

Knowledge Organiser

Year 10

Cycle 1

CORE SUBJECTS

Name:

Tutor Group:



What is a Knowledge Organiser and why are they important?

A knowledge organiser is designed to summarise the key information, concepts, and vocabulary for a specific topic or unit of work in each subject. Its purpose is to help students:

- o Understand what they are expected to learn.
- o Make connections between ideas.
- o Retain and recall essential knowledge more effectively.
- o Support independent study and revision

Your Knowledge Organiser contains the essential knowledge that we expect every student to know. Regular use of the Knowledge Organiser helps you to recap, revise and revisit what you have learnt in lessons. This can be part of your homework in some subjects or as independent revision. The aim is to help remember this knowledge in the long term and to help strengthen your memory.

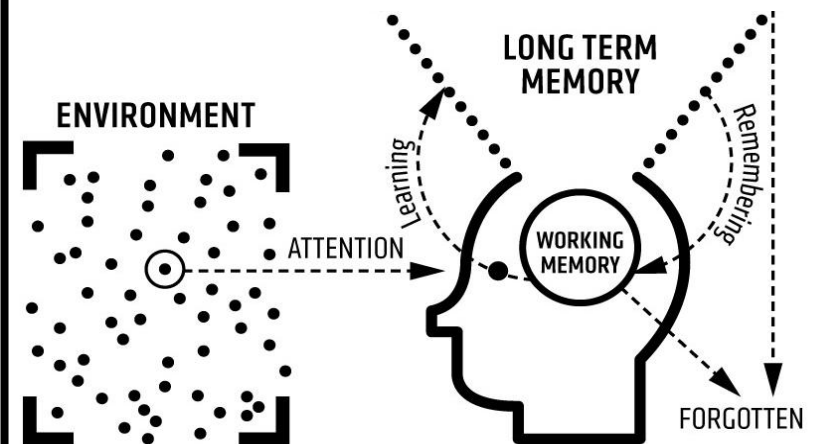
Each cycle there is an assessment in every subject and you will be assessed on the knowledge from your Knowledge Organiser; the more you revisit information the more likely it will be remembered for lessons, assessments and exams.

How we learn anything

We learn by focusing our attention on something. If we are distracted by other things in our environment (eg mobile phones, listening to music) it will affect how much/what we learn.

Information we pay attention to goes into our working memory, but our working memory is not very good and we quickly and easily forget things.

Learning happens when we think about, process or practise doing something so that it is stored in our long-term memory. Even then it can still be forgotten if we do not regularly think about it and go over it. *We remember what we think about.* Using your Knowledge Organiser outside of lessons helps you to remember things in the long-term.



Homework in Year 10-11

The purpose of homework

Homework plays a crucial role in reinforcing what you learn in the classroom, helping you to develop a deeper understanding of the material. It encourages independent learning, time management, and responsibility: skills that are essential for success both in school and in life.

Homework fosters a strong work ethic and a sense of discipline, preparing you for future academic and professional challenges. Homework is not just about completing tasks, it is about building lifelong learning habits. Learning is defined as a change in the long-term memory. You attend 5 hours of lessons per day, which is a lot of new information being taken in. Without additional opportunities to practise remembering, much of that information would be quickly forgotten.

Homework expectations

In Years 10-11 we expect every student to complete around 1 hour of homework a day, 5 days a week. English, Maths and Science will set around 1 per week each and the other GCSE subjects will be around 30 minutes each using the following timetable:

	Monday	Tuesday	Wednesday	Thursday	Friday
Subject 1	Science	Geog/History	Maths	Option Block F	Maths
Subject 2	English	Option Block E	English	Science	Option Block G

Maths and Science homework will be completed on Sparx. All other subjects may be a mixture of Seneca, Knowledge Organiser work and worksheets/tasks. Homework will be recorded on Class Charts to help students and parents keep track of what to do.

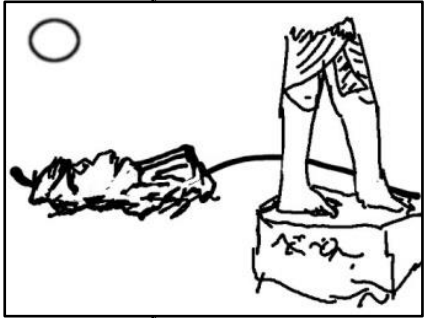
Year 10 Core Cycle 1
Knowledge Organiser Contents Page

Subject	Page Number
English	5-19
Geography	20-29
History	30-42
Life Skills	43-44
Maths	45-49
Religion Philosophy and Ethics	50
Science	51-63

English Learning Area

GCSE English Literature

AQA Power and Conflict Poetry

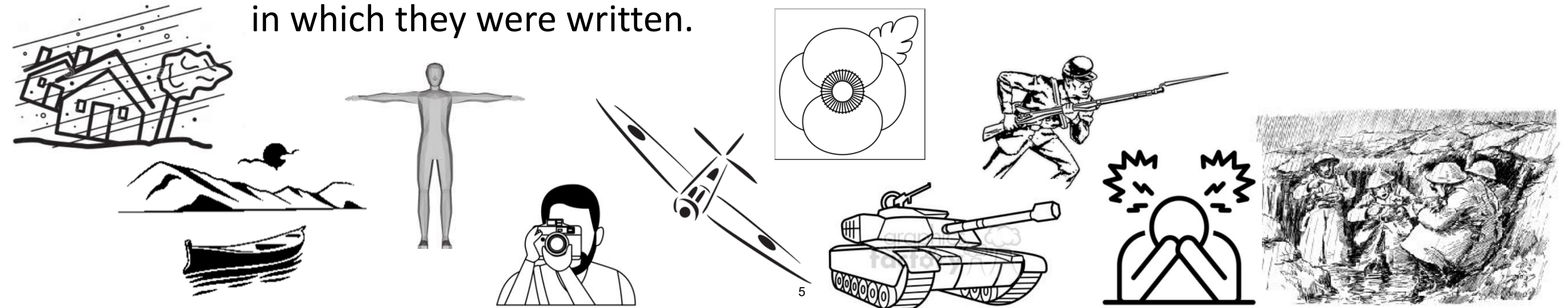


AO1: Read, understand and respond to texts. Students should be able to: maintain a critical style and develop an informed personal response, use textual references, including quotations, to support and illustrate interpretations.

AO2: Analyse the language, form and structure used by a writer to create meanings and effects, using relevant subject terminology where appropriate.



AO3: Show understanding of the relationships between texts and the contexts in which they were written.



What to expect:

- In the exam, you will be asked to compare, by theme, a named and printed poem that you have studied, to another poem of your choice from the anthology.
- We have modelled thesis statements which you can use and adapt to structure and focus your comparisons. You should aim to make 3-4 clear points between the poems, and support these with evidence and detailed analysis of the language- remembering to link back to the keyword in the questions, themes and bigger ideas explored through the poems.
- To support this, we have selected key quotes from our lessons and collated them here with prompts for the method and the effect, along with a summary of the poem. You can supplement this with your class learning, independent research and personal interpretations of the poems. There are lots of resources, guides, videos and models available on the internet.

Mark/ Level	A0	Typical Features	✓
<u>Level 5</u> <i>Convincing critical analysis and exploration</i> 26 – 30 marks	A01	▪ Critical, exploratory comparison ▪ Judicious use of precise references to support interpretation(s)	
	A02	▪ Analysis of writer's methods with subject terminology used judiciously ▪ Exploration of effects of writer's methods to create meanings	
	A03	▪ Exploration of ideas/perspectives/contextual factors shown by specific, detailed links between context/text/task	
	A01	▪ Thoughtful, developed comparison ▪ Apt references integrated into interpretation(s)	
<u>Level 5</u> <i>Thoughtful, developed consideration</i> 21 – 25 marks	A02	▪ Examination of writer's methods with subject terminology used effectively to support consideration of methods ▪ Examination of effects of writer's methods to create meanings	
	A03	▪ Thoughtful consideration of ideas/perspectives/contextual factors shown by examination of detailed links between context/text/task	
	A01	▪ Clear comparison ▪ Effective use of references to support explanation	
	A02	▪ Clear explanation of writer's methods with appropriate use of relevant subject terminology ▪ Understanding of effects of writer's methods to create meanings	
<u>Level 4</u> <i>Clear understanding</i> 16 - 20 marks	A03	▪ Clear understanding of ideas/perspectives/ contextual factors shown by specific links between context/text/task	
	A01	▪ Some explained comparison ▪ References used to support a range of relevant comments	
	A02	▪ Explained/relevant comments on writer's methods with some relevant use of subject terminology ▪ Identification of effects of writer's methods to create meanings	
	A03	▪ Some understanding of implicit ideas/ perspectives/contextual factors shown by links between context/text/task	
<u>Level 3</u> <i>Explained, structured comments</i> 11 - 15 marks	A01	▪ Supported comparison ▪ Comments on references	
	A02	▪ Identification of writers' methods ▪ Some reference to subject terminology	
	A03	▪ Some awareness of implicit ideas/contextual factors	
	A01	▪ Simple comments relevant to comparison ▪ Reference to relevant details	
<u>Level 2</u> <i>Supported, relevant comments</i> 6 – 10 marks	A02	▪ Awareness of writer making deliberate choices ▪ Possible reference to subject terminology	
	A03	▪ Simple comments on explicit ideas/ contextual factors	
	A01	▪ Simple comments relevant to comparison ▪ Reference to relevant details	
	A02	▪ Awareness of writer making deliberate choices ▪ Possible reference to subject terminology	
<u>Level 1</u> <i>Simple, explicit comments</i> 1 – 5 marks	A03	▪ Simple comments on explicit ideas/ contextual factors	
	A01	▪ Simple comments relevant to comparison ▪ Reference to relevant details	
	A02	▪ Awareness of writer making deliberate choices ▪ Possible reference to subject terminology	
	A03	▪ Simple comments on explicit ideas/ contextual factors	
0 marks	Nothing worthy of credit/ nothing written		

Storm on the Island



Week 1

Method	Evidence	Effect	Summary -- Storm on the Island – Seamus Heaney
Statement / plural pronoun	We are prepared	Confident/ familiarity / community /	"Storm on the Island" is a poem Irish writers, Seamus Heaney. In the poem, an unspecified narrator talks about an isolated island community. These islanders live in fear of a coming storm, and have no trees for shelter. On the surface level, the poem appears to be about nature's ultimate power over humankind. The anticipation of disaster, however, can also be interpreted as a comment on humankind's own capacity for violence, perhaps in relation to the political tensions in Northern Ireland during the 20th century (which became, soon after the poem's publication in 1966, what's now known as the Troubles).
Oxymoron /personification Simile	The sea is ‘exploding comfortably’ and then it becomes ‘like a tamed cat turned savage’	Familiarity Threatening / danger	
Closing statement Oxymoron / metaphor	Strange, it is a huge nothing that we fear	Repeats ‘we’ Ambiguous conclusion	
* Internal Conflict * Reality of War *			



Storm on the Island and The Prelude both explore the relationship between man and nature. However, whilst nature is shown to be more powerful than man in both poems, Heaney presents its power as an enemy that attacks whilst Wordsworth shows that its power is largely in his mind.

The Prelude

Method	Evidence	Effect	Summary -- <i>The Prelude</i> - William Wordsworth
Verbs start Repetition end pace	I dipped my oars I struck and struck again ‘Upreared its head’	Calm/ confidence Scared/ alarmed /fast	<i>The Prelude</i> is an extract from an autobiographical poem by William Wordsworth. It focuses on Wordsworth's spiritual development, which is often spurred on in the poem by the surrounding natural environment. In this early passage from <i>The Prelude</i> , the speaker recalls a night when he, as a young boy, steals a boat and rows out into the middle of a lake. Eventually, the boy becomes scared of a huge mountain and rows back to shore. The image of the mountain haunts him from then on, planting the seeds for a more complex relationship with nature.
Semantic field of light Semantic field of isolation	‘glittering’, ‘moon’, ‘sparkling light’ ‘darkness’, ‘solitude’, ‘desertion’		
Contrast start Repetition end	Craggy ridge A huge peak, black and huge	Respect/ beauty Petrified/ inexpressible	
Closing statement	Huge and might forms ... we a trouble to my dreams	Nightmare / long term / innocence /	
* Internal Conflict * Power of Nature *			

Storm on the Island



Week2

Method	Evidence	Effect	Summary -- Storm on the Island – Seamus Heaney
Statement / plural pronoun	We are prepared	Confident/ familiarity / community /	"Storm on the Island" is a poem Irish writers, Seamus Heaney. In the poem, an unspecified narrator talks about an isolated island community. These islanders live in fear of a coming storm, and have no trees for shelter. On the surface level, the poem appears to be about nature's ultimate power over humankind. The anticipation of disaster, however, can also be interpreted as a comment on humankind's own capacity for violence, perhaps in relation to the political tensions in Northern Ireland during the 20th century (which became, soon after the poem's publication in 1966, what's now known as the Troubles).
Oxymoron /personification Simile	The sea is ‘exploding comfortably’ and then it becomes ‘like a tamed cat turned savage’	Familiarity Threatening / danger	
Closing statement Oxymoron / metaphor	Strange, it is a huge nothing that we fear	Repeats ‘we’ Ambiguous conclusion	
* Internal Conflict * Reality of War *			



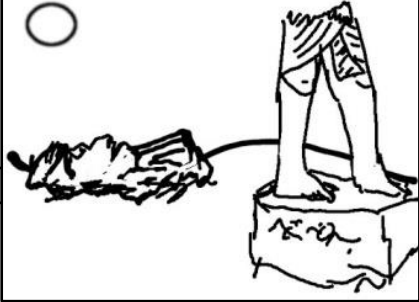
Exposure

THESIS STATEMENT: Both poems explore the idea that nature is more powerful than man and, in fact, nature can sometimes be the enemy. However, Heaney shows that nature can be helpful to man whilst, for Owen, it is always the foe.

Method	Evidence	Effect	Summary -- Exposure – Wilfred Owen
personification	The merciless iced east winds that knife us	Power of nature/ Danger/ pain/ suffering	"Exposure" is a poem written by the English poet and soldier Wilfred Owen. Owen wrote "Exposure" in 1918, but it wasn't published until 1920, after Owen's death in World War I. "Exposure" focuses on the sheer monotony of daily life for many soldiers, as well as the harsh conditions they must endure (that is, be "exposed" to) even when not on the battlefield. This suffering is made all the more devastating given the fact that, in the speaker's mind, war seems to accomplish nothing on a larger scale.
Repetition	But nothing happens	Slow pace/ Reality/futility of war	
Verb/ lexical choice	We cringe in holes.	Despair / anguish	
Adverb/ noun/ metaphor	Slowly our ghosts drag home	misery – they are changed men	
* Conflict * Reality of War * Nature *			

Ozymandias

Week3



Method	Evidence		Summary --Ozymandias – Percy Bysshe Shelley
Perspective/ third person	I met a traveller from a distant land	dissociated	“Ozymandias” is a sonnet written by the English Romantic poet Percy Bysshe Shelley. The title of “Ozymandias” refers to an alternate name of the ancient Egyptian pharaoh Ramses II. In “Ozymandias,” Shelley describes a crumbling statue of Ozymandias as a way to portray the transience of political power and to praise art’s power of preserving the past. Although the poem is a 14-line sonnet, it breaks from the typical sonnet tradition in both its form and rhyme scheme, a tactic that reveals Shelley’s interest in challenging conventions, both political and poetic.
Noun phrase	My name is Ozymandias King of Kings	Arrogance / conceit / egotism	
Alliteration / metaphor	Boundless and bare, / The lone and level sands stretch far away	Echoes/ power of nature / longevity / endurance	
* Power * Nature *			



The Prelude

Both Ozymandias and The Prelude explore the power of Nature. Initially, both believe they are more powerful than nature, although ultimately, Nature has more power and outlasts man.

Method	Evidence		Effect	Summary -- The Prelude - William Wordsworth
Verbs Repetition pace	start end	I dipped my oars I struck and struck again	Calm/ confidence Scared/ alarmed /fast	<i>The Prelude</i> is an extract from an autobiographical poem by William Wordsworth. It focuses on Wordsworth's spiritual development, which is often spurred on in the poem by the surrounding natural environment. In this early passage from <i>The Prelude</i> , the speaker recalls a night when he, as a young boy, steals a boat and rows out into the middle of a lake. Eventually, the boy becomes scared of a huge mountain and rows back to shore. The image of the mountain haunts him from then on, planting the seeds for a more complex relationship with nature.
Contrast Repetition	start end	Craggy ridge A huge peak, black and huge	Respect/ beauty Petrified/ inexpressible	
Closing statement		Huge and might forms ... we a trouble to my dreams	Nightmare / long term / innocence /	
* Internal Conflict * Power of Nature *				

Charge of the Light Brigade

Week4

Method	Evidence	Effect	Summary - Charge of the Light Brigade –
Repetition that changes at the end of each stanza *At the end	‘Rode the six hundred’ ‘Not the six hundred’ ‘Noble Six Hundred’ *‘When can their glory fade?’	Chorus Celebratory tone Rhythm of the horses	The Charge of the Light Brigade” was written by the English poet Alfred Lord Tennyson in response to a battle during the Crimean War (1853-1855). In this battle, a British cavalry unit—the “Light Brigade”—was commanded to charge against a Russian artillery unit. The order was almost suicidal, and the brigade was decimated in the charge. “The Charge of the Light Brigade” celebrates the self-sacrifice and heroism of the cavalrymen, suggesting that bravery consists of doing one's duty even when it leads to almost certain death.
Biblical imagery	‘Into the valley of Death’ ‘Into the mouth of hell’	Undaunted bravery of the soldiers	
Semantic field of patriotism – aural imagery	‘heroic’, ‘valour’, ‘splendour’, ‘noble’	Contrasts to the newspaper reports of the battle	
* Conflict * Battlefield * Heroism *			



Exposure

In ‘Exposure’ Owen explores the futility of war in a poignant poem about suffering. He explores ideas about the purpose of conflict. On the other hand, ‘Charge of the Light Brigade’ highlights a clear purpose and conflict: patriotism. Tennyson glorifies the soldiers’ efforts in the Crimean war.



Method	Evidence	Effect	Summary -- Exposure – Wilfred Owen
personification	The merciless iced east winds that knife us	Power of nature/ Danger/ pain/ suffering	"Exposure" is a poem written by the English poet and soldier Wilfred Owen. Owen wrote "Exposure" in 1918, but it wasn't published until 1920, after Owen's death in World War I. "Exposure" focuses on the sheer monotony of daily life for many soldiers, as well as the harsh conditions they must endure (that is, be "exposed" to) even when not on the battlefield. This suffering is made all the more devastating given the fact that, in the speaker's mind, war seems to accomplish nothing on a larger scale.
Repetition	But nothing happens	Slow pace/ Reality/futility of war	
Verb/ lexical choice	We cringe in holes.	Despair / anguish	
Adverb/ noun/ metaphor	Slowly our ghosts drag home	misery – they are changed men	
* Conflict * Reality of War * Nature *			

Bayonet Charge



Week5

Method	Evidence	Effect	Summary - Bayonet Charge – Ted Hughes
Adverb / metaphor/ medias res (in the middle of the action)	‘Suddenly, he awoke and was running’	Fast pace / shock / reality of war / danger	Set in the heat of battle, the poem focuses on the thoughts and behaviour of a soldier in World War I . This soldier is depicted mid-charge, his bayonet (that is, the blade attached to this end of his gun) primed to attack the enemy. However, he has an epiphany during his charge and suddenly questions why he's there in the first place. Old notions like patriotism and honour seem to fade away as the soldier confronts the absurd reality of war—and of the likelihood of his own death .
Lexical set (listing)	‘King, honour, human dignity etc’	Anger / frustration / despair / realisation	
Alliteration symbolism	His terrors touchy dynamite	Solider reduce to a weapon / danger / fear	
* Conflict * Battlefield * Reality of War * Solider *			



Remain

Both poems explore the horrors of being in a conflict zone or battle field. However, they also both consider the longer, lasting effects of war.

Method	Evidence	Effect	Summary -- Remains – Simon Armitage
Literal and metaphorical	Remains	Physical and emotional remnant of the killing	"Remains" was published by the British poet Simon Armitage in 2008 as part of his collection <i>The Not Dead</i> , a series of war poems based on the testimonies of ex-soldiers. Instead of detailing conflict, however, these poems confront the <i>aftermath</i> of war and the traumatic memories that ex-service people might struggle to cope with. "Remains" specifically focuses on a soldier who was involved with killing a man caught looting a bank during conflict in what is implied to be the Middle East.
Repetition Start and End	Probably armed, possibly not	Uncertainty / doubt / guilt / internal conflict	
metaphor	Blood shadow	Inescapable guilt	
Turning point. Revisits events mentally once he's home.	End of story, except not really	Long term consequence of war Contrast chatty tone to reality	
* Internal Conflict * Reality of War *			

War Photographer



Week6

Method	Evidence	Effect	Summary -- War Photographer" - Carol Ann Duffy
Literal and metaphor	Solutions slop in trays Spools of suffering	Processing emotions Internal conflict memories	"War Photographer" is a poem by Carol Ann Duffy, the UK's poet laureate from 2009 to 2019. "War Photographer" depicts the experiences of a photographer who returns home to England to develop the hundreds of photos he has taken in an unspecified war zone. The photographer wrestles with the trauma of what he has seen and his bitterness that the people who view his images are unable to empathize fully with the victims of catastrophic violence abroad. The poem references a number of major historical air strikes and clearly draws imagery from Nick Ut's famous Vietnam War photograph of children fleeing the devastation of a napalm bomb.
Light and dark imagery Metaphor / noun	A hundred agonies in black and white	Reality and horror of war is more complicated than B&W	
Change to address the audience/ reader	Reader's eyeballs prick with tears between the bath and pre-lunch beers	Judgmental tone Rhythm and Rhyme contrast to message	
* Internal Conflict * Consequences of War *			



Remains

Both Armitage and Duffy show that conflict negatively impacts individuals involved in conflict – they experience trauma, guilt and powerful memories all relating to and caused by their experience in conflict zones.

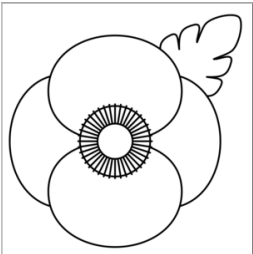
Method	Evidence	Effect	Summary --Remains – Simon Armitage
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Repetition Start and End metaphor	Probably armed, possibly not	Uncertainty / doubt / guilt / internal conflict	
	Blood shadow	Inescapable guilt	
Turning point. Revisits events mentally once he's home.	End of story, except not really	Long term consequence of war Contrast chatty tone to reality	
* Internal Conflict * Reality of War *			

War Photographer



Week 7

Method	Evidence	Effect	Summary -- War Photographer" - Carol Ann Duffy
Literal and metaphor	Solutions slop in trays Spools of suffering	Processing emotions Internal conflict memories	"War Photographer" is a poem by Carol Ann Duffy, the UK's poet laureate from 2009 to 2019. "War Photographer" depicts the experiences of a photographer who returns home to England to develop the hundreds of photos he has taken in an unspecified war zone. The photographer wrestles with the trauma of what he has seen and his bitterness that the people who view his images are unable to empathize fully with the victims of catastrophic violence abroad. The poem references a number of major historical air strikes and clearly draws imagery from Nick Ut's famous Vietnam War photograph of children fleeing the devastation of a napalm bomb.
Light and dark imagery Metaphor / noun	A hundred agonies in black and white	Reality and horror of war is more complicated than B&W	
Change to address the audience/ reader	Reader's eyeballs prick with tears between the bath and pre-lunch beers	Judgmental tone Rhythm and Rhyme contrast to message	
* Internal Conflict * Consequences of War *			

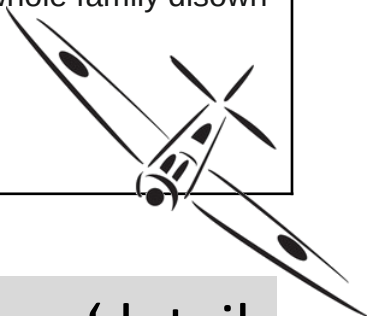


Poppies

Both Duffy and Weir explore the effects of conflict on individuals who experience conflict in differing ways (a mother and a war photographer) with differing responses. Weir shows these effects to be long-lasting, whereas Duffy shows how quickly people move on.

Method	Evidence	Effect	Summary -- Poppies Jane Weir
Structure start v end Symbolic imagery /	Individual war grave War memorial	Change from individual experience to universal	“Poppies” is a poem by the English poet Jane Weir, first published in 2005 as part of her collection <i>The Way I Dressed</i> . Weir’s poem imagines the trials and difficulties of war from the perspective of a mother who sends her child off to fight. The poem investigates this grief by comparing it, through an extended metaphor, to the more general feeling of anxiety that all parents face as their children prepare to enter a frightening and often violent world.
Part of a military semantic field Metaphor / sibilance Juxtaposition	<i>Steeled</i> the softening of my face ‘blockade’ ‘bandage’ reinforcements’	Holding back emotions Restraint / Repressing Links through time and memory	
Metaphor / symbolism / imagery of peace	The dove pulled freely against the sky / Released a songbird from its cage	Comfort / freedom / internal peace/acceptance	
* Internal Conflict * Consequences of War * * Power of Memory * Mother’s Perspective *			

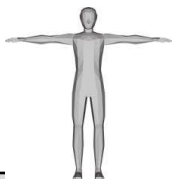
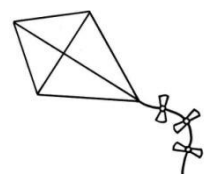
Method	Evidence	Effect	Summary -- Kamikaze – Beatrice Garland
Perspective Pathetic fallacy	‘Her father embarked at sunrise’ ‘A shaven head full of powerful incantations’	Contrast optimism and reality of death Influenced by society	"Kamikaze" was written by contemporary British poet Beatrice Garland. The title refers to Japanese pilots during World War II tasked with flying a suicide mission. With planes full of explosives and just enough fuel to make it to their target, kamikaze pilots had to fly directly at American warships to inflict maximum damage—killing themselves in the process. The poem tells the story of one particular pilot who decides to turn back, prompted by a childhood memory of his brother and father by the sea. Upon his return, however, his whole family disown him—including the poem's main speaker, his daughter.
Juxtaposition Symbolism Nature / memory	In a figure of eight, the dark shoals of fish flashing silver	Eternity/ power of nature dark v light / beauty sword – violence	
Implied rhetorical question Verbs Cultural contrast	‘We children still chattered and laughed till gradually we too learned to be silent ’ ‘He must have wondered which had been the better way to die’	Memory / Regret / remorse / guilt / family	
* Conflict * Consequences of War * Family * Memory * Nature *			



The Emigree

THESES STATEMENT: Both ‘The Emigree’ and ‘Kamikaze’ detail perspectives of people who find themselves as social outcasts. However, the speaker in ‘The Emigree’ has been displace by force, while the pilot in ‘Kamikaze’ made a choice, the result of which he had to live by.

Method	Evidence	Effect	Summary --The Emigree
Childish tone	There once was a country	Narrative perspective	"The Emigrée" was written by the British poet Carol Rumens. A first-person speaker describes how as a child she was forced to flee her homeland and emigrate to another country because of war and tyranny. Though the speaker can never return to her home, it still occupies an important place in her heart. She keeps it alive through memory, which is compared to sunlight throughout the poem—suggesting warmth and vitality. The poem deliberately avoids tying itself to a particular context, instead looking more generally at the emigrant experience—with all its trauma and nostalgic longing for home.
Personification	It may be sick with tyrants	Bond with the country	
Metaphor	The bright filled paperweight	Hope for change – (health/ peace)	
Changing repetition	I am branded by an impression of sunlight’ ‘It tastes of sunlight’ ‘My shadow falls as evidence of sunlight’	Grows in confidence Identify / optimism	
* Internal Conflict * consequences of conflict * identity *			



Method	Evidence	Effect	Summary -- Tissue - Imtiaz Dharker
Nature v Society	Maps too. The sun shines through their boarder lines	Power of nature is greater than man and history	"Tissue" was written by Pakistan-born British poet Imtiaz Dharker and published in her 2006 collection, <i>The Terrorist at My Table</i> . The poem is an impressionistic meditation about paper, focusing on the way that it represents both human fragility and power. The poem shifts its focus throughout, first looking at a Koran and information that has been written in the back about people's births and deaths. Later, the speaker imagines what it would be like if buildings were made out of paper, before finally relating it back to the "tissue" of human skin.
simile	Fly our lives like paper kites	Freedom	
Extended metaphor	Paper smoothed and stroked and thinned to be transparent turned into your skin.	Closing image Returns to the reader/ individual	
* Internal Conflict * Power of Society * Nature *			



Both ‘The Emigree’ and ‘Tissue’ explore what is combined within identity. However, Rumens explore identity from an individual and personal perspective. In contrast, Dhaker questions how humans form identities specifically, whether regarding things on paper is necessary to prove our existence.

The Emigree

Method	Evidence	Effect	Summary --The Emigree
Childish tone	There once was a country	Narrative perspective	"The Emigrée" was written by the British poet Carol Rumens. A first-person speaker describes how as a child she was forced to flee her homeland and emigrate to another country because of war and tyranny. Though the speaker can never return to her home, it still occupies an important place in her heart. She keeps it alive through memory, which is compared to sunlight throughout the poem—suggesting warmth and vitality. The poem deliberately avoids tying itself to a particular context, instead looking more generally at the emigrant experience—with all its trauma and nostalgic longing for home.
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Metaphor	The bright filled paperweight	Hope for change – (health/ peace)	
Changing repetition	I am branded by an impression of sunlight’ ‘It tastes of sunlight’ ‘My shadow falls as evidence of sunlight’	Grows in confidence Identify / optimism	
* Internal Conflict * consequences of conflict * identity *			

My Last Duchess



Method	Evidence	Effect	Summary -- My Last Duchess - Robert Browning
Noun phrase Possessive pronoun	My Last Duchess My gift of a nine-hundred-years-old name	Controlling / power / reputation	“My Last Duchess” is a dramatic monologue written by Victorian poet Robert Browning in 1842. In the poem, the Duke of Ferrara uses a painting of his former wife as a conversation piece. The Duke speaks about his former wife's perceived inadequacies to a representative of the family of his bride-to-be, revealing his obsession with controlling others in the process. Browning uses this compelling psychological portrait of a despicable character to critique the objectification of women and abuses of power.
Diagloue	A heart-how shall I say? - too soon made glad	Attributes blame	
Metaphor foreshadow	The faint half flush that dies along her throat	Joy v suffering	
statement	I gave commands;	Misuse of power / pace is dismissive	
* Internal Conflict * Reality of War *			



London

Both Blake and Browning explore how powerful authorities cause suffering to less powerful members of society in ‘London’ and ‘My Last Duchess’. However, Blake criticises this abuse of power across a whole city whereas Browning focuses on this kind of power imbalance within an oppressive relationship.

Method	Evidence	Effect	Summary -- London - William Blake
First person perspective repetition	I wander thro' each charter'd street, Near where the charter'd Thames does flow.	Familiar with location personal Control /	"London" is among the best known writings by visionary English poet William Blake. The poem describes a walk through London, which is presented as a pained, oppressive, and impoverished city in which all the speaker can find is misery. It places particular emphasis on the sounds of London, with cries coming from men, women, and children throughout the poem. The poem is in part a response to the Industrial Revolution, but more than anything is a fierce critique of humankind's failure to build a society based on love, joy, freedom, and communion with God.
Metaphor	‘The mind-forg'd manacles I hear’	Individual belief and freedom is influence by society	
Symbolisms of society Metaphor / adjective onomatopoeia	‘the youthful Hrlots curse blasts the new born infants tear and blights with plagues the Marriage hearse.’	Sympathy / responsibility / dismay	
* Internal Conflict * Power of Society*			

Checking out me history



Week11

Method	Evidence	Effect	Summary -- Checking Out Me History - John Agard
Dramatic monologue Phonetic spelling	Dem tell me Dick Whittington and his cat/ Touissaint L'Ouverture	Education system Contrasts characters	"Checking Out Me History" was written by the British Guyanese poet John Agard. The poem focuses on the holes in the British colonial education system—particularly that system's omission of important figures from African, Caribbean, and indigenous history. It discusses how colonized people were forced to learned about ‘British’ history—which had little to do with their actual lives—at the expense of their ‘own’ history. Not only does the poem call attention to the oppressive nature of colonial education, but it also praises important figures who were left out—figures such as Touissaint L'Ouverture, the leader of the Haitian revolution. The poem suggests the colonial syllabus deliberately blinded colonized people to their own histories, and argues that only by re-learning their history can these people can fully understand and embrace their identities.
Metaphor Semantic field	Bandage up me eye with me own history Blind me to my own identity	Ironic reflection on the reality of the education system	
Active verbs metaphor	But now I checking out me own history I carving out me identity	Proactive and positive Lack of punctuation = continuity of discovery	
* Internal Conflict * Power of Society * Identity *			



London

Both Agard and Blake use their poems to express their anger towards the misuse of power by those with authority. However, while Agard expresses a positive resolution, Blake implies that society won’t change.

Method	Evidence	Effect	Summary -- London - William Blake
First person perspective repetition	I wander thro' each charter'd street, Near where the charter'd Thames does flow.	Familiar with location personal Control /	"London" is among the best known writings by visionary English poet William Blake. The poem describes a walk through London, which is presented as a pained, oppressive, and impoverished city in which all the speaker can find is misery. It places particular emphasis on the sounds of London, with cries coming from men, women, and children throughout the poem. The poem is in part a response to the Industrial Revolution, but more than anything is a fierce critique of humankind's failure to build a society based on love, joy, freedom, and communion with God.
Metaphor	‘The mind-forg'd manacles I hear’	Individual belief and freedom is influence by society	
Symbolisms of society Metaphor / adjective onomatopoeia	‘the youthful Hrlots curse blasts the new born infants tear and blights with plagues the Marriage hearse.’	Sympathy / responsibility / dismay	
* Internal Conflict * Power of Society*			

18

Question stem: Explore how the poet use language to present **theme/ idea/ concept** in **named poem** and a poem on your choice from the Power and Conflict anthology.

Thesis statement: - Provide a brief explanation how the poems are link and what bigger ideas you are going to compare in your essay

Initial idea about named poem

Comparative point

Link to second poem

Development of your point

Comparative point

Compare or contrast to second poem

Final comment on the ideas explored

Comparative point

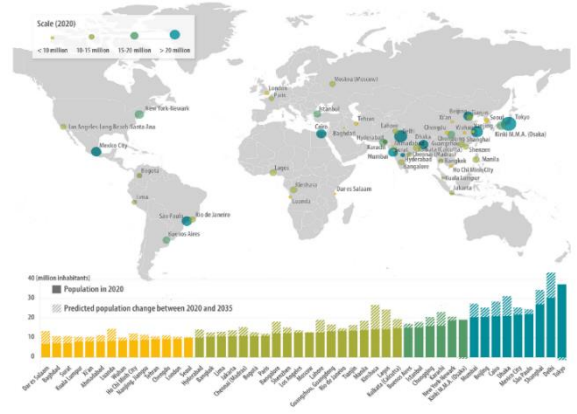
Compare or contrast to second poem

Conclusion: - Return to the ideas raised in your thesis statement, which you then covered in detail in your essay. Comment on the overall links and bigger ideas explored through both poems.



Year 10 Cycle 1 Geography Knowledge Organiser – Urban Issues and Challenges



Week 1 – Tuesday 9 th September 2025		
Lesson 1 – Urban change	Lesson 2 – Migration & Natural increase	Lesson 3 – Megacities
Key Terms: Urban: The characteristics of a town or city with a population of over 20,000 people. Rural: An area with a population of less than 10,000 people Urbanisation: A process where an increasing proportion of a population lives in towns and cities.	Key Terms: Migration: The movement of people from one place to live in another, permanently or semi permanently. Rural to urban migration: The movement of people from the countryside to towns and cities areas. Natural increase: When birth rates are greater than death rates.	Key Terms: Megacity: Urban area with over 10 million people living there. Counter-urbanisation: Large numbers of people move from urban areas into surrounding countryside or rural areas.
Content: More than 4 billion people live in urban areas. The number of people living in urban areas is highest in HIC. But urbanisation is highest in LICs and NEEs. This is mostly because of the rapid economic growth, which is leading to increasing life expectancies. The population is rising fastest in Asia, so they are projected to have the highest levels of urbanisation. Whereas in Europe and the US, urban populations will decrease as their populations are stagnating.	Content: Push factors that encourage people to move away from a place (negatives). Examples of push factors: natural disasters e.g. drought, war and conflict, lack of jobs. Pull factors that encourage people to move to a place (can be perceived rather than actual) (positives). Examples of pull factors: more jobs, better education and healthcare, following family members. Natural increase and migration can involve young adults. When there is a high percentage of population of child-bearing age, this leads to higher birth rate.	Content: Two thirds of megacities currently in NEEs/LICs and in Asia. Predicted to increase from 28 to 41 by 2030.  The figure consists of a world map and a bar chart. The map shows the locations of megacities (populations over 10 million) in 2020, with a legend indicating four size categories: < 10 million, 10-11 million, 11-20 million, and > 20 million. Major megacities like New York, London, Tokyo, and Shanghai are highlighted. The bar chart below the map shows the predicted population change between 2020 and 2035 for various countries. The y-axis represents population in millions, ranging from 0 to 40. The x-axis lists countries. Bars are color-coded: yellow for population in 2020 and green for predicted population change between 2020 and 2035. The chart shows that while some countries like India and China have large populations, their growth is slowing down, while others like Africa and South America show more significant projected growth. HIC cities are growing slower as people are moving to rural areas, moving to commuter settlements, the population is older (non-fertile age range) and the cost of raising children.
Questions: - How many people live in urban areas? - Where is urbanisation highest? - Why is it highest here? - Why will populations decrease in Europe and US?	- What are push and pull factors? - Give examples of push factors - Give examples of pull factors - What leads to natural increase?	- Where are two thirds of today's megacities? - Which continent has the most megacities? - How many megacities will there be in 2030? - Why are HIC cities growing slower?



Year 10 Cycle 1 Geography Knowledge Organiser – Urban Issues and Challenges



Week 2 – Tuesday 16th September 2025

Lesson 4 – Mumbai location & importance	Lesson 5 – Mumbai growth	Specification terminology
Key Terms: Globalised: More connected, so people, products and ideas can easily move between countries. TNC (Transnational corporation): Large companies that operate all over the world.	Key Terms: Positive multiplier effect: The introduction of a new industry or the expansion of an existing industry in an area also encourages growth in other industrial sectors.	1. Urban 2. Rural 3. Urbanisation
Content: Location: • On the west coast of India on the Arabian Sea. • It has access to the Indian Ocean and is therefore an important trade route. • It one of the most globalised cities. 4th largest in the world.  Regional importance of Mumbai: • Regional capital of Maharashtra State. National importance of Mumbai: • Receives 60% of India's imports. • Location of India's main scientific and number research centres. International importance of Mumbai: • HQ of important TNCs such as Disney, GlaxoSmithKline, Johnson and Johnson and Volkswagen. • It is a globally important transport hub.	Content: Mumbai has grown rapidly due to rural to urban migration. It has a population of 23 million and is growing by 1 person a minute. Most migrants are aged between 20 and 35, 64% are male and looking for work in TNCs or manufacturing. The initial economic activity was textiles and trade as it is a port. This stimulated further economic growth through the positive multiplier effect. This encouraged further investment and in migration.	4. Migration 5. Rural to urban migration 6. Natural increase 7. Megacity 8. Counter-urbanisation 9. Transnational corporation (TNC) 10. Positive multiplier effect
Questions: 1. Where is Mumbai located in India? 2. State a regional importance of Mumbai 3. State a national importance of Mumbai 4. State an international importance of Mumbai	5. Why has Mumbai grown rapidly? 6. What is Mumbai's population? 7. What age are most migrants? 8. What was Mumbai's initial economic activity?	9. Use lessons 1-5 to write out the definition for each key term above.



Year 10 Cycle 1 Geography Knowledge Organiser – Urban Issues and Challenges



Week 3 – Tuesday 23 rd September 2025		
Lesson 6 – Mumbai social opportunities	Lesson 7 – Mumbai economic opportunities	Lesson 8 – Mumbai social challenges
Key Terms: Social opportunities: Chances for people to improve their quality of life such as access to education and health care. Literacy rate: The percentage of people who can read and write.	Key Terms: Economic opportunities: Chances for people to improve their standard of living through employment. Informal employment: When workers do not work regular hours and do not pay tax.	Key Terms: Informal settlement: An area of low-quality housing, lacking amenities such as a clean water, sewage systems and access to electricity. They often develop spontaneously and illegally. Sanitation: Measures designed to protect public health including the provision of clean water and the disposal of sewage and waste.
Content: Health care: Easier access to a wider range of medical services including doctors, hospitals and nurses. Education: Many have access to schools for their children. 85% of children receive an education. Literacy rate is 90%. Clean water supply: 95% of households can access water from pipes for 2 hours a day. Can be shared by up to 12 families. Energy: In rural areas, access to electricity is limited. In Mumbai, electricity is available to run a fridge, light and charge a mobile phone.	Content: The TNCs and other businesses such as telecommunications and call centres mean there is a range of high skilled and low skilled employment opportunities. The incomes are reliable. 16,000 small factories employ 250,000 people. The informal employment sector employs 85% of people in the informal settlement of Dharavi. Within the informal settlement 15,000 informal businesses create over \$1 billion per year. Jobs include rag picking, making pottery, selling items on the street.	Content: Rural to urban migration has caused the growth of informal settlements (slums). They are illegal. The government supplies limited services such as sanitation, water, electricity. 40% of Mumbai live in informal settlements. Dharavi is the largest with 1 million people per mile² Up to 500 people can share one public latrine (toilet). There is limited or no sewage system (sanitation). Doctors deal with 4,000 cases a day of diphtheria and typhoid. People earn around a £1 a day for their work and often work in poor conditions. Mumbai has the 3rd highest crime rate of all cities in India. 22% have been exposed to bribery. They don't have the money for police or people distrust the police. Gangs control the areas.
Questions: 1. What health care do people have access to? 2. What percentage of children have an education? 3. What is the literacy rate in Mumbai? 4. What percentage of households' access water?	5. How many small factories are there and how many do they employ? 6. What percentage of Dharavi is employed in the informal sector? 7. How many informal businesses are there? 8. How much do informal businesses earn?	9. What percentage of Mumbai's people live in informal settlements? 10. How many people share one public latrine? 11. How much to people earn a day? 12. Why is there a lack of police?



Year 10 Cycle 1 Geography Knowledge Organiser – Urban Issues and Challenges



Week 4 – Tuesday 30th September 2025

Lesson 9 – Mumbai environmental challenges	Lesson 10 – Improving Mumbai's quality of life	Specification terminology
Key Terms: Pollution: The presence of chemicals, noise, dirt or other substances which have harmful or poisonous effects on an environment.	Key Terms: Residency: The place where someone lives most of the time and is officially allowed to stay. Trade: When people or countries buy, sell, or swap things like goods or services with each other.	1. Social opportunities 2. Literacy rate 3. Economic opportunity 4. Informal employment 5. Informal settlement 6. Sanitation 7. Pollution 8. Trade
Content: Mumbai produces 7,500 metric tonnes of waste every day. However, the trucks can't get into the informal settlements as the streets are too narrow. Dharavi has a recycling zone. 80% of plastic waste is recycled. In the UK its between 20- 60% 77% of households suffer from poor water quality in the city. Mumbai has some very dirty air including dangerous levels of Nitrous Oxides, due to vehicles, industry and wood burning stoves in Dharavi. Traffic congestion is caused by the 3 million vehicles which are often old and polluting. They contribute to both noise and air pollution. They create high levels of traffic congestion. Mumbai is the 4th most polluting city globally. Mumbai's renowned train system. This is hard to manage due to the sheer volume of people. Also, trying to build new roads is difficult as they are so congested.	Content: Vision Mumbai - Dharavi Redevelopment Project: The \$2 billion project offers free housing in apartment blocks to residents who can prove residency since 2000. Aims to provide 26,000 new electricity connections for residents of Mumbai's Shivaji Nagar informal settlement and 7,000 new toilets for 350,000 people. Reliance Infrastructure, The Global Partnership on Output-Based Aid (GPOBA), and other partners have launched a project to provide improved access to safe electricity supply to around 104,000 people in Mumbai's informal settlements. Many people work in the informal sector. Mumbai has also started the Mumbai Bangalore Industrial Corridor to create more jobs in manufacturing and boost trade. Authorities are trying to reduce begging and crime by having more police, ensuring children are in school and installing CCTV.	
Questions: 1. How much waste is produced in Mumbai? 2. What percentage of waste is recycled? 3. What is there dangerous levels of in the air? 4. Why is the train system difficult to manage?	5. How much did the project cost? 6. Who are they offering free housing to? 7. How many new toilets are they providing? 8. What is creating more jobs and boosting trade?	9. Use lessons 6-10 to write out the definition for each key term above.



Year 10 Cycle 1 Geography Knowledge Organiser – Urban Issues and Challenges



Week 5 – Tuesday 7 th October 2025		
Lesson 11 – Mumbai traffic	Lesson 12 – Mumbai economic growth	Lesson 13 – UK cities
Key Terms: Traffic congestion: Occurs when there is too great a volume of traffic for roads to cope with, so traffic jams form and traffic slows to a crawl.	Key Terms: Positive multiplier effect: The introduction of a new industry or the expansion of an existing industry in an area also encourages growth in other industrial sectors.	Key Terms: City: A large settlement with many buildings and people, offering services like transport, education, and healthcare, and usually acting as a centre for business and government.
Content: Environmental Problems: - Traffic increases air pollution which releases greenhouse gases that is leading to climate change Economic Problems: - Business deliveries take longer. This costs companies more money as drivers take longer to make the delivery. Social Problems: - Congestion can make people late for work. Solution: Mumbai Urban Transport Project (MUTP) - Costing \$1 billion - Aims to improve and build roads and highways such as the East West Highway - Providing modern trains that are safer, faster and with more space 600 eco- friendly buses, enabling more people to travel. In HICs, roads can be widened, build ring roads and bypasses to keep traffic out of city centres, Park and Ride schemes to reduce car use.	Content: Positive Multiplier Effect for Mumbai: - Mumbai was originally a port in the 1800s which caused the growth of the textile industry. - The textile industry employed 20,000 workers in Mumbai. - The workers received an income. - The government used taxes from income to improve infrastructure, schools and hospitals and other services. - Mumbai became a more attractive place to live - TNCs such as Disney/VW and the Bollywood film industry set up HQ. - Workers immigrate. - People/workers spend money in local economy which starts the cycle again. - The government uses taxes to improve infrastructure, roads, railways, airports, ports and superfast broadband.	Content: The location of most UK cities is linked to the availability of natural resources (particularly coal), or near to the coast for imports, and the subsequent location of industry during the industrial revolution. This is because coal was the original source of power for the factories e.g Glasgow, Newcastle, Nottingham and Cardiff. Primary and secondary industries have closed down in the centre and north of the UK. Cities in the north are growing slower. London and the SE of the UK have a lot of tertiary (banking and insurance), quaternary industries and universities so people are migrating to these cities from within the UK and from other countries.
Questions: - State an environmental problem of traffic - State an economic problem of traffic - State a social problem of traffic - Give 4 features of the MUTP	- How many people did the textile industry employ? - What did the government use taxes for? - Where do people/workers spend their money? - Draw a diagram of the multiplier effect	- What is the location of UK cities linked to? - What was the original source of power in the UK? - Why are cities in the north growing slower? - Why are cities in the south growing quicker?



Year 10 Cycle 1 Geography Knowledge Organiser – Urban Issues and Challenges



Week 6 – Tuesday 14 th October 2025		
Lesson 14 – UK population distribution	Lesson 15 – London location & importance	Specification terminology
Key Terms: Population distribution: How a population is a spread out. Population density: A measure of how many people there are in an area. Measured in km².	Key Terms: National importance: Significant to the nation/rest of the country. International importance: Significant to other nations/countries across the world.	1. Traffic congestion 2. Positive multiplier effect 3. City 4. Population distribution 5. Population density 6. National importance 7. International importance
Content: Mountainous areas tend to have the lowest population densities. These areas are sparsely populated (low number of people per km²). Wales has the Cambrian Mountains, the SW has Dartmoor and Central UK has the Pennines. These places tend to have low population densities Cardiff, Bristol and Liverpool all have large docks and lots of trade. There are jobs so there are high population densities here. Birmingham has a lot of industries so there is a high population density here. These areas are densely populated (high number of people per km²). SE is flat and has good farmland. London is the largest and most densely populated city with a variety of employment opportunities.	Content: London is the UK capital and is in the SE. It has a population of 8 million inhabitants and likely to rise to 10 million by 2030. National importance: • It is the administrative capital where UK Parliament sits House of Commons • London is the UK capital • It generates 20% of the total UK GNI International importance: • It is the location of many TNCs such as GlaxoSmithKline, HSBC, Barclays and the UK stock exchange • Well-connected through the motorway network and has 5 international airports and the Eurotunnel link through Waterloo.	
Questions: 1. What does sparsely populated mean? 2. Give an area of the UK that is sparsely populated 3. What does densely populated mean? 4. Give an area of the UK that is densely populated	5. Where in London in the UK? 6. What is the population of London? 7. State a national importance 8. State an international importance	9. Use lessons 11-15 to write out the definition for each key term above.



Year 10 Cycle 1 Geography Knowledge Organiser – Urban Issues and Challenges



Week 7 – Tuesday 21 st October 2025		
Lesson 16 – London growth	Lesson 17 – London opportunities (1)	Lesson 18 – London opportunities (2)
Key Terms: Internal/national migrant: Individuals who move from one place to another within the same country. International migrant: Individuals who move from one place to another within the same country.	Key Terms: Urban Change: The process of change as a result of growth, decline, dereliction, redevelopment. Cultural mix: When several different ethnic, racial, religious or cultural groups coexisting in harmony in the same society.	Key Terms: Integrated transport system (ITS): When different transport methods connect together making journeys smoother and, therefore, public transport more appealing.
Content: Most people who move to London are internal/national migrants between 18 and 35 who attend university or work. This creates a vibrant and energetic character, with a lot of social opportunities. Often means that many single occupancy homes are needed which puts the price of rents up. There is considerable international migration. 300 languages spoken. The majority do low skilled work such as security guards and cleaners but many work for TNCs or in the NHS as doctors, dentists and nurses. In London, 60% of people are white British and the other 40% are other ethnicities such as Asian and Eastern European. This contributes to a multicultural mix and creates ethnic enclaves such as China Town. It can also create tension and conflict.	Content: Recreation & entertainment: • Huge number of cultural attractions such as the British Museum, the National Gallery and the Natural History Museum. • The West End where a huge number of shows can be seen and tourist attractions such as Buckingham Palace and the Houses of Parliament. • Huge number of concert and cinema venues and lots of sporting events such as the Oxford-Cambridge Boat Race, the Wimbledon Tennis Open, big name football teams and even hosted the Olympics. Cultural mix: Strategies to improve this include: • Improve literacy in areas where English can be a second language • Increasing employment through initiatives to ensure basic skills and access to information and training • Numerous cultural celebrations such as Notting Hill Carnival, Diwali, Chinese New year.	Content: Employment: • The biggest growth has been in professional, real estate and business sectors. • Many TNCs have offices here including HSBC, Barclays and Unilever. • “The City” is the main financial services which has highly paid jobs. • There are also many low skilled employment opportunities, support services, the service sector and tourism. Integrated transport scheme (ITS): ITS makes for efficient travel across the city on the Underground, Buses, Tramlink, the Docklands Light Railway, London River Services and the London Overground. This means you do not need to own a car, and travel is quick efficient and affordable. More than 3 million passengers travel on the Underground (the Tube) every day.
Questions: 1. Why do most internal migrants move to London? 2. What type of work do international migrants do? 3. What is the ethnic split of London? 4. What does migration contribute to?	5. State 3 cultural attractions in London 6. State 3 tourist attractions in London 7. State 3 sporting events held in London 8. State 3 strategies to improve the cultural mix	9. What sectors have the biggest economic growth? 10. What is in “The City”? 11. What sectors have low skilled employment? 12. What is the benefit of an integrated transport scheme?



Year 10 Cycle 1 Geography Knowledge Organiser – Urban Issues and Challenges



Week 8 – Tuesday 4 th November 2025		
Lesson 19 – London greening	Lesson 20 – London environmental challenges	Specification terminology
Key Terms: Urban greening: The process of increasing and preserving open space such as public parks and gardens in urban areas.	Key Terms: Urban Sprawl: The unplanned growth of urban areas into the surrounding rural areas. Rural-urban fringe: A zone of transition between the built-up area and the countryside where there is often competition for land use.	1. Internal/national migrants 2. International migrants 3. Urban change 4. Cultural mix 5. Integrated transport system (ITS) 6. Urban greening 7. Urban sprawl 8. Rural-urban fringe
Content: London is 47% green space. It has over 3,000 parks, 30,000 allotments, three million gardens and two National Nature Reserves. Creating more green space by creating rooftop green spaces. There are 8.1 million trees. Environmental benefits: • Cleaner air as trees filter pollution • Trees reduce flood risk • Habitat for animals Social and health benefits: • Place for exercise • Reduces stress • Accessible and free Economic benefits: • Attract UK and overseas visitors • Healthier workers have less time off work	Content: There is not enough affordable housing in London, so the Government has suggested building on greenfield sites on the rural urban fringe. Greenfield: A plot of land, often in a rural or on the edge of an urban area, that has not yet been subject to any building development. This has led to the rise of commuter settlements outside London. People live here and commute to the city for work. Alternative is to use brownfield sites and areas of dereliction. Brownfield: Land that has been used, abandoned and now awaits some new use. Commonly found across urban areas, particularly in the inner city. Dereliction: Abandoned buildings and wasteland.	
Questions: 1. What percentage of London is green space? 2. State two environmental benefits 3. State two social and health benefits 4. State two economic benefits	5. Why is the government suggesting building on greenfield sites? 6. What is a greenfield site? 7. What has building on greenfield sites led to a rise of? 8. What is a brownfield site?	9. Use lessons 16-20 to write out the definition for each key term above.



Year 10 Cycle 1 Geography Knowledge Organiser – Urban Issues and Challenges



Week 9 – Tuesday 11 th November 2025		
Lesson 21 – London social challenges (1)	Lesson 22 – London social challenges (2)	Lesson 23 – London urban regeneration (Olympic)
Key Terms: Inequalities: Differences between poverty and wealth as well as in peoples' wellbeing and access to things like jobs, housing and education. Deprivation: A standard of living below that of the majority of society that involves hardships and lack of access to services and resources.	Key Terms: Spiral of decline: A process where a decrease in one area leads to further decreases in other areas.	Key Terms: Urban regeneration: The revival of old parts of the built-up area by either installing modern facilities in old buildings (known as renewal) or opting for redevelopment (i.e. demolishing existing buildings and starting afresh).
Content: Multiple deprivation includes: • Low education achievement (low levels of achievement GCSE Grade 9-5) • High levels of unemployment • High crime rates • Lower life expectancy • Low participation in sport East London – Newham • 62% of students achieved 5+ GCSE • 30% 16-24yr old unemployed • Life expectancy is 75 • Over 1300 crimes a year (8.9 per 1000) • £758 average weekly income West London – Chelsea and Kensington • 94% of students achieved 5+ GCSE • 3% unemployed • Life expectancy is 87 • Less than 300 crimes a year • £988 average weekly income	Content: Why does inequality exist in London? Inequality is often located in areas which were former industrial areas employing a lot of people. Spiral of Decline: 1. Loss of industry 2. Unemployment 3. Low income 4. Poorer health, diet & lack of exercise 5. Lack of engagement with education 6. Lack of investment and opportunity 7. Increase in crime 8. High levels of multiple deprivation 	Content: Reasons why the area needed regeneration: Newham was one of most deprived areas of London and UK. It hosted the 2012 Olympics. The main features of the project: Social: • Housing in East Village. • New school – Chobham Academy. • The aquatics centre for the community, schools and elite athletes. Economic: • The new Stratford Tube station • All the Olympic venues have been sold, including the £300m high-tech media centre Environmental: • Grounds in the Olympic Park have been kept as parkland. • Water quality improved in the River Lea. • Wildlife habitats were created • Stadiums made of at least 25% recycled materials.
Questions: 1. State 5 areas of multiple deprivation 2. Compare GCSE grades between the 2 areas 3. Compare life expectancy between the 2 areas 4. Compare income between the 2 areas	5. State why there is inequalities in London 6. What starts the spiral of decline? 7. What happens after low income in the spiral of decline? 8. What does the spiral of decline lead to?	9. Where was the Olympics hosted in London? 10. State two social features of the project 11. State two economic features of the project 12. State two environmental features of the project



Year 10 Cycle 1 Geography Knowledge Organiser – Urban Issues and Challenges



Week 10 – Tuesday 18 th November 2025		
Lesson 24 – Sustainable urban living (BedZED)	Lesson 25 – Urban transport strategies	Specification terminology
Key Terms: Sustainable urban living: A city is one in which there is minimal damage to the environment, resources allocated fairly and jobs secure, and there is a strong sense of community, with local people involved in decisions made. Waste recycling: The process of extracting and reusing useful substances found in waste.	Key Terms: Integrated transport system: When different transport methods connect together making journeys smoother and, therefore, public transport more appealing.	1. Inequalities 2. Deprivation 3. Spiral of decline 4. Urban regeneration 5. Sustainable urban living 6. Waste recycling 7. Integrated transport system
Content: BedZED (Beddington Zero Energy Development) is the UK's first and largest carbon-neutral eco-community. Transport: • Promotes walking, cycling, use of public transport. • On-site charging points for electric cars Energy: • Houses have south facing terraces • 777 square meters are covered with solar panels. Water: • Water use is reduced to 76 litres/day; out of which 18% represents rainwater or recycled water Local materials: • Materials were sourced within a 35 mile radius of BedZED wherever possible. Social: • 50% of the dwellings are allocated to low income families Waste Recycling: • Multi-bins have been designed into the kitchens so that residents can separate their waste	Content: London Underground: • There are 3 million passengers per day. Oyster card: • Integrated travel payment method which allows people to use buses, trains and tubes quickly. • This has now been superseded by contactless payments on debit cards and smart phones. Congestion Charging zone: • A fee of £11.50 is charged to any vehicle travelling in central London between 7am and 6pm, Monday to Friday. Low emissions zone (ULEZ): • All vehicles in the emissions zone will have to meet strict exhaust emission standards or pay a daily rate of £12.50 for cars and £100 for lorries and buses. • This will be on top of the congestion charge. Bike sharing scheme and E Scooters: • Bicycles can be self-hired in many public places. • E Scooters are rentable, but these are increasing accidents, and the laws are still being written.	
Questions: 1. State two transport features of BedZED 2. State two features of energy in BedZED 3. State a feature of water in BedZED 4. How do they encourage recycling?	5. How many passengers use the London Underground? 6. What is the congestion charging zone? 7. What is the low emission zone? 8. What is the bike sharing scheme?	9. Use lessons 21-25 to write out the definition for each key term above.

Buckland Abbey (Monastery) Knowledge Organiser

1	Who founded Buckland Abbey in 1273?	Amicia, Countess of Devon
2	What order of monks were at Buckland Abbey?	Cistercian
3	What was a 'lay brother'?	A monk who mostly did manual labour rather than mostly religious duties
4	Which end of a church is most holy?	East End – it faces Jerusalem
5	In what shape were churches built in medieval times?	A cross (Cruciform)
6	Name 5 buildings that existed in the monastic era.	The abbey, the Great Barn, an infirmary, dormitories, Cloisters, north and south transepts
7	What is the Rule of St Benedict?	Collection of religious texts read by the Choir monks
8	What would have been produced on site as a Monastery?	Beer, bread, agricultural produce, wool.
9	What feature dominated the abbey building?	The crossing tower
10	Name 2 reasons the monks picked such an isolated place in Dartmoor to build an abbey.	To avoid distractions (better for religious reflection). Good water supply. Building materials.
11	Why might an artist's modern day reconstruction of what Buckland looked like as a monastery not be accurate?	Lack of sources and lots of changes made over the years (particularly by Richard Grenville).
12	How might an artist overcome the problem of not knowing what Buckland used to look like?	There are some remains of the original monastery. Comparison to other monasteries like Fountains Abbey.
13	What are the architectural features of the monastic buildings?	Buttresses, slit windows, bar tracery (stonework that supports glass in a stained glass windows), arched windows, made of stone.
14	What is a bar tracery?	Stonework that supports glass in a stained glass window

Key Terms

Abbot	a man who is the head of an abbey of monks
Abbey	the building or buildings occupied by a community of monks or nuns, also known as a monastery
Dormitories	the building in which the monks sleep
Chapter House	the building where monks hold meetings and where a chapter of the Rule of St Benedict would be read to them every morning
Buttress	a structure of stone or brick built against a wall to strengthen or support it.

Buckland Abbey (Tudor Home) Knowledge Organiser

1	Which King dissolved the monasteries by 1539?	Henry VIII
2	Who bought Buckland from Henry VIII?	Richard Grenville the Elder
3	Why did Henry Break from Rome? (To leave the Catholic church and create the Church of England)	To get a divorce from Catherine of Aragon and to gain the wealth of England's monasteries.
4	In what decade does Richard Grenville (the grandson) make alterations?	1570s
5	What kind of changes did Richard Grenville the Grandson make?	Removed North and South transepts; demolished cloisters and dormitories; Created a second floor in the Nave; Changed the Chancel into a service wing for servants + kitchen.
6	Why did Grenville make the changes?	Changed the building to take away its Catholic roots. Complex and solid build of the abbey meant to was too difficult and costly to change much.
7	What did MOST Tudor gentlemen do when buying an old monastery?	Demolish it and build a new home from scratch.
8	What other general features of Buckland show that it was a Tudor manor?	Rectangle/square windows (a design popular in the Tudor era. These did not exist in the monastic era.
9	How can we prove that the Grenville family had the fireplaces built in Drake's Chamber?	They have the family device or logo on them.
10	Who did Grenville sell Buckland to in 1580?	Sir Francis Drake
11	When the Drakes took over Buckland, did they invest heavily in it between 1590-1740?	No because their main property became Nutwell Lodge in Exeter from 1699 onwards and Buckland became a second home, visited irregularly.

Key Terms

Break From Rome	When Henry VIII broke away from the Catholic Faith and replaced the Pope as the Head of the Church in England. This occurred in 1533-4 and he dissolved the Catholic monasteries in England by 1539.
Tudor Era	A period in History with Tudor monarchs (like Henry VIII and Elizabeth I)
Catholic	A Christian who follows the Catholic faith and who follows the words of the Pope
Protestant	A Christian who does not follow the words of the Pope. They are 'protesting' against Catholicism.
Dissolution	The process of closing (dissolving) the monasteries in England. It happened from 1536. Buckland was

Buckland Abbey (Agricultural Revolution) Knowledge Organiser

1	Name two ways that the Agricultural Revolution made farming more productive	Enclosure meant more food could be grown. New machinery like the Seed Drill. Selective breeding to improve the quality of sheep, cows, pigs.
2	Which agricultural reformer visited Buckland in the late 18 th century (late 1700s)?	William Marshall
3	How was the Great Barn amended?	3 new doors added, allowing carts to be driven the whole length of the barn.
4	Who owned Buckland when changes were made during this era?	Lord Francis Augustus Heathfield
5	Which extra buildings were built during this time?	The Ox Sheds and The Linhay
6	What animal was used to plough the fields?	Oxen
7	A diary was kept by Marshall, telling us about daily life. How many days per week did agricultural labourers work?	6
8	Did just men work at Buckland?	No – oxen and children too.
9	Name different tradesmen named in Marshall's diary	Mason, wheelwright, blacksmith, miller, cooper, harness-maker and a Mole Catcher.
10	Name types of crops grown at Buckland	Wheat, barley, oats, turnips, potatoes, cabbages, peas, dairy produce, honey and cider.
11	What did the owner of Buckland do with the wealth generated by improved farming?	Built the impressive wooden Georgian staircase.
12	Did the Drake's live Permanently at Buckland Abbey?	No, they were based at Nutwell Lodge near Exeter
13	What did the area which is now the Education Centre used to be	The Milking yard for dairy cows.

Key Terms

Agricultural Revolution	a period of technological improvement and increased crop productivity that occurred during the 18th and early 19th centuries in England and Europe
Linhay	A type of farm building found in Devon and Somerset. It has two storeys – the hay loft at the top and bottom storey is for keeping cattle in during winter. The hay at the top acted as insulation for the cows to keep warm
An estate (noun)	an extensive area of land in the country, usually with a large house, owned by one person or family
Georgian period	The Georgian era is a period in British ³² history from 1714 to c. 1830–37, named after the kings George I, George II, George III and George IV.

Buckland Abbey (National Trust) Knowledge Organiser

1	Which resident of Buckland does the National Trust celebrate the most?	Sir Francis Drake
2	Name ways in which Drake is commemorated	There is a sundial to commemorate 400 th anniversary of his death. A Drake statue in the Lifetimes gallery. Drake's Drum on display. Paintings and artefacts. Stag horns in kitchen.
3	What have the Ox Sheds been converted into?	Shops, galleries, toilets, video presentation room..
4	Name some changes the National Trust has made to make it attractive for tourists	Access made easier (e.g. for wheelchair users); Information signs ; Restaurants, toilets to ensure people are relaxed; opportunity to spend money (e.g. Gift Shop)
5	What has been done to attract children to Buckland?	The upstairs of the main house is modelled as a ship with entertainment for children, like being able to dress up. Ice cream!
6	What is the Linhay now used for?	To display agricultural machinery such as different types of ploughs
7	What is the Great Barn used for now?	It has a Victorian Cider Press (simply because it is interesting to tourists) and sometimes art exhibitions
8	What is the Guest House now used for?	The building tourists walk into to pay for entry/present their membership card of the National Trust. Another part of the Guest House is the gift shop. The Restaurant/Café.
9	What is the significance of Education Room?	Provides a base for visiting schools – shows the National Trust care about education

Key Terms

National Trust	UK conservation charity, protecting historic places and green spaces
English Heritage	Another charity, founded by the government to preserve historic sites.

Buckland Abbey (Compared with Fountains Abbey) Knowledge Organiser		
1	What was Fountains Abbey built from?	Sandstone
2	Was the abbey bigger or smaller than Buckland?	Bigger
3	How many people worked at Fountains when the abbey was at the height of its wealth?	200
4	What ornamentation was there on Fountains Abbey?	The Green Man (like a gargoyle) and carving of the Abbot's face.
5	How were choir monks and laybrothers kept separate in terms of the abbey buildings at Fountains?	Stairs and dormitories were separate
6	Name additional buildings at Fountains Abbey other than the abbey	Dormitories, Refectory, library, Chapter House, Kitchen
7	Name three ways Fountains abbey is DIFFERENT to Buckland Abbey	Had a library and separate place for lay brothers The burial ground at Fountains Abbey is much more understood – as there are gravestones which mark the burials of 19 Abbots The cloisters are on the south side of the monastery (like nearly all monasteries) whereas Buckland was on the North (due to draining issues).
8	Fountains Abbey was dissolved in 1539 like Buckland was. In the 1600s ,Stephen Proctor decided to make a Tudor Home on the site. Did he convert the abbey or use the stone from the Abbey ruins to build a new house?	Used the stone from the ruins to build a new house.
9	When was Fountains Abbey at its wealthiest?	1200s
10	Why did Fountains Abbey face financial troubles in the 1300s?	It experienced sheep disease. The Black Death killed many of its inhabitants. Famine in Scotland meant Scots came from the north to steal from Fountains Abbey
Key Terms		
Fountains Abbey		The ruins of an Abbey in North Yorkshire

Medieval Britain	Medieval C&P Knowledge Organiser		Crime
Society: ‘Hierarchical’ with the king at the top and peasants at the bottom. Everyone knew their place in society	The majority of crimes in this period were non-violent, theft being the most common crime. 1315-1321 was the great famine, following a succession of bad harvests. The crime rate increased due to debt and hunger, this was reflected in the changing nature of crimes towards the end of the medieval period.		
Food and famine: Farming was important for food and work - if the harvest failed there would be famine 1348 Black Death disrupted farming as millions died and the land was left unfarmed.	Serious Crime		Petty Crime
Life and leisure: Church calendar dictated way of life – Sundays were rest days, also Saints’ days. fairs and sports on feast days and holidays. people drank beer as water unsafe. most people were illiterate	• Murder • Stealing expensive goods (12d.+) • Suicide – the church taught that only God could decide when a person’s life should end		• Stealing goods worth less than 12d • Getting into debt • Limited harm to person or property
Landownership: Land was the basis of power – provided food and wealth. England divided into ‘counties’ or ‘shires’ – each shire ruled by a sheriff – shires divided into ‘hundreds’ - hundreds then divided into parishes. communities were small and everyone knew each other, strangers were easily spotted			
Technology: Most work done by hand with tools such as axes, hammers and spades. Communication by word of mouth - priest could read and write so kept records. 1476 – England’s first printing press in London	Treason	Crime of plotting against your monarch or country was defined, included a woman killing her husband. Counterfeiting coins.	
War and rebellion: A peaceful society depended on each person or group showing loyalty to those above. Occasional rebellion from lords against king - 1381 Peasants’ Revolt and 1455-1487 Wars of Roses meant people were familiar with bloodshed and violence.	Vagrancy	When people wandered from place to place in search of work.	
The church: Catholic country and many churches were richly decorated Church taught that God cared about his people on earth - God would forgive people their sins if they followed honest lives - sinners would be punished in hell - not all priests led holy lives.	Scolding	Using offensive or abusive speech in public - 1350 onwards became a crime applied mainly to women.	
Homes and possessions: Peasants’ houses were simple wooden structures with walls of hardened mud, no glass windows but wooden shutters - wealthier homes in the towns were similar - people had few belongings.	Outlaw gangs	Gangs of robbers were most feared, as travellers were ambushed, houses robbed and villages threatened with burning if valuables not given Gang members were often outlaws, on the run after being accused of committing crimes in own villages.	
	Heresy	Spreading beliefs not allowed by the church became a crime.	
	Immoral behaviour and beliefs	Laws passed against dice, football and other games, church believed they encouraged idleness. Moral crimes included shaving beards on Sundays and committing acts of homosexuality.	

Law Enforcement

Medieval C&P Knowledge Organiser

Punishments

King: in overall charge – kept the ‘king’s peace’

Sheriff: King’s chief law enforcer in each county. Had an armed posse to help him. Often took a share of property of convicted.

Chief constable of the hundred: Supervised law and order in their area. Made sure every free man aged 15-60 was ready to take up arms to support the king.

Parish constable: Ensured his parish could supply armed men when needed. Powers to arrest suspicious strangers.

People/Hue and cry: Adult men were grouped into ‘tithings.’ If one broke the law the others had to bring him to court. Victims of crime called the ‘hue and cry’ – all those within earshot had to stop what they were doing and help.

Towns: Watchmen patrolled the town streets at night - suspicious individuals were arrested and handed over to constables, it was an unpopular job

Royal Courts: Heard the most serious criminal cases - overseen by a judge - jurors were drawn from criminal’s own area

Justices of the Peace (JPs): Existed from 1361 and an important change as took over the hundred courts (courts run by the county sheriff) - appointed by the king (2 or 3 in each county) - 1388 onwards quarter sessions were held every 3 months (4 times a year)

Manor Courts: From 1250, took over work of the hundred courts - dealt with most crimes in England – petty crimes, thefts, land disputes, fights and debts - run by the lord or his steward and wealthy villagers made up the jury - each manor had their own local laws - began to lose influence 1500 onwards

Church Courts: Dealt with crimes that were considered un-Christian – immoral priests, homosexuality, swearing, gambling and failure to attend church - priests heard the evidence and passed judgement- no juries

Medieval Juries: Selected from the same parish or hundred - used prior knowledge of accused to reach their verdict - judge followed juries’ verdicts - trials usually lasted about 20 minutes

Verdicts: ‘Guilty’ or ‘Not Guilty’ - many juries were lenient - often let the accused go free, especially women

Serious Crimes

Hanging	Rope placed around the neck and criminal slowly strangled Punishment for murder, rape, theft of goods 12d.+, burglary and robbery
Hanging, drawing and quartering	Criminal hanged then taken down whilst still alive _ intestines cut out and/or genitals _quartered – body cut into pieces Punishment for high treason (plotting to kill the king) and counterfeiting
Burning	Criminal usually tied to a wooden post surrounded by wood _ bonfire then lit Punishment for petty treason (wife killing husband or servant their master) and heresy

Petty Crimes

Fines	Payment of money _ those who oversaw each level of court kept the financial proceeds
Public humiliation	Cucking stool –forced to sit on a wooden seat in public Stocks (sitting) and pillories (standing) – criminals would have rotten fruit and vegetables thrown at them
Imprisonment	Those awaiting trial would be imprisoned _ used to punish debtors and forgers

Avoiding punishment

1. Run away
2. Seek sanctuary in a church
3. Powerful friends
4. Refuse to plead
5. Hope for a friendly jury
6. Buy a pardon from the king
7. Join the king’s army
8. Be pregnant (women)
9. Claim benefit of clergy
10. Become a king’s approver

Early Modern Britain	Early Modern C&P Knowledge Organiser		Crime
Growing population and urbanisation: 1550-1650 population doubled from 2.4 million to 4.1 million. Most people continued to live and work in the countryside. 1750 – 20% of population lived in towns. London = largest and busiest city in Europe.	Crime dramatically increased mid-16th-mid 17th centuries, particularly amongst the poor. Vagrancy, witchcraft, smuggling and highway robbery emerged as new crimes. In Elizabethan England (1558-1603) printed pamphlets and leaflets sensationalised crime and gangs.		
Growing inequalities between rich and poor: More prosperous but still inequality. Population growth: food prices increased, wages fell and unemployment. 1590s = harvest failure so people moved to towns for work.			Vagrancy Caused by failed harvests and fall in demand for cloth. Those living in poverty = no choice - leave their village and become vagrants. Sensationalised by printed press – accused of committing thefts, assaults and murders. Reality – few vagrants were criminals; many travelled alone or in twos or threes, desperate for work.
Travel: People began to move in search of work - drovers herded cattle and sheep - carriers to cloth to the towns. 1600s – start of road-building, used by stagecoaches to transport goods and people - normal for people to travel with valuables			Moral Crime Growing Puritan beliefs - moral crimes: drinking, swearing, sexual immorality, not attending church, scolding in public
Technological change – the printing press: transformed people’s lives and multiple copies of books and pamphlets could be made quickly and cheaply. growth in literacy – people could read local and national news and be more informed. 1641 onwards – broadsheets first emerged 1750 = 4 daily newspapers in London and 30 in different towns across the country.			Witchcraft Medieval times = few cases of witchcraft. 1500-1650 widespread belief in magic and the devil giving powers to witches through familiars (spirits in the form of small animals which fed on witch’s blood.) Usually single elderly women who quarrelled with a rich villager. Accusations of causing harm – death of animal or sickness of a child. C16 th / 17 th harsh new laws against witchcraft introduced. Witchcraft trials increased: famines of 1580’s and 1590s; chaos of Civil War – Puritan areas. Early 18 th century – witchcraft trials decreased - new scientific ideas about the world emerged.
Religious changes and Puritans: 1530s onwards = Protestant Reformation brought religious change . people had to follow official state religion chosen by the monarch (Protestantism). late 1500s Puritans emerged – tried to enforce higher standards of behaviour sinful acts condemned - drinking, gambling, dancing, swearing.			Smuggling Smugglers secretly brought goods into the country without paying high taxes. Smuggling gangs would bring these goods across the Channel and landers would bring them ashore on small boats - included respectable people who disliked paying taxes and poor people who could earn money through smuggling.
Growing power of the state (government): Under Tudor monarchs (1485-1603) the power of the state grew - Henry VIII insisted on “Your Majesty”. Parliament introduced new laws - people’s lives more closely controlled by the government.			
Power of the landowners in the countryside: Landowners played important part running the country - in each county landowners were MPs, JPs and enforced the law. 1660 onwards as king had limited power, large landowners more powerful.			Highway Robbery C17 th / 18 th roads were built and travel increased. Wealthy were targets as they often carried their money and jewellery with them as no banks. Highway robbers later portrayed as romantic gentlemen thieves, in reality they were often brutal thugs.
Civil War 1642-1648 King vs Parliament: disagreement over ruling of England, King defeated and executed January 1649 people suffered as battles fought across the country – thousands killed. England a republic, Oliver Cromwell and Puritans governed			

Law Enforcement		Early Modern C&P Knowledge Organiser		Punishments
Continuity from the Medieval period - No police force – communities continued to police themselves. - Prosecutions – decision to prosecute someone was made by individuals. - Hue and Cry – continued to be raised by the local constables and the people were expected to join in. - Law enforcement – administered by unpaid and amateur officials such as JPs, constables and churchwardens.		Change from the Medieval period - Watchmen – patrolled the streets and arrested drunks, vagabonds and criminals. - JPs role extended – an important change – dealt with criminals at petty sessions. - Decline of office of sheriff, manorial courts and church courts.		There was some continuity in the use of punishments between Medieval and Early Modern periods, such as execution. New types of punishment were introduced to deal with the changing nature of crime and the lack of police force. Public Humiliation: Became widespread as crimes such as vagrancy increased. <u>Pillory</u>: offender’s head and arms were put in wooden frame and they were pelted with rotten food, stones and excrement - used for those who traded unfairly or committed sexual offences <u>Stocks</u>: arms and feet were placed in heavy pieces of wood and locked in position - people were pelted with rotten food, spat on, insulted or kicked <u>Scold’s bridle</u>: a heavy iron frame locked onto a woman’s head, a projecting spike pressed down on the tongue <u>Cucking stool</u>: disorderly women, scolds and dishonest tradesmen were paraded around on a cucking stool <u>Ducking stool</u>: offender tied to a chair and repeatedly lowered into a river or pond, used on suspected witches Prisons: Less common form of punishment Still mainly used to hold those in debt or awaiting execution 1531 Gaol Act – forced JPs to build prisons where needed Bridewells (houses of correction) a new form of punishment - introduced to help tackle the vagrancy problem - prisoners were forced to work or were punished if they refused to do so 1609 Vagabond Act forced JPs in every county to build a bridewell Bloody Code: Increased capital offences as people were hanged for minor crimes Introduced 1688 to 1820 – the threat of hanging was intended to be a strong deterrent No police force to protect property so MPs used their parliamentary power to pass to frighten people into obeying the law 1723 Black Act made poaching deer, rabbit and fish a capital offence By 1820 = 200 capital offences (compared to 50 in 1688), most were for crimes against property However, number of hanging decreased; assize judges often unwilling to pass a sentence of hanging for minor crimes
	Type of offences	Organised/administered		
Assizes	- Serious crimes/capital offences - murder, manslaughter, highways robbery, burglary, grand larceny (stealing goods 12d.+), witchcraft and rape.	- Country divided into 6 circuits - Each circuit visited by 2 judges twice a year. - Dealt with ‘capital offences’ which carried the death penalty		
Quarter Sessions	- Less serious crimes – petty theft - Extra powers – licensing ale houses, regulating local sports and arresting vagrants.	- Administered by JPs - Visited each county every four times a year.		
Petty Sessions	- Drunkenness and minor violence	- JPs met regularly in local areas to cope with the increased amount of work.		
Manorial Courts	- Played an important role in controlling behaviour of tenants on individual manors: - Let their animals stray - Stole wood from the common - argued with neighbours	- 17 th century = became less important as the Petty Sessions gradually took over their work.		
Church Courts	- Played an important role monitoring Christian behaviour: - church attendance - sexual offences - drunk on Sunday - swearing at neighbours	- Survived the Reformation - Active late 16 th and early 17 th centuries.		

Growing population and Industrialisation: From 1750, population rocketed: 1750 = 6 million 1850 = 21 million 1900 = 37 million. Mass migration of people from the countryside to towns in search of jobs

Urbanisation: Growth of cities – Birmingham, Bradford, Leeds and Manchester - by 1850, more people lived in towns and cities than rural areas - lodging houses provided temporary accommodation for families moving to cities

Growing inequalities between rich and poor: industrialisation brought wealth to some but poverty to others - upper and Middle classes moved out of town centres to suburbs - working classes crowded into terraced houses and back-to-backs near the factories

Poverty – rural and urban: life was grim for the urban poor; families lived in back-to-back houses that were overcrowded and insanitary - rural labourers continued to live in poverty; often forced to eat turnips from the fields, unemployment forced many to the towns in search of work - no government benefits at this time so people struggled to survive.

Railways: network of railways built across Britain during 1830s and 1840s. navvies (mostly Irish) blasted the tunnels, laid the lines and moved the earth. By 1850, most major towns and cities were connected by rail. People and goods were moved quickly and cheaply across the country. Coach and canals companies went into decline

Growing literacy: churches and charities schooled the poor. 1870 Forster's Education Act made schooling compulsory for all to age 10. Demand for newspapers grew as more people could read and write. Newspapers vital for growth of working class political consciousness - people demanded reform to living and working conditions

Growth of Democracy: until 1832, 5% of the population could vote. 1832 Great Reform Act enfranchised middle class men and larger towns had MPs. 1867 Second Reform Act enfranchised skilled working class men. 1884 Third Reform Act enfranchised more working class men; 2/3 could not vote

Alcohol: During the 19th century, pubs played a major part in the lives of the working class - scape from the despair of the slums - drunkenness led to violence and caused misery in many working class families. Temperance Movement formed to persuade people to stop drinking alcohol.

Industrial Revolution had a huge impact on types of crime – many of which were new. 1750-1850 – crime rates increased, 1850 onwards – crime rates fell. New ideas emerged about the causes of crime, such as poverty, bad moral habits or physical features.

Why did crime increase?	How did crime change?
- 1750 → effects of industrial revolution - increase in population, growth in trade and urbanisation led to a rise in crime - 1815 → end of Napoleonic Wars saw a sharp increase in crime as thousands of soldiers returned home to face rising prices. - Urbanisation - overcrowded lodging houses (often temporary accommodation) and crowded alleyways contributed to increasing crime rates. - Therefore, most crime was opportunistic (unplanned)	- Petty theft remained the most common crime – from factories and houses – much of this was opportunistic - Prostitution remained the most common crime for women - New crimes: - Fare-dodging on the railways - Vandalism (on the railways) - Failing to send children to school 1870 - Stealing water from standpipes (in many cities, water was owned by private companies) - Violent crimes and murder rates remained low – around 10%

Causes of Crime	
Radical thinkers - John Glyde – genuine concern for the poor - blamed poverty - poor environment the poor lived in - slum children had little education	Conservative/traditional thinkers - Blamed crime on the bad moral habits of the poor - drunkenness and gambling - dismayed at number of pubs and alehouses in working class areas
Biological/physical causes - New theories emerged in the 19th century: - Children born to criminal parents inherited criminal tendencies – that 'bad genes' were passed from parents to children. - Criminals had different physical features such a different shaped heads, hands, colour of skin	Temperance Movement Became popular at this time - favoured complete abstinence from drinking alcohol - belief that the pubs and alehouses left the poor without money or food - poverty led to gambling, violence and prostitution.

John Fielding	Robert Peel
- First experiments in professional policing - 1754-1780 a magistrate at Bow Street Court, London - 1750s – organised groups of part-time constables who were paid to patrol London's main streets and roads until midnight. - 1800 – 68 Bow Street runners - 1773 - Hue and Cry published – weekly newspaper that detailed criminals and stolen property.	- Due to rising crime rates 1800 → Bow Street Runners, constables and watchmen couldn't cope. - 1829 Sir Robert Peel (Home Secretary) set up first Metropolitan Police force of 3000 men - 'Peelers' or 'bobbies' were armed with a truncheon and wore a uniform of dark blue tall hat and coat. - Initially, people were opposed to the idea of a police force paid for out of public money.

Developments in Policing after 1829

1835 Municipal Corporation Act - Allowed towns to set up a police force

- Slow to effect change as only 100/178 towns had a police force by 1838

1839 Rural Constabulary Act - Allowed county magistrates to set up a police force

- Slow progress because of the cost, 2/3 of counties had a police force by 1855

1856 County and Borough Police Act - Created a national police force

- 3 new Inspectors of Constabulary ensured local forces met national standards.

- Government met 25% of funding for forces

Changing role of Police Officers

- Preventing crime – most important role:
- Removing drunks, vagrants and prostitutes from the streets
- Dealt with pubs that allowed Sunday drinking, gambling and illegal sports
- Prevent theft and violence
- CID (Criminal Investigation Department) founded 1878
- New technology helped crime detection:
 - photographing crime scenes 1880s
 - use of telegraph to relay information 1867
 - use of fingerprinting 1897

Changing role of Courts

- Small developments
- Assizes and quarter sessions tried felons
- Petty session and magistrates continued to deal with minor offences
- Lawyers acted for both the prosecution and defence
- Trials were longer and more formal

Capital Punishment

- Changes meant more humane forms of hanging and fewer executions: 1800-1809 = 871 people ; 1830-1839 = 297 people
- 1780s 'new drop' - execution by hanging brought inside the prison walls due to concern over rowdy behaviour prisoner died more quickly by being dropped through a trap door.
- However, hanging took place on the roof so people could still witness them.
- 1872 'long drop' calculated how much rope was needed to break the neck instantly, so death quick and painless
- Peel's reforms:
- Reduced the number of capital crimes; only murder and attempted murder punished by hanging.
- 1868 public executions made illegal

Transportation

- 1780s – Australia chosen: it was unknown - crime would be reduced - convicts provided labour
- May 1787 - first convicts transported Who – thieves and political prisoners (Tolpuddle Martyrs who wanted to form a trade union)
- Sentences = 7 or 14 years, or lifetime
- The Convict Colony
- harsh conditions – convicts shackled hard labour – digging ditches, felling trees, planting crops, construction
- harsh punishment – lashes with whip
- Change – arguments against transportation
- Harsh journey/working/living conditions
- Taxpayers supported convict's family resented by Australia
- ended 1868

Prisons

After campaigns for change, the modern prison system was formed.

John Howard 'The State of Prisons'
prisons be built near water supply
prisoners have own cell
adequate food and 2 clean shirts a week
gaolers be paid

Elizabeth Fry
reformed Newgate prison for women:
education and readings from the Bible
encouraged sewing and knitting
1811 Millbank Prison built – failed
1823 Gaols Act – separate cells
1842 Pentonville Prison built

Separate system
prisoners kept apart from each other
led to loneliness and mental breakdown
Silent system
prisoners not allowed to speak
1865 Prisons Act – hard labour, fare and board

Continued growth of cities and towns: 20th century – the poor lived in large estates in town centres or conurbations (cities merging with outlying towns), the rich and middle classes lived in the suburbs. Few people live and work on the land. By 2011, over 80% of the population lived in cities or large towns.

Changing work and increased wealth: Following economic struggles of early 20th century, Britain prospered. Britain no longer a manufacturing society - making goods from scratch, but became a 'consumer society' – buying and selling goods. Many people own their own homes

Government control/intervention: Welfare State 1906-1914 – Liberal welfare reforms to tackle poverty – start of state intervention. 1928 – all men and women enfranchised. Governments had to care about social issues. 1945-1951 – welfare state fully established. More state intervention in people's lives

Society and family/migration and diversity: Educational changes – more people go to university, but still difficult for poor and poorly qualified young men to find jobs. Women have more rights – build own careers and not have to stay at home. Children of single/unmarried parents no longer stigmatised. Same sex relationships more accepted. Immigration led to greater diversity but increased tensions.

Transport and communication: Cars and aeroplanes allow people to travel further and more speedily. 1901 – first telegraph signal. 1985 – first mobile phones – now prolific use across society – mobile technology now allows people to communicate, take photos/videos, access e-mails etc. Computers and tablets – now widespread in the workplace and in homes

Science and technology: Developments in science and technology transformed many aspects of our lives. Research - antibiotics and DNA research eradicated fatal infections and diseases. 1950s – extension of national grid to provide electricity to people's homes.

Leisure and entertainment: 1930s = television broadcasting began, by the 1970s, most homes had a TV. Most homes can access films, programmes etc. via online streaming. Computer games became an enormous industry 1970s onwards.

Religion/beliefs and attitudes: Fewer people attended church as century progressed, only 10% of population by 2000. Less reliance on the Bible; psychologists and sociologists offer explanations for human behaviour.

Changing nature of crime

Crime was not always reported to the police: Before 1980, young troublemakers were dealt with by adults and some police constables by a 'clip round the ear'.

Spike in some crimes: The number of reported burglaries rose once insurance companies refused to pay out if the police had not been informed.

No longer crimes: 1961 → suicide; 1967 → abortion; 1967 → homosexual acts

New crimes have been created: 2007 smoking in enclosed spaces
2015 smoking in cars with young children

Recording crime: 1998-2002 changes made to the way police record crimes

Changes in crime rates 1900-1955

- 1920s and 1930s = severe economic problems and widespread poverty, so crime rose as the police had to deal with strikes and public protests.
- WW2 – as people sheltered during the Blitz, opportunistic thieves looted houses and even stole jewellery and cash from bodies.
- 1945-1954 – stolen goods often sold on the black market - rationing continued.

Changes in crime rates 1955-present day

Car crime	1967 → drink driving limits imposed, police used breathalysers 1983 → drivers had to wear seat belts 1992 → roadside speed cameras captured images of speeding cars
Football hooliganism	Reached a peak in the 1970s and 1980s 1985 - Liverpool fans rioted before the match with Juventus fans; a wall collapsed and 39, mostly Italians, died. CCTV within grounds to identify dangerous fans; stadiums are fitted with seats and fan movement is controlled.
Race, religion and hate crimes	1998 and 2003 'hate crime' became a new category of offence. Gave greater protection to victims of crime based on their race, gender, religion or disability with Race Relations Act of 1965, 1968 and 1976
Illegal drugs	1971 Misuse of Drugs act restricted availability of drugs. 1985 – supplying drugs carries a 14 year sentence.
Cyber crime	1990s emergence of internet led to new types of crime: illegal downloading, phishing (emails that trick people into revealing financial details) and cyber criminals who hack big businesses. 2015 – cyber crime included in Britain's national crime statistics

POLICE

Changing attitudes -1900-1970 – police were respected

1970 → public trust eroded: Fewer police on foot/'the beat', resent punishment of traffic offences, criticised for using force in crowd control, police corruption

Recruitment, training and pay: 1900 – police were often poor, working class white males with little education

1939 only 226 female officers, 2008 there were 37,000

1947 → police receive specific training

Community policing: Police Liaison Officers visit schools; schemes such as Neighbourhood Watch are encouraged.

Weapons: 1900-2000 truncheons only

2000 → weapons, pepper sprays, tasers

Range of work: 1993 survey – only 18% calls were crime-related

NEW TECHNOLOGY

Identification of criminals: 1901 - discovery of blood groups allowed police to narrow down suspects.

1902 – fingerprints first used to identify suspects

1984 – discovery that each person's DNA is unique is used as key evidence in court

Communication and data storage: Mid 1960s → radios installed in patrol cars and portable radios used

Computers store huge amounts of data – DNA tests, fingerprinting and crime reports.

ANPR quickly checks a car's registration

Surveillance: CCTV and cameras are central to police investigations; cameras on streets, in patrol cars and on officers' uniforms.

Monitoring emails, text messages and internet searches has also increased.

COURTS

1971 Courts Act – the Crown Court replaced the assizes and quarter sessions.

Magistrates Courts try less serious cases

Ministry of Justice is in overall control of courts in England and Wales.

Crown Prosecution Service (CPS): From 1986, the CPS took on the responsibility of bringing trials to court, rather than the police.

Women's roles: 1919 → women allowed to serve on juries

1920 – Ada Summers became the first JP

Juvenile Courts: Introduced from 1908 – for criminal cases of children aged 7-16.

Juries: Since 1974, juries reflect breadth of society

Corporal Punishment - continued alongside prisons, eventually abolished.

- 1900 – whipping and beating was widely used as it was a quick, cheap and effective deterrent - More liberal-minded people argued that it was preferable to a brutal prison sentence.

- 1933 – corporal punishment ended for young offenders

- 1948 – ended as a punishment for all offenders

- 1962 – ended as a punishment for prisoners who misbehaved whilst in prison.

Capital Punishment - was abolished, in stages, as ideas became more liberal.

- 1908- no one under the age of 16 could be executed

- 1953 – public outcry when 19 year old Derek Bentley, mental age 10, was hanged

- 1957- death penalty ended for all murders except where a police officer was the victim, a gun was used or the person was resisting arrest.

- 1965- Parliament passed the Abolition of the Death Penalty Act.

- 1969 – Parliament permanently abolished the death penalty for all murders.

- Debate over the death penalty continues, particularly when grim murders occur.

Prisons - By 1900, reformers believed rehabilitation and education were the keys to improving society.

Imprisonment of young offenders

- 1902 – borstals set up for young offenders under the age of 21; emphasis on education, and skills that might lead to jobs

- 1988 – borstals replaced with young offender institutions.

- 1908 – criminal age of responsibility set at 7; now 10 years and over.

Prison reform

- 1896 Broadmoor Hospital set up for prisoners who were mentally ill.

- 1922-1947 Alexander Paterson's reforms: relaxation of silent system, education, paid, meaningful work.

Prison problems

- Since 1940, prison population continues to rise, as many prisoners receive short sentences, can't pay fines or await trial.

- Prisons are overcrowded and many prisoners suffer with mental health issues.

Alternative to Prisons

- 1907 – Probation Service introduced for minor offenders

- 1967- parole system introduced to supervise prisoners released early

- 1972 - Community Service Orders introduced where offenders do a number of hours unpaid work for the community rather than go to prison.

- 1990 – digital tags introduced; these send signals to show where they are.

Victims

Since 1990, the government introduced direct support for victims.

- Victim's Charter sets out victim's rights on support they should receive.

- Victim's Personal Statement – victims now have the right to make a VPS explaining how the crime has affected them. Read aloud once a guilty victim has been reached.

Year 10 Life Skills		
Lesson 1- Coping with change and building resilience	Lesson 2- How our behaviour affects our mental health	Lesson 3- Intimate relationships
Transition- the process or a period of changing from one state or condition to another. Resilience- the capacity to recover quickly from difficulties. Anxiety- a feeling of worry, nervousness, or unease about something with an uncertain outcome. Building resilience: - Staying connected to your friends and family, and talking about how you feel is a great way to help your emotional wellbeing - A healthy balanced diet can improve your mood and increase your energy levels. - Stay mentally active is also important; you can do this by completing any work set by your teachers and accessing online resources too - Exercise is important because your physical health has a big impact on how you are feeling - Getting enough sleep can help improve your mood Websites: Childline- Feelings and emotions YoungMinds- Feelings and symptoms Kooth https://www.healthforteens.co.uk/feelings/resilience/video-5-ways-to-build-resilience/	Mental Health- A person's condition with regard to their psychological and emotional well-being. Stress- A state of mental or emotional strain or tension resulting from adverse or demanding circumstances Anxiety- A feeling of worry, nervousness, or unease about something with an uncertain outcome. Depression- Depression is a constant feeling of sadness and loss of interest, which stops you doing your normal activities. Different types of depression exist, with symptoms ranging from relatively minor to severe. Generally, depression does not result from a single event, but from a mix of events and factors. Emotional well-being is the ability to produce positive emotions, moods, thoughts, and feelings, and adapt when confronted with adversity and stressful situations.	Characteristics of a healthy one-to-one intimate relationship: Respect- To feel admiration for someone/ something and to act in a way which shows that you are aware of someone's rights, wishes, etc. Consent- To give permission for something to happen or agreement to do something. Loyalty- The quality of being faithful to someone or something else. Trust- Trust is a feeling that somebody or something can be relied upon/ be truthful. Shared interests- Have the same tastes in hobbies/ interests/ sense of humour etc Sex- Sexual activity, including specifically sexual intercourse Friendship- People who are friends talk to each other and spend time together.

Lesson 4- Assertive Communication & Consent	Lesson 5- Changes and breakdown of relationships	Lesson 6-Sexual harassment and abuse
Peer Pressure- The pressure that you feel to behave in a certain way because your friends or people in your group expect it Coercion- The action or practice of persuading someone to do something they wouldn't normally do or something they don't want to do by using force or threats. Assertiveness- The quality of being confident and not frightened to say what you want or believe. Sexual pressure is when someone tries to make you feel like you should engage in sexual behaviour. Sexual Consent- The giving of permission by a person to engage in any form of sexual activity including penetrative and oral sex. Sexting is when someone sends or receives a sexually explicit text, image or video. This includes sending 'nude pics', 'rude pics', or 'nude selfies'. Taking, possessing or sharing a sexually explicit picture or video of someone under 18 is against the law.	Emotions- An emotion is a feeling such as happiness, love, fear, anger, or hatred, which can be caused by the situation that you are in or the people you are with. Your emotions are constantly changing all the time. You may feel different emotions at the start of a relationship, compared to at the end. Grief- Grief is a natural response to loss. The loss may be physical (such as a death), social (such as divorce), or occupational (such as a job). Emotional reactions of grief can include anger, guilt, anxiety, sadness, and despair. Separation- Separation means that you are living apart from your spouse but are still legally married until you get a judgment of divorce. Although a separation doesn't end your marriage, it does affect the financial responsibilities between you and your spouse before the divorce is final. Divorce- A divorce happens after a married couple decide not to live together anymore and that they no longer want to be married to each other. They agree to sign legal papers that make them each single again and allow them to marry other people if they want to.	Sexual harassment- Sexual harassment is any unwanted behaviour of a sexual nature that makes you feel distressed, intimidated or humiliated. Sexual harassment can include: - someone making sexually degrading comments or gestures - your body being stared or leered at - being subjected to sexual jokes or propositions - e-mails or text messages with sexual content - physical behaviour, including unwelcome sexual advances and touching - someone displaying sexually explicit pictures in your space or a shared space, like at work - offers of rewards in return for sexual favours Online harassment- Internet harassment, also referred to as "cyberbullying", is the term used to describe the use of the Internet to bully, harass, threaten, or maliciously embarrass. Challenging prejudice and discrimination: The Equality Act (2010) provides a legal framework to protect the rights of individuals and advance equality of opportunity for all. It provides Britain with a discrimination law which protects individuals from unfair treatment and promotes a fair and more equal society. It makes all people equal in regard to sex, age, race, sexuality, religion, disability (this means the same laws apply to everyone).

Y10C1 Key Maths Knowledge

Your Maths Homework is to complete your sparx

Use this guide to make sure you know **what to do, when to do it and how to do it:**

Maths homework is to complete sparx



What to do

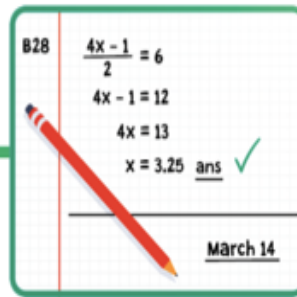
- Do Sparx on the days in the homework timetable
- **Compulsory Homework:** You must do this part of your homework every week
- **Optional/Target Homework:** Do this to gain loads of XP and to improve your maths!

Top Tips

- Do your homework as soon as you can
- Watch the help video
- If you are stuck, speak to your maths teacher before hand-in or pop in to Sparx Support club during breaks

Always:

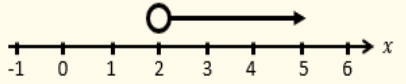
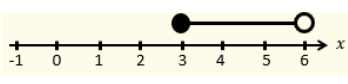
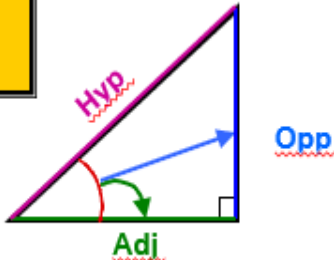
- Write down the date
- Write down your bookwork code
- Read the question carefully
- Show all your workings
- Highlight/underline your final answer
- Tick if correct/cross if wrong

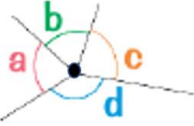
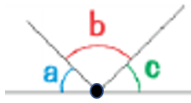
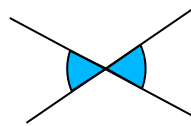
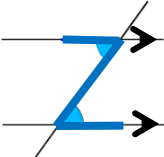
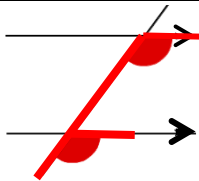
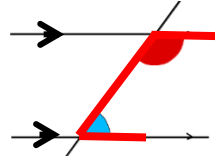
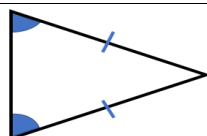
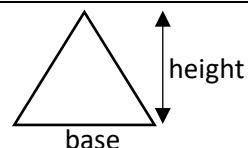
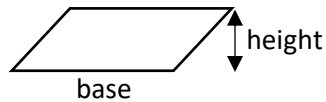
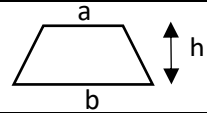
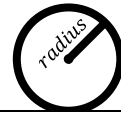


We want you to do well with your maths and doing Sparx will help.

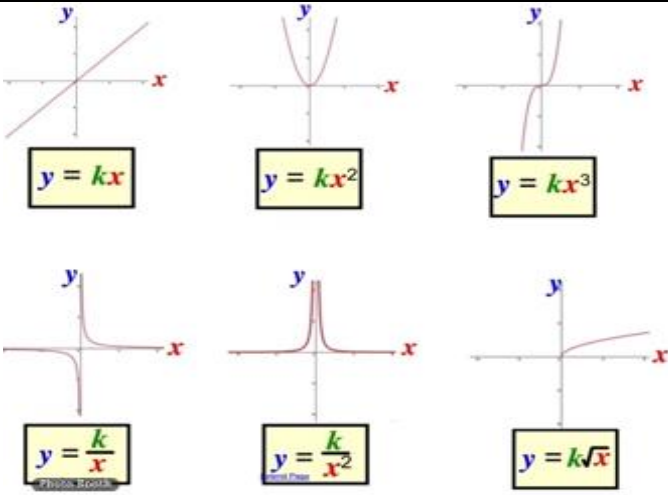
If you've tried something, watched the video and are still not sure how to do something make sure you ask for help!

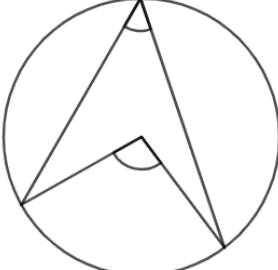
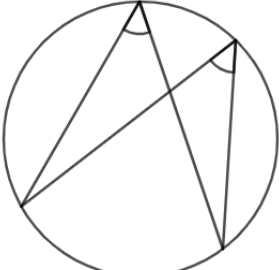
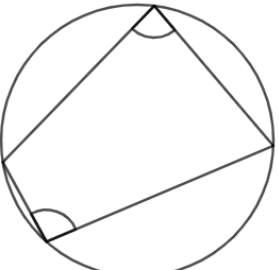
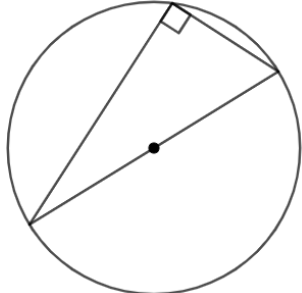
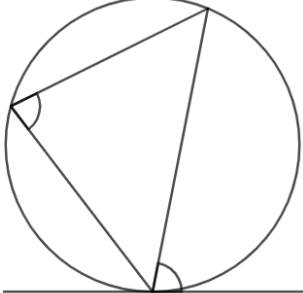
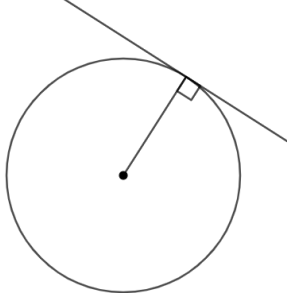
You're expected to complete it every week and catch up if you haven't.

Item	Description
Proportion Use unitary method	Work out what ONE is worth. example: If a recipe for 8 buns needs 160g butter then 1 bun will need 20g.
Collect like terms	Add/subtract terms which are the same type example $5a + 7b + 2a - 6b + 11 = 7a + b + 11$
Simplify fractions	Make the values as small as possible $\frac{12}{18} = \frac{2}{3}$
Convert fractions	mixed number $2\frac{3}{4} = \frac{11}{4}$ top-heavy (improper) fraction
Add or Subtract fractions	The denominators must be the same example $\frac{2}{3} + \frac{4}{5} = \frac{10}{15} + \frac{12}{15} = \frac{22}{15} = 1\frac{7}{15}$
Multiply Fractions	Multiply the numerators and the denominators example $\frac{2}{3} \times \frac{4}{5} = \frac{2 \times 4}{3 \times 5} = \frac{8}{15}$
Solve an Equation	Use inverse (opposite) operations to both sides to find the value
Inequality on a number line	$x > 2$  $3 \leq x < 6$ 
Percentage % of an amount	To find 10% divide by 10 example 10% of 70 = 7 so 20% of 70 = 14
Trigonometry – finding lengths of sides and sizes of angles using sin cos tan	$\sin \theta = \frac{\text{opp}}{\text{hyp}}$ $\cos \theta = \frac{\text{adj}}{\text{hyp}}$ $\tan \theta = \frac{\text{opp}}{\text{adj}}$ S O H C A H I O A Remember : The hypotenuse is the longest side opposite the right angle 

Angle Facts		
Angles together around a point add up to 360°	Angles together on a straight line add up to 180°	Vertically opposite angles are equal
		
Corresponding Angles on Parallel lines are equal	Alternate Angles on Parallel lines are equal	Co-Interior Angles on Parallel lines add up to 180°
		
Angles in a triangle add up to 180°		Base angles of an isosceles triangle are equal
		
Area Formulas – Area is the space inside a shape		
Area of a rectangle	$\text{Area of rectangle} = \text{base} \times \text{height}$	
Area of a triangle	$\text{Area of triangle} = \frac{1}{2} \text{base} \times \text{height}$	
Area of a parallelogram	$\text{Area of parallelogram} = \text{base} \times \text{height}$	
Area of a trapezium	$\text{Area of trapezium} = \frac{1}{2} (a + b) \times h$	
Area of a circle	$\text{Area of circle} = \pi \times \text{radius}^2$	

Y10HC1 Key Maths Knowledge – Higher

Item	Description	
Direct proportion formulae	$y = kx$ $y = kx^2$ $y = kx^3$ $y = k\sqrt{x}$	y is proportional to x y is proportional to the square of x y is proportional to the cube of x y is proportional to the square root of x
Inverse proportion formulae	$y = \frac{k}{x}$ $y = \frac{k}{x^2}$ $y = \frac{k}{x^3}$ $y = \frac{k}{\sqrt{x}}$	y is inversely proportional to x y is inversely proportional to the square of x y is inversely proportional to the cube of x y is inversely proportional to the square root of x
Shapes of graphs		
Irrational number/Surd	A number that cannot be written as a fraction. Usually written as the square root of a number. Eg. $\sqrt{2}$ is irrational but $\sqrt{4}$ is not	

Circle theorems		
The angle at the centre is double the angle at the circumference	Angles subtended by the same chord are equal	The opposite angles of a cyclic quadrilateral sum to 180°
		
The angle in a semicircle is 90°	The angle between a tangent and a chord is equal to the angle in the alternate segment	The angle between a tangent and a radius is 90°
		

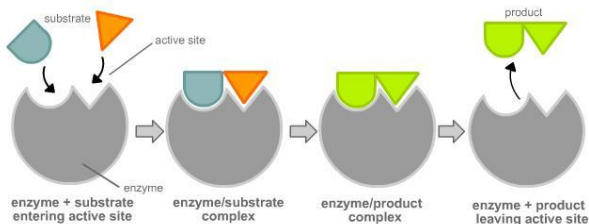
Year 10 – Unit 1 – Extremism

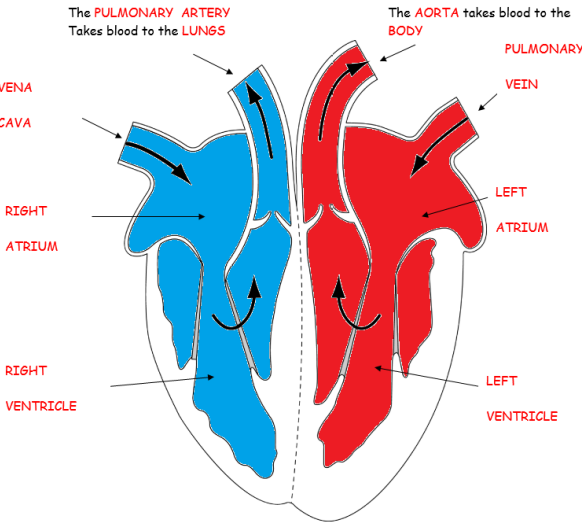
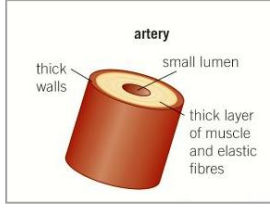
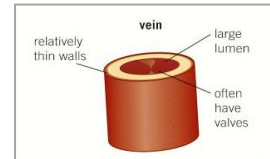
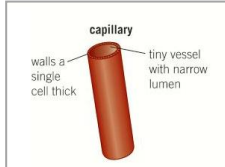
Key Words			
Extremism	Holding extreme political or religious views.	Supremacy	A belief that someone or something is better than everyone else.
Terrorism	The unlawful use of violence and intimidation to bring about political or social change.	Radicalised	A process where someone comes to believe in extreme beliefs.
Fundamentalist	Where people stick very strictly to the rules/beliefs of religion.		

Key Information	
Islam key beliefs 	- The six articles of faith in Sunni Islam and five roots of Usul ad-Din in Shi'a Islam, including key similarities and differences. - The oneness of God (Tawhid), Quran Surah 112 and the nature of God: omnipotence, beneficence, mercy, fairness and justice (Adalat in Shi'a Islam), including different ideas about God's relationship with the world: immanence and transcendence. - Angels, their nature and role including Jibril and Mik'ail and predestination and human freedom (free will) and its relationship to the Day of Judgement. - Life after Death (Akhirah), human responsibility and accountability, resurrection, heaven and hell. - Authority: Prophethood (Risalah) including the role and importance of Adam, Ibrahim and Muhammad. - Authority: The Holy Books – Qur'an: revelation and authority, the Torah, the Psalms, the Gospel and their authority. The imamate in Shi'a Islam: its role and significance.
Extremism 	Extremism in its broadest sense is an individual or group of individuals who take an extreme position from that of the norm or take an extreme action. - Commonly, those with extremist perspectives have a particular perspective or belief 'in the sense that they take their opinions or beliefs to the limit and do not allow much room for the existence of any other views of life.'
Malala 	Malala Yousafzai is an activist for female education. She was attacked by the Taliban (religious extremists). She is quoted as saying: <i>'The extremists are afraid of books and pens. The power of education frightens them.'</i>
Radicalisation 	- It is important to remember that radicalisation does not just happen to Muslims. - A person who becomes involved with any extremist group can be said to be radicalised. - The UK government has been worried about the rise in extremism for some years. In 2014, it introduced a new responsibility to schools to teach about what the government has called British Values.

Lessons 1 & 2 Homeostasis & Organisation of the Nervous System	Lessons 3 & 4 Neurones & Synapses	Lessons 5 & 6 Required Practical- Reaction Times & Reflex Actions
Homeostasis is the maintenance of a constant internal environment to ensure optimal conditions for enzyme action and cell function. Examples of factors we need to control are blood sugar levels, blood water levels, body temperature There are 3 parts to a homeostatic control system; Receptors, Co-ordination centre and Effectors. The Central Nervous System (CNS) is the brain & spinal cord. The Peripheral Nervous System (PNS) carries nerve impulses around the body. Receptors detect a stimulus. Examples are Eyes, Ears, Skin, Tongue, Nose Effectors carry out a response. There are 2 types of effector Muscles – contract Glands - produce a hormone	Sensory neurones take impulses from the receptor to the CNS. Relay neurones pass the impulse around the CNS. Motor neurones carry impulses from the CNS to an effector. The gap between 2 neurones is called a Synapse. A nerve impulse reaches the end of a neurone. Neurotransmitters are chemicals that pass across the gap. Once the chemicals reach receptors on the next neurone the impulse can continue on its way.	You will investigate the Effect of Practice on Reaction Time. Independent variable: the amount of practice Dependent variable: reaction time Control variable: partner, ruler, how the ruler is dropped, where the measurement is taken, the use of dominant hand, hand resting on the table. Reflex actions are automatic and very quick they do not involve the conscious part of the brain to save time eg... • coughing • sneezing • blinking • moving quickly to prevent injury Messages sent by the nervous system are quicker and shorter lasting than messages sent by hormones.

Lesson 1 Organisational Hierarchy	Lessons 2 & 3 The Digestive System	Lesson 4 Required Practical- Food Tests
Cell: The smallest unit of an organism Tissue: A group of cells with a similar structure and function, which all work together to do a particular job. Organ: Made from a group of different tissues, which all work together to do a particular job. Organ system: Made from a group of different organs, which all work together to do a particular job. Organism: An individual plant, animal, or single-celled organism.	Function: Digestion: breaking down food so that it is small enough and soluble enough to pass through the wall of the small intestine. Absorption: transporting digested food molecules from the lumen of the gut into the blood. The small intestine is adapted to absorb food: • Thousands of villi • Large surface area – quicker absorption of food molecules • Good blood supply	1. Benedict's test for sugar Add 10 drops of Benedict's solution to food sample. Heat in a water bath at 80°C for 5 minutes. Negative result – Blue Positive result – Green/ orange/ brick red 2. Iodine test for starch Add 5 drops of iodine solution to food sample. Negative result – Orange Positive result – Blue/black 3. Ethanol test for lipids (fats) Add a few drops of distilled water and then a few drops of ethanol to food sample. Positive result – white & cloudy emulsion forms 4. Biuret test for protein Add 5 drops of Biuret solution to food sample. Negative result – Blue Positive result – Purple

Lesson 5 Properties of Enzymes	Lesson 6 Required Practical - Enzymes	Lesson 7 Digestive Enzymes
Catalyst: A chemical which speeds up a reaction without being changed or used up. Enzyme: - A substance produced by a living organism that acts as a catalyst for chemical reactions. It is made up of amino acids. - Enzymes are specific, they can only catalyse one type of reaction. E.g. amylase in saliva only catalyses the reaction of breaking down starch. Lock and Key Theory of Enzyme action:  In the same way that a key fits into a lock, so a substrate is thought to fit into an enzyme's active site. The enzyme is the lock, and the substrate is the key.	The effect of pH and temperature on enzymes: - A low or high pH denatures enzymes. - At a low temperature enzyme and substrate molecules have low kinetic energy so rate of reaction is low. - At a high temperature the enzymes start to denature. Denatured: An enzyme's active site has changed shape, the substrate will no longer fit. The enzyme will no longer work. Aim: to find the optimum pH for the enzyme amylase to catalyse the reaction to break down starch. Independent variable: pH of the solution Dependent variable: time taken to break down starch in seconds Control variables: temperature, volume of starch solution, volume of buffer solution, time of intervals between testing, volume of amylase Calculating rate of reaction: $\text{Rate} = \frac{1000}{\text{Time}}$ Units = s⁻¹	Food molecules must be broken down before they can be absorbed into the blood because they are too large and insoluble. Carbohydrate digestion Carbohydrase enzymes e.g. amylase break down starch into sugar. Protein digestion Protease enzymes break down protein into amino acids. Fat digestion Bile emulsifies fats Lipase enzymes break down fat molecules into glycerol and fatty acid molecules.

Lesson 8 The Heart	Lesson 9 Blood Vessels	Lessons 10 & 11 Coronary Heart Disease (CHD)
- An organ that pumps blood around the body - It is made of two pumps – double circulation. - The walls of the heart are made up of cardiac muscle. - The right side pumps blood to the lungs to pick up oxygen. - The left side pumps blood around the rest of the body. Oxygenated: Blood high in oxygen Deoxygenated: Blood low in oxygen 	There are 3 types of blood vessel: Arteries Carry blood away from the heart to the body. Usually hold oxygenated blood. Blood is under high pressure. Thick muscle walls and a small lumen.  Veins Carry blood back to the heart from the body. Carry deoxygenated blood. Blood is under low pressure. Thin muscle and elastic wall. Have valves to prevent back flow of blood.  Capillaries Carry blood to cells. Links arteries and veins Very thin walls – one cell thick Small vessel Narrow lumen 	Coronary arteries: The blood vessels that supply oxygenated blood to the heart muscle. Coronary heart disease (CHD): When the heart's blood supply is blocked or interrupted by a build-up of fatty substances in the coronary arteries. Stages of CHD: - Fatty cholesterol plaques develop over time - Hard outer layer of plaque can crack - Platelets form blood clots around the cracks - Artery narrows even more - Blood flow blocked – oxygen doesn't reach the heart muscle, so the muscle dies. Treating CHD: Stents – a metal mesh placed in a blocked or partially blocked artery. They are used to open up the blood vessel by the inflation of a tiny balloon. Statins – drugs used to lower blood cholesterol levels and improve the balance of HDLs and LDLs in the blood. Treating heart failure: - Heart transplant - Artificial heart - Replacement valves

Lesson 12 Blood	Lesson 13 Lungs	Lesson 14 Non-Communicable Diseases
<u>Functions of blood:</u> • Transports oxygen and nutrients to cells • Transports carbon dioxide from cells back to lungs • Transports waste products from cells • Transports heat, water, salts, white blood cells and hormones around the body. <u>Components of blood:</u> Red blood cells • Carry oxygen. • Biconcave shape to absorb oxygen • No nucleus White blood cells • Fight disease • Some carry out phagocytosis • Some produce antibodies & anti-toxins Platelets • Cell fragments • Stick cells together around cuts to clot blood. Plasma • Liquid part of blood • Substances dissolve into plasma such as carbon dioxide, glucose and proteins	The diagram illustrates the human respiratory system. At the top, the trachea (windpipe) leads into two bronchi (bronchus) that branch into the lungs. The lungs are shown with a network of smaller airways (alveoli). The heart is located between the lungs. Below the lungs is the diaphragm, a muscular partition. Ribs are shown on the sides, and intercostal muscles are located between the ribs. Arrows indicate the flow of air: in through the trachea and out through the bronchi. The job of the breathing system is to move air in and out of the lungs. • Breathing air into the lungs= inhalation • Breathing air out of the lungs = exhalation <u>Gas Exchange:</u> • Gas exchange occurs in the alveoli of the lungs. • Here oxygen passes into the blood by diffusion. • At the same time carbon dioxide passes from the blood into the alveoli to be breathed out. • Alveoli are adapted for efficient gas exchange by having: a large surface area, thin, moist membranes and a good blood supply.	<u>Health:</u> A state of mental physical wellbeing <u>Non-communicable disease:</u> • A medical condition or disease that is non-infectious (cannot be passed on from one person to the next) • E.g. Cardiovascular disease, diabetes, asthma <u>Causes of non-communicable disease:</u> Combination of genetic and environmental factors. Lifestyle factors such as smoking, alcohol abuse, unhealthy diets and physical inactivity. <u>Risk factors for non-communicable diseases:</u> • Cardiovascular disease – Obesity, poor diet, smoking, physical inactivity. • Type 2 diabetes – Obesity, poor diet, physical inactivity. • Lung disease – smoking • Cancer – Poor diet, obesity, smoking, alcohol abuse, UV exposure, physical inactivity <u>Correlation:</u> A correlation shows a link between two variables, for example one may increase whilst the other also increases. <u>Causal mechanism:</u> A causal mechanism proves the link between the two variables through a biological process. For example, there is a causal link between smoking and getting lung cancer.

Lesson 15 Cancer

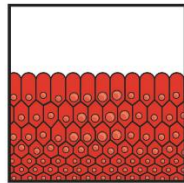
Risk factors for cancer:

- Genetics
- Carcinogens e.g. asbestos, tar in tobacco smoke
- Ionising radiation e.g. UV light, X-rays, radioactive materials, nuclear disasters
- Viral infections e.g. HPV causing cervical cancer

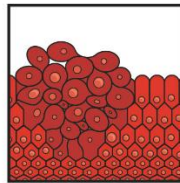
Tumour:

A mass of cells caused by uncontrolled cell growth and division.

Most cancers are the result of mutations – changes in genetic material



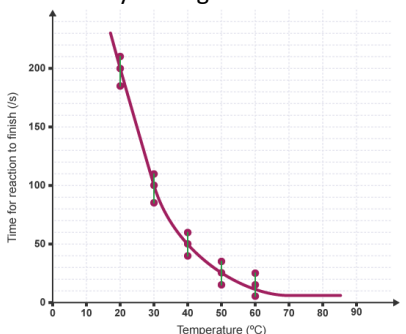
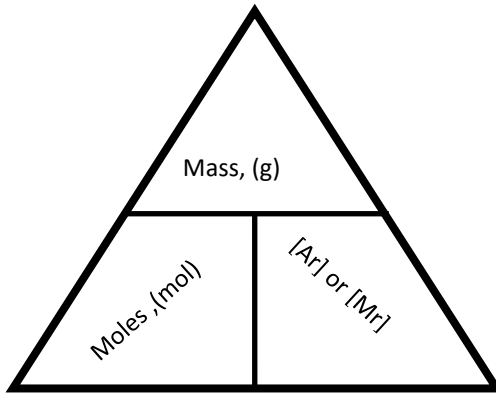
Normal cells



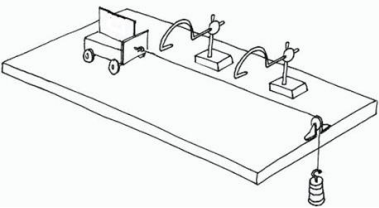
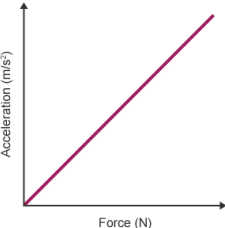
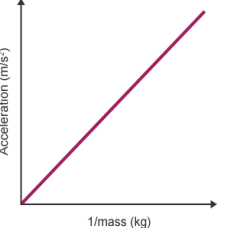
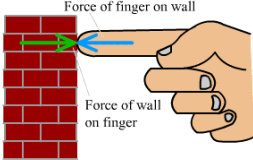
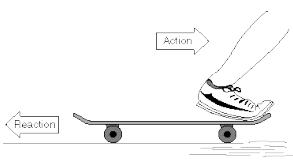
Cells forming a tumour

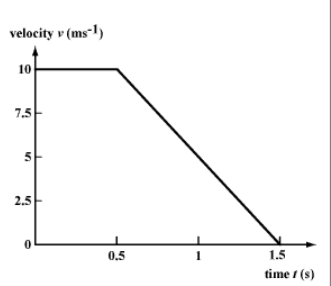
Two types of tumour:

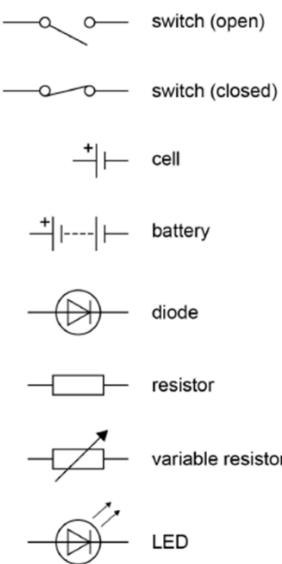
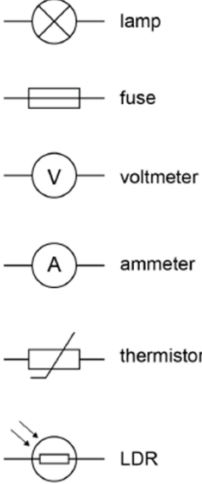
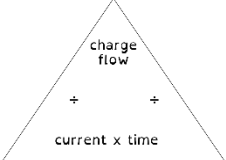
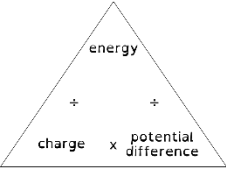
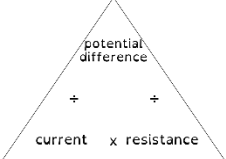
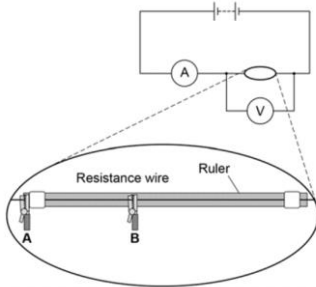
1. **Benign** – Not cancerous, the tumour stays in one place.
2. **Malignant** – Tumour grows and spreads to other tissues. Cells can break off and travel in the bloodstream to infect other tissues.

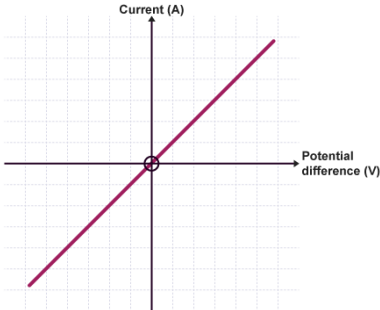
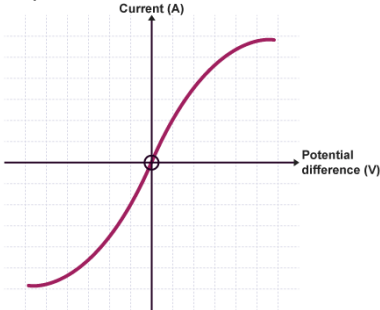
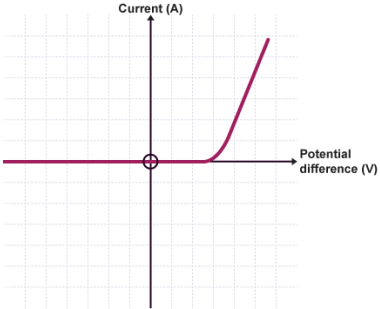
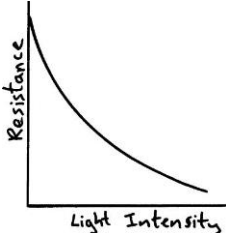
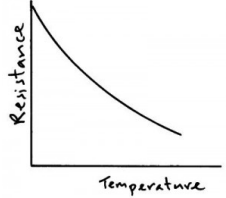
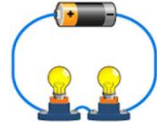
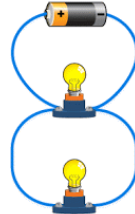
Lessons 1 & 2 Conservation of mass & relative Formula mass	Lessons 3 & 4 Percentages , uncertainty, mean and range	Lessons 5 Moles
- Atoms are the smallest parts of pure substances called elements. - Atoms cannot be created or destroyed. - The number of atoms present in the reactants are the same as the number in the products. - Due to the law of conservation we have to balance symbol equations by putting numbers in front of the formula. - Due to the law of conservation we can calculate unknown reactants or products. Magnesium + Oxygen Magnesium Oxide 10g + 5g = ? Answer = 15 g - No substances can enter or leave a closed system. - Substances can enter or leave a non-enclosed system. - An element is a pure substance the only contains <u>one</u> type of atom. - A compound contains atoms from different elements chemically joined in a <u>fixed</u> composition. - The [Ar] is the relative atomic mass and is the number of protons added to neutrons - The [Mr] if the relative formula mass and is the [Ar] of each element in a compound added together.	- Calculate the percentage of a total value - Calculate the percentage of an atom in a compound using the [Mr] - The Mean is the average of the numbers a calculated "central" value of a set of numbers. - Work out the mean of the following set of data . 7.5 , 6.5 , 4.8 , 5.7 , 6.2 Add them together: $7.5 + 6.5 + 4.8 + 5.7 + 6.2 = 30.7$ Divide 30.7 by the number of values: $30.7 \div 5 = \underline{6.14}$ - The resolution of a measuring instrument is the smallest change in a quantity that gives a change in the reading that can be seen. - Uncertainty is the interval within which the true value of a quantity can be expected to lie. - Range = largest value - smallest value - Uncertainty = Range $\div$ 2 	- Chemical amounts are measured in MOLES. - The MOLE is a unit like centimetres, (cm), grams , (g) or Metres ,(M). - The MOLE has its own symbol too, its mol. - A Mole measures the number of particles in the mass of a substance. - The number of atoms, molecules or ions in ONE MOLE of a substance is called the Avogadro constant. Avogadro constant = 6.02×10^{23} - Number of particles = Avogadro constant $\times$ mol Moles ,(mol) = Mass , (g) [Ar] or [Mr]  - The mass of one mole of a substance is equal to the [Ar] or [Mr] in grams.

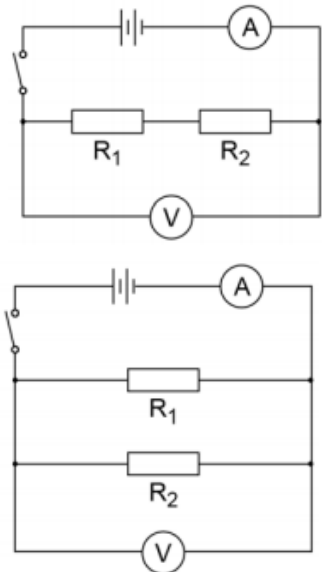
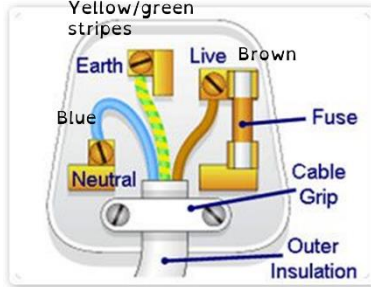
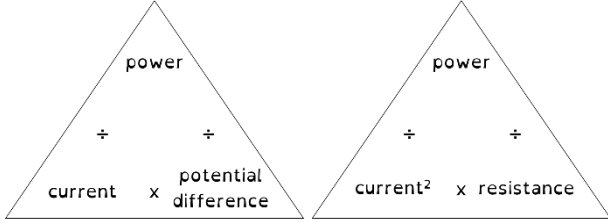
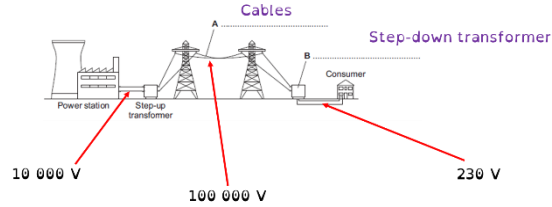
Lesson 6 Reacting masses	Lessons 7 Concentration
• 20g of magnesium reacts with oxygen to produce Magnesium Oxide . How much Magnesium Oxide will be produced ? • Step 1 Write the balanced symbol equation $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$ • Step 2 Calculate the masses in reaction $48\text{g} + 32\text{g} \rightarrow 80\text{g}$ • Step 3 work out what 1g produces by dividing through by 48g $\frac{48\text{g}}{48\text{g}} + \frac{32\text{g}}{48\text{g}} \rightarrow \frac{80\text{g}}{48\text{g}}$ $= 1\text{g} + 0.67\text{g} \rightarrow 1.67\text{g}$ • Step 4 work out what 20 g of magnesium produces . X through by 20 $(20 \times 1\text{g}) + (20 \times 0.67\text{g}) \rightarrow (20 \times 1.67\text{g})$ $20\text{g} + 13.4\text{g} \rightarrow \underline{\underline{33.4\text{g}}}$	• A solution forms when a solute dissolves in a solvent. • The concentration of a solution is a measure of how 'crowded' the solute particles are. • The more concentrated the solution, the more particles it contains in a given volume. • The concentration of a solution can be shown in g/dm^3 or mol/dm^3. • Volume is measured in dm^3. • 1 dm^3 is the same as 1 litre or a 1000 cm^3. • A solution with a concentration of 0.5 g/dm^3 ,has 0.5 grams dissolved in 1 dm^3. • Concentration = $\frac{\text{Mass, (g)}}{\text{Volume, (dm}^3\text{)}}$

Lessons 1 & 2 Newton's first and second laws	Lessons 3 & 4 Newtons second law required practical	Lessons 5 & 6 Newtons third law and inertia
Newton's First Law: If the resultant force acting on an object is zero and: - the object is stationary – the object will remain stationary - the object is moving – the object will continue to move at the same speed and in the same direction. So the object continues to move at the same velocity. If the forces are not balanced the object will accelerate (change direction or velocity) in the direction of the resultant force. Newton's Second Law resultant force = mass × acceleration The tendency of objects to continue in their state of rest or of uniform motion is called inertia. HT only $F = ma$ - force (F) is measured in newtons (N) - mass (m) is measured in kilograms (kg) - acceleration (a) is measured in metres per second squared (m/s^2) The equation shows that the acceleration of an object is: - proportional to the resultant force on the object - inversely proportional to the mass of the object In other words, the acceleration of an object increases if the resultant force on it increases, and decreases if the mass of the object increases. Inertial mass – Higher: The ratio of force over acceleration is called inertial mass. Inertial mass is a measure of how difficult it is to change the velocity of an object. Example: $F = ma$ $F = 22 \times 15$ $F = 330 \text{ N}$ Calculate the force needed to accelerate a 22 kg cheetah at 15 m/s^2.	Physics practical 6: <u>Acceleration</u> Method: what did you do?  - Connect the light gates to the datalogger and configure it to measure acceleration. - Attach the bench pulley to the end of the bench. - Tie a length of string to the toy car or trolley. Pass the string over the pulley and attach the weight stack to the other end of the string. - Release the toy car or trolley – the data logger will calculate acceleration. - Carry out this experiment by either changing the mass of the trolley or the force acting on the trolley (weight stack).  Acceleration is directly proportional to the force exerted on the object.  Acceleration is inversely proportional to the mass of the object. This means that a graph of acceleration against 1/mass should produce a straight line that passes through the origin	Newton's Third Law According to Newton's Third Law of motion, whenever two objects interact, they exert equal and opposite forces on each other. 'every action has an equal and opposite reaction'. Examples of force pairs Pushing a pram: There are contact forces between the person and the pram. The person pushes the pram forwards and the pram pushes the person backwards Car tyre on a road: There are contact forces between the tyre and the road: The tyre pushes the road backwards and the road pushes the tyre forwards A satellite in Earth orbit There are non-contact gravitational forces between Earth and the satellite: The Earth pulls the satellite and the satellite pulls the Earth.    Higher tier Only The tendency of objects to continue in their state of rest or of uniform motion is called inertia. - Inertial mass is a measure of how difficult it is to change the velocity of an object. - Inertial mass is defined by the ratio of force over acceleration.

Lessons 6 & 7 Stopping Distance and reaction times	Lessons 8 Braking energy	Lessons 9 Momentum (higher tier only)
Stopping distances stopping distance = thinking distance + braking distance thinking distance is the distance a vehicle travels in the time it takes for the driver to apply the brakes after realising they need to stop braking distance is the distance a vehicle travels in the time after the driver has applied the brake  Thinking distance = 0-0.5 seconds Braking distance = 0.5-1.5 seconds Thinking distance can be affected by: - Reaction times which vary from person to person. Typical values range from 0.2 s to 0.9 s. Reaction time can be affected by tiredness, drugs, alcohol and distractions (mobile phone, passengers). - The speed of the vehicle. The greater the speed the greater the thinking distance. Braking distance of a vehicle can be affected by: - Adverse road and weather conditions and poor condition of the vehicle. Adverse road conditions include wet or icy conditions. Poor condition of the vehicle is limited to the vehicle's brakes or tyres. - Mass of the vehicle. The greater the mass the greater the braking distance. - Speed of the vehicle. The greater the speed the greater the braking distance.	- When a force is applied to the brakes of a vehicle, work done by the friction force between the brakes and the wheel reduces the kinetic energy of the vehicle and the temperature of the brakes increases. - The greater the speed of a vehicle the greater the braking force needed to stop the vehicle in a certain distance. - The greater the braking force the greater the deceleration of the vehicle. Large decelerations may lead to brakes overheating and/or loss of control. Example question: At the end of a race a car is travelling at 5.2 m/s. The brakes are applied causing the car to slow down and stop. The brakes apply a constant force of 855 N in the opposite direction to the car's motion. The mass of the car is 950 kg Calculate the braking distance travelled by the car. [6 marks] You could also be asked to work out the energy transferred, braking force or braking distance using the equation: Work done = Force X distance from the energy topic. Calculate acceleration using $F=ma$ $a = -855/950$ (1) $a = -0.9 \text{ (m/s}^2\text{)}$ (1) <i>Substitute values into equation $v^2 - u^2 = 2as$</i> $0^2 - 5.2^2 = 2 \times (-0.9) \times s$ <i>for this mark, sign of "a" must be opposite to sign of "u"</i> <i>i.e., allow: $0^2 - (-5.2)^2 = 2 \times 0.9 \times s$ (1)</i> $s = -27.07 / -1.8$ (2) $s = 15.0 \text{ (m)}$ <i>an answer of 15.0 (m) scores 6 marks.</i>	Momentum is a property of moving objects and is defined by the equation: momentum = mass x velocity $[p = m v]$ - momentum, p, in kilograms metre per second, kg m/s - mass, m, in kilograms, kg - velocity, v, in metres per second, m/s Example A lorry has a mass of 7,500 kg. It travels south at a speed of 25 m/s. Calculate the momentum of the lorry. $P = m v$ $P = 7500 \text{ kg} \times 25 \text{ m/s}$ $P = 187\,500 \text{ kg m/s}$ The Principle of Conservation of momentum In a closed system: total momentum before an event = total momentum after the event A 'closed system' is something that is not affected by external forces. Momentum is conserved in collisions and explosions. (c) Skater A bumps into another skater, Skater B. Skater B is stationary. The skaters move off together in a straight line. Explain what happens to the velocity of each of the skaters. Use the idea of conservation of momentum. (c) (total) momentum before (collision) = (total) momentum after (collision) 1 either momentum of skater A decreases and momentum of skater B increases <i>allow (total) momentum is shared between skater A and skater B</i> 1 velocity of skater A decreases and velocity of Skater B increases 1 or momentum of skater A decreases and so velocity of skater A decreases (1) momentum of skater B increases and so velocity of skater B increases (1) [7]

Lesson 1 Introduction to circuits	Lessons 2 & 3 Current, p.d. and resistance	Lesson 4 Required Practical – Resistance and the length of a wire
  Charge is a property of materials. - It can be positive or negative and is measured in coulombs. Electrons have a negative charge. - Metals have a “sea” of delocalised/free “conduction electrons”. - These electrons can move through the material, causing a current. Insulators do not have free electrons.	<i>charge flow = current x time</i> Charge in Coulombs, C Current in Amperes, A Time in seconds, s  <i>energy transferred = charge x potential difference</i> Energy transferred in Joules, J Charge in Coulombs, C Potential difference in Volts, V  <i>potential difference = current x resistance</i> Potential difference in Volts, V Current in Amperes, A Resistance in Ohms, Ω 	Resistance is a measure of how hard or easy it is for a current to flow. - The more resistance: - The lower the current will be for a given p.d. - The higher the p.d. will be needed for a particular current to flow. - You will investigate the relationship between the length of a wire and its resistance.  Independent variable: Length of wire in metres Dependent variable: Resistance of wire in Ω Control variable: Current, temperature, material of wire

Lessons 5 & 6 Required Practical – I-V Characteristics	Lesson 7 Non-ohmic components	Lessons 8 & 9 Series and Parallel circuits												
- You will investigate the relationship between current and potential difference for circuit components Ohm's law states that the current through a resistor is directly proportional to the potential difference across it, at constant temperature. - A graph is directly proportional if a line of best fit is a straight line through the origin. Resistor:  Filament lamp/bulb: 	Diode/LED:  Some components have a resistance that depends on an environmental factor. LDR:  Thermistor: 	- In a series circuit, you have one component after another. All of the components are connected together by the same 'loop' of wire.  - A parallel circuit is one where components are connected in separate loops – sometimes called branches. - Each component is placed along a different path.  <table border="1" data-bbox="1413 954 2040 1326"> <thead> <tr> <th></th><th>Series</th><th>Parallel</th></tr> </thead> <tbody> <tr> <td>Current</td><td>Same everywhere</td><td>Shared between branches</td></tr> <tr> <td>P.d.</td><td>Shared between components</td><td>Same in each branch (and equal to p.d. of the supply)</td></tr> <tr> <td>Resistance</td><td>Sum of individual resistances</td><td>Less than the resistance of any one resistance</td></tr> </tbody> </table>		Series	Parallel	Current	Same everywhere	Shared between branches	P.d.	Shared between components	Same in each branch (and equal to p.d. of the supply)	Resistance	Sum of individual resistances	Less than the resistance of any one resistance
	Series	Parallel												
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Lesson 10 Required Practical – Resistance in series and parallel	Lessons 11 & 12 The 3-pin plug and mains electricity	Lessons 13 & 14 Electrical power and The National Grid												
- You will investigate how combinations of resistors in series and parallel behave  - In series, current must flow through both resistors. It is harder to flow through both than to flow through either resistor individually, so the resistance increases. In series: $R_{total} = R_1 + R_2$ - In parallel, current can flow through both resistors at the same time. More current flows in the circuit than if only one of the resistors was there. As the p.d. remains constant, this means the total resistance must have decreased.	 <table border="1" data-bbox="788 603 1384 1005"> <thead> <tr> <th>Name of wire</th><th>Colour</th><th>Job</th></tr> </thead> <tbody> <tr> <td>Live</td><td>Brown</td><td>Supplies the alternating potential difference</td></tr> <tr> <td>Neutral</td><td>Blue</td><td>Completes the circuit</td></tr> <tr> <td>Earth</td><td>Green/Yellow stripes</td><td>Safety (can prevent shocks or fires)</td></tr> </tbody> </table> A fuse is a thin wire in a glass tube designed to melt at a specific current. Earthing means connecting the metal case of an appliance directly to the earth using a low resistance cable. - The UK mains supply is an alternating current supplied at a p.d. of 230 V and a frequency of 50 Hz.	Name of wire	Colour	Job	Live	Brown	Supplies the alternating potential difference	Neutral	Blue	Completes the circuit	Earth	Green/Yellow stripes	Safety (can prevent shocks or fires)	power = potential difference x current power = current² x resistance  Power in Watts, W - The National Grid is the system of cables and transformers that bring electricity to homes and businesses.  - Transformers increase (step up) or decrease (step down) the potential difference of the electricity supply. - If the potential difference goes up the current goes down. (As power = current x p.d.) - If the current goes down, less energy is lost as heat in the wires. (As power = current² x resistance, half the current means ¼ the energy lost!)
Name of wire	Colour	Job												
Live	Brown	Supplies the alternating potential difference												
Neutral	Blue	Completes the circuit												
Earth	Green/Yellow stripes	Safety (can prevent shocks or fires)												