
- *Family, education, crime etc. all work to keep the class divide and benefit the ruling class
- *The working class do not realise they are being exploited
- *The only way to overcome this inequality is a revolution (and society becoming communist)

Feminist approach

- *Society is negative and is based on conflict
- #Society is divided by gender and is based on patriarchy (male domination and power)
- *Men have power and dominance in society and women are oppressed
- *Family, education, crime etc. all work to keep the gender divide and exploit women
- *For example, women may be victims of domestic abuse and may be taught gender roles that limit their opportunities in society

Weber's approach

- *People's ideas, values and skills have more of an influence on their position in society than class and money *Status (someone's social position) is not always linked to their class/money
- *E.g. some people have high status but do not have a lot of money (junior doctors) whereas some people may have low status but lots of money (lottery winners)

Interactionist approach

- *Society does not influence everyone in the same way
- *Everyone's experiences are different, you can't generalise about behaviour
- *People can be labelled as something (e.g. clever, naughty) which can affect how they see themselves
- *People might accept and live up to the label through a self-fulfilling prophecy

New Right approach

- *Society should be based on traditional values such as marriage
- *People should not be reliant on welfare benefits as this can create an underclass
- *Nuclear families are the best type (with a married mum and dad) and lone-parent families can cause issues

Consensus vs. conflict theories

Consensus theories

- *These theories believe society is based on consensus (agreement) and is in harmony
- *Everyone shares the same norms and values and no one group has more power than another
- ★E.g. functionalism

Conflict theories

- *These theories believe society is based on conflict (disagreement) and is divided
- *People in society have different norms/beliefs/values
- *Some groups have more power than others
- *E.g. feminism, Marxism

Key methods terms

Aim	A general statement about what a sociologist expects to find out in research			
Hypothesis	A prediction about what the sociologist expects they will find in research			
Pilot study	A small test-run of a study which is carried out before the main study to check for any problems (e.g. equipment)			
Sampling	How participants are chosen to take part in a study (e.g. volunteer, opportunity)			
Primary data	sociologist expects to find out in research A prediction about what the sociologist expects they will find in research A small test-run of a study which is carried out before the main study to check for any problems (e.g. equipment) How participants are chosen to take part in a study (e.g. volunteer, opportunity) Data which is collected first hand by the researchers (e.g. using a questionnaire or interview) Data that already exists and is used by the researcher (e.g. official statistics, letters) Data which IS in the form of numbers			
Secondary data	the researcher (e.g. official statistics,			
Quantitative data	Data which IS in the form of numbers			
Qualitative data	numbers and tends to be visual or in			
Validity	, .			
Reliability	repeated the study, would we find the			

Sampling methods

Random – all participants have an equal chance of being chosen (e.g. names out of hat)

✓Less biased and likely to be more representative

×May not be fully representative – could choose all males

Volunteer – participants choose/self-select to take part (e.g. responding to an advert)

✓Easy to gain a sample, less likely to drop out

×May not be representative – only certain people will agree

Opportunity – participants who are available are chosen

✓Easy to gain a sample × may not be representative

Stratified— participants chosen according to % in the population

✓Most representative × difficult for the researcher to do

Primary research methods

Method	Advantages	Disadvantages
Questionnaires	✓ Participants are likely to be honest as anonymous ✓ Can be given to a large sample so more representative	× Participants may not understand the questions × May not be honest as want to appear desirable
Structured interviews (set questions)	✓Can compare responses easily between participants ✓Less likely to be biased as set questions	× May not get full detail or gain a deep understanding × Cannot ask additional questions
Unstructured interviews (no set questions)	✓Can get full detail and a deep understanding ✓You can build rapport/relationship so may be more honest	× May not get full detail or gain a deep understanding × Cannot ask additional questions
Group interviews	✓Can gain a variety of opinions ✓May be more honest as have group support	×Some participants might take over the interview × Participants might be embarrassed to be honest
Participant observation (researcher joins group)	✓ May understand behaviour more as joining in ✓Can ask questions to help with research	× Could be biased as too involved × Difficult to note behaviour so may not be accurate
Non-participant observation (watches from a distance)	✓ Less likely to be biased as not involved ✓ Easier to note behaviour so more likely to be accurate	× May not get full understanding of behaviour as not involved in the group
Longitudinal study (follows a group over time)	✓Can look at the influence of different factors over time ✓Can gain detailed information of the group you study	× Participants may drop out of the study × Sample is likely to be small so not representative

Secondary sources of data

Method	Advantages	Disadvantages
Official statistics (quantitative)	✓Often large sample sizes – more representative ✓Easy to analyse and compare over time as quantitative ✓ Likely to be accurate as collected by the government	× May not give reasons for behaviour (just trends) × May not include all behaviours e.g. crime statistics may ignore the dark figure
Documents (qualitative) e.g. letters, diaries, school reports	✓Lots of detailed data as qualitative ✓Can find reasons behind behaviour	× May be small sample sizes and not representative × May be time-consuming to analyse × Could be biased and not valid

Triangulation and mixed methods

Where a sociologist uses more than one method to find out lots of information about a topic e.g. using a questionnaire, interview and observation.

Gain more data on a topic

Check the validity/accuracy of the data

×But, the data may be difficult compare as it is collected using different methods.

BTEC Health and Social Care



Leari	ning Aim C – person-cent	tered health and wellbeing improvement plans
Key vocabulary	Definition	Examples
1 Person-centred approach	An approach which takes into account an individual's needs wishes and circumstances.	a) Lower blood pressure b) Increase BMI / Decrease BMI c) Cutting down on alcohol consumption d) Exercise more frequently e) Improve diet f) Current health status g) Employment status h) Location of housing i) Support already in place
2 SMART Targets	Targets that are specific, measurable, achievable, realistic and targets which have a time constraint.	a) S – Specific: A target/goal that is really well explained so an individual knows exactly what they need to do e.g. In 3 months, you need to cut down from smoking 10 cigarettes a day to smoking 5 cigarettes a day b) M – Measurable: A target/goal that can be easily observed by another individual so they can make a judgement when the goal is achieved e.g. In 3 months, you need to cut down from smoking 10 cigarettes a day to smoking 5 cigarettes a day c) A – Achievable: A target/goal that can be met in the time given ensuring an individual remains motivated e.g. In 3 months, you need to cut down from smoking 10 cigarettes a day to smoking 5 cigarettes a day d) R – Realistic: A target/goal that will enable an individual to remain motivated as they know the goal can be achieved e.g. In 3 months, you need to cut down from smoking 10 cigarettes a day to smoking 5 cigarettes a day e) T – Time related: A target/goal must have an amount of time allocated to it giving an individual something to aim for e.g. In 3 months, you need to cut down from smoking 10 cigarettes a day to smoking 5 cigarettes a day

3 Short-term targets	Targets or goals that are set which need to be achieved between 1 and 6 months.	a) Short-term target/goal to stop smoking In 3 months, you need to cut down from smoking 10 cigarettes a day to only smoking 5 cigarettes a day.		exercise more In 3 months, y the number of from none to 3	b) Short-term target/goal to exercise more frequently In 3 months, you need to increase the number of times you exercise from none to 3 times a week for one hour on each day		c) Short-term target/goal to eat a healthier diet In 3 months, you need to reduce the number of takeaways you eat from 5 a week to 3 times a week on the other days you need to eat a healthy meal.	
4 Long-term targets	Targets or goals that are set which need to be achieved between 6 months and a year	a) Long-term target to stop smoking In 1 year, you need to stop smoking completely by reducing from 5 cigarettes a day to none.		b) Long-term to more frequent In 1 year, you number of time 3 times a weel	b) Long-term target to exercise more frequently In 1 year, you need to increase the number of times you exercise from 3 times a week for one hour to 5 times a week for one hour and a half. c) Long-term target to eat a healthic In 1 year, you need to reduce the number of times awounce a week and the other days you 2 healthy meals.		eed to reduce the number of eat from 3 times a week to only d the other days you need to eat	
5 Support	Help, advice or guidance that is offered by a trained professional through formal support or by a family member or friend through informal support.	All sources of support must circumstances a) Formal support to stop ii) GP ii) Nurse practioner d) Informal support to stop ii) Family members e.g. par iii) Friends	smoking p smoking	b) Formal support more i) Gym instructii) GP e) Informal support	port to exercise	c) Formal suppo i) Dietician ii) GP f) Informal supp	ort to eat a healthier diet oort to eat a healthier diet oort to eat a healthier diet ers e.g. partner, children	
6 Obstacles	A difficulty an individual might face that means accessing a health or social care services hard.	The obstacles you decide to a) Emotional / Psychological Caused by: i) Lack of motivation ii) Low self-esteem iii) Acceptance of health status	b) Time constraints Caused by: i) Work commitments ii) Family commitments	,	d) Unachievable targets Caused by: i) Target is too difficult ii) Target has an unrealistic timescale	e) Lack of support Caused by: i) From family ii) From friends iii) From professionals	f) Other factors specific to individual Caused by: i) Disabilities ii) Addiction	

	a) Physical	b) Geographical	c) Psychological	d) Cultural and	e) Financial
	Caused by:	Caused by:	Caused by:	language	Caused by:
	i) Wheelchair	i) Location of house	i) Lack of motivation	Caused by:	i) Low income
	ii) Walking aid e.g. stick	ii) Access to public	ii) Low self-esteem	i) Restrictions of	ii) Cost of treatment
	iii) Poor mobility	transport	iii) Acceptance of	culture on access to	
	iv) Push chair use (baby)		health status	services e.g. access	
				to female doctor	
				ii) Speak little or no	
				English	

Component 1

Key	Definition	Relating factor to Justin	Impact on PIES
vocabulary			
1 Income/	The amount of	Early childhood – money available to him would	a) P – lower immunity, increased risk of infection, poor growth and
wealth	money available to	have been the income his mum from the jobs she	development (early childhood), deficiencies
	an individual, sources	had.	b) I – poor focus, lack of concentration, struggle to retain or learn new
	of income can come	Adolescence – money available to him would have	information,
	from paid	been the income he received from his singing career	c) E – attachment with mum (working all the time), low-self esteem
	employment,	and any endorsements.	(early childhood), increased confidence (adolescence & later
	benefits or pensions.	Later adulthood – he will hopefully have money	adulthood)
		available to him from the singing career he had	d) S – reduce opportunities to socialise (early childhood), increased
		when he was younger.	opportunities to socialise (adolescence & later adulthood)
2 Diet and	The food an	Early childhood – his diet would be controlled by his	a) P – lower immunity, increased risk of infection, more susceptible to
lifestyle	individual chooses to	mum as she would have been the one buying the	disease (later adulthood),
choices	eat. Other lifestyle	food.	b) I – impaired judgement (adolescence), poor decision making
	choices are made	Adolescence – his diet would have changed when	(adolescence), increased risk of dementia (later adulthood)
	over levels of	his singing career started. This is when he would	c) E – poor self-esteem, poor confidence, heightened confidence and
	exercise, alcohol	have experimented with drugs and alcohol.	self-esteem (adolescence)
	consumed and use of	Later adulthood – his diet would vary, he may have	d) S – increased opportunities to socialise
	drugs including	someone to cook for him and eat a balanced diet.	
	nicotine.	This might not be the case and his diet may be poor.	
3 Personal	These are	Early childhood – mum and dad, siblings, friends he	a) P – maintenance of personal care (early childhood)
relationships	relationships an	made in school	b) I – help with homework (early childhood & adolescence)
	individual has with	Adolescence – mum, siblings, friends made	c) E – secure, strong attachments and bonds, sense of belonging
	family, friends and	throughout school, his team when on tour, girlfriend	d) S – independence, opportunities to socialise, social isolation
	other key individuals	Later adulthood – friends he had throughout,	(adolescence when touring & later adulthood)
	in their life.	siblings if still alive, wife.	

4 Role models	A role model is	Fault abildhaad his main rale mandale would be us	al D. shangas to announce shangas to dist shangas to lifestule
4 Role models		Early childhood – his main role models would have	a) P – changes to appearance, changes to diet, changes to lifestyle
	someone an	been his mum and his school teachers	choices
	individual looks up	Adolescence – his mum would have still been a role	b) I – poor concentration, misbehave (early childhood), more focused
	to. Role models can	model to him but he would also have been a role	(adolescence)
	be both positive and	model to all of his fans.	c) E – low/high self-esteem, low/high confidence
	negative on an	Later adulthood – he will be a role model to his	d) S – increased opportunities to socialise, new friendships, social
	individual's	future children and grandchildren as he sees them	isolation
	development.	growing up.	
5 Social	This refers to long	Early childhood – he wouldn't have been socially	a) P – poor eating habits, disturbed sleeping patterns, weight gain
isolation	periods of time that	isolated as he would have his friends around him. He	b) I – increased risk of dementia, poor brain stimulation, poor levels
	an individual spends	may have felt isolated at home when his mum was	of concentration
	on their own without	at work.	c) E – low self-esteem, low confidence, lack of security, poor
	interacting with	Adolescence – he may have been a little socially	attachments and bonds
	others.	isolated when on tour as he would have been away	d) S – isolated, lose contact with friends and family
		from his friends and family. He would have his team	
		around him though.	
		Later adulthood – he will have his family around	
		him, but if he loses his wife he may become socially	
		,	
		isolated.	



GCSE Photography



Year 10 — Term 1a Disguise and Identity

Photography	Photography is the art, application, and practice of creating durable images by recording light, either electronically by means of an image sensor, or chemically by means of a light-sensitive material such as photographic film.
Assessment	Assessment objectives are part of the assessment arrangements for these qualifications. We adopt them into our regulatory
objectives	framework through the subject-specific conditions that exam boards must comply with when designing their specifications
Disguise	Disguise is a means of altering one's appearance to conceal one's identity.
Conceal	To hide something from view or from public knowledge, to try to keep something Secret
Transform	To change greatly the appearance or form of.
Saul Steinberg	Saul Steinberg (June 15, 1914 – May 12, 1999) was a Romanian and American cartoonist and illustrator, best known for his work for The New Yorker,
Ingeborg Morath	Ingeborg Morath (May 27, 1923 – January 30, 2002) was an Austrian-born American photographer.
Mask Series	Between 1959 and 1963 Steinberg produced paper bag masks made famous through the photographs taken by Inge Morath, of the artist and friends wearing the paper bag masks he created.
Identity	Sameness identicalness; the quality or fact of (several specified things) being the same.
Character	A distinguishing feature; characteristic; trait;
Personality	1. A set of qualities that make a person (or thing) distinct from another.
	2. An assumed role or manner of behaviour.
	3.

12.	Pose	1. To place in an attitude or fixed position, for the sake of effect.			
	Posture	2. The way a person holds and positions their body.			
	Idea	Any result of mental activity; a thought, a notion; a way of thinking			
	Concept	 abstract and general idea; an abstraction understanding retained in the mind, from experience, reasoning and/or imagination; a generalization (generic, basic form), or abstraction (mental impression), of a particular set of instances or occurrences (specific, though different, recorded manifestations of the concept). 			
	Black and white	Black-and-white (B/W or B&W) images combine black and white in a continuous spectrum, producing a range of shades of grey.			
	Selective colour	Selective colour photography is a process of photo manipulation in which a photographer will convert a photograph from colour to black & white yet leaving an "accent" or partial colour in a defined area of the image.			
	Image overlay	Overlay image on another image with or without transparency, with positioning directly on top, to the top, bottom, right, or left side.			
	HDR	In photography and videography, HDR or high-dynamic-range imaging is the set of techniques used to reproduce a greater range of luminosity than that which is possible with standard photographic techniques.			
	Assessment	 The act of assessing or an amount An appraisal or evaluation. 			
	Combined	Resulting from the addition of several sources, parts, elements, aspects, etc. able to be united together, to converge.			
	Bruno Timmermans	 Bruno Timmermans is a Belgian artist born in 1977 in Brussels, where he currently lives and works. He creates portraits of the great icons of our times, by superimposing other images through transparencies, linked or related to their work and their actions. Among the characters featured in his canvases are: David Bowie, Lady Gaga, Marilyn Monroe, Amy Winehouse and many others. 			
	Portrait	A painting, drawing, photograph, or engraving of a person, especially one depicting only the face or head and shoulders.			
	Transparent	Allowing light to pass through so that objects behind can be distinctly seen			
	Texture	The feel, appearance, or consistency of a surface or substance.			
	Opacity	The state or quality of being opaque			
	Rotation	The action or process of rotating on or as if on an axis or centre.			
28.	Studio	An artist's or photographer's workshop or the room in which an artist works			

Year 10 - Term 1a Disguise and Identity

A Magazine Project Brief

	- 9	
1.	Brief	A. Is a simple document that outlines a summary of the project requirements.
		B . It highlights all the milestones and shows what work needs to be done.
2.	Magazine	A. Is a periodical publication containing articles and illustrations, often on a particular subject or aimed at a particular readership.
		B. The standard sizing is 210 mm × 280 mm, Just a bit smaller than A4.

B Capturing a HDR Image using a DSLR

- Set the AEB to capture three different exposures (-2 0+2)
- 2 Set your mode to aperture priority (AV)
- 3 Set your aperture to something above f11
- 4 Set your ISO as low as possible, ISO 100 is best.
- 5 Put your camera on a tripod
- 6 Focus your camera manually on your focal point
- 7 Capture your photograph using a trigger or selftimer if possible to avoid movement.

C Pete Carr

- 1. Local Photographer that works mainly with architecture and people.
- 2. Uses the HDR technique to enhance his architecture photographs.
- He captures HDR traditionally using his camera and then makes further changes in post-production.



Image taken from - HDR Photography Photo Workshop 2nd Edition book



TOP Revision Techniques

1. Flashcards

How to organise your flashcards

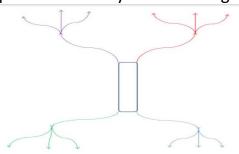
- 1. Use an envelope.
- Write the topic title on the envelope.
- Write the title of each flashcard on the outside.
- Add tick boxes.
- 5. File your flashcards in the envelope.
- Tick off each time you revise the flashcard.



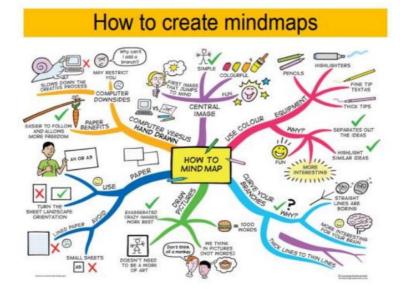
Flashcards are made using index cards which you can buy from any good stationery shop or Amazon. The beauty of flashcards is that they force you to break information down into bite-sized chunks. It makes you think about how to chunk down the information, which helps them to chunk your knowledge and, in the process, makes the information easier to remember. We highly recommend you use flashcards as it is one of the best revision methods

2. Revision posters and mind-maps

Revision posters are great for visual learners. If you are artistic theses are a great way to enjoy and enhance your revision. Posters aren't suitable for all topics, but if there is a diagram, a map of a case study or something that can be illustrated with



images then they're idea S Post-its and sticky note Post-it notes provide a fun, interactive and flexible



way to revise. You can go so far beyond just sticking them around the bathroom

mirror to look at while you're cleaning your teeth! Use Post-it notes to test yourself, stick them up in your bedroom or use them to mark pages in your class books to come back to.

3. Teach someone

This is an all-time favourite revision technique. You can't teach someone else effectively unless you understand it yourself. Teach

The humble Post-it Note has multiple uses...

- They are an essential study tool and prove especially useful when it comes to revision.
- In this session we will look at ten ways in which you can use Post-it Notes for revision (some of which we have already touched on).

10 Uses for Post-it not	
Stick them on your walls and doors Movable revision! Keywords will catch your eye and pretty soon you'll internalise definitions HOWEVER – don't cover every wall in your bedroom. It should be a sanctuary of sleep!	2: Stick them around the house One former student used to stick Post-it notes around her house. When asked a question she would mentally search the house. She would then say something along the lines of 'Fridge milk 1969!' This might help you make mental maps.
3: Use them as keyword match up Write a series of keywords on one set of Post-its and the definitions on another set. Jumble them and then use a wall space to check your understanding by matching them up.	4: Use them to write paragraph summaries Post-its encourage you to be brief yet concise.
5: Use them to keep track of what you have and have not revised • Stick these notes to your exercise book, text books or revision books as a handy reminder of what you still need to cover	Use them as page markers in your exercise books Use Post-it to mark out different topics and chapters.
7: Use them to create a flowchart You can even mix up the order and rearrange as a method testing yourself	8: Use them as a past paper question planner If you don't want to waste a past paper with so-so responses, you can use a Post-it to jot down your answer in rough.
9: Use them as a past paper prompter • You can use a Post-it to remind yourself of how to answer specific questions. • This is useful because of the movable nature of Post-it notes.	This app allows you to turn physical Post-it notes into digital ones You simply take a picture in the free app and converts the Post-it into a digital version which you can move around and scroll through

someone else what you are learning and you will benefit from having to come up with a good explanation. Share your knowledge with a family member and teach them what you know!

4. Test Yourself!

Throughout your revision you must test yourself to see what you can remember! If you are struggling with a topic go back over that topic again using your class book. Make another poster or flash card and then test yourself again! Once you are confident you can tick this topic off and move onto the next one!



Reading is just a part of revising – you need to **rehearse**

Read ...your notes Write ...what you remember Recite ...what you remember Review ...your understanding

- · Get someone to test you.
- · Cover up sections and test yourself.
- · Review what you missed, read over it and start the cycle again.
- · You need to look over your notes and identify what doesn't stick.
- Evaluate your performance and spend more time going over that section.
- Relying on reciting won't prove the most effective method of revision
 ... it's just one part of a cycle.
- · Read-Write-Recite-Review offers an enhancement that works.
- Simply reading the information is never enough, but this active addition can prove more effective. A little reciting, and a little checking, go a long way.

TIP: Saying complicated or hard-to-remember information out loud and with a funny accent might help remember it!

