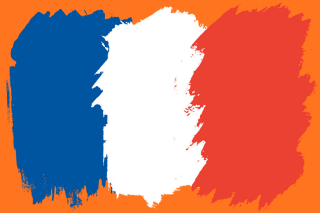
YEAR 9

Knowledge

ORGANISER

2025-26

SEMESTER 1



WHO CAN I GET *support* FROM?

You can also speak to your check-in tutor, all your subject teachers, your PD teacher and all your pastoral staff: Miss Leonard, Miss Howe, Mr Sykes, Mrs Sykes If you are unable to speak to any member of staff, please contact: **studentsupport@bentonpark.net**

MY Y9 LEADER
Miss Charlton

KEY STAGE LEADER
Mrs Collins

MY SLT LINK
Mrs Howard

MY SLT LINK
Miss Smith

OTHER YEAR LEADERS

Year 7 – Miss Downing

Year 8 – Miss Bannister

Year 10 – Miss Webster

Year 11 – Mrs Galvin

Designated Safeguarding Lead / Assistant Headteacher
Mrs Howard

KS3 Safeguarding Officer
Mrs Barrett

SENCo / Assistant Headteacher
Miss Tyldsley

Key Stage 4 Leader
Miss Dobby

HOME-SCHOOL *Communication* LOG

DATE	NOTE

MY *Attendance* RECORD

ATTENDANCE %

Year so far:

Attendance Targets:

DATE	WEEKLY %	YEAR TO DATE %
Week 1		
Week 2		
Week 3		
Week 4		
Week 5		
Week 6		
Week 7		
Week 8		
Week 9		
Week 10		
Week 11		
Week 12		
Week 13		
Week 14		
Week 15		
Week 16		
Week 17		
Week 18		
Week 19		

EVENTS / EXTRA CURRICULAR ACTIVITIES / CLUBS / PRESENTATIONS

SEMESTER 1	WHAT I HAVE ATTENDED / BEEN PART OF / BEEN A MEMBER OF AN AUDIENCE
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Week 8	
Week 9	
Week 10	
Week 11	
Week 12	
Week 13	
Week 14	
Week 15	
Week 16	
Week 17	
Week 18	
Week 19	

LAST TERM I WAS A MEMBER OF / TOOK PART IN / ATTENDED....

HOME *Learning*

In addition to your online home learning with SPARX and EDUCAKE, some subjects will give you homework based on your Knowledge Organiser. The next page gives you further information...

HOW DOES HOME LEARNING WORK?

The main way you will complete homework will be via 2 online platforms: SPARX and EDUCAKE.
These online platforms will quiz you on your learning in lesson. It's a great way to test yourself and developing your memory retrieval and retention skills. As well as home learning quizzes, these platforms allow you to prepare for assessments and revise key content.

HOW DO I ACCESS THESE?

PLATFORM	WEB ADDRESS	SUBJECTS
SPARX	www.sparx.com	Maths and Science
EDUCAKE	www.educake.co.uk	English, Geography, History, Languages, and Computer Science

HOMEWORK PLAN

SUBJECT	FREQUENCY
English / Science / Maths	Weekly
Geography / History / Languages / Computer Science	Fortnightly

EMAILS AND PASSWORDS

School Email: **Password:**

Use this above to access Sparx and Educake

Other Usernames and Passwords:

IN THE LIBRARY YOU CAN:

- Access books and resources
- Use the internet to complete any online home learning
- See staff who can give you any advice and guidance you may need
- Study independently in a quiet place

HOME *Learning*

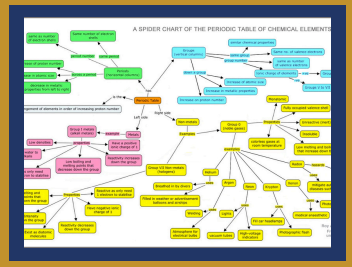
HOME LEARNING AND REVISION PRACTISE

For subjects that do not use an online learning platform for home learning, you will receive homework that is based on your Knowledge Organiser.

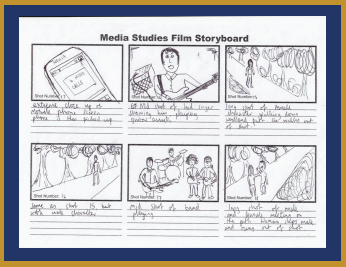
You complete this homework on paper that you hand in to your subject teachers.
The purpose of this is to help you know and remember more content over time, by developing your memory recall and supporting your revision practise.

ADDITIONAL HOME LEARNING AND REVISION PRACTISE METHODS:

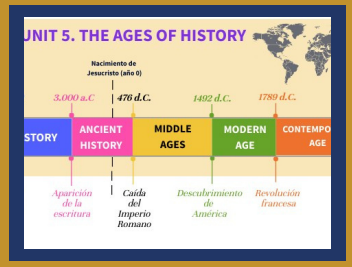
- Using the Word Revolution words – checking spellings are 100% accurate and that you know the definitions
- Producing a mind map or a spider diagram with the key learning content
- Making a storyboard of key events or draw out key images
- Making a timeline of events
- Copying out a diagram and practising labelling it accurately
- Practising writing out some sentences or phrases in the language you are studying
- Retrieving and finding information from what you have read



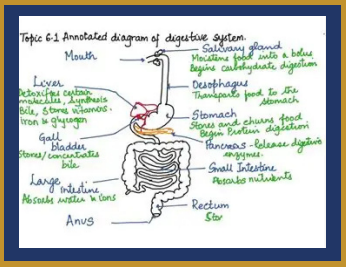
MIND MAP/SPIDER DIAGRAM



STORYBOARD



TIMELINE



DIAGRAM

Organisation AND Planning SHEET

DATE SET	TASK	DUE DATE	TICK WHEN COMPLETE

DATE SET	TASK	DUE DATE	TICK WHEN COMPLETE

Organisation AND Planning SHEET

DATE SET	TASK	DUE DATE	TICK WHEN COMPLETE

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STUDENT *Loyalty* CARD

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

COLLECT A STAMP EACH TIME YOU ATTEND A LUNCH AND AFTER SCHOOL EXTRA-CURRICULAR ACTIVITY. WHEN YOU'VE REACHED 10, 20, 30 AND 40 STAMPS YOU WILL RECEIVE A REWARD!

SUBJECT: ENGLISH — YEAR: 9

TOPIC: PROTEST POETRY — SEMESTER: 1

WORD REVOLUTION	
protest	Expressing disagreement with something, often in public.
social class	A group of people with similar money, jobs, or status in society.
institution	An important organisation or system in society, like education.
oppression	Unfair treatment that keeps people from having equal rights.
prejudice	Judging someone unfairly before knowing them, often based on race,
romantic poetry	A type of poetry from the late 1700s and early 1800s.
persona	The character or voice the writer uses to speak in a poem or story.
refugee	A person who has to leave their country because they are in danger.
immigrant	A person who moves to another country to live there permanently.
identity	The qualities, beliefs, or characteristics that make a person or group unique.
injustice	Unfair treatment, often by an institution which holds power.
crisis	A time of intense difficulty or danger.
controversy	Prolonged public discussion or heated debate.
context	The historical or social background in which a text is written.

What will I study in this topic?	A selection of poems addressing various political and social issues such as: **climate change** and **human impact** on the environment; **immigration** and **refugees**; **governmental power** and how it impacts individuals; race and **racial prejudice**, **slavery** and its legacy.
What will I be able to do by the end of this topic?	Comment on key messages and ideas explored in a range of poems. Understand how poems relate to the specific social and historical context in which they were written. Identify a range of techniques used by poets and explain how they help to convey the writer's message.

CONTEXT: Climate Emergency *(Future Visions)*

The climate emergency is a global crisis driven by human-induced greenhouse gas emissions, causing rising temperatures, extreme weather, sea level rise, and biodiversity loss. Activists have campaigned a lot in recent years for urgent action to reduce emissions, use renewable energy, and protect ecosystems to avoid irreversible damage to the planet.

CONTEXT: William Blake

William Blake was a poet, artist, and thinker who helped shape the Romantic movement in the late 1700s. He believed in the power of imagination, emotion, and nature over reason and rules. His work challenged injustice and celebrated the power of the human spirit, inspiring future writers and artists to think freely and deeply.

CONTEXT: Black Lives Matter

The Black Lives Matter protests began in the US in response to police violence and racial injustice, especially after the killing of George Floyd in 2020. Millions of people around the world marched to demand justice, equality, and an end to systemic racism, calling for real change in how Black lives are treated. A major protest was held in Bristol, UK, where the statue of Edward Colston was pulled down.

SUBJECT: ENGLISH **YEAR: 9**

TOPIC: PROTEST POETRY **SEMESTER: 1**

Key Questions:	• How do poets use imagery to express ideas? • How do poets use structure effectively to convey ideas? • How do poets use different voices to explore ideas and issues? • How do poets use their own personal experiences to inspire their work? • How do protest poems reflect the social and historical contexts they are written in?
Curriculum Connections:	**Protest** - Protest is a key element at the heart of many of the texts we study in English. One example you studied in Year 7 is *A Christmas Carol*, in which Charles Dickens draws attention to the suffering caused by poverty and urges greater social responsibility in the wealthier classes. Another example is *The Blue Book of Nebo*, which has a strong environmental message, drawing attention to the impact of human actions on the natural world. **Poetry** - We studied a range of poetry in Year 8 to develop understanding of different poetic techniques and how they are used to express ideas and emotions. In this unit, we look at the same techniques but explore how language is used to make a political point.

POETIC DEVICES

Tone	The attitude or emotion expressed in a poem.
Structure	How a poem or text is organized (e.g., stanzas, rhyme, order).
Stanza	A group of lines in a poem, like a paragraph in prose.
Enjambment	When a sentence or phrase runs over from one line to the next without a pause.
Caesura	A pause in the middle of a line of poetry.
Anaphora	Repeating the same word or phrase at the start of several lines
Personification	Describing an inanimate object as though it is human
Imagery	The use of vivid visual description using a variety of methods.
Volta	A rhetorical shift or dramatic change in thought or emotion in the poem.

Caleb Femi (L) and **Linton Kwesi Johnson** (R) both write about the injustice suffered by young black men due to police 'stop and search' powers.

CONTEXT – Police Stop and Search Powers

Police stop and search powers in the UK have long been a contentious issue, particularly due to their disproportionate impact on young black men. In the year ending March 2023, there were 24.5 stop and searches per 1,000 Black people, compared to 5.9 per 1,000 White people. Young Black men often report feeling targeted and criminalised, which can damage relationships between police and communities.

This issue is not new. The 'sus law', which Linton Kwesi Johnson addresses is his poem '*Sonny's Lettah'* was a controversial law used by police in the 1960s and 70s to stop and search anyone who looked suspicious. The sus law disproportionately affected young black men, which led to riots and widespread resentment of the police.

Civil rights protest, Washington, 1963

SUBJECT: English **YEAR: 9**

TOPIC: PROTEST POETRY **SEMESTER: 1**

How will I be assessed?	You will write your own protest poem on a topic of your choice. You will write an analytical essay on one of our chosen protest poems.

Every time you read a new poem, **Do the TWIST**!

T **Title**	**W** **Word Choice**	**I** **Imagery**	**S** **Structure**	**T** **Tone**
What does it suggest to you? What does it make you think the poem is about?	Pick out 2/3 words or phrases Why do you think they are interesting? What do they suggest to you? What type of words are they? Nouns? Powerful adjectives, verbs, adverbs?	Pick out 2-3 lines that make you picture an image in your mind. Which techniques have been used? Simile? Metaphor? Personification etc?	How is the poem laid out? How does it look on the page? Why do you think this is? Is there a rhyme or a rhythm? Why? What is the purpose?	What do you think the narrator is feeling? Does the mood change? Is there a Volta? Why do you think the poet wrote it?

Language for Essay Writing

Analytical Verbs	Shows, Suggests, Implies, Indicates, Reveals, Highlights, Illustrates, Conveys, Portrays, Demonstrates, Emphasises, Symbolises
Evaluative Adjectives	Adjectives, Crucial, Significant, Effective, Successful, Clear, Skilful, Convincing, Engaging, Thought-provoking,
Evaluative Adverbs	Significantly, Crucially

A Writing Frame for Poetry: WQSF

Writer	The writer focuses on …
Question/Quotation	Comment on the focus of the question and use a quotation.
Significance	• What is the significance of your evidence? • What is the significance of the question focus?
Furthermore	• Can you link your ideas to the writer's intention? • Can you find further evidence in another quotation? • Can you find further meaning in a link to the context?

Further Reading and Other Resources

Books:

Travel Light, Travel Dark by John Agard (a collection of modern poems)

Songs of Innocence and Experience by William Blake (classic poems)

Websites:

Examples of Protest Poetry:
https://www.poetryfoundation.org/collections/101581/poems-of-protest-resistance-and-empowerment

Revising Poetic Techniques:
https://www.bbc.co.uk/bitesize/topics/zryk8hv

Recall Questions

1. What is a volta?
2. What does it mean to be prejudiced?
3. What did William Blake believe in?
4. Why are 'stop and search' powers still a contentious issue?
5. What does **TWIST** stand for in poetry analysis?
6. What is a caesura?
7. What is enjambment?
8. In 2020, there was a significant global protest. Why were so many people protesting?
9. What is oppression?
10. What are some of the climate problems activists are protesting against?

SUBECT: ENGLISH

YEAR: 9

TOPIC: DYSTOPIA & POLITICAL SPEECHES

SEMESTER: 1

WORD REVOLUTION	
dystopia	An imaginary community or society that is **undesirable or frightening.**
utopia	An imaginary community or society with ideal political and social structures.
rhetoric	Effective or persuasive speaking or writing.
post-apocalyptic	The time following a catastrophic event, especially nuclear war.
oppression	Prolonged cruel or unjust treatment or exercise of authority
coercive government	A government which uses threat or force to control its citizens; restricting freedoms and autonomy.
democracy	A system of government consisting of elected representatives.
resistance	Refusal to accept or comply with something.
futuristic	Having or involving advanced or imaginary technology or design.
trope	A commonly used descriptive device used to convey ideas.
prejudice	A preconceived opinion that is not based on reason or experience.
discrimination	Unjustified treatment of a certain category of people eg. age, gender
totalitarian	A government which has a single, dominant party or leader.
propaganda	Information of a misleading nature used to promote a particular cause.

What will I study in this topic?	You will read and study a range of **dystopian texts** and explore the **typical tropes** and characters. You will then move on to study a range of **political speeches** and **rhetorical techniques** used to influence an audience.
What will I be able to do by the end of this topic?	Identify key **dystopian features** through a range of texts, understand **authors' intentions** and **develop your writing** so that it is suited to the genre and purpose. You will be able to contextualise writer's ideas and comment on historic and social issues in the past and present.

Understanding Society and Attitudes

You will explore how power is abused by rulers; how people rebel through uprisings, war and disaster; what totalitarianism is and the impact of a lack of democracy; the impact of oppressive governments; the impact of politics on society; how texts relate to today's world and the intentions and impact of writers and speakers.

People and Relationships

You will explore what community is, how this is presented in the texts and the impact of tyranny on individual and groups of people. Through dystopian literature, you will study the effects of oppression on individual people and communities and explore how hierarchies are created and how abuse of power causes human suffering.

Form, Structure and Narrative

Development of ideas through carefully structured narratives and speeches
Writer's purpose and craft (use of methods)
Impact of form, structure and language typical of the genre
Building tension using language methods
Effective characterisation
Speaker/listener perspectives
Exploration of forms: novel, short story, speech.

What is **dystopian** about this poster?

SUBJECT: ENGLISH **YEAR: 9**

TOPIC: DYSTOPIA & POLITICAL SPEECHES **SEMESTER: 1**

Key Questions:	• What are the key stylistic features of a dystopian piece of writing? • How can we link the dystopias you have studied to the real world? • How do writers of dystopian texts show the divides between different communities? • How do speakers engage audiences using language, structure and rhetorical devices?
Curriculum Connections:	• Mystery stories and Creative Writing (Year 7) Understanding structural features of writing for effect and how these are used to engage the reader. • Protest Poetry- (Year 9) Understanding cultural and diverse perspectives and the struggles of marginalised people. • *Animal Farm* (Year 9) Allegorical and social commentary on democracy, inequality and its impact on society. • *The Blue Book of Nebo* (Year 8) Dystopian concepts and human struggle in the face of adversity.

Tropes in dystopian literature	
Oppressive/totalitarian government	A form of government that seeks to exercise total control over all aspects of life, both public and private, often led by a dictator.
Surveillance and control	The monitoring of individuals or systems, gathering information and regulating people's behaviours.
Rebellion and resistance	Forms of challenging authority or systems: sometimes an organised uprising, which creates the conflict in dystopian stories.
Social inequality and divide	Uneven distribution of resources, opportunities and power. Disparities in income, health, wealth, social status and free will.
Suffering / poverty	The oppressed public have no control over their lives or wealth, which leads to human suffering.
Censorship	Suppression or prohibition of speech, public communication or writing.
Climate of fear	A pervasive atmosphere of anxiety and apprehension, often created by leadership that negatively impacts human beings in society.
Dehumanisation / violation of human rights	Depriving a person or group of their human qualities, personality or dignity to make them feel degraded or inhuman.

SUBJECT: ENGLISH **YEAR: 9**

TOPIC: DYSTOPIA & POLITICAL SPEECHES **SEMESTER: 1**

Aristotle's Rhetorical Appeals:

Ethos: The Ethical Argument	Pathos: The Emotional Argument	Logos: the Logical Argument
A mode of persuasion that convinces an audience of the credibility of the producer.	A mode of persuasion that appeals to an audience's emotions.	A mode of persuasion that convinces and audience by use of evidence, logic or reasoning.

Examples of Famous Speeches:

Steve Jobs (2005): Ethos	Martin Luther King Jnr (1963): Pathos	Sojourner Truth (1851): Logos
'Woz and I started Apple in my parent's garage when I was 20. We worked hard, and in 10 years Apple had grown from just the two of us in a garage into a $2billion company with over 4000 employees.	I am not unmindful that some of you have come here out of great trials and tribulations. Some of you have come fresh from narrow jail cells. Your quest for freedom has left some of you battered by the storms of persecution and staggered by the winds of police brutality.	That man over there says that women need to be helped into carriages, and lifted over ditches, and to have the best place everywhere. Nobody ever helps me into carriages, or over mud-puddles, or gives me any best place! And ain't I a woman? Look at me! Look at my arm! I have ploughed and planted, and gathered into barns, and no man could head me! And ain't I a woman?

D	Direct address including personal pronouns
A	Alliteration and Anecdotes
F	Facts
O	Opinions
R	Rhetorical questions
R	Repetition
E	Emotive Language
S	Similes
T	Tripling

Martin Luther King Jnr 1963

'I have a dream'

X Gonzales 2017

'The guns have changed but our laws have not'

Greta Thunberg 2019

'How dare you?'

SUBJECT: ENGLISH — YEAR: 9

TOPIC: DYSTOPIA & POLITICAL SPEECHES — SEMESTER: 1

How will I be assessed?	READING: Analysis of an extract from a dystopian novel WRITING: A dystopian description **End of unit**: WRITING: Write and perform a speech to express a point of view/perspective

An Example of a Dystopian Description: what techniques can you find?

The sky was a permanent shade of ash, choked by the smog that billowed endlessly from the towering factories lining the city's edge. Streets once vibrant with life were now cracked and silent, patrolled by faceless enforcers in black armour, their boots echoing like gunshots in the stillness. Billboards flickered with state propaganda—smiling faces and hollow slogans—while drones buzzed overhead, scanning every passerby for signs of dissent.

The people moved like shadows, eyes downcast, their identities reduced to barcodes etched into their wrists. Beyond the city walls, the wastelands stretched endlessly—scorched earth and skeletal remains of a world that had long since burned. Hope was a forgotten word, whispered only in the darkest corners where the resistance dared to dream.

Dystopian Protagonists and Antagonists

Protagonists	Feel trapped and isolated and therefore seek to escape and change.	Question authority and systems and have an inquisitive nature.	Even if they conform, they have a rebellious streak.
Antagonists	A dominant authority who is ruthless and uncompromising.	Manipulative and uses propaganda to control the masses.	Often serve as a foil to the protagonist.

Political Soundbites

Political soundbites can be catchy, memorable, informative, empowering and essential in providing effective messaging to the public. They tend to employ techniques such as **alliteration** or **imperatives** and are **repeated** often.	**'Take back control.'** UK Leave campaign (Brexit) **'For the many, not the few.'** UK Labour Party **'Labour isn't working'** UK Conservative party **'War on terror'** George W Bush, 2001 **'Make America great again.'** Donald Trump

Further Reading

The Hunger Games – Suzanne Collins (2008)
1984 – George Orwell (1949)
Divergent – Veronica Roth (2011)
Brave New World – Aldous Huxley (1932)
Lord of the Flies – William Golding (1954)
Legend – Marie Lu (2011)
The Maze Runner – James Dashner (2009)
Matched – Ally Condie (2010)
The Grace Year – Kim Liggett (2019)

Recall Questions

1. What is a dystopia?
2. Name three tropes of a dystopian novel.
3. Name three tropes of a dystopian protagonist.
4. Name three tropes of a dystopian antagonist.
5. How is propaganda used in dystopias?
6. Give 3 examples of well-known dystopian novels.
7. Give an example of how a dystopia could reflect real life issues.
8. What techniques are employed in a political soundbite?
9. What did Aristotle mean by an 'ethical' argument?
10. What is a climate of fear?

SUBJECT: Maths **YEAR: 9**

TOPIC: Number 1 **SEMESTER: 1**

WORD REVOLUTION	
Percentage	Per-cent means "out of one hundred". A percentage is part of an amount.
Reverse	The process if doing something backwards. You will look here at reverse percentages.
Change	The process of making something different. Here you will find the percentage change.
Interest	When extra money is given to you when you invest, or money you pay if you borrow.

What will I study in this topic?	You will recap work you did last year on finding percentages and fractions of amounts. You will learn how to find the original value or the percentage something has changed by. You will also learn about simple interest and how you can calculate this.
What will I be able to do by the end of this topic?	• Find, increase or decrease by a give percentage or fraction • Find the original value following a percentage change • Find the percentage a value has either increased or decreased by • Be able to calculate the interest given to you when you invest money

Percentages and Fractions Recap

Find 27% of £360

10% of £360 = £36 so 20% = £72 1% = £3.60 so 7% = £25.20
Hence, 27% of £360 = £72 + £25.20 = £97.20

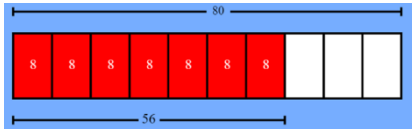
With a calculator you can simply so 360 x 0.27 = £97.20

Increase £360 by 27% = 360 + 97.20 = £457.20
Or with a calculator: 360 x 1.27 = £457.20

Decrease £360 by 27% = 360 - 97.20 = £262.80
Or with a calculator: 360 x 0.73 = £262.80

Finding fractions of an amount

Eg Find $\frac{7}{10}$ of 80

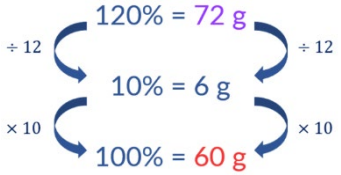


Dividing 80 by 10, finds one tenth of 80, shown here with all the boxes. Then multiply by 7 (the red boxes). So, the correct answer is 56.

Finding the original amount (non-calc)

A snack bar now weighs 20% more than previously. It now weighs 72 g. How much did it weigh before?

So, the bar now weighs 120% of what it did before. You need to find 100% using the method shown here.



Finding the original amount (calc method)

A snack bar now weighs 20% more than previously. It now weighs 72 g. How much did it weigh before?

So, _____ x 1.2 = 72

Here we are saying that there was a value that the bar weighed before, which when multiplied by 1.2 (to increase by 20%) gives us 72 grams
Hence 72 ÷ 1.2 = 60

Finding the percentage change

$$\text{Percentage change} = \frac{\text{Change}}{\text{Original}} \times 100$$

So, to work out the percentage change here the calculation is:

$\frac{26850 - 24702}{26850} \times 100$

$= \frac{2148}{26850} \times 100$ = 8%

Year	Population
2000	26 850
2005	24 702

Simple Interest

£1400 is put into an account. It gathers **simple interest** at a rate of 7% per year.

a) How much money is added to the account each year?

b) How much money will be in the account after two years?

Answers: a) Find 7% of £1400 (= £98)
b) £98 is paid every year, so in two years the interest is £196. £1400 + £196 = £1596

SUBJECT: Maths **YEAR: 9**

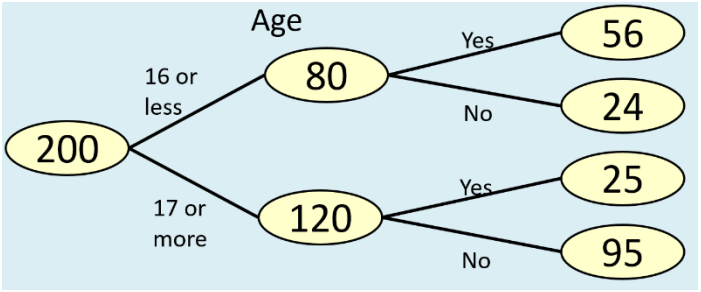
TOPIC: Statistics/Number **SEMESTER: 1**

WORD REVOLUTION

Probability	The chance of something happening or not happening
Theoretical Probability	The likelihood of an event happening, found by using equally likely outcomes.
Experimental Probability	The likelihood of an event occurring based on the results of an experiment.
Standard Form	An abbreviated way of writing a very large or very small number.
Frequency	How often something happens or how many people do a certain thing.

What will I study in this topic?	You will learn how to calculate the probability of an event happening by considering equally likely outcomes. You will also find probability by looking at the results of experiments. You will draw and use frequency trees and calculate with standard form.
What will I be able to do by the end of this topic?	• You will calculate probabilities based on logic and reasoning, but also based on the results of experiments • You will be able to draw a frequency tree and use it to calculate probabilities. • You will add, subtract, multiply and divide numbers written in standard form and know how to use a calculator to do this.

Frequency Trees



A frequency tree like the one above gives information about how many people fall into different categories. For example here, there are 200 people in total, of which 80 are 16 years old or less and 120 are 17 or more. Of the younger people, 56 said yes to whether they liked sweets and 24 said no.

A person is chosen at random. What is probability they do not like sweets?

There are 119 people who said they did not like sweets so the probability is $\frac{119}{200}$.

Experimental Probability

Sometimes it is not possible to work out the probability of an event occurring and so we must perform an experiment. For example, a bowl contains beads in the colours below. To estimate probability of obtaining a colour we can use the frequency table below. The experimental probability of obtaining green is $\frac{5}{25} = \frac{1}{5}$.

Colour	Green	Purple	Black	Yellow
Frequency	5	4	10	6

Standard Form Calculations 1

When adding or subtracting numbers in standard form, it is best to write in ordinary form first.

Work out $4.3 \times 10^4 + 2 \times 10^3$
Give your answer in standard form.

$4.3 \times 10^4 = 43000$ $2 \times 10^3 = 2000$

$43000 + 2000 = 45000$

So final answer in standard form is 4.5×10^4

Look how close this is to the first given number

Standard Form Calculations 2

For multiplication and division, you can multiply the numbers and the powers of 10 separately.

Work out $(4.9 \times 10^{-8}) \times (8.8 \times 10^2)$
Give your answer in standard form.

$4.9 \times 8.8 = 43.12$ $10^{-8} \times 10^2 = 10^{-6}$

So the answers is 43.12×10^{-6}

(Not in standard form, so divide 43.12 by 10 and Multiply 10^{-6} by 10) Answer = 4.312×10^{-5}

Standard Form on a Calculator

You can use your calculator to perform standard form calculations. You need to find this button, usually found on the bottom row of the keys. To enter the number 3.71×10^4, simply type in 3.71, followed by that button, and then the number 4.

This makes calculations like the ones in these examples much easier to work out.

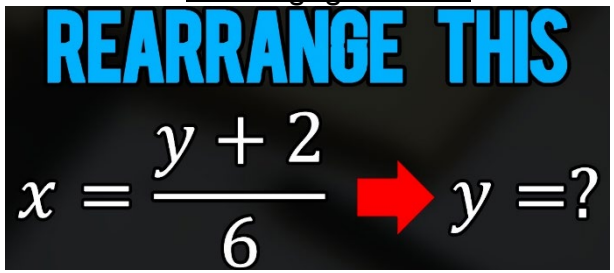
SUBJECT: Maths **YEAR: 9**

TOPIC: Algebra I **SEMESTER: I**

WORD REVOLUTION	
Inequality	An inequality is used when we don't know exactly what an expression is equal to.
Quadratic	An expression or equation where the highest power of the unknown is 2
Factorise	The process of writing an expression as a product of factors, usually back into brackets
Formula	(Plural Formulae) – A mathematical rule or relationship including unknown values
Rearrange	Move things around. In this context, make an unknown the subject of the formula

What will I study in this topic?	You will learn what the inequality signs are and how we can write and solve an inequality. You will also learn how to factorise a quadratic expression and use it solve an equation. Finally, how to rearrange the subject of a formula.
What will I be able to do by the end of this topic?	• Recognise and describe each of the inequality signs • Factorise quadratic expressions where the value in front of x^2 is one • Solve a quadratic equation by first factorising it • Rearrange a formula so that one of the other unknowns is the "subject of the formula"

Rearranging Formulae



To rearrange a formula means to change the subject so that a different unknown appears left of the equals sign.

In the example above we need to rearrange it so that y is the subject. You do this in the same way you solve equations. So here, first multiply both sides by 6 to give 6x = y + 2. Then subtract 2 from both sides and swap things around the equals sign to leave you with:

y = 6x - 2

Inequality Signs

Inequality Symbols

>	<	≥	≤
Greather Than	Less Than	Greater Than or Equal To	Less Than or Equal To

Solving inequalities

You can solve inequalities in the same way you solve equations, making sure the inequality sign is there throughout your working.

E.g. Solve $2x + 2 \leq 14$

Subtract 2 from both sides, then divide both sides by 2.

The answer means "if x is less than or equal to 6, then 2x+2 will be less than or equal to 14."

$$2x + 2 \leq 14$$
$$-2 \quad -2$$
$$\frac{2x}{2} \leq \frac{12}{2}$$
$$x \leq 6$$

Factorising Quadratic Expressions

Factorise: $x^2 + 2x - 8$

We need to put this into double brackets.
Remember to list pairs of numbers that multiply to make -8, and look for the pair with a sum of 2.
The only pair this
Works for is 4 and -2.
So the answer is (x+4)(x-2)

+8, −1 +4, −2 ✓
−8, +1 −4, +2

Solving Quadratic Equations

Solve: $x^2 + 2x - 8 = 0$

In the box on the left we factorised this so we now solve:

$$(x + 4)(x - 2) = 0$$

This is two things multiplied together to give zero. The only way that can happen is if either (x+4) = 0 or (x-2) = 0 so x = -4 or x = 2

SUBJECT: Maths **YEAR: 9**

TOPIC: Geometry 1 **SEMESTER: 1**

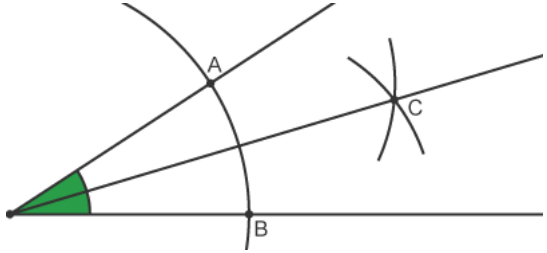
WORD REVOLUTION	
Construction	A drawing using mathematical equipment
Sector	Part of a circle bounded by two radii and an arc
Arc	Part of the circumference of a circle
Cylinder	A 3D shape like a prism, it has a circle as its cross-section
Surface Area	The area of all the faces of a 3D shape added together
Volume	The amount of space inside a 3d shape

What will I study in this topic?	You will learn how to construct bisectors of angles and lines using compasses and rulers. You will also learn how to find the arc length of a sector and its area. Finally, you will calculate the total surface area and volume of a cylinder
What will I be able to do by the end of this topic?	• Construct bisectors of angles and lines • Calculate the arc length and area of a sector • Calculate the surface area and volume of a cylinder

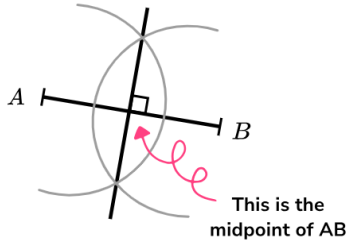
Constructions

We can draw constructions such as bisectors using compasses.

Angle Bisector:



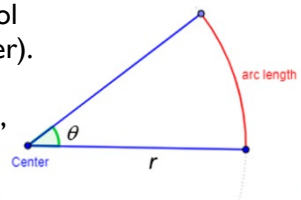
Perpendicular Bisector of a line:



Arc Length

Here, the angle symbol is theta (a Greek letter).

To find the arc length, multiply the proportion of the whole circle by the whole circum-ference.



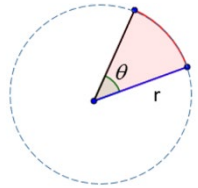
If θ is measured in degrees then

$$\text{arc length} = \frac{\theta}{360°} \times 2\pi r$$

Area of a Sector

The formula for the area of the sector works in the same way as the arc length.

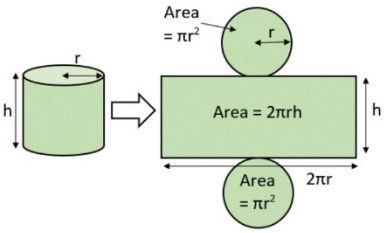
But this time use the area of the circle in the formula.



If θ is measured in degrees then

$$\text{area of sector} = \frac{\theta}{360°} \times \pi r^2$$

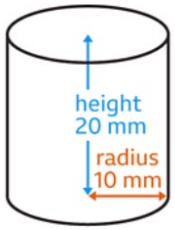
Surface Area of a Cylinder



The net of a cylinder consists of two circles and a rectangle with length 2πr (the circumference).

So, the surface area is $2\pi r^2 + 2\pi rh$

Volume of a Cylinder



$V = \pi r^2 h$
$= \pi \times 10^2 \times 20$
$= 3{\cdot}142 \times 10^2 \times 20$
$= 6284$

Volume = **6284 mm³**

As a cylinder is very much like a prism we can use the formula:

Volume = area of cross-section x length

SUBJECT: Maths **YEAR: 9**

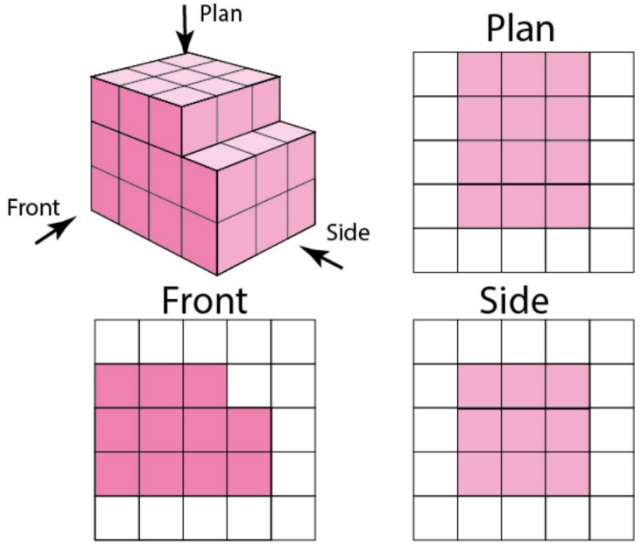
TOPIC: Geometry 2 **SEMESTER: 1**

WORD REVOLUTION	
Plan	In the context of 3D shapes, this refers to what you can when you look from above
Elevation	In the same way, this means what you see when you look from the front or side
Hypotenuse	The longest side of a right-angled triangle – always opposite the right angle
Pythagoras Theorem	A theorem discovered by a Greek mathematician and philosopher

What will I study in this topic?	You will learn how to draw plans and elevations of shapes, in other words what the shape looks like from above and from the side. You will also use Pythagoras' Theorem involving right angled triangles.
What will I be able to do by the end of this topic?	• Draw the plan or elevation of a 3D shape • Find the Hypotenuse of a right-angled triangle using Pythagoras' Theorem when given the other two sides • Find another side length other than the Hypotenuse • Use Pythagoras Theorem to solve problems in two-dimensions

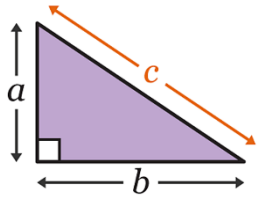
Plans and Elevations

You can draw plans and elevations of 3D shapes in 2D. Just imagine you were holding the solid shape in front of you – what shapes would you be able to see?



Pythagoras' Theorem

The Hypotenuse is the side opposite the right angle. It is the longest side in a right-angled triangle. The theorem stated the following:

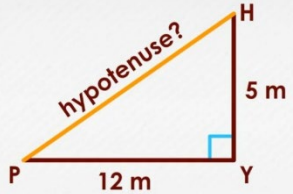


$$a^2 + b^2 = c^2$$

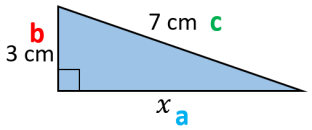
Finding the Hypotenuse

You can use the theorem to find any side length provided you know the other two.

$a^2 + b^2 = c^2$
$5^2 + 12^2 = c^2$
$25 + 144 = c^2$
$169 = c^2$
$\sqrt{169} = c$
$c = 13$



Finding a Shorter Side



$c^2 - b^2 = a^2$

$7^2 - 3^2 = 40$

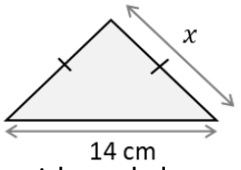
$a^2 = 40$

$a = \sqrt{40} = 6.32$ cm

You can also find a shorter side but remember to rearrange the formula, or substitute the numbers in first and rearrange afterwards.

Problem Solving

Sometimes Pythagoras is not obvious. Imagine here we were told the area was 84cm^2 and we had to find x. First split the shape right down the middle to create two right-angled triangles. Using the area of a triangle formula you can calculate that the perpendicular height is 12cm. From this you can use Pythagoras to find the missing side length x.



SUBJECT: Biology **YEAR: 9**

TOPIC: Paper 1 Topics **SEMESTER: 1**

WORD REVOLUTION	
Mitochondria	Where respiration occurs in cells, which releases energy
Ribosomes	Where proteins are made in cells
Differentiation	When a cell has specific features that allows it to do a particular job
Eukaryotic cell	A cell that has a clear defined nucleus e.g. animal and plant
Prokaryotic cell	A cell that does not have a clear defined nucleus e.g. bacteria
Enzyme	A biological catalyst
Amino acid	Small molecules that are the building blocks of proteins
Catalyst	A substance that speeds up chemical reactions e.g. digestive enzymes
Antigen	Any substance that causes an immune response in the body
Antibody	Protein produced by white blood cells to attack pathogens
Communicable disease	Diseases that are infectious e.g. COVID
Non-communicable disease	Diseases that are not infectious e.g. cancer
Phagocytosis	When white blood cells ingest antigens

What will I study in this topic?	The differences between eukaryotes and prokaryotes. The role of enzymes in the digestive system. How disease spreads and how this transmission can be prevented. How aerobic and anaerobic respiration supply the body with energy.
What will I be able to do by the end of this topic?	State the function of each organelle in a prokaryote and eukaryote and describe how stem cells differentiate. To label and give the functions of each digestive organ including how an enzyme catalyses reactions. Describe the differences between viruses, bacteria, fungi and protists. Describe the process of aerobic and anaerobic respiration in humans and in yeast and explain its importance.

Enzyme production:

- **Mouth (Salivary Glands):**

Produce amylase, an enzyme that begins the digestion of carbohydrates.

- **Stomach:**

Releases protease that starts the breakdown of proteins.

- **Pancreas:**

Produces amylase, protease, and lipase, released into the small intestine to further digest carbohydrates, proteins, and lipids.

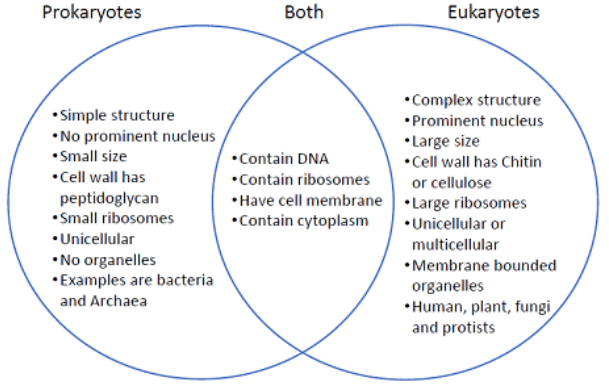
- **Small Intestine:**

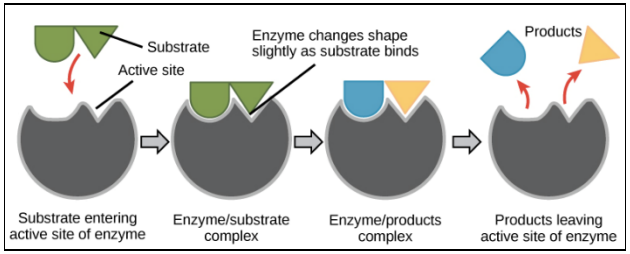
Also produces amylase, protease, and lipase, to breakdown more of these macronutrients.

Enzyme action:

They achieve this by lowering the activation energy needed for a reaction to occur. Enzymes are highly specific, meaning each enzyme typically acts on a specific substrate due to the complementary shape of the enzyme's active site and the substrate.

Venn diagram of cell types:





SUBJECT: Biology **YEAR: 9**

TOPIC: Paper 1 Topics **SEMESTER: 1**

Key Questions:	What is the differences between eukaryotes and prokaryotes? How do we digest food? What are the differences between viruses, bacteria, fungi and protists?
Curriculum Connections:	Past: Year 7 – Microscopes, Plant and Animal Cells. Year 8 - Enzymes and Digestion, Structure of cells, Respiration. Future: Year 10 – Adaptation of cell membranes, root hairs and villi. The functions of blood vessels and the structure of blood. The benefits and disadvantages of vaccination against disease. The ideal conditions for photosynthesis – linked to limiting factors.

Types of pathogens:

Viruses, bacteria, fungi, and protists are all microorganisms, but they differ significantly in their structure, how they reproduce, and how they interact with other organisms. All types of pathogen have a simple life cycle. They infect a host, reproduce themselves or replicate if it is a virus, spread from their host and infect other organisms. They also all have structural adaptations that make them successful at completing their life cycles, which enable them to cause further disease.

- Viruses are non-living particles that require a host cell to reproduce, while bacteria, fungi, and protists are living cells.
- Bacteria are prokaryotes, while fungi and protists are eukaryotes, with fungi having cell walls made of chitin and protists exhibiting a wide range of characteristics.

Pathogen	Example in animals	Example in plants
Viruses	HIV potentially leading to AIDS	Tobacco mosaic virus
Bacteria	Salmonella	Agrobacterium
Fungi	Athlete's foot	Rose black spot
Protists	Malaria	Downy mildew

Examples of pathogens in animals and plants

Aerobic and anaerobic respiration:

The equation for aerobic respiration is:

glucose + oxygen → carbon dioxide + water + energy released

$C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O$ + energy released

Respiration is a series of reactions, but this summarises the overall process. Respiration occurs in the mitochondria.

Most organisms cannot respire without oxygen but some organisms and tissues can continue to respire if the oxygen runs out. These organisms and tissues use the process of anaerobic respiration.

The glucose in muscle is converted to lactic acid:

glucose → lactic acid + energy released

Some plants, and some *fungi* such as yeast can respire anaerobically – it's preferable to release less energy but remain alive.

Glucose in yeast cells is converted to carbon dioxide and *ethanol*, which we refer to simply as 'alcohol':

glucose → ethanol + carbon dioxide + energy released

Anaerobic respiration occurs only in the cytoplasm of cells.

Food Test	Colour of reagent	Positive test result	Negative test result
Iodine for starch	orange–brown	blue–black	orange–brown (no change)
Benedict's for sugar	light blue	green to brick–red	light blue (no change)
Ethanol for lipid	colourless	cloudy emulsion	colourless (no change)
Biuret for protein	blue	lilac–purple	blue (no change)

These are the food tests and the positive result colours you need to know

SUBJECT: Chemistry **YEAR:** 9

TOPIC: Atomic structure + Chemistry of the atmosphere **SEMESTER:** 1

WORD REVOLUTION	
Solute	The substance dissolved in the solvent
Solvent	The liquid used to dissolve the solute
Distillation	A separation technique involving evaporation and condensation
Crystallisation	Separation technique where solid crystals are formed
Isotopes	An atom with the same number of protons but a different number of neutrons
Relative Atomic Mass	The average mass numbers of its isotopes
Atmosphere	The layer of gases surrounding the Earth, held in place by gravity
Combustion	Reacting with oxygen (burning)
Greenhouse Gases	Gases that trap radiation from the sun
Pollutants	A substance that causes harm to the environment when released
Photosynthesis	A process where plants use light energy, typically from the sun, to convert carbon dioxide and water into glucose (a type of sugar) and oxygen
Carbon Footprint	Amount of greenhouse gases, sent into atmosphere by a person

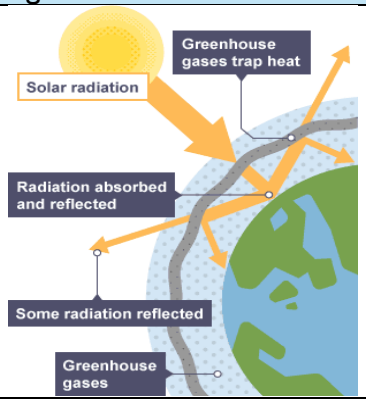
What will I study in this topic?	The makeup of atoms, isotopes and relative atomic mass. How the atmosphere has changed How human activities are causing climate change
What will I be able to do by the end of this topic?	• Identify atoms, elements, compounds and mixtures by their particle diagrams • State the masses and charges of an atom • Calculate numbers of sub-atomic particles in given data • Calculate relative atomic mass • State the composition of the Earth's atmosphere today • Describe the changes in the atmosphere over last 4.6 billion years • State ways carbon dioxide levels decreased, and oxygen levels increased • Describe how the greenhouse effect works

Greenhouse Effect:

The greenhouse effect is a natural process where greenhouse gases in the atmosphere trap heat, keeping the Earth warm enough to support life.

Shorth wavelength solar radiation passes through the atmosphere.
Some energy is absorbed by the Earth's surface, and the Earth then emits longer wavelength infrared radiation.
Greenhouse gases reflect some of this back towards the Earth's surface.

How the greenhouse effect works:



Greenhouse gases:

- Water vapor – evaporation of oceans and combustion
- Carbon dioxide – combustion of fuels
- Methane – animal waste
- Nitrous oxides – nitrogen cycle and agriculture

ATOMIC PARTICLE	CHARGE	MASS
PROTON	+ 1	1
NEUTRON	0	1
ELECTRON	- 1	1/2000

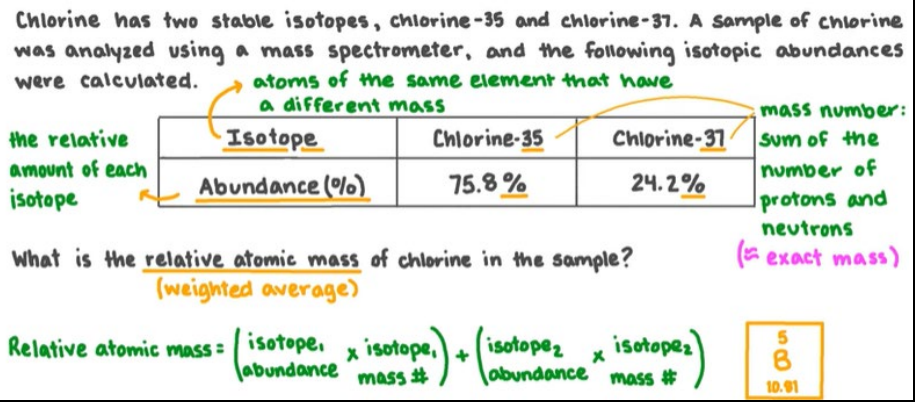
SUBJECT: Chemistry **YEAR:** 9

TOPIC: Atomic structure + Chemistry of the atmosphere **SEMESTER:** 1

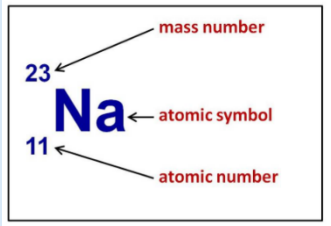
Key Questions:	How are certain objects separated – which technique would work best and why? How many protons, electrons and neutrons are in _____? What is the relative atomic mass of _____? How do greenhouse gases contribute to global warming? How has the Earth's atmosphere changed over time?
Curriculum Connections:	Past: Year 7 separation techniques. Year 8 atmosphere topic. Future: Year 10 Atomic models and the periodic table development. Year 10: Alternative fuels and sustainability.

How to calculate relative atomic mass:

The relative atomic mass of an element is calculated by averaging the mass numbers of its isotopes, weighted by their natural abundances:



How to work out how many protons, neutrons and electrons are in an atom using the periodic table



Using **mass** number and **atomic** number we can **calculate** the number of protons, neutrons and electrons in **any atom**.

protons = atomic no.
electrons = atomic no.
neutrons = mass - atomic

Changes in the atmosphere:

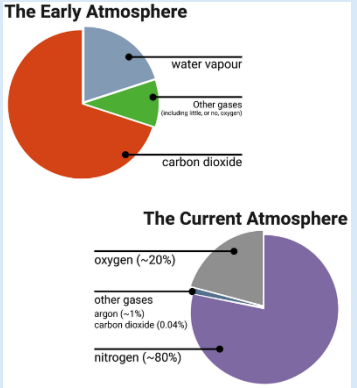
The Earth's atmosphere has changed significantly since its formation.

Early in Earth's history, the atmosphere was primarily composed of carbon dioxide, with much smaller amounts of nitrogen and oxygen.
Over time, volcanic activity released gases like water vapor, which condensed to form oceans.

When life evolved on Earth, the proportion of oxygen increased due to photosynthesis by early life forms.

Today, the atmosphere is predominantly nitrogen and oxygen, with trace amounts of other gases like argon and carbon dioxide. Burning fossil fuels has increased the amount of carbon dioxide in the atmosphere, leading to concerns about climate change.

Pie charts to represent the changes in the Earths atmosphere over 4 billion years



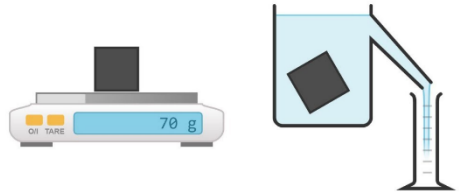
SUBJECT: Physics **YEAR: 9**

TOPIC: Paper 1 Topics **SEMESTER: 1**

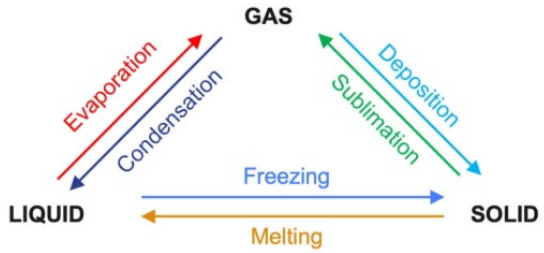
WORD REVOLUTION	
Transformer	Can increase (step up) or decrease (step down) potential difference
Efficiency	How good something is at it's job. (Useful energy out/Total energy in)
Evaporation	Liquid to Gas
Condensation	Gas to Liquid
Sublimation	Solid to Gas
Arrangement	How the particles are positioned
Potential difference	Measured in volts - the energy transferred between two points
Resistance	Measured in Ohms - how difficult it is for an electric current to flow
Isotope	An atom with the same number of protons but a different number of neutrons
Ionising power	Cancer causing ability
Penetrating power	Ability to pass through materials
Radioactive decay	The release of radiation to go from an unstable nucleus to a stable one
Ionising radiation	The release of alpha, beta or gamma radiation from an unstable atom

What will I study in these topics?	Transfer of energy and the national grid Density of materials and link structure to other properties Difference between series and parallel What radioactive decay is
What will I be able to do by the end of this topic?	Describe how energy can be usefully transferred between stores. To appreciate how the arrangement of particles affects the density of a substance and its state of matter. Construct, draw and describe basic properties found in a circuit. Describe how our understanding of the atom has changed over time and how nuclear radiation is produced.

Using a Eureka can:

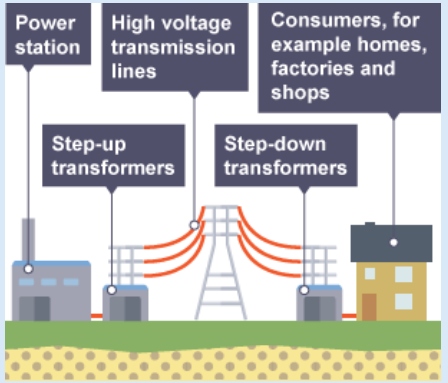


Changes of state:



National grid:

To move power around the National Grid (the country):
Before electrical power leaves a power station – it is transferred at high voltages by using 'step-up' transformers to increase the voltage to around 275,000 V. This is done to reduce energy loss through heat and make the process more efficient.
Before electrical power enters homes and factories – the voltages are decreased by 'step-down' transformers to 230 V.



SUBJECT: Physics **YEAR: 9**

TOPIC: Paper 1 Topics **SEMESTER: 1**

Key Questions:	Why do we need step-up transformer? What methods can you use to measure the density of an object? How can you tell if a radioactive source is alpha, beta or gamma?
Curriculum Connections:	Past: Year 7 energy stores. Year 8 density calculations. Year 7 circuits. Year 8 Chemistry of atoms Present: Year 9 Chemistry of atomic model and isotopes. Future: Specific Heat Capacity in Year 10. Nuclear Physics in Year 13.

Radioactive decay:

- **Alpha (α) radiation:**

Consists of alpha particles, which are essentially helium nuclei (two protons and two neutrons). Alpha particles are relatively heavy and slow-moving compared to other types of radiation. They are the least penetrating and can be stopped by a sheet of paper or even clothing.

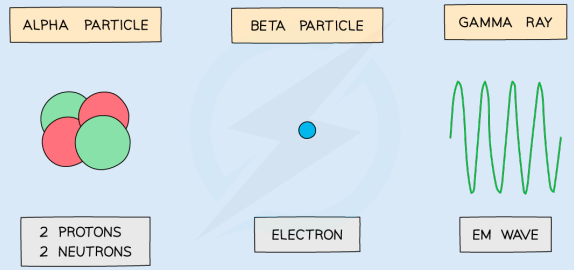
- **Beta (β) radiation:**

Involves the emission of either electrons (beta-minus, β-) or positrons (beta-plus, β+) from the nucleus. Beta particles are much smaller and faster than alpha particles. They can penetrate paper but are stopped by a thin sheet of aluminum.

- **Gamma (γ) radiation:**

Consists of high-energy electromagnetic waves, not particles. Gamma radiation is the most penetrating of the three and requires thick shielding like lead or concrete to be stopped.

This is a description of the 3 types of radiation and what they actually are:



Circuit rules:

In series circuits, components are connected end-to-end (1 loop of wire), forming a single path for current flow.

- The current is the same through all components
- The potential difference is that the total voltage of the power supply is shared between the components
- The total resistance is the sum of individual resistances added together.

In parallel circuits, components are connected on separate branches (2 or more loops of wire), allowing current to split.

- The potential difference (voltage) is the same across each branch
- The current splits when the wires split at the branches.
- The total resistance decreases as more branches are added.

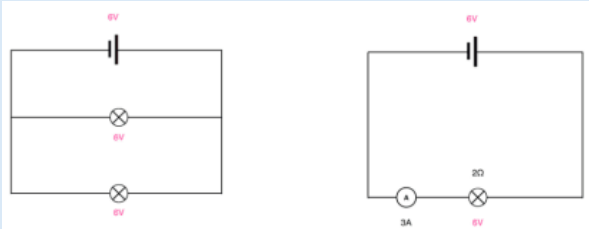


Fig 1. Comparison of Series and Parallel Circuits.

SUBJECT: Maths **YEAR: 9**

TOPIC: Ratio & Proportion 1 **SEMESTER: 1**

WORD REVOLUTION

Ratio	A proportional relationship between two or more amounts
Simplify	The process of making something simpler, here you make the numbers in a ratio smaller.
Direct Proportion	Increase or decrease together at the same rate with a constant ratio.
Inverse Proportion	A relationship such that as one quantity increases, the other decreases.
Currency Conversion	When we change between two countries currency using an exchange rate

What will I study in this topic?	You will be reminded how to simplify a ratio and share a quantity in a given ratio. You will then solve direct and inverse proportion problems and finally look at exchange rates and how we can convert between two different currencies.
What will I be able to do by the end of this topic?	• Understand the difference between direct and inverse proportion and be able to solve worded problems involving the two. • Convert between two currencies using an exchange rate

Currency Conversions

Exchange Rates are Used to see what Each currency is Worth compared To others. In this Table we can see £1 is equivalent to $1.36. These can fluctuate day by day.

British Pound	1.00 GBP
US Dollar	1.360001
Euro	1.159490
Indian Rupee	116.523332
Australian Dollar	2.071437
Canadian Dollar	1.859423

Use the exchange rate £1 = €1.21 to work out

a) how much £80 is worth in euros.

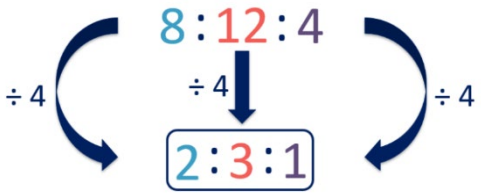
Each pound is worth €1.21 so £80 = £80 x 1.21 = €96.80

b) how much €38.72 is worth in pounds.

This time we are working with the exchange rate but backwards, like when you return from holiday and exchange currency back into pounds. This time we have to divide.

So, €38.72 ÷ 1.21 = £32.00

Simplifying Ratios (recap)



To simplify a ratio, divide each value in the ratio by the same amount (the Highest Common Factor of all the values).

Sharing in a given ratio (recap)

Eg Bob and Betty share £20 in the ratio 3:2

You can use a bar-model to help you share

Bob's share: $^3/_5$ of £20 = **£12**

Betty's share: $^2/_5$ of £20 = **£8**

Direct Proportion

10 identical plants cost £60 in total. How much would 7 of the plants cost?

This is a direct proportion question because first the cost increases, as the number of plants you buy increases, but also because it costs you zero pounds to zero plants. Use the unitary method here to first discover it costs £6 per plant, found by dividing 60 by 10. So, 7 plants costs 7x6 = £42

Inverse Proportion

It takes 20 hours for 4 people to build a wall. How long would it take 5 people to build the same wall?

This is an inverse proportion question. We a increasing the number of workers, so the time it takes decreases. Again, use the unitary method to find how long it would take 1 person, but this time multiply 20 by 4 to give 80 hours. So, 5 people would take 80 ÷ 5 = 16 hours

SUBJECT: Science **YEAR: 9**

TOPIC: Semester 1 **SEMESTER: 1**

How will I be assessed?	Within class you will have low stakes testing, mini whiteboard work and quick 6 starters every lesson so your teacher can see your understanding of the topic work as well as if you can remember and recall information from previous lessons. After semester 1 you will complete 3 assessments – 1 in each subject (Biology – green book, Chemistry – red book and Physics – blue book) – within these assessments there will be questions based on the science content and skills from all semester 1 topics.

Typical energy stores to remember:

Kinetic Energy: The energy an object possesses due to its motion. The faster it moves or the more massive it is, the more kinetic energy it has.
Gravitational Potential Energy: Energy stored by an object due to its position in a gravitational field (e.g., height above the ground).
Elastic Potential Energy: Energy stored in a stretched or compressed object (e.g., a spring or rubber band).
Chemical Energy: Energy stored in the bonds between atoms and molecules. This is released during chemical reactions like burning fuel or in a battery.
Thermal Energy: The total kinetic energy of the particles within a substance. It's often referred to as heat.
Nuclear Energy: Energy stored within the nucleus of an atom, released during nuclear reactions like fission or fusion.
These energy types can be converted from one form to another, such as potential energy converting to kinetic energy (a ball rolling down a hill) or chemical energy converting to heat and light (burning wood).

Extra Nuggets!

- **Mechanical:**

Energy is transferred through forces, like when a force moves an object over a distance. For example, a person pushing a box, or a ball rolling across the floor.

- **Electrical:**

Energy is transferred by moving charges, like in an electric current. An example is the energy transfer in an electrical circuit.

Extra Nuggets!

- **Heating:**

Energy is transferred due to a temperature difference, causing heat to flow. For example, heating a room with a radiator, or the sun warming the earth.

- **Radiation:**

Energy is transferred as waves, such as light, infrared, or sound. The sun's light reaching the earth, or a microwave heating food are examples.

Further Reading and Other Resources

https://sparxscience.com/ - here you have your weekly homeworks, but you can also use the independent learning tab and choose whichever topics you need extra help with.
https://www.bbc.co.uk/bitesize/examspecs/z8r997h - bitesize has our AQA course on it. Here there is lots of useful information, quizzes and videos to watch about the topics you have been studying.
KS4 GCSE CGP revision guides – we have discounted revision guides available through parentpay
https://www.aqa.org.uk/subjects/science/gcse/science-8464/assessment-resources
You can find past papers here from AQA

Recall Questions

1. **Name the differences between prokaryote and eukaryote cells**
2. **Describe the role of enzymes in digestion**
3. **Name 2 examples of viruses in plants and animals**
4. **Describe the food test for protein**
5. **Why would the body anaerobically respire?**
6. **How do you calculate relative atomic mass?**
7. **What is an isotope?**
8. **Describe how the atmosphere of the Earth has changed over 4 billion years**
9. **How would you separate salt and water – why?**
10. **Describe the different properties of the three radiation types**
11. **How do you calculate the density of an irregular object?**
12. **What are the rules for current and potential different in series and parallel?**

SUBJECT: Geography **YEAR: 9**

TOPIC: Fieldwork **SEMESTER: 1**

1. WORD REVOLUTION

Fieldwork	The process of investigating the world around us.
Enquiry question	A question about an area of geography that can be tested through fieldwork.
Hypothesis	A statement that can be tested through a fieldwork inquiry.
Primary data	Data you collect yourself.
Secondary data	Data collected by someone else.
Risk assessment	Process of working out the possible dangers, and how to avoid them

3. CREATING AN ENQUIRY QUESTION

- ✓ **Geographical**: to do with geography
- ✓ **Open ended**: not a yes/no question
- ✓ **Achievable**: not in a dangerous environment, possible to travel to

What will I learn?	What fieldwork is and how it works
What will I be able to do?	Take part in external fieldwork
How will I be assessed?	Progress check in class

4. DATA COLLECTION

Method	Purpose	Limitation
Field sketch	Record key features of the landscape	Hard to complete, not numerical
Questionnaire	Find out opinions about a place or issue	Members of the public might not want to answer
Measurements	Find numerical sizes/shapes/numbers	Making mistakes with measuring

2. FIELDWORK ENQUIRY PROCESS

Aim
Write a question or hypothesis

Plan
Complete risk assessment

Data collection
Getting out and collecting data

Data presentation
Show the data in a visual way

Conclusion
Answer the question you started with

Evaluation
How could the study be improved?

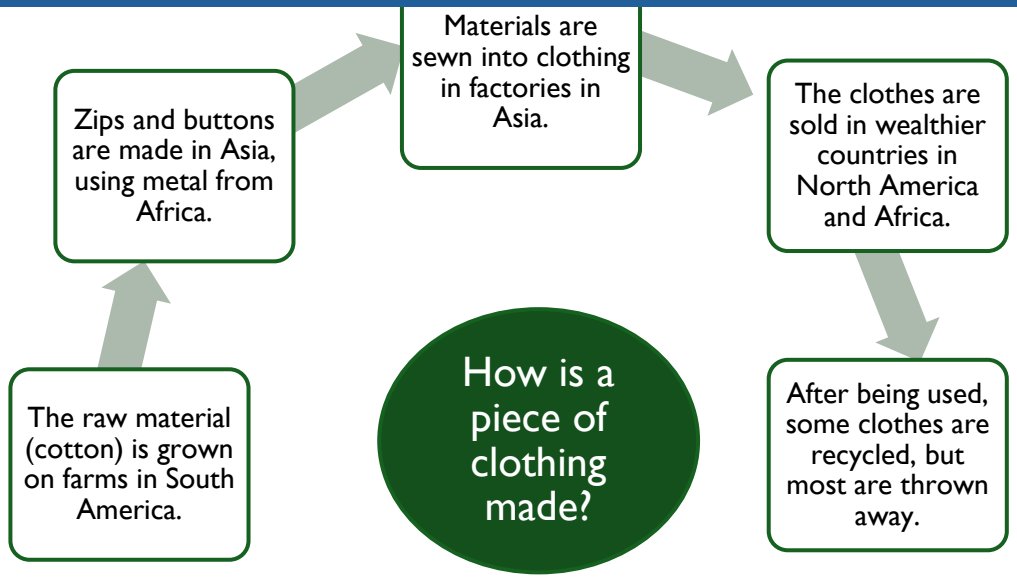
SUBJECT: Geography **YEAR:** 9

TOPIC: Clothes **SEMESTER:** 1

1. WORD REVOLUTION

Globalisation	The process of the world becoming increasingly interconnected
Fast fashion	Making clothing as quickly as possible: as soon as a trend appears, it may just take a matter of weeks to be made.
Supply chain	The process of making an item of clothing, often involving many different steps around the world.
Consumer	Person who buys the product.
Manufacture	Make a product, such a clothing
Sustainable	Acting in a way that won't have a negative impact on the planet or people in the future.

2. THE CLOTHING SUPPLY CHAIN



3. IMPACTS OF THE CLOTHING INDUSTRY

Social	Economic
• **Pay** – minimum wage in Bangladesh is $0.32 an hour • **Child labour** – children can work in factories • **Working conditions** – 10-12 hours a day, physical and verbal abuse	• **Water –** a single pair of jeans needs 9,500 litres of water • **Fossil fuels –** 90% of clothes contain materials that come from oil • **Waste** – clothes are thrown away after a few uses and often go to landfill

4. IMPROVEMENTS

Individuals: Buy less, keep clothes for longer, research the best brands.

Companies: Encourage people to recycle, make sure factories treat people fairly and do not harm the environment

Countries: Make laws to ensure companies treat people and the environment fairly.

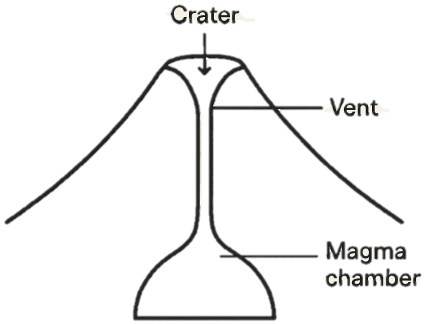
SUBJECT: Geography **YEAR:** 9

TOPIC: Geographical basics **SEMESTER:** 1

1. WORD REVOLUTION

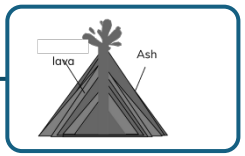
Risk	Possibility of something dangerous happening
Tectonic	To do with the movement of the earth's crust
Erosion	Wearing away of rock or soil
Geology	Rock type
Infrastructure	Physical systems needed for a society to function
Adaptation	Changing behaviour to reduce effects of a problem
Mitigation	Taking action to prevent the causes

2. PARTS OF A VOLCANO



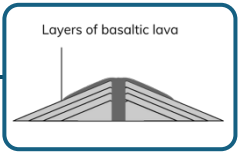
3. TYPES OF VOLCANO

Composite



Thick, sticky lava that builds up at the vent

Shield



Runny lava that spreads out

4. COASTAL EROSION CAUSES and EFFECTS

Causes

- Storms and strong winds
- Sea level rise caused by climate change
- Geology (rock type)
- Human activitiy - removing natural defences

Effects

- Loss of land
- Damage to property
- Threat to infrastructure
- Loss of habitats
- Loss of income

5. RESPONDING TO RISK

	Mitigation	**Adaptation**
Volcanic eruptions		Evacuation plans Lava barriers
Coastal erosion	Building sea walls Stabilising sand dunes	Moving buildings No-build zones
Climate change	Reducing fossil fuel use Planting trees (carbon sink)	Changing crops Improving water supplies

SUBJECT: Geography **YEAR:** 9

TOPIC: Geography basics **SEMESTER:** 1

1. WORD REVOLUTION

Development	Process of a country or area improving
Life expectancy	Average age people live to in an area.
Literacy rate	Amount of people who can read and write in an area
Erosion	Wearing **away** of rock
Weathering	Weakening of rock **where it is**
Weather	Day to day changes in the atmosphere
Climate	Long term average weather conditions

2. DEVELOPMENT AROUND THE WORLD

Development

HIC: High income country

Europe and North America have mostly HICs, e.g. UK

NEE: Newly emerging economy

Asia and South America have mostly NEEs, e.g. Pakistan, Brazil

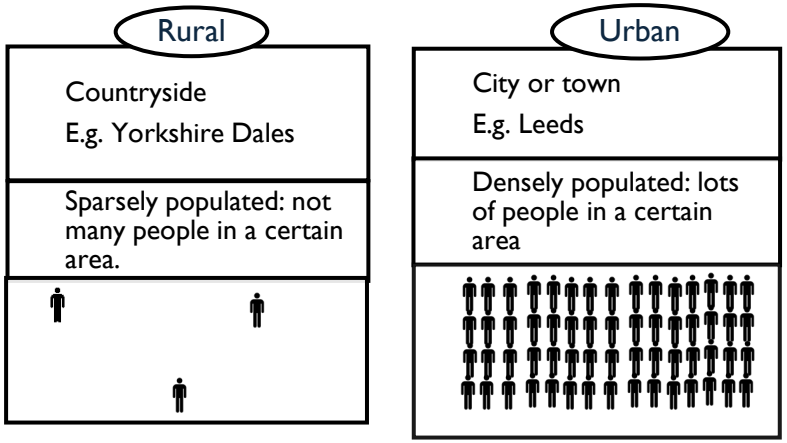
LIC: Low income country

Africa has many LICs, e.g. Niger

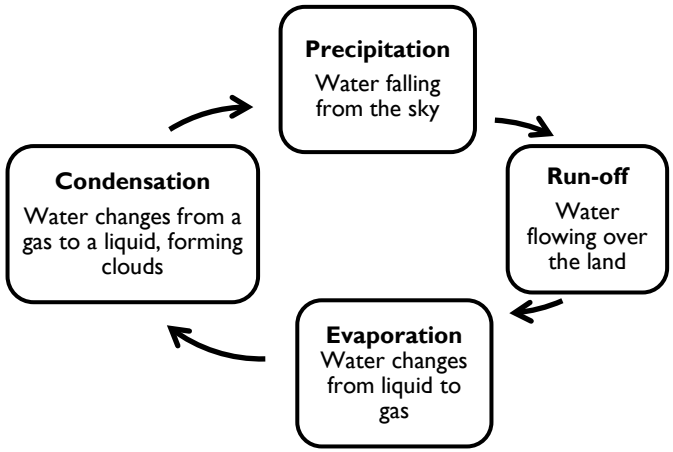
3. JOB TYPES

Tertiary jobs 	Providing a service, e.g. doctor, shop assistant, taxi driver
Secondary jobs 	Making raw materials into a product, e.g. in a factory
Primary jobs 	Extracting raw materials from nature, e.g. farmer, fisher, miner

3. RURAL and URBAN AREAS



4. THE WATER CYCLE



5. WEATHERING

Biological: tree roots grow into rock, animals burrow into rock

Chemical: slightly acidic rainwater dissolves certain types of rock (e.g. limestone)

Freeze-thaw: water freezes and melts inside rock, expanding cracks

SUBJECT: History **YEAR:** 9

TOPIC: Women's Suffrage Movements **SEMESTER:** 1

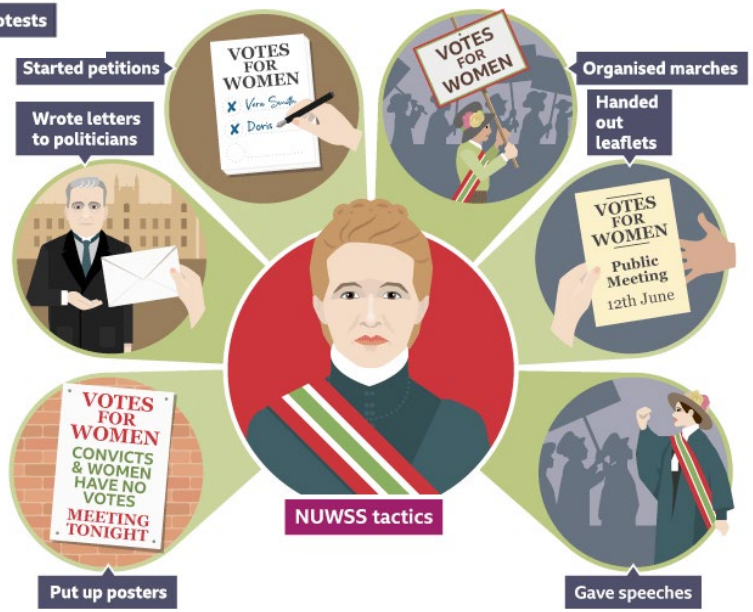
WORD REVOLUTION

Suffrage	The right to vote in a political election.
Patriarchy	A system in which men are in positions of power and control.
Parliament	The elected government in Britain, responsible for making and changing laws.
Hunger strike	Refusing to eat as a form of protest.
Militant	Using extreme or violent methods in support of a political or social cause. .
Moderate	Views and methods are balanced and are acceptable to a large number of people.
Munitions	Military weapons made for war (e.g. shells, ammunition)
Suffragette	A member of the Women's Social and Political Union led by Emmeline Pankhurst who fought using violence to achieve votes for women.
Suffragist	A member of the National Union of Women's Suffrage Societies led by Millicent Fawcett who campaigned for women's suffrage using debate, petitions and non-violent marches.

Men and women were not equal in the 1800s. Women had very few rights in the eyes of the law and they were not allowed to vote. Women were expected to marry a man, have children and look after the home. When a woman got married, any property she owned passed into the ownership of her husband.

In the mid-1800s, some women started to campaign for the right to vote, commonly referred to as women's Suffrage.

Though many men opposed the women's suffrage movement, there were some men who supported the campaign.

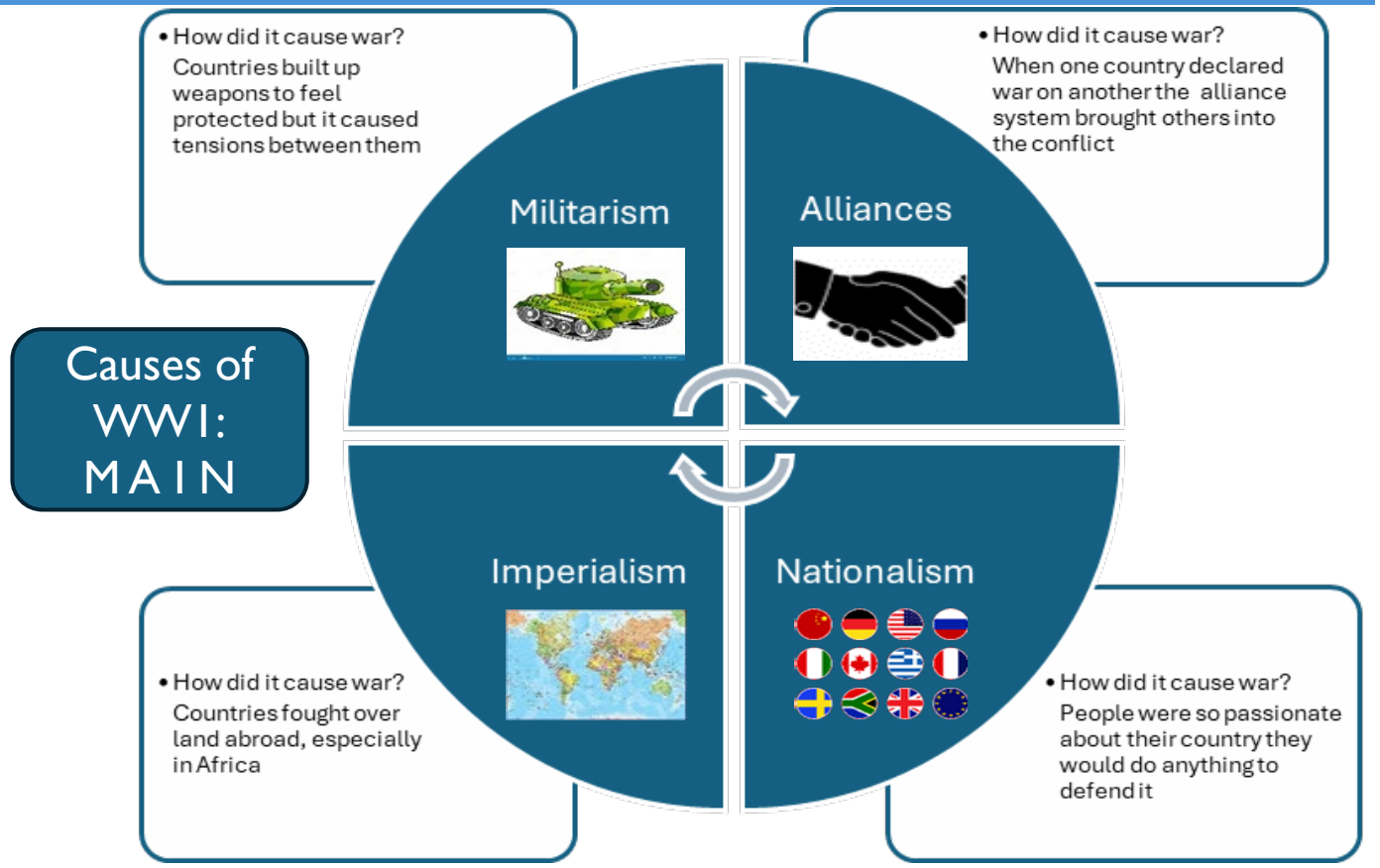


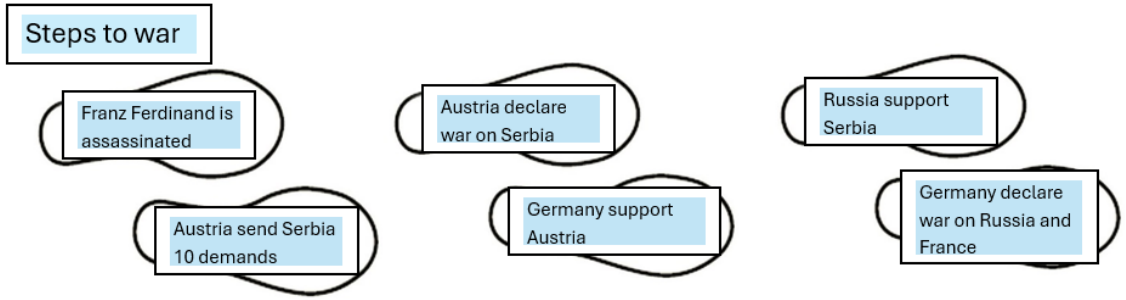
Medieval period					Renaissance		Industrial Period		Modern Period
1000-1100	1100-1200	1200-1300	Sing 1300-1400	1400-1500	1500-1600	1600-1750	1750-1800	1800-1900	1900-present

SUBJECT: History **YEAR:** 9

TOPIC: Causes of WW1 **SEMESTER:** 1

WORD REVOLUTION	
Empire	A group of countries ruled by one powerful nation.
Colonialism	When a country controls and settles lands overseas.
Naval	To do with warships and the sea.
Assassination	A planned killing of an important person for political reasons.
Munition(s)	Military weapons and ammunition.
Militarism	Aggressive build-up of armed forces
Alliances	Forming of a group with a common aim
Imperialism	Building an empire by taking over territory
Nationalism	Feeling of pride in ones nation





Medieval period					Renaissance		Industrial Period		Modern Period
1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1750	1750-1800	1800-1900	1900-present

SUBJECT: History **YEAR:** 9

TOPIC: WW1: Life in the Trenches **SEMESTER:** 1

Word Revolution

Trench	A long, narrow ditch.
Western Front	A 400-plus mile stretch of land through France and Belgium from the Swiss border to the North Sea where most battles of WW1 were fought
Propaganda	Information (often misleading) used to persuade people to support a view or opinion.
Shell shock	a psychological condition resulting from the stress a soldier experiences during battle. Now known as PTSD (Post Traumatic Stress Disorder).
No man's land	an area or strip of land that no one owns or controls, especially in a war.
Trench foot	Happens when feet are exposed to wet and cold conditions for a long time. Symptoms include redness, swelling, blisters, skin turns black and peels off.
Bombardment	A continuous attack with bombs, shells or other missiles.
Armistice	an agreement made by opposing sides in a war to stop fighting for a certain time; a truce.
Conscientious objector	person who refuses to fight in wars because of strong personal beliefs against war.

- At the start of World War One, the UK launched a huge recruitment campaign, recruiting soldiers from all around the UK and the British Empire.
- Life in the trenches was extremely difficult, uncomfortable and dangerous.
- New weapons and technology changed how wars were fought, prolonging World War One for four years, until 1918. It resulted in the deaths of millions of people.
- The first day of the Battle of the Somme was the deadliest day in the history of the British army.

Medieval period					Renaissance		Industrial Period		Modern Period
1000-1100	1100-1200	1200-1300	Sing 1300-1400	1400-1500	1500-1600	1600-1750	1750-1800	1800-1900	1900-present

SUBJECT: Computer Science **YEAR:** 9

TOPIC: Data interpretation **SEMESTER:** 1

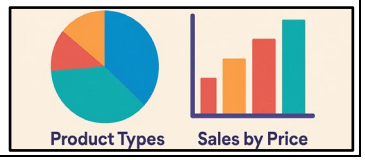
WORD REVOLUTION

Variable	A named space in memory used to store data that can change during a program.
Sequence	The order in which instructions are carried out in a program.
Selection	A decision-making process in code (e.g., using if statements).
Iteration	Repeating a set of instructions (e.g., using for or while loops).
Boolean	A data type with only two values: True or False.
String	A sequence of characters, like words or sentences, in quotation marks.
Integer	A whole number (positive or negative, no decimals).
Float	A number that includes a decimal point.
Syntax Error	A mistake in the code that breaks the rules of the programming language.
Logic Error	A mistake in the program's design that causes it to run incorrectly.
Input	Data received from the user or another source.
Output	Information the program gives back to the user.
Casting	Changing a variable from one data type to another (e.g., from string to int).
Concatenation	Joining two or more strings together.

What will I study in this topic?	In this topic, you will deepen their understanding of how computers use data and logic to solve problems. You will explore core programming concepts such as variables, selection, iteration, and data types using a text-based language like Python. You will learn how to plan and write structured code, identify and fix errors, and use functions to make their programs more efficient. You will also develop their ability to think computationally—breaking problems into smaller steps and using logical reasoning to design solutions.
What will I be able to do by the end of this topic?	You will be able to write and test structured Python programs using variables, selection, and loops. They will confidently use different data types, apply functions to simplify code, and debug common errors. You will be able to plan solutions using flowcharts or pseudocode and explain how their code works using correct terminology. You will also develop their ability to think logically and solve problems independently, preparing you for more advanced programming challenges.

What is "Merchandising"?

Merchandising means picking the right products to sell, showing them in attractive ways, and setting prices that draw in customers. It's used in shops, online, and even at school events like bake sales!
In computing, students might use **data modelling** to plan—figuring out how many items to sell, what to charge, and how much profit they could make.



My email address: _____@bentonpark.net

My computer log in: _____

My computer Password: _____

My EduCake user name: _____

EduCake password: _____

What is Data Modelling?

Data modelling is the process of using data to represent real-world situations so we can understand them better and make decisions. It's like building a simplified version of something complex—such as a business, a budget, or a sports league—using numbers and rules.

Advantages of Data Modelling:

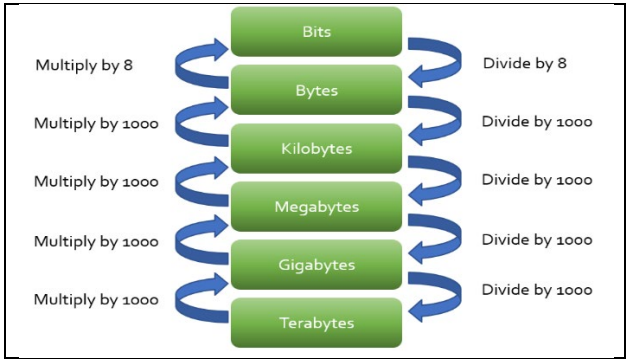
- Helps you **predict outcomes** (e.g. how much profit you might make).
- Makes it easier to **spot patterns or problems**.
- Allows you to **test different scenarios** without real-world risks.
- Supports **better decision-making** using facts and figures.

SUBJECT: Computer Science **YEAR:** 9

TOPIC: Computer Logic **SEMESTER:** 1

Key Questions:	1. How do computers use logic and decision-making to solve problems? 2. Why is it important to choose the right data type when writing a program? 3. What's the difference between a syntax error and a logic error, and how can we fix them? 4. How can using functions make our code easier to read and reuse? 5. What skills do we develop when we break problems into smaller steps?
Curriculum Connections:	This unit builds on the programming foundations introduced in Year 7 and 8, moving from basic block-based logic to more advanced text-based coding. It strengthens students' understanding of computational thinking, problem-solving, and digital literacy. The skills learned here—such as writing structured code, debugging, and using functions—are essential for future units in computer science, including algorithms, data structures, and software development. These concepts also support logical thinking and resilience across other subjects like maths and science.

Top Tips for writing code
Plan before you code – Use flowcharts or pseudocode to map out your ideas.
Use clear variable names – Make your code easier to read and understand.
Check your syntax – Python is picky! Make sure your punctuation and indentation are correct.
Test often – Run your code regularly to catch errors early.
Use comments – Add # comments to explain what your code does.
Don't fear errors – Mistakes help you learn. Read error messages carefully and try to fix them.
Ask for help – If you're stuck, talk to a classmate or teacher. Everyone gets stuck sometimes!
Keep practising – The more you code, the more confident you'll become.



Top tips for using Excel to analyse data
Use clear headings – Label your columns and rows so your data is easy to understand.
Keep it tidy – Avoid leaving random blank rows or columns; it helps your spreadsheet stay organised.
Use formulas – Let Excel do the maths! Try =SUM(), =AVERAGE(), or =IF() to save time.
Check your cell types – Make sure numbers, dates, and text are formatted correctly.
Use autofill – Drag the corner of a cell to copy formulas or patterns quickly.
Freeze panes – Keep your headers visible while scrolling by using "Freeze Panes" under the View tab.
Use filters – Quickly sort and find data using the filter tool in the Home or Data tab.
Save your work – Save regularly and name your files clearly so you can find them later.

Try charts – Turn your data into a visual by using Insert > Chart to make it easier to understand.

Undo is your friend – Made a mistake? Press Ctrl + Z to undo it instantly.

Excel

SUBJECT: Computer Science **YEAR:** 9

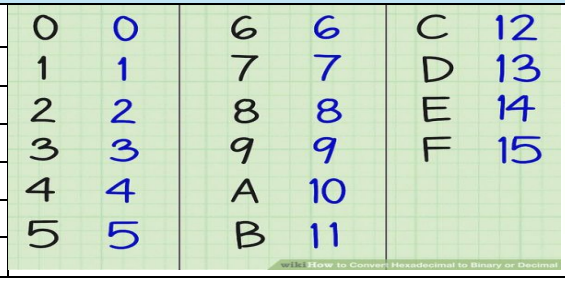
TOPIC: Number systems **SEMESTER:** 1

Number systems: Conversion

Conversion Type	Method of Doing This	Worked Example
Denary to Binary	Divide the number by 2, record the remainder, repeat with the quotient until the quotient is 0. The binary number is the remainders read in reverse.	Example: 13 → 1101
Binary to Denary	Multiply each bit by 2 raised to the power of its position (starting from 0 on the right), and sum the results.	Example: 1101 → 1*2^3 + 1*2^2 + 0*2^1 + 1*2^0 = 8 + 4 + 0 + 1 = 13
Binary to Hex	Split the binary number into groups of 4 bits (from the right). Convert each group to its hex equivalent.	Example: 11010111 → 1101 0111 → D7
Hex to Binary	Convert each hex digit to its 4-bit binary equivalent.	Example: 2F → 0010 1111
Hex to Denary	Multiply each hex digit by 16 raised to the power of its position (starting from 0 on the right), and sum the results.	Example: 2F → (2*16^1) + (15*16^0) = 32 + 15 = 47
Denary to Hex	Divide the number by 16, record the remainder, repeat with the quotient until the quotient is 0. The hex number is the remainders read in reverse.	Example: 47 → 2F

Understanding data storage

Bit	The smallest piece of data – just a 1 or a 0.
Nibble	4 bits. It's called a "nibble" because it's half a byte – like a small bite!
Byte	8 bits. Enough to store one letter or symbol.
Kilobyte (KB)	1024 bytes. Not 1000, because computers use **binary** (base 2), and 1024 is
Megabyte (MB)	1024 KB. Used for storing photos, songs, or small apps.
Gigabyte (GB)	1024 MB. Common for USB sticks, phones, and games.
Terabyte (TB)	1024 GB. Used for large hard drives and cloud storage.



Why should I care about binary or hex?

Computers use **base 2 (binary)** because they are made of millions of tiny switches that can only be **on** or **off**—just like binary digits, which are only **1** or **0**. This makes binary the simplest and most reliable way for computers to store and process data. **Hexadecimal (base 16)** is used because it's a **shorter, more human-friendly way** to write long binary numbers. One hex digit represents four binary digits, so it's easier to read, write, and debug code—especially when working with colours, memory addresses, or machine code.

What Is a Programmer?

A **programmer** writes code to make computers, apps, and websites work. They solve problems, build software, and work in areas like gaming, web design, and cybersecurity.

How Much Do They Earn?

Starting salary: £29,000/year
Average salary: £30,700/year
Experienced: £45,000–£70,000+

SUBJECT:	**Religious Studies**	**YEAR:**	**9**
TOPIC:	**Crime and Punishment**	**SEMESTER:**	**1**

WORD REVOLUTION

Absolute Morality	There is always a right action to take no matter what the moral dilemma.
Addiction	When you have a strong need to do something.
Capital Punishment	Legally killing someone for their crime.
Crime	An act which is an offence and punishable by law.
Criminals	A person who has committed a crime or offence.
Corporal Punishment	Physical punishment such as whipping
Deterrence	To put people off from committing an act sometimes by fear.
Ethics	Moral principles which govern a person's behaviour.
Forgiveness	To let go of resentment and anger.
Golden Rule	Treat others as you wish to be treated.
Greed	Intense and selfish desire for something.
Punishment	The imposing of a penalty due to an offence.
Reform	Make someone or something change and improve for the better.
Retribution	Punishment inflicted as revenge

What will I study in this topic?	You will learn about important legal and moral issues linked to crime and punishment. You will explore different theories of punishment, as well as the debate around the death penalty. Alongside this, you will study how ethical ideas and religious teachings from Judaism, Islam, Christianity, and Buddhism shape different responses to these issues, including ideas about justice, forgiveness, and the purpose of punishment.
Curriculum Connections:	During the course of the year you will learn about ethical debates surrounding crime, abortion and debating big topical questions including the treatment of animals, the legalisation of cannabis, reasons for war and euthanasia. This knowledge will help you when you study ethical and religious dilemmas at GCSE in Year 10 and 11.

What are the causes of crime?

What are the aims of punishment?

Reform Help criminals change for the better	**Protection** Keep society safe from dangerous criminals
Retribution Criminals should 'pay' for their crimes	**Deterrence** Put people off committing crimes

Different forms of punishment

SUBJECT: Religious Studies **YEAR:** 9

TOPIC: Crime and Punishment **SEMESTER:** 1

Why is Punishment important?

- **Protect Public Safety -** Prevents harm and violence
- **Ensure Justice and Fairness** - Everyone is treated equally
- **Maintain Social Order** -Reduces chaos and conflict
- **Set Standards for Behaviour** - Defines what is acceptable
- **Support Rights and Freedoms** -Protects individual rights
- **Ensure Justice and Fairness** - Everyone is treated equally

How should we treat others? The Golden Rule

Every religion has a version of the Golden Rule which religious believers follow in their treatment with others.

- **Christianity and Judaism** – *'love your neighbour as yourself'*
- **Buddhism –** *'treat other with respect. How they treat others will be how they treat you'.*
- **Islam** – *'None of you truly believes, until he wishes for his brother what he wishes for himself'*
- **Sikhism** – *'I am a stranger to no one, I am a friend to all'*

=

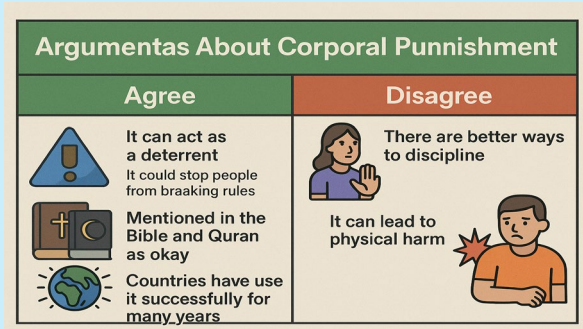
What does religion teach about Crime and Punishment?

Christianity	Jesus in the New Testament of the Bible said 'an eye for an eye and a tooth for a tooth' is wrong and Christians should 'turn the other cheek' Matthew 5:38.
Islam	Shari'ah law (Islam) states that the family of a murder victim can accept money as compensation rather than enforce the death penalty.
Judaism	The death penalty is used in the Christian Bible (Old Testament) and the Jewish Torah for certain offences e.g. murder Exodus 21:24 'an eye for an eye, a tooth for a tooth…'
Buddhism	Buddhism – The first of the Five Moral Precepts (5 rules Buddhists should follow) is *'abstain from harm'* (abstain = don't do it)

Capital Punishment

The Prison System in the UK

✅ Positives of Prison	❌ Negatives of Prison
Keeps dangerous people away from others Protects the public by separating criminals from society	**Can be very expensive** Prisons cost a lot to run. Money could be better spent
Acts as a deterrent Some people may avoid crime to stay out of prison	**Doesn't always stop reoffending** Many prisoners commit crimes again – lack of reform
Gives time to reflect and reform Offenders may rethink their actions and change – opportunities to get counselling and qualifications	**Can break families apart** Children and partners can suffer when someone is jailed – destroys relationships



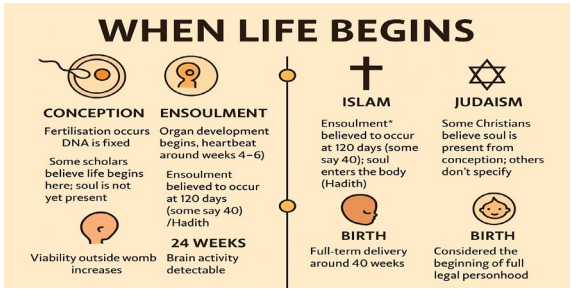
SUBJECT: Religious Studies **YEAR: 9**

TOPIC: Ethics and Abortion **SEMESTER: 1**

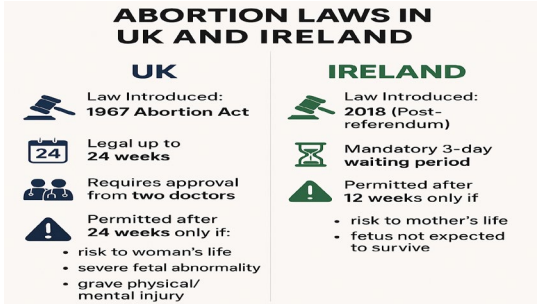
WORD REVOLUTION	
Abortion	The deliberate ending of a pregnancy so that it does not result in the birth of a baby.
Conception	The moment when a sperm fertilises an egg, marking the beginning of pregnancy.
Ensoulment	The belief about when the soul enters the body of a developing baby.
Foetus	The developing baby in the womb from around 8 weeks after conception until birth.
Miracle of life	The idea that life is special, amazing, and possibly a gift from God
Pro choice	The belief that a woman should have the right to choose whether or not to have an abortion.
Pro life	The belief that abortion is wrong because life begins at conception and should be protected.
Quality of life	A measure of how good or comfortable someone's life is, including their physical and
Sanctity of life	The belief that life is holy, sacred, and given by God, so only God should decide when it ends.
Viability	When a baby could survive outside the womb with medical help. (24 weeks)

What will I study in this topic?	You will gain a well-rounded understanding of the key ethical questions and religious and non-religious perspectives surrounding abortion, approaching the topic with sensitivity and an appreciation for its complexity as an ethical, legal, and religious issue.
Curriculum Connections:	During this topic you will learn about the foetal development and the different views on when life begins. This will link to your Science lessons and also allow you to develop a basic understanding of the different religious views towards abortion. This will lay the foundations for GSCE study where this topic is covered in detail from a Christian and Buddhist perspective.

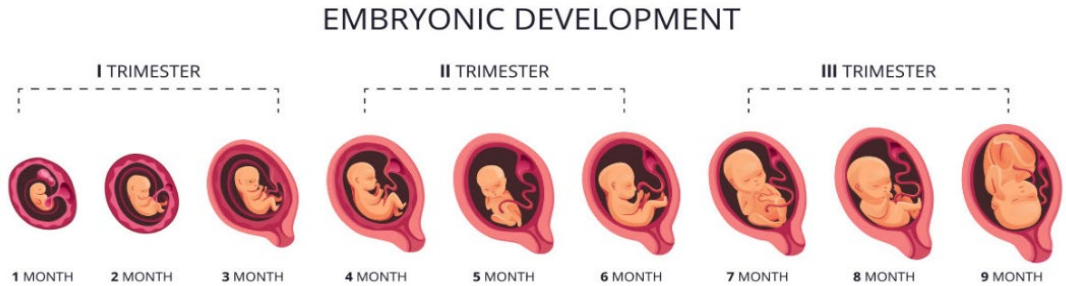
Different ideas on when life begins



Current law on abortion in the UK



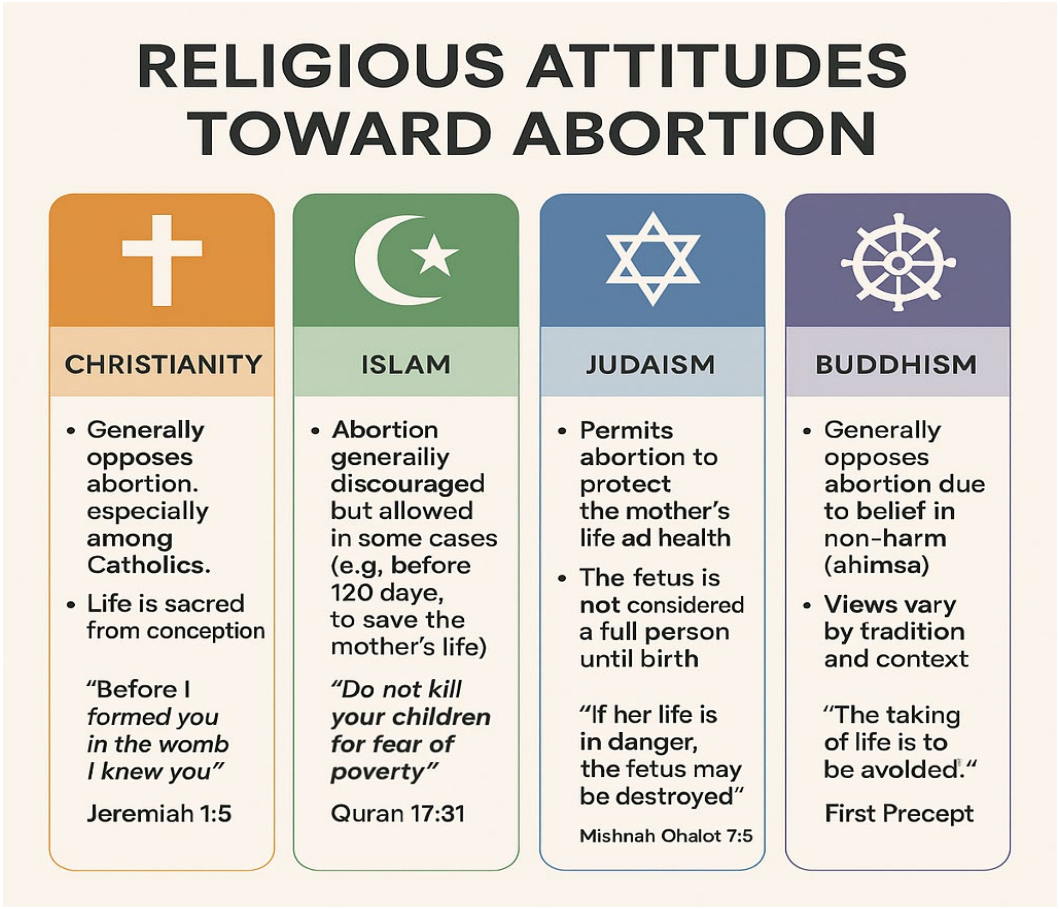
Stages of foetal development



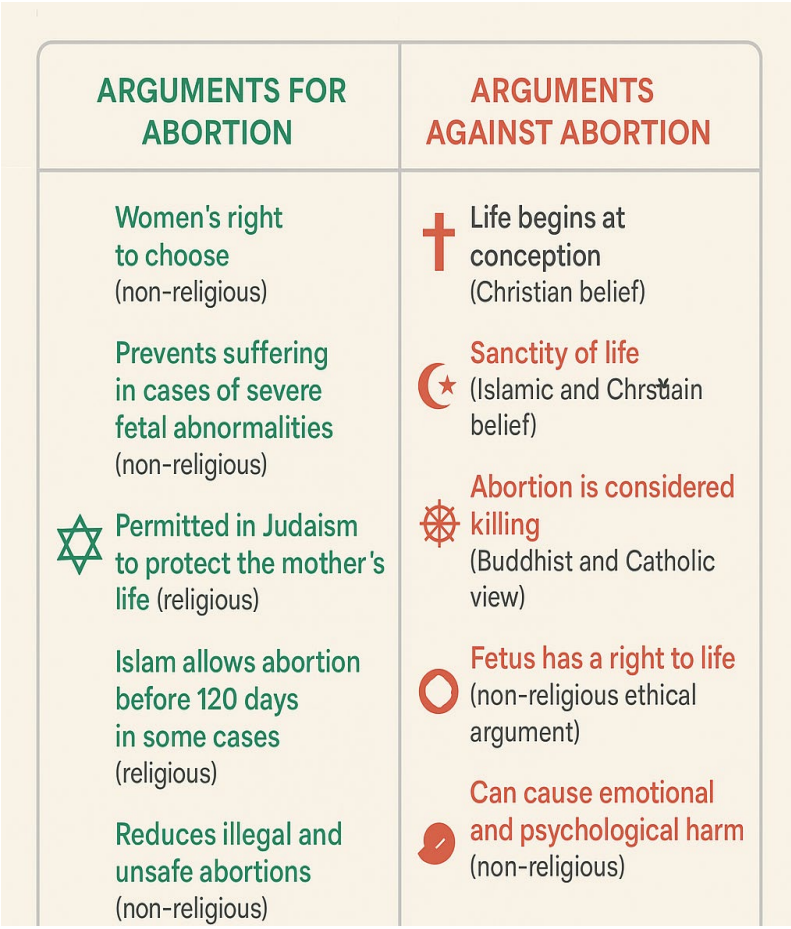
SUBJECT: Religious Studies **YEAR:** 9

TOPIC: Ethics and Abortion **SEMESTER:** I

Religious views on abortion



Arguments for and Against abortion



SUBJECT: Religious Studies **YEAR: 9**

TOPIC: World Religions **SEMESTER: 1**

	When It Began	Where It Began	Founder	Holy Book(s)	Place of Worship	Key Beliefs About God	Key Practices	Symbol(s)	Major Festivals	Beliefs About Afterlife
Hinduism (Hindus)	Around 4000 - 2000 BCE	Indian Subcontinent	Developed from the people of the Indus Valley	Vedas, Upanishads, Bhagavad Gita	Temple	Many gods (polytheistic), Brahman is supreme reality	Puja (worship) Festivals like Diwali		Diwali Holi	Rebirth (reincarnation) and Moksha (liberation from cycle of rebirth)
Judaism (Jews)	Around 2000 BCE	Ancient Israel	Abraham	Torah Tenakh	Synagogue	One God (Monotheistic) Yaweh/Elohim	Sabbath, Kosher Prayer Festivals		Passover Yom Kippur Hanukkah	Resurrection and Olam Ha-Ba (World to Come); focus on this life
Buddhism (Buddhists)	Around 5th Century BCE	India	Siddhartha Gautama (The Buddha)	Various scriptures (Tripitaka) (Pali Canon)	Temple	No creator God	Meditation Following the Eightfold Path Festivals		Vesak Paranirvana Day	Rebirth and Nirvana (end of suffering and cycle of rebirth)
Christianity (Christians)	Around 1st Century CE	Jerusalem (Middle East)	Jesus Christ	Bible (Old & New Testament)	Church	One God (Monotheistic), Trinity (Father, Son, Holy Spirit)	Prayer Worship Baptism Communion		Advent Christmas Lent Easter	Heaven and Hell; eternal life through faith in Jesus
Islam (Muslims)	7th Century CE	Mecca (Saudi Arabia)	Prophet Muhammad	Quran	Mosque	One God (Allah) Monotheistic	Five Pillars (Faith, Prayer, Fasting, Charity, Pilgrimage)		Eid al-Fitr, Eid al-Adha	Paradise (Jannah) and Hell (Jahannam) based on deeds
Sikhism (Sikhs)	Late 15th Century CE	Punjab (India/Pakistan)	Guru Nanak	Guru Granth Sahib	Gurdwara	One God (Waheguru), Monotheistic	Prayer Seva (service) Community (Langar)		Vaisakhi Guru Nanak's Birthday	Rebirth and union with God; emphasis on living a truthful, humble life

SUBJECT: Design & Technology — YEAR: 9

TOPIC: Product Design — SEMESTER: 1 & 2

WORD REVOLUTION

Sustainability	Using resources in a way that meets current needs without harming the environment or reducing resources for the future.
Eco-friendly	Not harmful to the environment; designed to reduce pollution and waste.
Client	The person or group you are designing a product for.
User needs	The requirements and preferences of the person who will use the product.
Container home	A house built using shipping containers, often adapted for comfort and sustainability.
Accessibility	Design features that make a product or space usable for people with different abilities or needs.
Insulation	Material used to keep heat in or out of a building, improving energy efficiency.
Perspective drawing	A way of drawing objects so they appear three-dimensional and realistic, showing depth.
Functionality	How well a product or design works to meet its intended purpose.
Iterative design	A process of constantly improving a design through testing, feedback, and refinement.
Recycled materials	Items that have been used before and processed to be reused in new products.
Design specification	A clear list of requirements that a product must meet, based on the user's needs.
Low-impact living	A lifestyle that tries to reduce damage to the environment through choices like saving energy and reducing waste.
Innovation	A new idea or method that improves how something works or looks.

What will I study in this topic?	• How eco-friendly and sustainable homes are designed and built • The needs of different users and how design can meet those needs • How to sketch and develop ideas using 1-point perspective drawing • How to plan, make, and evaluate a model of an eco container home
What will I be able to do by the end of this topic?	• Explain what makes a home sustainable and eco-friendly • Create design ideas that respond to a specific client's needs • Draw a container home in accurate 1-point perspective with annotations • Build and evaluate a 3D model that reflects your design and client brief

Key Tools:

Try Square

Scroll Saw

Coping Saw

Tenon Saw

Curriculum Connections:

Builds on your practical and drawing skills from Year 7 and 8 to create more detailed designs.

Introduces sustainability and client needs – key ideas for GCSE projects.

Follows the same design process used in the GCSE NEA, helping you get ready for Year 10.

Health & Safety

Wear goggles when operating machinery

Tie back long hair

Wear an apron.

How will I be assessed?

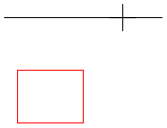
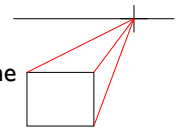
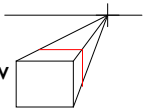
Design Ideas

Practical outcomes

End of unit test

SUBJECT: Design & Technology — YEAR: 9

TOPIC: Product Design — SEMESTER: 1 & 2

Key drawing skill: 1 point perspective	**Step 1** Draw the horizon and vanishing point  **Step 2** Draw the front of the shape  **Step 3** Draw lines to the vanishing point  **Step 4** Add lengths to show depth 
Why is energy efficiency important for housing?	They help reduce energy bills – using less electricity and gas saves money. They are better for the environment – using less energy means less pollution and fewer greenhouse gases. They keep homes more comfortable – better insulation means homes stay warmer in winter and cooler in summer. They reduce demand on power stations – helping the country avoid blackouts and reduce fuel imports.

The needs of the client

Accessibility – e.g. ramps, wide doorways, or step-free access for wheelchair users or people with mobility issues.

Comfort – spaces that are warm, well-lit, ventilated, and suitable for everyday living.

Privacy – areas for sleeping, relaxing, or working without being disturbed.

Storage – enough space to safely store personal belongings, tools, or equipment.

Personal lifestyle needs – e.g. a space for pets, hobbies, working from home, or family time.

Evaluation Tool - Pugh's Plates

Functionality – Does the design meet the client's needs and work well in daily use?

Cost – Is the design affordable and does it make good use of materials?

Aesthetics – Does the design look good and suit the client's style or preferences?

Sustainability – Does the design use eco-friendly materials and reduce environmental impact?

Ease of manufacture – Is the design easy to build using the tools and materials available?

Safety – Is the design safe for the user and safe to make in the workshop?

Space efficiency – Does the design make good use of space, especially in a small container home?

Innovation – Does the design include any creative or original ideas that make it stand out?

Moodboard - Ideas for inspiration!










SUBJECT: Design & Technology **YEAR:** 9

TOPIC: Textiles **SEMESTER:** 1 / 2

WORD REVOLUTION

Sustainability	To reduce the harm products cause the environment by considering how they are made, what materials they are made from and how they can be disposed of after use.
Annotate	To add labels and comments explaining an idea in full.
Evaluate	To judge how well something meets its purpose & suggest improvements
Properties (of materials)	How a material behaves (eg: is it absorbant, stretchy, strong, malleable)
Decorative Technique	A way of adding decoration to the surface of a textile product realistic
Sample	A practice version to test out the idea before creating the final piece
Applique	A technique where layers of fabric are applied to a larger piece to form decorative patterns or pictures.
Embroidery	Decorative sewing stitch technique.
Embellishment	A technique where decorative details are added such as button & beads.
Template	A guide that is traced around on to fabric before cutting out the pieces
Seam Allowance	The extra fabric between the sewing line and the cut edge
Seam	The line where two or more pieces of material are joined together

What will I study in this topic?	• The relevance of sustainability in design and as consumers • How to decorate fabric using a range of sewing techniques • How to create a 3D textiles product by making a template and using safe and accurate construction techniques • How fabrics are made (their construction) and how that effects how they behave (their properties)
What will I be able to do by the end of this topic?	• Follow the design process: research, design, make and evaluate • Use a range of specialist equipment safely and effectively including the sewing machine and fabric shears

Key Tools:

Curriculum Connections:

Builds upon earlier making skills & specialist knowledge in readiness for study at GCSE

- Developing ideas through sampling
- Safe and effective use of the sewing machine
- Testing and evaluating decorative techniques
- Understanding that fabrics have different properties and this impacts their suitability
- Understand the environmental issues associated with Textiles

Health & Safety

Take care with sharp objects.

Keep the room tidy to avoid trip hazards.

Tie back long hair.

How will I be assessed?

Design Ideas

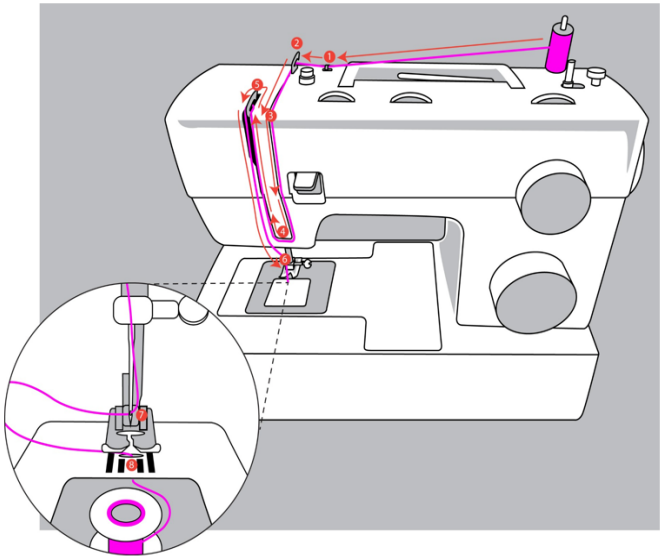
Practical outcomes

End of unit test

SUBJECT: Design & Technology **YEAR:** 9

TOPIC: Textiles **SEMESTER:** 1 / 2

Key practical skill: Threading the Sewing Machine



Follow the numbers 1-7 printed on the sewing machine, ensuring the thread also goes through the hole at the pointed end of the needle (point 7). There should be a second thread that comes up from the panel below the needle. This come from another, smaller spool of thread called the bobbin.

Decorative Techniques:

Applique: layer/s of fabric applied and stitched to base

Embellishment: adding buttons/sequins/beads

Embroidery: decorative stitch, eg: running, back, chain, cross-stitch

The 6Rs of Sustainability

RETHINK Always thinking 'do I really need this?', 'is there another way this could be done?'

REDUCE Reduce how much material we use, how much we buy & how much gets thrown away

REUSE Don't just throw things away! Can you pass on to someone else or keep using in a different way?

RECYCLE Choose recycled and recyclable products. Take time to sort the rubbish!

REPAIR Before you throw away, can your product be fixed and it's life extended?

REFUSE Change your habits! Check labels, refuse to buy products with poor sustainability. Refuse to just throw away and buy more.

QUICK 6 RESEARCH TASK: *How are companies being more sustainable?*

Which of the 6Rs are being demonstrated in the below examples?

Picture: 1

Picture: 2

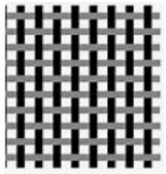
Picture: 3

Picture: 4

Challenge: Can you find examples like these on any products you own?

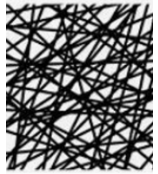
Specialist Technical Knowledge: Fabric Construction

Fabrics behave differently (have different ***properties***) depending on how they are made. Knowing the construction of a fabric will help you choose the right fabric for the product you want to make.



Woven
- Strong
- Smooth surface (good to print on)
- Rigid (no stretch)
- Fray when cut

Knitted
- Stretchy
- Warm
- Permanent patterns can be knitted into fabric
- Can ladder and edges curl when cut

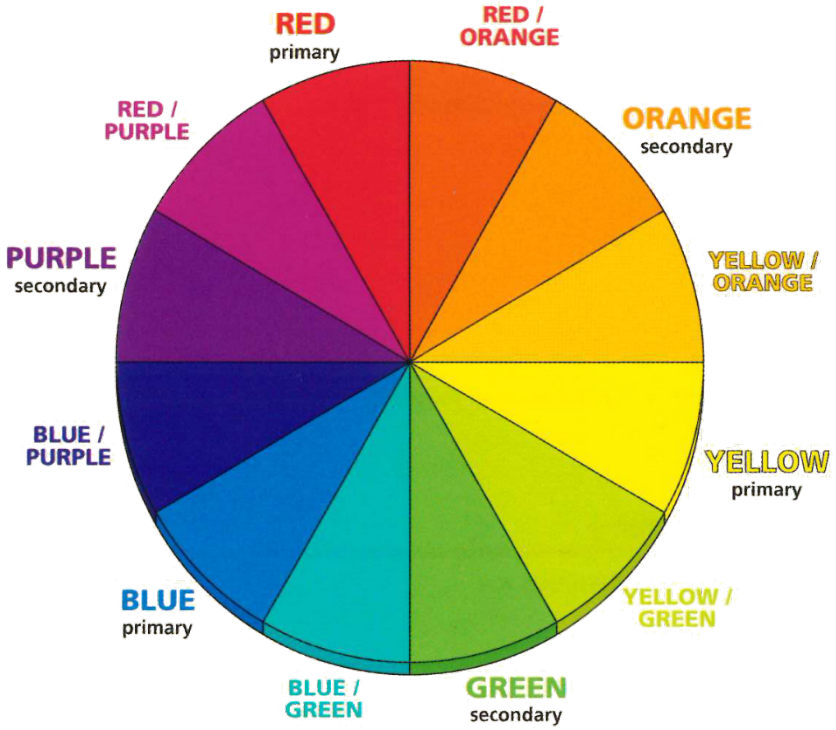


Non/Woven
- Does not fray
- Can be permanently shaped using heat & pressure (eg: hat making)
- No stretch and least strong

SUBJECT: Art & Design **YEAR:** 9

TOPIC: Formal Elements **SEMESTER:** 1

THE COLOUR WHEEL



COMPLEMENTARY COLOURS

The colours opposite each other on the wheel are called complementary colours.

RED is opposite GREEN
BLUE is opposite ORANGE
YELLOW is opposite PURPLE

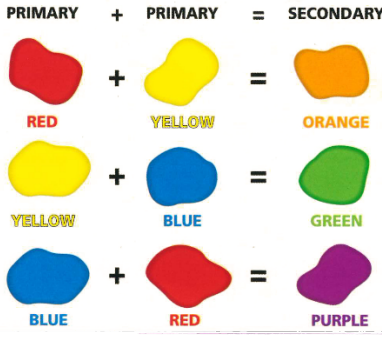
If a colour is surrounded by its complementary colour it will appear stronger and brighter.

PRIMARY COLOURS

There are THREE PRIMARY COLOURS.
These are pure colours which cannot be made by mixing other colours.

SECONDARY COLOURS

Secondary colours are made by mixing each primary colour with one other primary colour.

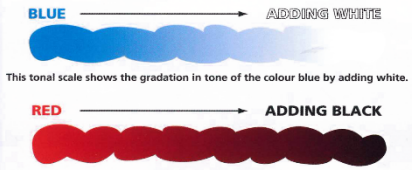


TONE

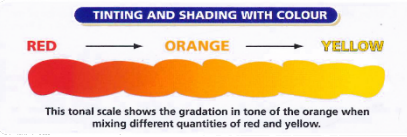
This tonal scale shows the gradation of dark tones, mid tones and light tones.
It shows the passage from black through grey to white.

TINTING AND SHADING

Tinting and shading refer to making a colour lighter by adding white (tinting) or darker by adding black (shading).



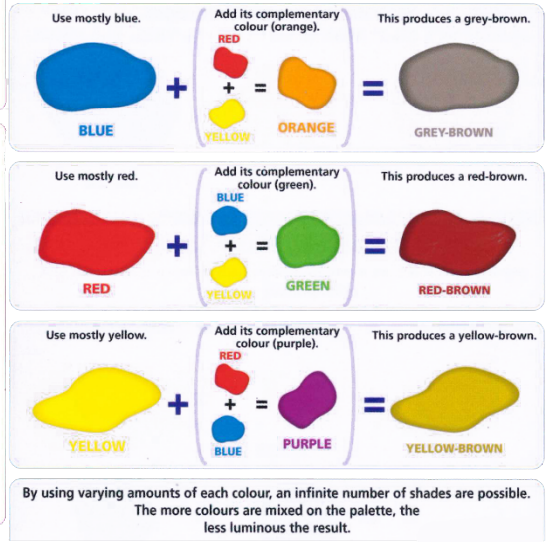
TINTING AND SHADING WITH COLOUR



TERTIARY COLOURS

TERTIARY COLOURS CONTAIN A MIX OF ALL THREE PRIMARY COLOURS. A PRIMARY, MIXED WITH ITS COMPLEMENTARY COLOUR EQUALS A TERTIARY COLOUR

PRIMARY + COMPLEMENTARY = TERTIARY



By using varying amounts of each colour, an infinite number of shades are possible. The more colours are mixed on the palette, the less luminous the result.

WORD REVOLUTION VOCABULARY

MIXED MEDIA	Art made using more than one material or technique.
TEMPLATE	A shape or guide used to help draw or cut something accurately.
MONOPRINT	A one-off print made by pressing paper onto ink or paint.
ILLUSTRATION	A drawing or image that explains or tells a story.
ASYMMETRICAL	A design that is not the same on both sides.
INTRICATE	Very detailed and often complex in design.
GRAPHIC ART	Art that uses bold images, often for posters, comics, or design.
ICONOGRAPHY	The use of symbols or images to represent ideas or themes.
SYMBOLISM	Using objects or images to stand for deeper meanings.
ZENTANGLE	A drawing made of repeated patterns, often relaxing to create.
HATCHING	Drawing closely spaced lines to show tone or texture.

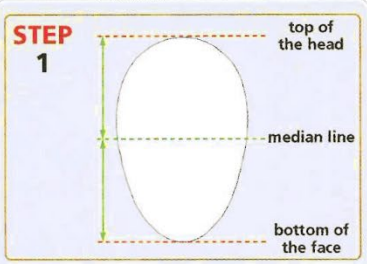
SUBJECT: Art & Design **YEAR:** 9

TOPIC: Formal Elements **SEMESTER:** 1

PORTRAIT

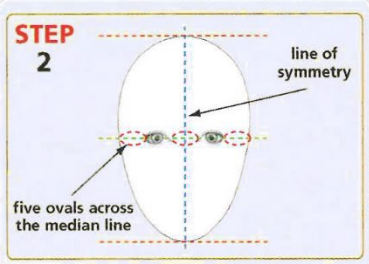
HOW TO DRAW A PORTRAIT - A STEP BY STEP GUIDE

STEP 1



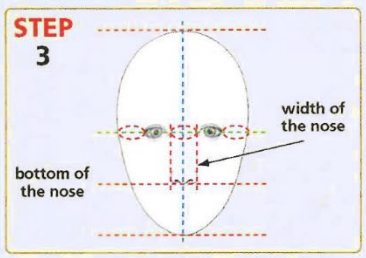
- Draw an egg-shaped oval.
- Split the oval in two halves with a horizontal line (median line).

STEP 2



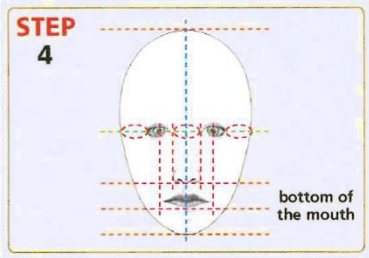
- Draw a vertical line of symmetry.
- Draw 5 ovals across the median line.
- Two of the ovals become the eyes.

STEP 3



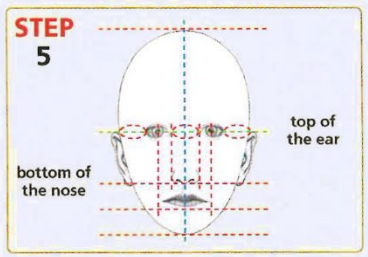
- The nose is the width of the centre oval.
- The base of the nose lies halfway between the median line and the bottom of the face.

STEP 4



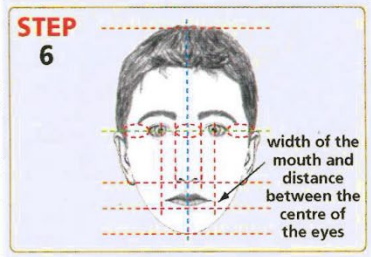
- The mouth lies above a line halfway between the base of the nose and bottom of the face.
- The bottom lip is usually fuller than the top.

STEP 5



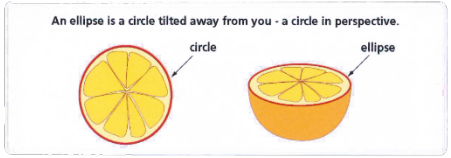
- The ears are bigger than you would imagine.
- They are drawn from the median line to just below the base of the nose line.

STEP 6

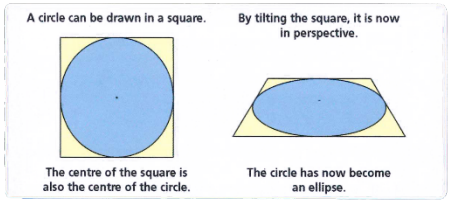


- Add the eyebrows which are thicker in the middle and thinner on the outside of the face.
- Add a hair style of your choice.

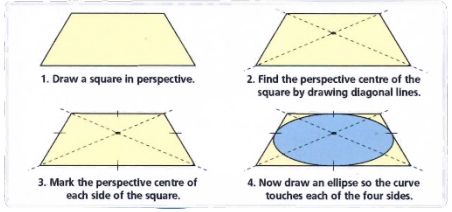
CIRCLES & ELLIPSES



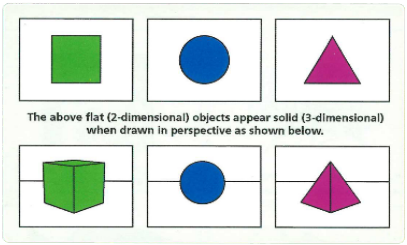
HOW A CIRCLE BECOMES AN ELLIPSE

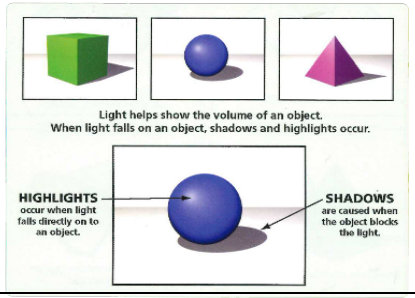


HOW TO DRAW AN ELLIPSE



LIGHT AND SHADE

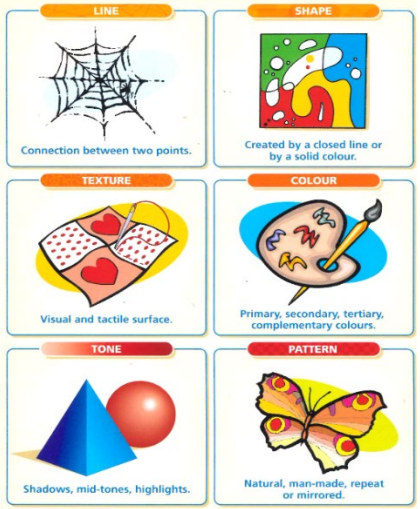


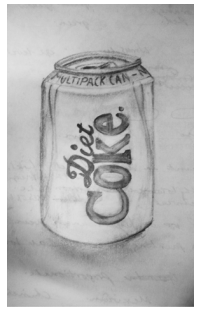


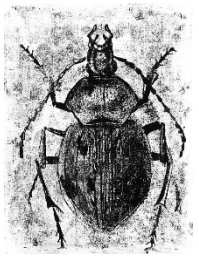
ANALYSING IMAGES

FORMAL ELEMENTS

THE FORMAL ELEMENTS ARE THE BASIC COMPONENTS FROM WHICH TWO-DIMENSIONAL DESIGNS ARE COMPOSED







SUBJECT: Drama

TOPIC: Performance Skills

YEAR: 9

SEMESTER: 1 & 2

WORD REVOLUTION

Characterisation	The way an actor uses voice, body, and emotions to show what a character is like.
Subtext	The hidden meaning behind what a character says or does — what they really feel or think.
Naturalism	A style of acting and performance that tries to look and feel like real life.
Stylised Theatre	Theatre that uses exaggerated movement, voice, or design instead of trying to look real.
Ensemble Work	When a group of actors work closely as a team, with no one person being more important than the others.
Stimulus	Something that inspires an idea for a drama — like a picture, word, sound, or object.
Monologue	A speech by one character, where they talk to themselves or the audience.
Emotional Truth	When an actor shows real, believable feelings that connect with the audience.
Physicality	How an actor uses their body to show a character or emotion.
Devising	Creating your own piece of drama from scratch, often in a group, instead of using a script.

Devising Challenge Task – The Ticking Clock: In a small group, create a short drama scene (2–3 minutes) using the idea of a ticking clock. The clock should represent something deeper, like pressure, fear, or time running out. Your scene should have a clear story, show strong emotions through movement and voice, and include everyone in the group. Try to show the meaning of the clock without using a real one and be ready to explain what your scene is about.

What will I study in this topic?	• **I will develop deeper, more complex characters using emotion and backstory.** • **I will learn to break down scripts and find hidden meanings (subtext).** • **I will explore performance styles like naturalism and stylised theatre.** • **I will work in groups to create original drama based on themes or issues.** • **I will perform comedy scenes and monologues with emotional depth.**
What will I be able to do by the end of this topic?	• **I can perform believable characters with emotion and strong physical choices.** • **I can analyse and perform scripts with clear understanding of subtext.** • **I can switch between acting styles and adapt to different genres.** • **I can collaborate in a group to create and perform original work.** • **I can deliver monologues and comedy scenes with skill and confidence.**

Naturalistic Theatre Performance

- Characters behave and speak like real people in believable, everyday situations.
- Dialogue is natural and realistic.
- Actors create detailed backstories to understand their character's thoughts and emotions.
- Performers react truthfully on stage, even when they aren't speaking.
- Sets, props, and costumes are realistic and match the real world of the play.

Working with a Script

- Read the script carefully to understand what's happening in the scene.
- Think about what each character wants and why they are saying certain lines.
- Look for feelings or thoughts that are *not* said out loud — this is the subtext.
- Use body language, facial expressions, and tone of voice to show hidden emotions.
- Practise the scene with different emotions or intentions to explore what's really going on.

Devising and Using a Stimulus

- Start by discussing what the stimulus makes you think or feel.
- Brainstorm ideas as a group and decide on a clear theme or message.
- Create characters, settings, and scenes based on your chosen idea.
- Use improvisation to try out different moments and develop the story.
- Rehearse, and shape the performance to make it clear and engaging for an audience.

SUBJECT: MUSIC

YEAR: 9

SEMESTER: 1 and 2

WORD REVOLUTION	
The Elements of Music	Dynamics, Rhythm, Pitch, Structure, Metre, Instruments (sonority), Tonality, Texture, Tempo
Leit motif	A short piece of music that is linked to a character e.g. Hedwig's theme.
Underscore	The music in the background that supposrts the on screen action
Pedal Note	A long sustained low note that plays under the rest of the music
Britpop	Britpop was a music startyed in 1990s Britain where bands like Oasis made catchy rock songs that celebrated being British.
Pop song structure	Intro, verse, bridge, chorus, middle 8, instrumental, outro
Mickey-mousing	Where the music is perfectly in sync with the on-screen action.
Extension chord	A chord that uses 4 or more notes e.g. E7, G7
Harmony	Use of chords and accompaniment. Major, minor, dissonance.
Interval	The gap in pitch between two note e.g/ C-G is an interval of a 5th

What will I study this year?	**Performing:** Keyboard, drums, guitar, bass and vocal skills. **Reading Music:** Learn treble and bass clef notes, rhythms and chords **Composing:** Make longer melodies and chord sequences to create emotions **Technology:** Use GarageBand to make, edit and save and export music **Listening:** Identify composing techniques and be able to describe the elements **Context:** Understand music's origins and emotions
What will I be able to do by the end of this year?	**Compose**: Create a descriptive piece of film music on GarageBand. **Understand**: Treble clef notes, rhythms, and time values **Identify Composing Techniques:** Pedal notes, tonality, use of elements **Perform**: Use instruments or voice in time confidently in a variety of contexts

Dynamics

pp	Pianissimo
p	Piano
mp	Mezzo Piano
mf	Mezzo Forte
f	Forte
ff	Fortissimo
	Crescendo
	Diminuendo

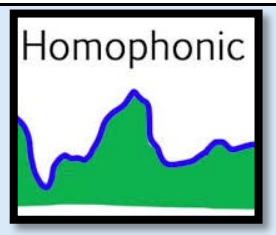
Film Music Overview

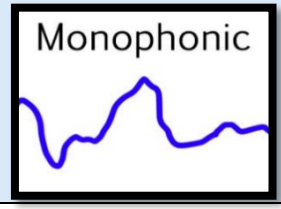
Film Music History 	Film music began in the early 1900s with live piano during silent films and grew into full soundtracks with orchestras, electronic, and digital compositions.
Purpose	It helps tell the story.
Notable Composers	John Williams, Hans Zimmer
Why it Matters	Film music builds tension, enhances emotions, and helps you connect with the story.

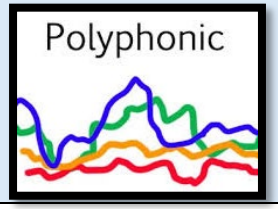
Rhythm

Semibreve	
Minim	
Crotchet	
Quaver	
Semiquaver	

Texture is the way the musical layers are combined. Basic texture can be described as 'thick' or 'thin'

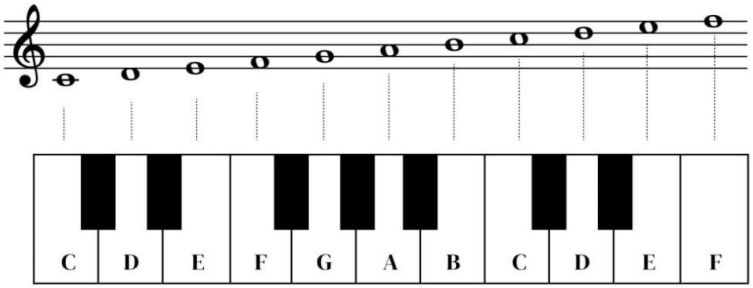




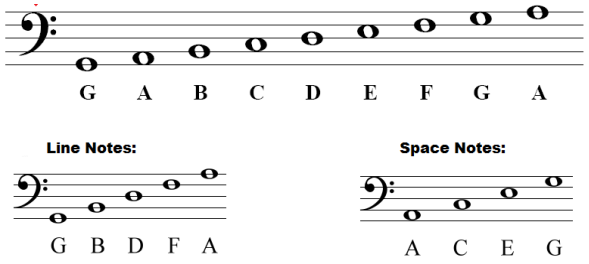


SUBJECT: MUSIC YEAR: 9

Treble clef notes and keyboard



Bass Clef – for instruments like bass guitar, cello, trombone etc.

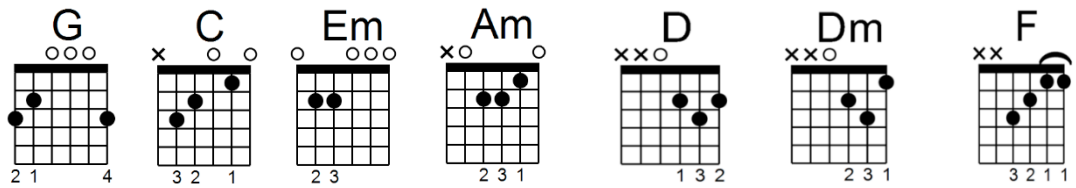


How to work out major and minor chords

Major
4 steps then 3 steps

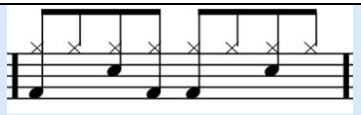
Minor
3 steps then 4 steps

Add 3 steps to either to create a 7th chord (4 notes) e.g. CEGBb

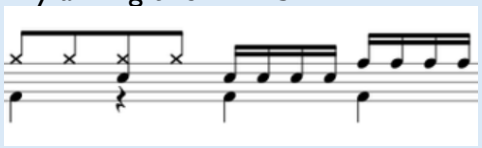


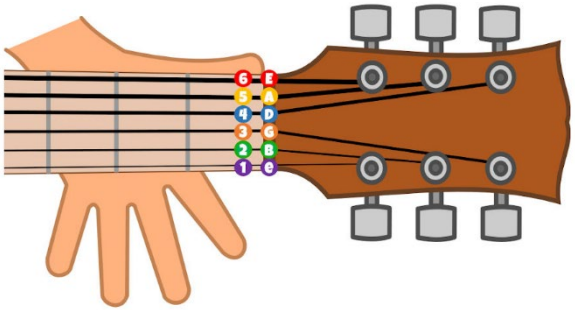
Guitar Chords

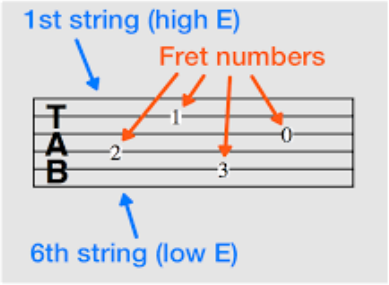
Drumbeat

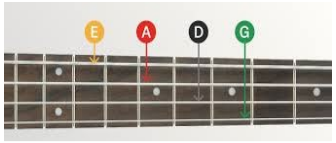


Try adding this fill in b4









Bass Guitar strings

INSTRUMENTS

Strings	Woodwind	Brass	Percussion
Violin	Flute	Trumpet	Xylophone
Viola	Clarinet	French Horn	Glockenspiel
Cello	Oboe	Trombone	Timpani
Double Bass	Bassoon	Tuba	Triangle
Guitar	Saxophone	Cornet	Tambourine
Bass Guitar	Recorder		Drum Kit

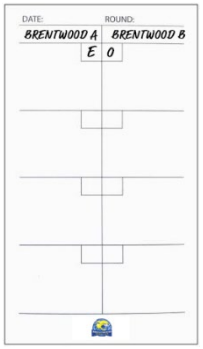
SUBJECT: Physical Education **YEAR: 9**

TOPIC: Winter Sports **SEMESTER: 1**

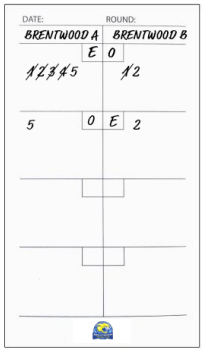
WORD REVOLUTION

Kick Out	*A technique used during somersaults where the body extends at the peak of the jump to control rotation and prepare for landing.*
Cardiovascular Endurance	*The ability of the heart and lungs to supply oxygen to the muscles during sustained physical activity.*
Time Signature	*A musical term used in dance to describe the number of beats in each measure, helping*
Choreography	*The art of designing sequences of movements in which motion, form, or both are specified*
Spin Pass	*A passing technique where the ball is spun through the air, allowing for greater distance and accuracy*
Zonal Marking	*A defensive strategy where players guard specific areas of the court rather than marking individual opponents.*
Penalty pass	*A penalty pass is awarded when a major rule infringement occurs*
hooker	*A central player in the front row of the scrum*
decompression	*the phase when the body extends and straightens after compression (bending)*
Reaction time	*the amount of time it takes for a person to respond to a stimulus.*
Articulating Movements	*Movement of joints in the body. These movements allow for actions such as bending, rotating, or extending limbs during physical activity*

Netball Scoring



1. A coin is tossed to decide who will start the netball game with the **first centre pass**. The team that wins the coin toss and then chooses the first centre pass will start as **EVENS**.
2. An '**E**' for **EVENS** should be written in the box under the team which will take the first centre pass and an '**O**' for **ODD** should be written in the box of the opponent.
3. The Umpire may also ask the Scorer which team has the next centre pass. The Scorer can work this out by adding both the scores together to find out if the total is an **Even** or **Odd** number.
4. In this example, the score is **5-2** and therefore the total comes to **7**, so the team who is currently **ODD** will take the next centre pass.
5. If the quarter **ended mid-play** then the team that were previously on **EVENS** now **changes** to **ODDS** and vice-versa.
6. If the quarter ended on a goal and the following **centre pass has not taken place**, then the **EVENS** and **ODDS stay the same.**
7. **REMEMBER**: - If **IN** play, **CHANGE** the way.



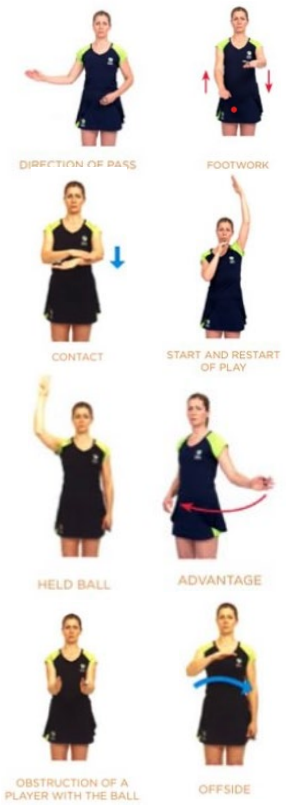
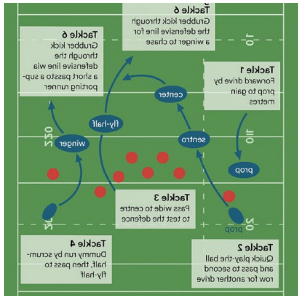
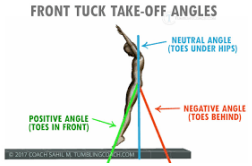
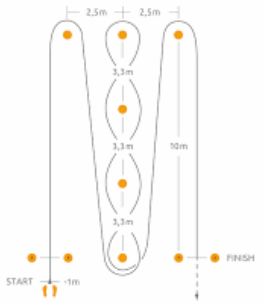
skill	Tariff value
Straight jump	0.0
Tuck jump	0.0
Seat drop	0.0
Half twist	0.1
Full twist	0.2
Back somersault (tucked)	0.5
Front somersault (tucked)	0.5
back somersault with half twist	0.6
Front somersault full twist	0.8

🤸 What Is a Difficulty Tariff in Trampolining?

The **difficulty tariff** (also called **degree of difficulty** or **DD**) is a score that reflects how challenging the skills in a trampoline routine are.

Each skill has a **pre-set value** based on:

- The number of **somersaults**
- The number of **twists**
- The **body shape** used (tuck, pike, straight)

Netball	Football	Rugby	Trampolining	Fitness	Dance
Hand Signals  **Penalty pass** A penalty pass is given to the non-offending team when a major infringement occurs. The offending player must stand out of play, which means: They must stand beside and away from the player taking the penalty. They cannot move or attempt to influence play until the pass is taken.	**Offside explained** They are **closer to the opponent's goal line** than both the ball and the second-last defender **at the moment the ball is played** to them by a teammate, **AND** they are **actively involved in play** (e.g. receiving the ball, interfering with an opponent, or gaining an advantage).  **Scenario**: Your team wins a corner kick. **Set Piece Plan**: The corner taker (Player A) passes the ball short to a nearby teammate (Player B). Player B either: Crosses the ball into the box for attackers to head or shoot. Passes back to Player A who now has a better angle to cross. **Why it's useful**: • It draws defenders out of the penalty area. • It creates better angles for crossing. • It encourages teamwork and communication.	**6 tackle strategy examples**  **Tackle 1** – Forward drive by prop to gain ground. **Tackle 2** – Quick ball to second row for another strong carry. **Tackle 3** – Pass wide to centre to stretch the defence. **Tackle 4** – Scrum-half dummy run, then pass to fly-half. **Tackle 5** – Short pass to supporting runner to keep momentum. **Tackle 6** – Grubber kick behind the line for winger to chase. 🏉 **Wrap-Around Move** **Pass & Loop**: Fly-half (10) passes to centre (12) and loops behind. **Timing**: Centre delays pass slightly to allow the loop. **Centre's Role**: Draw defenders, then return pass to fly-half.	**Compulsory 10-bounce routine** 1. Tuck Jump 2. Pike Jump 3. Straddle Jump 4. Half Twist Jump 5. Seat Drop 6. Half Twist to Seat 7. Half Twist to Feet 8. Back Drop 9. Half Twist to Feet 10. Front Somersault (Tucked) 🤸 **Front Somersault** 1. Take-Off: Jump high with arms up and tight body. 2. Tuck: Bring knees to chest, hold shins, stay compact. 3. Spot Landing: Open out early, look for the bed. 4. Landing: Land on feet, knees bent, arms forward.  	Cardiovascular endurance - 12minute cooper run Muscular strength – handgrip dynamometer Muscular endurance – 1-minute sit-up test Flexibility – sit and reach test Agility – Illinois agility test  Speed – 30m sprint test Power - vertical jump test Balance – standing stork test  Coordination – wall toss test Reaction time – ruler drop test.	**Choreography Techniques by Decade** 1980s: Focus on breaking, popping, and locking. Emphasize isolations, sharp movements, and floor work. 1990s: Introduce hip-hop freestyle, house, and rave styles. Teach groove-based movement and fluid transitions. 2000s: Explore krumping, street jazz, and commercial dance. Highlight expressive, high-energy, and stylized choreography. SCAN ME **Constructive Feedback** Use specific language when giving feedback (e.g., "Your arm isolations in the popping section could be sharper."). Encourage feedback on: Choreographic structure (beginning, middle, end) Use of space and levels Energy and commitment Synchronization in group work

SUBJECT: LANGUAGES: FRENCH — YEAR: 9

TOPIC 1: Ideal holidays — SEMESTER: 1

KEY VOCABULARY

verbs	adjectives
il vaut la peine de... – it's worth	reposant - restful
il vaut mieux... – it's better to	éco-respnsables – eco-friendly
il faut… – you have to	insolite – unusual
on peut… – you can	nouveau - new
faire amis – make friends	**nouns**
se reposer – to rest	un train de grande vitesse- a high speed train
se couper du monde – to switch off from the world	une église – a church
connaitre – to know (people, places)	la cote – the coast
savoir – to know (things)	une ile – an island
faire – to do, to make	une choix – a choice
sortir – to go out (of), escape	des vetements - clothes
se faire plaisier – to treat yourself	des jeux – games
essayer – try	des beaux sites – beautiful places
monter – climb	des copains – friends
prendre - take	**places**
découvrir - discover	à la campagne – countryside
s'amuser – to have fun	là-bas – there
faire une promenade – to take a walk	en avion privé – in a private jet
prendre – take	sur la cote – on the coast
profiter de – to make the most	au coeur de – in the heart of
faire un vol – take a flight	

What will I study in this topic?	☐ 1: Talking about holidays and what you would like to do ☐ 2: Talking about your dream holiday ☐ 3: Discussing what you can see and do on holiday
What will I be able to do by the end of this topic?	✓ Talk about dream holidays 🎤 ✓ Discuss holiday accommodation 🏨 🏄 🏕 ✓ Use the conditional tense 🧠

Grammar: Conditional tense 🧠

✓ **The conditional tense is like saying 'would' in English.**

je **passerais**	I would spend
je **voyagerais**	I would travel
je **logerais**	I would stay
j'**achèterais**	I would buy
j'**irais**	I would go
je **ferais**	I would do / make
je **mangerais**	I would eat

Grammar: Conditional tense 🧠

✓ There are 13 **conditional irregulars**

être	je **serais**	devoir	je **devrais**
avoir	j'**aurais**	venir	je **viendrais**
aller	j'**irais**	envoyer	j'**enverrais**
faire	je **ferais**	recevoir	je **recevrais**
voir	je **verrais**	pouvoir	je **pourrais**
savoir	je **saurais**	vouloir	je **voudrais**
		morir	je **meurrais**

Grammar: relative pronouns 'qui' and 'que'

qui and **que** (who, that, which) refer to a noun that has just been mentioned.

Qui refers to the **subject** of the verb

*Il y a un restaurant **qui** s'appelle Appétit*

Que refers to the **object** of the verb

*Il y a un hotel **que** nous adorons.*

subject or object ?

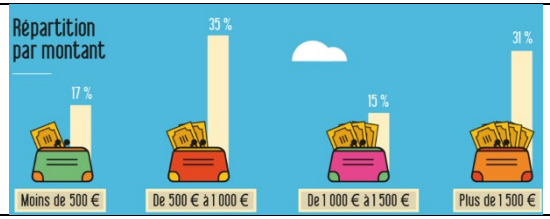
A **verb** is an action word.
The **subject** does the action.
The **object** receives the action.

The hotel is called "Appétit"
(subject)(verb)(object)

We love the hotel
(subject)(verb)(object)

SUBJECT: LANGUAGES: FRENCH — YEAR: 9

TOPIC 1: Ideal holidays — SEMESTER: 1

Key Questions:	**Voudrais-tu voyager?** Would you want to travel? **Pourquoi voudrais-tu voyager?** Why would you want to travel? **Comment seraient tes vacances idéales ?** What would your ideal holidays be like? **Quel type de vacances voudrais-tu ?** What type of holiday do you want? **Qu'est il vaut mieux visiter dans ta régon ?** What are the 'must sees' in your local area? **Qu'est-ce qu'il faut faire en Corse ?** What are the 'must-sees' of Corsica?
Cultural links:	 Where do French holiday-makers stay and how much do they spend ? 

QUESTION WORDS

Qu'est-ce que ? - What? **Qu'est-ce que c'est ?** – What is it ? (What is it that it is?)

Qui	Who	**Où**	Where
Que/Quoi	What	**Quand**	When
À Qui	Whose	**Pourquoi**	Why
À Quoi	What (about/of)	**Comment**	How
Lequel, Laquelle	Which one	**Combien**	How much/How many
Lesquels Lesquelles		**Quel, Quels, Quelle, Quelles**	Which

🧓 🤪 🦏 ❌ 🍽 Curriculum Connections:

☐ **Opinion:** Using conditional tense to talk about idea situations
☐ C
☐ R
☐ **Describing** an ideal holiday
☐ N
☐ F

French in context

Je voudarais voyager pour me faire de nouveaux amis et pour sortir de la routine.
I would like to travel to make friends and to get out of the routine.
J'aimerais mieux des vacances éco-responsables à la montagne. Je voyagerais en train à grande vitesse.
I would prefer eco-friendly holidays in the mountains. I would travel by high-speed train.
À Leeds il y a de nombreux lieux historiques et modernes. Il vaut la peine de visiter le centre.
In Leeds there are several historic and modern places. It's worthwhile visiting the centre.

Formation: Conditional tense 🧠

1. Take the infinitive or irregular stem
2. add the correct ending:

je reposer**ais**	I will rest
tu reposer**ais**	you will rest
il / elle / on reposer**ait**	s/he will rest
nous reposer**ions**	we will rest
vous reposer**iez**	you pl. will rest
ils /elles reposer**iont**	they will rest

SUBJECT: LANGUAGES: FRENCH — YEAR: 9

TOPIC 2: A Memorable Holiday — SEMESTER: 1

KEY VOCABULARY	
verbs	**nouns**
se passer	le défilé – the parade
aimer - to like	la mer – the sea
aller – to go	des plats régionaux – local dishes
couter – to cost	assenseur - lift
danser – to dance	salle de jeux – games room
devoir – to have to	de l'aide - help
demander – to ask for	la fenêtre - window
entendre – to hear	le lit – the bed
enregistrer – to record	la chambre – the room
essayer – to try	la lumière – the light
faire – to do / make	**higher frequency vocab**
feter – to celebrate	il y a – there is / are
manger - to eat	il n'y a pas de – there isn't
marcher – to work / function	il est – it is (il était – it was)
organiser – to organiser	il y avait – there was
pouvoir – to be able to	**negatives**
prendre – to take	ne…aucune
reposer – to rest	ne…ni … ni…
rester – to stay	ne… que
vouloir – to want to	ne… personne
adjectives	**complex expressions**
fermé - closed	il vaut la peine…
propre – clean	it's worth…
sale - dirty	il vaut mieux…
nouveau – new	it's better to…

What will I study in this topic?	☐ 1: Talking about festivals ☐ 2: Reviewing and booking holiday accommodation ☐ 3: Talking about staycation activities
What will I be able to do by the end of this topic?	✓ Talk about a memorable holiday ✓ Learn about festivals in the French-speaking world ✓ Understand how to use the perfect and imperfect tense

Grammar: Imparfait (imperfect tense)

- ✓ The **imperfect tense** is for **description in the past.**
- ✓ We say **what it was like**

j'étais contente	I was happy
c'était extraordinaire	it was extraordinary
il y avait beaucoup de gens	there were lots of people

Grammar: Simple future tense

- ✓ This works exactly as the **conditional tense** but with the following **endings**:

je reposer**ai**	I will rest
tu reposer**as**	you will rest
il / elle / on reposer**a**	s/he will rest
nous reposer**ons**	we will rest
vous reposer**ez**	you pl. will rest
ils /elles reposer**ont**	they will rest

Grammar: passé compose (perfect tense)

The main past tense in French is called the *perfect tense or passé composé.*

avoir (have) + **-é -i** or **-u** (past participle)	
j'**ai joué**	I played
tu **as chanté**	you sang
il/elle /on **a mangé**	s/he/we ate
nous **avons acheté**	we bought
vous **avez visité**	you pl. visited
ils/elles **ont feté**	they celebrated

⚠ The **perfect tense** is used to talk about events that happened in the past:

Je suis allé(e) chez mon oncle.

⏳ One of the uses of the **imperfect tense** is to describe what something was like:

C'était amusant. Il y avait beacoup de gens.

SUBJECT: LANGUAGES: FRENCH — YEAR: 9

TOPIC 2: A Memorable Holiday — SEMESTER: I

Key Questions:	**Tu es allé(e) à quel carnaval / festival ?**	Which carnival / festival did you go to?
	À ton avis, comment était l'hotel ?	In your opinion, how was the hotel?
	Je peux vous aider ?	How can I help you?
	C'est combien pour (deux) nuits ?	How much is it for (two) nights?
	Qu'est-ce qu'on fera en vacances ?	What will we do ?

Cultural links:

1. 

2. 

Les fêtes du monde francophone :

1. **La fête de la mer**, Cameret-sur-Mer
2. **La fête du citron**, Menton
3. **Carnaval**, Martinique
4. **La fête des Goyaviers,** Burkina Faso

3. 

4. 

⚠️ Passé compose (simple past) avoir verbs (everything else) and être verbs (of movement)

In French, verbs of movement **do not** use **avoir** to form the passé compose tense. Instead, they use **être**.

avoir verbs	
j'ai mangé	I ate
j'ai acheté	I bought
j'ai vu	I saw
j'ai bu	I drank
j'ai perdu	I lost

être verbs 🧍✨	
je suis allé(e)	I went
je suis arrivé(e)	I arrived
je suis entré(e)	I entered
je suis rentré(e)	I returned home
on est allé(é)(s)	we went
on est parti(e)(s)	we left

What is a past participle?

The part of the ⚠️ **passé compose** that conveys meaning ('went', 'left', 'melted')

To form it, take an infinitive & add an ending.

-er = é -ir = i -re = u	aller ➜ all- ➜ allé partir ➜ part- ➜ parti fondre ➜ fond- ➜ fondu

Many verbs have irregular past participles:

pouvoir ➜ **pu**, devoir ➜ **dû**, faire ➜ **fait**

could **had to** **did**

French in context

L'année dernière, je suis allé à Cameret-sur-Mer où j'ai vu la Fête de la Mer. C'était manifique.
Last year, I went to Cameret-sur-Mer where I saw the festival of the sea. It was incredible.
J'ai passé deux nuits dans l'hotel. J'aime cet hotel car les chambres sont assez grandes.
I spent two nights in the hotel. I like this hotel as the rooms are quite big.
S'il fait beau, je prendrai mon vélo et je me reposerai dans la forêt avec des amis.
If it is nice weather, I'll take my bike and I'll relax in the woods with my friends.

👴🤪🦏❌🍽 Curriculum Connections:

- ☐ O
- ☐ C
- ☐ **Reference to others: describing my school**
- ☐ **Describing subjects and teachers**
- ☐ N
- ☐ F

SUBJECT: LANGUAGES: FRENCH — YEAR: 9

TOPIC 3: Fashion and shopping — SEMESTER: 1

KEY VOCABULARY

verbs	Nouns
porter – to wear	un haut - a top
je porte – I wear	un pull - a jumper
je portais – I used to wear	un jogging - tracksuit
J'ai porté – I wore	un tee-shirt - t-shirt
je vais porter – I'm going to wear	un maillot de foot - football shirt
je porterai – I will wear	un sweat à capuche- hoody
je porterais – I would wear	un pantalon - trousers
Adjectives	un jean - jeans
grand(e) – big	une robe - a dress
petit(e) - small	une jupe - a skirt
élégant – stylish / elegant	une chemise - a shirt
chic - stylish	des chausseurs - shoes
confortable – comfortable	des bottes - boots
pratique – practical	des baskets - trainers
à la mode – fashionable	**opinions**
démodé - outdated	j'adorais – I loved
moche(s) - ugly	j'aimais - I liked
serré(e) - tight	je préférais – I preferred
ample - baggy	je détestais – I hated
décontracté - relaxed	je n'aimais pas – I didn't like
voyant - flashy	je pensais que – I thought
ajusté - fitted	je trouvais que – I found

What will I study in this topic?	☐ 1: Describing clothes ☐ 2: Balanced opinions of fashion trends ☐ 3: Comparing fashion then and now ☐ 4: Talking about problems with fashion and clothes
What will I be able to do by the end of this topic?	Talk about clothing and fashion Discuss past fashion trends Talk about issues with the fashion industry

Grammar: Adjectival Agreement

- ✓ Most French **adjectives** come after the noun they describe!
- ✓ Adjectives change to match the gender of the noun they describe

j'ai une robe **élégante bleue**
I have a stylish **blue dress**

Grammar: Using conjunctions

- ✓ **Conjunctions** and **connectives** link ideas
- ✓ They make your speaking and writing more fluent and interesting

néanmoins – nevertheless **par conséquent** – therefore **puisque** – since / as	**cependant** – however **en revanche** – on the other hand **toutefois** – however

Grammar: Imparfait (imperfect tense)

- ✓ The **imperfect** tense is used to describe things in the past
- ✓ It is also used to say what things used to be like.

Auparavant on avait le look hippie et on portais un jeans à pattes d'éléphant
Before they had the hippy look and wore flared jeans
(**avait** – description) (**portais** – regular action)

⚠ **Perfect tense** The main past tense in French is called the *perfect tense*

avoir (have) + **-é** (past participle)

j'**ai** tu **as** il/elle/on **a** nous **avons** vous **avez** ils/elles **ont**	**joué** played, **chanté** sung, **mangé** eaten, **acheté** bought, **visité** visited, **feté** celebrated

SUBJECT: LANGUAGES: FRENCH — YEAR: 9

TOPIC 3: Fashion and shopping — SEMESTER: I

Key Questions:	**Qu'est-ce que tu portes le weekend ?** What do you wear at the weekend? **Préfères-tu le look modern ou le look des année quatre-vingts ?** Do you prefer modern style clothes or 80s clothes? **Quels sont les problèmes les plus graves de la mode?** What are the major problems in fashion?
Cultural links :	**la mode à Paris** 🗼

Chanel 👜	Yves Sant-Laurent 👠	Dior 👗
Fondée par **Coco Chanel**	Fondateur : **Yves Saint Laurent**	Créée par **Christian Dior**
Connue pour : le style chic, la petite robe noire, le parfum **Chanel No. 5**	Invention du **smoking pour femmes**, mode élégante et audacieuse	Célèbre pour : **"le New Look"**, la haute couture, les sacs et parfums

Common verbs in the imperfect tense ⏳

avoir (to have) Nous avons → **av-** J'**avais** - I had / I used to have Il **avait** – he had / he used to have	**faire** (to do/make) Nous faisons → **fais-** Je **faisais** I did / I used to do Nous **faisions** we did / we used to do	**aller** (to go) Nous allons → **all-** Tu **allais** you went / you used to go Ils **allaient** – they went / they used to go	**prendre** (to take) Nous prenons → **pren-** Je **prenais** – I took / I used to take Vous **preniez** – you pl. took / you pl. used to take	**finir** (to finish) Nous finissons → **finiss-** Elle **finissait** – she finished / she used to finish nous **finissions** – we finished / we used to finish

French in context

J'aime porter un jean ample et des baskets à la mode.
I like wearing baggy jeans and fashionable trainers.
Neanmoins je n'aimais pas porter les jean quand j'étais plus jeune.
However, I didn't like to wear jeans when I was younger.
Le style des années quatre-vingt-dix est encore populaire parmi mes amis.
The 90s style is popular amongst my friends.

🧓🤪🦏❌🍽 Curriculum Connections:

- ☐ **O**
- ☐ **Comparison** comparing clothes then and now
- ☐ **R**
- ☐ **Description** detailed descriptions
- ☐ N
- ☐ **Figurative** language of clothes

Figurative Language

🧢 **Changer de casquette** – to change hats (to switch roles / responsibilities)

🧥 **Retourner la veste** – to turn your jacket inside out (to change sides or opinions)

🧥 **Prendre une veste** – to take a jacket (to suffer a failure or defeat)

🧤 **Prendre les gants** – to put on gloves (to handle someone carefully)


BENTON PARK