

YEAR 8

Knowledge
ORGANISER

2026 - 27
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, Mrs Kelly, Mr Sykes. If you are unable to speak to any member of staff, please contact: studentsupport@bentonpark.mlt.co.uk



MY YEAR LEADER
Miss Downing

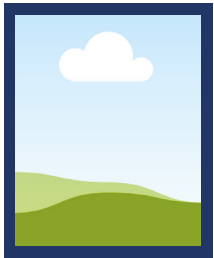


MY KEY STAGE LEADER
Mrs Collins



MY SLT LINK
Mr Bownass

OTHER YEAR LEADERS



Year 7 – Miss Bond



Year 9 – Miss Bannister



Year 10 – Miss Charlton



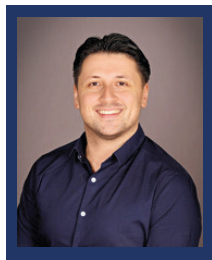
Year 11 – Mrs Sykes



**Designated
Safeguarding Lead /
Assistant Headteacher**
Mrs Howard



**KS3 Safeguarding
Officer**
Miss Fox



**SENCo /
Assistant Headteacher**
Mr Hayes



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

USE THE 'LOG IN WITH MICROSOFT' BUTTON TO ACCESS THESE PLATFORMS.

THESE SYSTEMS USE SINGLE SIGN ON.

NOTE: SPARX MAY REQUIRE TEACHER INPUT FIRST

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

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: 8



TOPIC: Heroes and Villains

SEMESTER: I

WORD REVOLUTION

Myth	a traditional story that explains natural or social phenomena, involving supernatural beings, heroes, and events
Archetype	a symbol, pattern, or character type that appears across different stories and cultures
The Hero's Journey	a story structure where a hero goes on an adventure, faces challenges and returns changed
Symbolism	an object, person, or situation that represents something else
Moral	the lesson or message conveyed through a story
Allegory	a story that has a deeper, moral or political message
Revenge	harm done to someone as a punishment for harm that they have done to someone else
Ambition	a strong desire to achieve something, often involving success, power, or fame
Isolation	a state of being separated from others, either physically or emotionally, leading to feelings of loneliness and detachment
Responsibility	to be held accountable for your actions and their consequences
Monstrous	something that is thought to be both physically and morally abnormal
Pathetic fallacy	where the weather or environment in a story reflects the emotional state of a character or the overall mood of the scene
Stage directions	instructions written in a play's script that guide actors, directors and production designers how to perform, stage, and present the play
Hubris	excessive pride or arrogance, often displayed by a character, that leads to their downfall

What will I study in this topic?

- The characterisation of heroes and villains in myths
- How the play *Frankenstein* uses dramatic techniques for effect
- How to write an essay about the characters in the play *Frankenstein*

What will I be able to do by the end of this topic?

- Compare the presentation of heroes and evaluate the writer's use of language.
- Identify the different character traits of heroes and villains in myths.
- Create a text that has clear characterisation.
- Explore and be able to comment on how the characters of the monster and Victor Frankenstein are presented as both heroic and villainous.

SOCIETY AND ATTITUDES

- **Myths** are among the most ancient human constructions, helping societies make sense of life and the world.
- **Heroes** embody cultural values, often demonstrating courage, kindness, and selflessness.
- **Villains** represent what a society considers unacceptable or undesirable, helping to define the boundaries of acceptable behaviour.

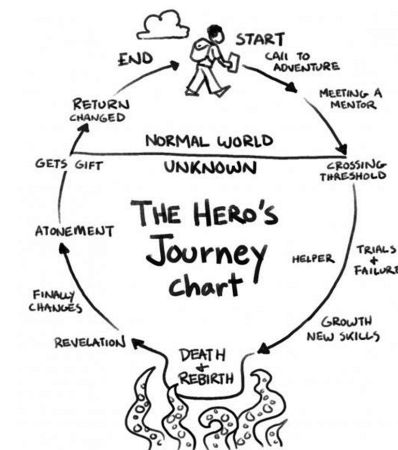
PEOPLE & RELATIONSHIPS

- **Myths** are often about people and relationships, exploring themes of love, betrayal, courage, and conflict. These narratives help us to understand human nature and the complexities of relationships.
- Both the novel and the play *Frankenstein* explore the importance of human connection through different relationships and the destructive nature of isolation.

FORM, STRUCTURE & LANGUAGE

Some key features of myths:

- Symbolism
- Archetypes
- Supernatural
- Moral (the lesson or message of the story)
- The hero's journey
- Characterisation



SUBJECT: English

YEAR: 8

TOPIC: Heroes and Villains

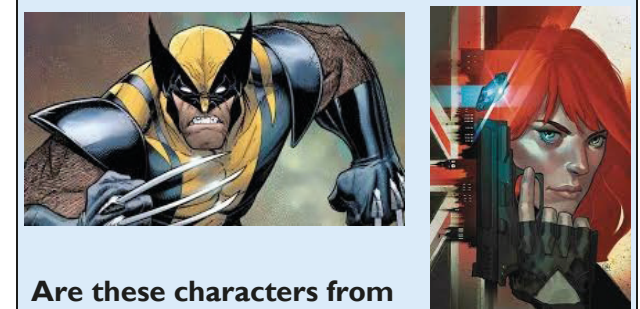
SEMESTER: I



Key Questions:	• What qualities make someone a hero in fiction? • Why do you think myths often have both a hero and a villain? What do these stories teach us about good and evil? • Are villains always purely evil, or do they sometimes have reasons for their actions? • How does Philip Pullman create sympathy for the creature in the play <i>Frankenstein</i>? What techniques are used to make the audience understand him better? • Do you think the play gives a positive or negative view of scientific discovery?
Curriculum Connections:	• Why we tell stories (Y7). Myths and understanding the history of storytelling • An Introduction to the Gothic genre (Y8). • Short Stories (Y9) • <i>Macbeth</i> (Y10) – the character of Macbeth as a tragic hero • <i>An Inspector Calls</i> (Y10), <i>The Strange Case of Dr Jekyll and Mr Hyde</i> (Y11)

TYPES OF HEROES

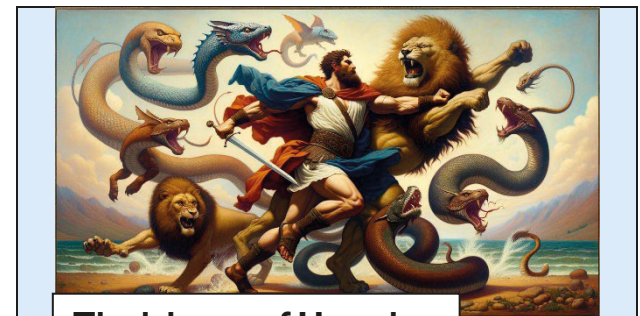
Type of Hero	Definition	Examples	Traits
Classical Hero	A hero with great strength or skill who often comes from noble birth.	Achilles (Greek Mythology), Hercules, Atalanta	Brave and strong Destined for greatness.
Tragic Hero	A hero who is noble but has a fatal flaw (like pride) that leads to their downfall.	Macbeth, Oedipus	Noble but flawed Learns a lesson (too late).
Reluctant Hero	Someone who doesn't want to be a hero but is forced into action.	Frodo Baggins, Katniss Everdeen	Doubtful and modest Discovers inner strength.
Anti-Hero	A central character who lacks traditional heroic qualities (like kindness or honesty) but still does the right thing in the end.	Black Widow, Batman, Snape	Flawed and complex Morally grey



Are these characters from Marvel comics heroes or villains?

EXAMPLES OF GREEK MYTHICAL HEROES

Heracles (Hercules):	Famous for completing the 12 Labours (e.g. killing the Nemean Lion).
Atalanta:	A fierce huntress, took part in the Calydonian Boar Hunt, and raced suitors to avoid marriage.
Theseus:	Defeated the Minotaur in the Labyrinth.
Daphne:	A nymph who was turned into a tree to escape Apollo – a symbol of independence.
Achilles:	Greatest warrior in the Trojan War, had one weak spot – his heel.
Psyche:	A mortal who went through great trials to reunite with her love, Eros (Cupid).
Odysseus:	Known for his long journey home in the Odyssey, using cleverness.
Circe:	A powerful sorceress who lived on an enchanted island. Appears in The Odyssey. Symbol of transformation, knowledge, and feminine power. Known for her speed, archery, and loyalty.



The labours of Heracles

SUBJECT: English

YEAR: 8

TOPIC: Heroes and Villains

SEMESTER: I



FRANKENSTEIN – KEY CONTEXT

The Author of *Frankenstein*

Philip Pullman's play is an **adaptation** of Mary Shelley's gothic novel *Frankenstein*. Mary Shelley wrote the novel in 1816 when she was 18 years old, after a challenge from Lord Byron (a famous poet) to write a ghost story during a summer holiday. The story was inspired by a nightmare she had, as well as by the scientific and philosophical debates of the time.

Scientific discovery

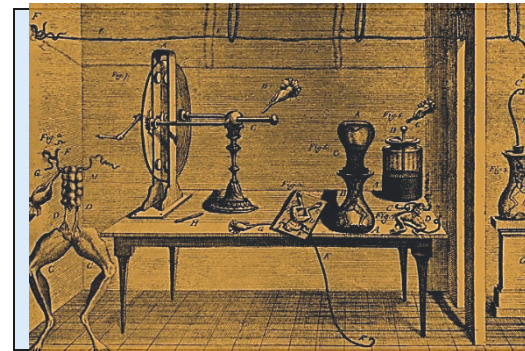
Written in the Victorian Era, at a time when the boundaries of scientific knowledge, geographical discovery and technological change were being challenged, *Frankenstein* looks at the key question of whether humans can have too much knowledge and, therefore, too much power.

Galvanism

The novel draws inspiration from the experiments of Luigi Galvani, an Italian scientist who discovered in 1781 that electricity could make a frog's leg twitch. These experiments sparked public fascination and speculation about the possibility of reanimating dead bodies.

DRAMA & THEATRE- KEY TERMS

Stage Directions	Instructions in the script that describe movement, tone, and setting.
Monologue	A long speech by a character, often revealing inner thoughts.
Dialogue	Exchanges between characters that drive plot and reveal relationships.
Tension	Building suspense and emotional intensity.
Symbolic Props	Objects with deeper meaning (e.g., scientific instruments, the journal).
Lighting	Used to create mood, shift scenes, or focus attention.

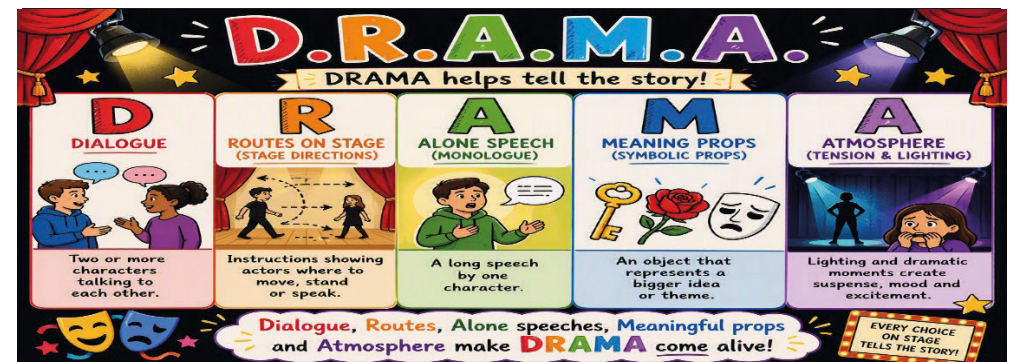


Experimenting in Science

In 1781, Italian scientist **Luigi Galvani** showed that a spark could make the muscles of a dead frog contract. This was an early study of

KEY THEMES IN THE PLAY

Power and Responsibility	What it means to 'play God' and the consequences.
Appearance vs. Reality	Judging by looks, and the deeper truth beneath.
Justice and Injustice	The creature is punished for how he looks, not who he is.
Isolation and Belonging	A powerful emotional thread in the play.
Obsession and ambition	Victor's downfall and the play's dramatic momentum.
Nature vs. Science	Conflicts between natural life and human interference.



SUBJECT: English

YEAR: 8

TOPIC: Heroes and Villains

SEMESTER: I



How will I be assessed?

READING:

Write an essay: Explore how the creature is presented in the play Frankenstein. How is the creature presented as both sympathetic and threatening? Examine how the creature is described through stage directions and dialogue, using evidence to support your points.

WRITING:

Plan and write a modern myth with a hero and a villain. Use descriptive techniques and imaginative vocabulary choices to engage your reader.

KEY TERMS – GRAMMAR

Proper noun:	A word that is the specific name of a person, place or thing. This word is always capitalised.
Adjective:	A word used to describe a noun
Adverb:	A word used to express time, manner or place.
Verb:	A doing or action word.
Abstract noun:	A word that names an emotion, feeling or quality.
Common noun:	A word that describes a class of objects and does not have a capital letter.

EXAMPLES:

Adjectives	Common nouns	Verbs	Adverbs
Fierce Monstrous Beastly Mighty Ferocious Enormous	Creature Fur Maze Snout Horns Mountain	Roaring Grunting Roaming Hunting Devouring	Menacingly Fearlessly Powerfully Savagely Fiercely Wisely

SENTENCE STARTERS FOR ESSAY WRITING

In Philip Pullman's adaptation of Frankenstein, the Creature is presented as both sympathetic and threatening.
One way Pullman presents the Creature as sympathetic is through...
The audience feels sorry for the Creature when...
On the other hand, the Creature appears threatening when...
The stage directions suggest a sense of danger when the Creature...

EVIDENCE AND ANALYSIS SENTENCE STARTERS

This is shown when the Creature says, "..."
This line suggests that the Creature feels...
The use of [emotive language/symbolism/stage direction] here creates the impression that...
The word "... " shows that... This makes the audience feel...
This moment is powerful because it reveals...

Further Reading and Other Resources

Books:

The Song of Achilles by Madeline Miller
Percy Jackson and the Olympians series by Rick Riordan
The Children of Blood and Bone by Tomi Adeyemi
Mythos by Stephen Fry
Heroes by Stephen Fry
This Dark Endeavor and Such Wicked Intent by Kenneth Oppel

Web Resources:

<https://greece.mrdonn.org/myths.html>
<https://www.nationalgeographic.com/podcasts/greeking-out>

Recall Questions

1. Who was the hero who completed 12 labours in Greek mythology?
2. What is a common purpose of myths?
3. Who stole fire from the gods and gave it to humans in Greek mythology?
4. What was Medusa known for?
5. In myths, what is a hero's journey often about?
6. What drives Victor Frankenstein to create the creature?
7. What is the creature's first reaction to the world around him?
8. What are stage directions used for?
9. What is an example of an adverb?
10. Name two types of heroes in literature.

SUBJECT: ENGLISH

YEAR: 8



TOPIC: Gothic Literature

SEMESTER: I

WORD REVOLUTION

Supernatural	Something that cannot be explained by science or nature, like ghosts.
Gloomy	Dark, sad, or depressing.
Menacing	Threatening or scary, like something bad might happen.
Foreboding	A feeling that something bad is going to happen.
Foreshadowing	A hint or clue about something that will happen later in a story.
Isolated	Alone or far away from other people or places.
Sinister	Evil or suggesting something harmful is coming.
Malevolent	Wanting to cause harm or do bad things to others.
Eerie	Strange and scary in a mysterious way.
Repressed	Hidden or kept inside, especially feelings or memories.
Symbolism	Using objects, colours, or actions to represent bigger ideas or meanings.
Gender	The social and cultural identities associated with being male or female.
Mystery	Something that is unknown or hard to explain, often involving a puzzle or secret.
Tension	A feeling of nervousness or suspense, especially when something important or dramatic is about to happen.

What will I study in this topic?

- How settings in a gothic story are used to create a sense of fear or suspense
- Typical features of a gothic characters, settings and storylines.
- Why gothic literature was so popular in Victorian times and how gothic texts reflect fears and concerns of the time.

What will I be able to do by the end of this topic?

- Identify key features of Gothic literature, such as setting, atmosphere and character types.
- Comment on the effect of gothic features on the reader.
- Create an effective piece of descriptive or narrative writing using Gothic conventions (setting, mood, tone).

SOCIETY AND ATTITUDES

Victorian Anxieties

Gothic literature written in the Victorian era often deals with things that Victorians were afraid of.

Religion vs science

The conflict between religious beliefs and new discoveries in science is explored in some gothic texts, such as *Frankenstein*.

FORM, STRUCTURE & LANGUAGE

Some key style features in gothic texts:

- symbolism
- emotive language
- non-linear structures
- tension and suspense
- pathetic fallacy
- multiple narrators

PEOPLE & RELATIONSHIPS

Extreme Emotions

Gothic characters experience emotional extremes such as fear, love, hate, anger and guilt.

Power and Control

Gothic stories often explore power relationships between people where one character seeks to control another and deny them freedom.



Which gothic features can you spot?

SUBJECT: ENGLISH

TOPIC: Gothic Literature

YEAR: 8

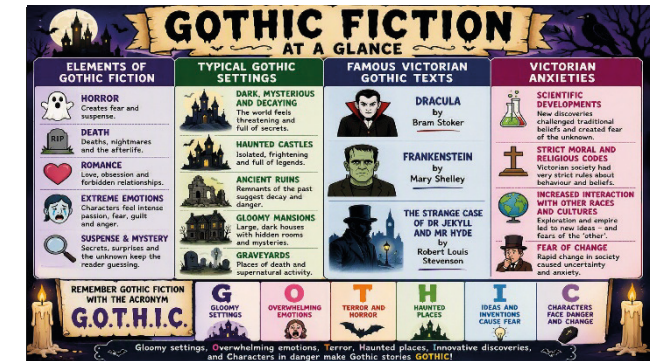
SEMESTER: I



Key Questions:	- How does the setting in a Gothic story create a sense of fear or suspense? - What are some of the typical features of a Gothic character, and how do these features help tell the story or explore important themes? - Why do you think Gothic writers often focus on fear, mystery, and the unknown? What effect does this have on the reader? - How do writers of gothic texts use language to create a mysterious or tense atmosphere?
Curriculum Connections:	- A Christmas Carol (Y7), Victorian ghost story with lots of Gothic features. - Frankenstein (Y8): An Intro to the Gothic. - The Strange Case of Dr. Jekyll and Mr. Hyde (Y11), a classic Gothic story set in Victorian London. - Short Stories (Y9), an exploration of how writers use structure to create horror and tension.

THE GOTHIC GENRE

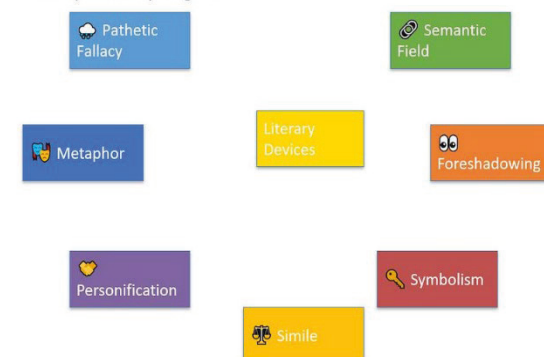
Elements of Gothic Fiction	Gothic Settings	Victorian Gothic Texts	Victorian Anxieties
Horror Death Romance Extreme Emotions	Dark, mysterious and decaying. Haunted castles Ancient ruins Gloomy mansions Graveyards	<i>Dracula</i> by Bram Stoker <i>Frankenstein</i> by Mary Shelley <i>The Strange Case of Dr Jekyll and Mr Hyde</i> by Robert Louis Stevenson	Scientific developments. Strict moral and religious codes. Increased interaction with other races and cultures.



GOTHIC ELEMENTS

Setting:	Often in remote, decaying, or haunted locations—castles, abbeys, crypts, or wild landscapes.
Atmosphere:	Dark, eerie, and suspenseful, with a sense of impending doom or mystery.
Supernatural:	Ghosts, monsters, curses, or unexplained phenomena.
Emotion and Psychology:	Intense emotions like fear, madness, obsession, and passion are central.
Characters:	Often include a sinister villain, a distressed heroine, and a hero with a troubled past.
Themes:	Breaking rules and crossing boundaries, the conflict between reason and emotion, science and discovery, foreign and far-away places.

Literary Devices Spidergram



SUBJECT: English

YEAR: 8

TOPIC: Gothic Literature

SEMESTER: I



GOTHIC SETTINGS

Gothic Settings: *Rebecca* by Daphne du Maurier

The setting of Daphne du Maurier's *Rebecca* is primarily the grand and mysterious **Manderley**, a fictional estate located on the Cornish coast of England. This setting plays a crucial role in establishing the novel's Gothic atmosphere. Manderley is an isolated mansion surrounded by wild, overgrown gardens and shadowy woods.

Gothic Settings: *The Woman in Black* by Susan Hill

The main setting for *The Woman in Black* is **Eel Marsh House**, a lonely, decaying house surrounded by marshland. The house is accessible only by a causeway, which is submerged at high tide, cutting the house off from the mainland. The house is cold, silent, and filled with remnants of the past—perfect for building suspense and a sense of haunting.

COMMON FEATURES OF GOTHIC SETTINGS

Isolation	Isolation – they tend to be remote places that are difficult to get to or difficult to escape from!
Darkness	Gothic settings are usually dark, shadowy places where evil things can hide.
Locked Rooms or Forbidden Places.	These create mystery and intrigue.
Wild or overwhelming natural settings	Mountains, forests, overgrown gardens -places where human beings are not in control or appear insignificant.
Ancient or religious places.	Often with a dark or mysterious history.
Stormy Weather	Often used to intensify a feeling of danger.



EXAMPLE DESCRIPTION OF A GOTHIC SETTING

The **wind howled** through the **skeletal trees** that lined the crumbling path to Blackthorn Hall, their twisted branches **clawing at the sky like desperate hands**. The mansion loomed ahead, its stone façade slick with rain and **cloaked in ivy**, windows like dark, watching eyes. A single lantern flickered in the arched doorway, casting **long, trembling shadows** across the overgrown courtyard. Inside, **the air was thick with dust** and the scent of decay. **Floorboards groaned** underfoot, and the silence was broken only by the **distant, rhythmic, incessant drip** of water echoing through the empty halls. Somewhere deep within the house, a door creaked open on its own.



What is typically gothic about these settings?

SUBJECT: English

YEAR: 8

TOPIC: Gothic Literature

SEMESTER: I



How will I be assessed?

READING:

Write about the way a character is presented in an extract from a gothic text. You need to comment in detail on the writer's use of language and link ideas to your wider knowledge of gothic literature.

WRITING:

Describe a gothic setting, inspired by the gothic literature you have been studying. Your writing will be assessed for your use of TVCOPS.

LANGUAGE FEATURES USED IN GOTHIC TEXTS

Pathetic Fallacy	The weather and season can be described with human emotions to reflect the mood of a character or create a particular tone.
Personification	Giving human traits to non-human things or abstract ideas. <i>Personifying objects in gothic settings can make them more sinister.</i>
Imagery	Descriptive language appealing to the senses to create mental pictures. <i>Imagery is very important when describing setting and characters.</i>
Juxtaposition	Placing two contrasting ideas or characters close together to highlight differences. <i>Gothic texts are full of juxtapositions eg light & dark, good & evil.</i>
Semantic Field	A related set of words, grouped by meaning that refer to a specific subject. <i>Gothic texts often employ a semantic field of darkness or evil.</i>
Simile	A comparison using "like" or "as." <i>Similes are a great way to build imagery.</i>
Symbol	A concrete object representing an abstract idea. <i>Symbolism is often used in gothic texts to reinforce key ideas.</i>

Introducing ideas: Analysing a Gothic Text

One of the main ideas the writer explores in the extract is...
A key idea in this extract is...
The writer presents _____ in the extract as...
One of the most significant aspects of _____'s character in the extract is...
The depiction of _____ in this extract is typical of the gothic genre because...

Phrases you can use to analyse and explore texts

This means ... This shows ... This illustrates ... This depicts ...
This conveys ... This creates...
A possible interpretation is... We could infer that ... This implies ...
This has connotations of ... This suggests ... This possibly ... Perhaps ...
One interpretation is ... This could be viewed as ... The writer could be

Further Reading and Other Resources

Here some modern gothic stories you might like:

Between the Devil and the Deep Blue Sea by April Genevieve Tucholke

The Twilight Series by Stephanie Meyer

Forbidden by Eve Bunting

Beware the Wild by Natalie Parker

White Crow by Marcus Sedgewick

The Dead of Winter by Chris Priestley

The Dark Between by Sonia Gensler

Recall Questions

1. What are some of the distinguishing features of the gothic genre?
2. What makes an effective gothic setting?
3. What are the characteristics of a typical gothic monster?
4. What fears in Victorian society are often explored in gothic texts?
5. What are some of the common descriptive techniques used in gothic texts?
6. What concerns in Victorian society were often explored in gothic stories?
7. What kind of juxtapositions might you find in a Gothic text?
8. What extreme emotions might characters experience in Gothic texts?

SUBJECT: ENGLISH

YEAR: 8

TOPIC: GOTHIC LITERATURE

SEMESTER: I



GOthic MONSTERS

A Gothic monster is a central figure in Gothic literature. These monsters are not just terrifying creatures—they often represent deeper ideas about **society and human nature**. Here are some common characteristics:

Supernatural or uncanny elements	While not always supernatural, Gothic monsters often evoke the uncanny—something familiar yet disturbingly strange. Their presence disrupts the natural order and evokes fear.
Physical grotesqueness	Many Gothic monsters are physically deformed or grotesque, reflecting their inner monstrosity or the horror they inspire.
Moral complexity	They are rarely purely evil and may evoke sympathy. Their monstrosity often comes from human actions—neglect, ambition, or cruelty.
Isolation and alienation	- They are frequently outcasts, either physically or emotionally isolated from society.
Ambiguity and duality	Gothic monsters often blur the line between human and non-human, good and evil, natural and supernatural.
Transgression of boundaries	They often violate natural, moral, or societal laws—such as life and death, sanity and madness, or science and religion.

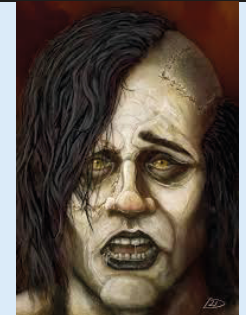
MONSTERS AND SOCIETY

Gothic Monsters	Often reflect fears or concerns in society, such as fear of the unknown, the foreign, or the consequences of excessive ambition. They can also reflect anxieties about gender, sexuality, race, or class.
Frankenstein's Monster	Reflects Victorian fears about scientific developments and scientists 'playing God' by interfering with nature. The monster is also a product of Victor Frankenstein's ambition, which leads him to go against God by creating life.

Count Dracula



Frankenstein's monster



Examples of Gothic Monsters

Count Dracula	A fictional character from Bram Stoker's novel <i>Dracula</i> . He is a centuries-old Transylvanian nobleman who is also a vampire. He lives in a castle in the Carpathian Mountains and travels to England to find new victims and spread his undead curse.
Bertha Mason	A character from <i>Jane Eyre</i> by Charlotte Brontë. Bertha is the first wife of Mr Rochester who suffers a mental illness which makes her behave in a violent and unpredictable way. Mr Rochester keeps her hidden in the attic of Thornfield House.

Bertha Mason





WORD REVOLUTION

Percentage	Per-cent means "out of one hundred". A percentage is part of an amount
Increase	To raise the value of something by a given percentage
Decrease	To reduce the value of something by a given percentage
Multiplier	The value you multiply something by to find a percent, increase or decrease.
Better Buys	Determining which is the best value for money from given offers.

Better Buys

Is it cheaper to buy 12 plants from shop A or shop B?

In shop A you would have to buy 3 of these offers.

$$3 \times £9.80 = £29.40$$

In shop B you need to find out how much plants are each. So, decrease £3.80 by 20%. This is $£3.80 \times 0.8 = £3.04$ (using the multiplier). So, 12 plants cost $12 \times £3.04 = £36.48$. It is therefore cheaper (and so better value) to buy them from A.

Which offer below is the best value?

Two packs of toilet rolls are available in the supermarket

9 toilet rolls for £3.15

4 toilet rolls for £1.36

Here you would need to find out how much each roll is in each offer. $£3.15 \div 9 = £0.35$ and $£1.36 \div 4 = £0.34$.

The toilet rolls in the 4 pack are cheaper per roll.

What will I study in this topic?

You will learn how to find percentages of amounts and how to increase and decrease values by a given percentage. You will learn how to tell which offer gives the best value for money.

What will I be able to do by the end of this topic?

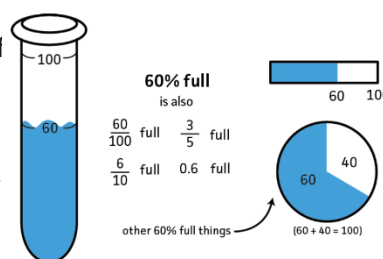
- Calculate a given percentage of an amount (with and without a calculator)
- Increase and Decrease values by a given percentage using a multiplier
- Compare two or more offers from a shop to determine which offers the best value for money.

What are Percentages?

Percentages represent part of an amount, split into 100 parts.

50% = a half
25% = a quarter
10% = a tenth

If you get 60% in a test, you have achieved just over half marks



Finding a Percentage

For example, if you need to find 27% of £360:

$$10\% = £36 \text{ so } 20\% = £72$$

$$1\% = £3.60 \text{ so } 7\% = 7 \times £3.60 = £25.20$$

$$\text{Hence } 27\% \text{ of } £360 = 72 + £25.20 = £97.20$$

Find 27% of £360

Alternatively with a calculator, you can multiply the value by the decimal equivalent of the percentage (known as the multiplier) $£360 \times 0.27 = £97.20$

Increasing by a Percentage

To increase a value by a percentage, you can find the percentage, and then add it on. So using the above example, to increase £360 by 27%, add the £97.20 onto £360 = **£457.20**

Increase £360 by 27%

When using a calculator, you can simply multiply by the multiplier (add the decimal equivalent to one)

$$£360 \times 1.27 = £457.20$$

Decreasing by a Percentage

To decrease a value by a percentage, you can find the percentage, and then subtract it. So using the above example, to decrease £360 by 27%, subtract £97.20 from £360 = **£262.80**

Decrease £360 by 27%

When using a calculator, you can simply multiply by the multiplier (subtract the decimal equivalent from one)

$$£360 \times 0.73 = £262.80$$



WORD REVOLUTION

Index (Indices)	This is the name given to the power. Eg in 2^5 , 5 is the index number
Expression	Something written with unknowns but without an equals sign eg, $2x + 5$
Equation	Written with an equals sign that must be solved to find x. Eg $2x + 5 = 10$
Sequence	A list of numbers that follow a certain rule. Eg, 3, 5, 7, 9, 11...
Term	Each value in a sequence is called a term. In the sequence below, the 3 rd term is 14

Sequences

An "Arithmetic Sequence" is a list of numbers where you add the same value each time to arrive at the next term. In the example below, the "term-to-term" rule is "start at 6 and add 4 each time". This is ok if you know any term and want to know the next. But what if you wanted to find the 100th term?

6, 10, 14, 18, 22 The sequence increases by 4, so the nth term starts with 4n

+4 +4 +4 +4

Now compare the sequence to the 4 times table

6, 10, 14, 18, 22 Each term is 2 bigger than the 4 times table

+2 +2 +2 +2 +2

4, 8, 12, 16, 20 So the nth term is $4n + 2$

What will I study in this topic?

You will learn how to simplify expressions that involve powers, and how to simplify an algebraic fraction. You will also learn how to construct and solve more complex equations. Finally, you will look at how to find term-to-term and position-to-term rules for sequences.

What will I be able to do by the end of this topic?

- Simplify expressions involving powers by using the rules of indices
- Form an equation from some given information and solve the equations where the unknown appears in a variety of places
- Be able to find the nth term for an arithmetic sequence

Rules of Indices

The rules on the right show us how to simplify expressions that involve indices (powers).

Rule

$$a^x \times a^y = a^{x+y}$$

$$a^x \div a^y = a^{x-y}$$

$$(a^x)^y = a^{xy}$$

Eg $3^7 \times 3^4 = 3^{11}$
 $9^8 \div 9^3 = 9^5$
 $(5^3)^7 = 5^{21}$

Solving equations

Following on from work completed in year 7, you will now solve more complex equations.

$$\text{Solve } \frac{x-4}{3} = 5$$

Multiply both sides of the equation by 3 to give:

$$x - 4 = 15$$

Then add 4 to both sides to finish with **$x = 19$**

Solving Equations with x's on both sides

$$3x + 4 = x + 12$$



Solving Equations with x's on both sides

Sometimes it helps to picture an equation as a set of balancing scales, like the one on the left.

If you remove an "x box" from both sides it will remain balanced, and you will now have the equation:

$$2x + 4 = 12$$

You can then solve this like you have other equations, so **$x = 4$**

SUBJECT: Maths

YEAR: 8



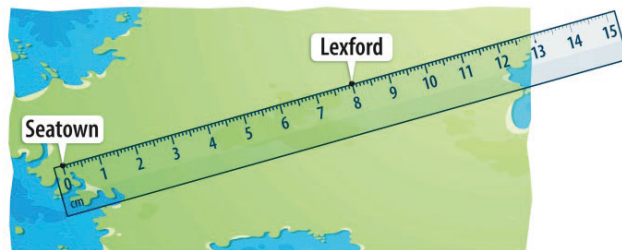
TOPIC: Ratio & Proportion I

SEMESTER: I

WORD REVOLUTION

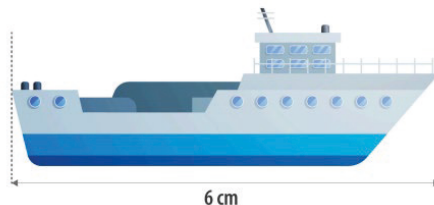
Ratio	A proportional relationship between two or more amounts
Simplify	The process of making something simpler, here you make the numbers in a ratio smaller.
Convert	Change one thing into another. Here, change ratios to fractions or percentages
Scale Diagram	A smaller version of a real-diagram such as a map

Scale Drawings



A scale drawing is a smaller version of the real-life item. A map is a good example. If here the scale is 1cm represents 20km, then the real distance shown is $8 \times 20 = 160 \text{ km}$

Scale 1 : 2000



A scale could also be given as a ratio. So here a ratio of 1:2000 means everything is 2000 times bigger in real life. The ship has a length of $2000 \times 6 = 12000\text{cm} = 120\text{m}$

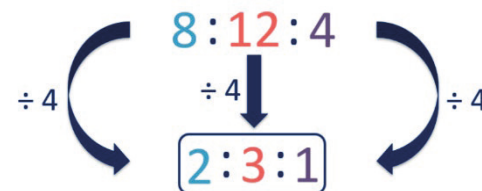
What will I study in this topic?

You will learn what a ratio means, how to simplify it and write it in the form $I:n$. You will be able to convert between ratios, fractions and percentages and share values in a given ratio. You will also be able to draw and interpret scale diagrams.

What will I be able to do by the end of this topic?

- Recognise a ratio as two or more numbers separated by a colon
- Simplify ratios, by making the numbers smaller
- Convert a ratio to a percentage or fraction and vice-versa
- Share a given value in a ratio
- Read information from a scale diagram

Simplifying Ratios



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

Converting Ratios

WHAT FRACTION ARE APPLES?



To convert a ratio to a fraction, consider the proportion that you are interested in out of the whole amount. Here the apples and blueberries are in the ratio 3:5 so $\frac{3}{8}$ are apples.

Using Ratios

The ratio of T-shirts to jumpers in a shop is 9 : 5
There are 72 T-shirts.
How many jumpers are there?

Write the ratio with the known value underneath the correct part. Since we are multiplying 9 by 8 to make 72, do the same to 5
There are $5 \times 8 = 40$ jumpers.

$$\begin{array}{rcl} 9 & : & 5 \\ \times 8 & & \times 8 \\ \hline 72 & : & \end{array}$$

Sharing in a given ratio

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

You can use a bar-model to help you share



Bob's share

Betty's share

$$\frac{3}{5} \text{ of } £20 = £12$$

$$\frac{2}{5} \text{ of } £20 = £8$$

SUBJECT: Maths

YEAR: 8



TOPIC: Number 2

SEMESTER: I

WORD REVOLUTION

Rounding	The process of simplifying a number to a nearby, more convenient value.
Significant Figures	The first significant figure in a number is the first non-zero digit.
Coordinates	Two values placed together in brackets, locating a point on axes.
Midpoint	The number lying exactly half-way between two values.
Standard Form	An abbreviated way of writing a very large or very small number.

Values in Standard Form

Ordinary Form	Standard Form
34000	3.4×10^4
2195000000	2.195×10^9
0.0096	9.6×10^{-3}
0.000001208	1.208×10^{-6}

A very large or very small number can be abbreviated (to save us writing lots of unnecessary digits) to something called standard form. This is when the value is written as a number between 1 and 10, multiplied by a power of 10.

As you can see in the table above, the first two are large numbers and include a positive power of ten, then the next two are small numbers and have a negative power of ten. Multiply by 10^{-5} is the same as dividing by 10^5 .

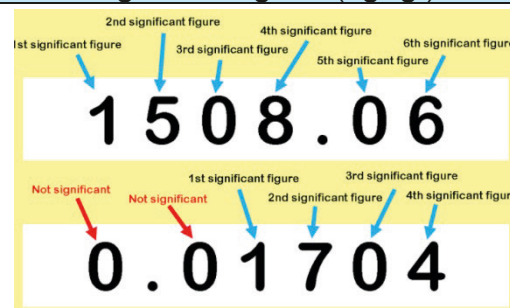
What will I study in this topic?

You will learn how to round values to a given number of significant figures. You will learn how to find the mid-point between two co-ordinates. You will also learn what standard form is, and how to convert numbers between ordinary and standard form.

What will I be able to do by the end of this topic?

- Round a number to a given number of significant figures
- Find the mid-point between two coordinates
- Recognise a number written in standard form as an abbreviation of either a very large or very small number
- Convert numbers between ordinary and standard form
- Use numbers written in standard form

Significant Figures (sig figs)



Rounding to a given number of sig figs

When rounding to any number of significant figures, first find which column that digit is in. If it is in the hundreds, round to the nearest hundred, if it is in the third decimal place (thousandths) round to 3 decimal places. Eg round to 2 sig fig:

3429
The 2nd sig fig is in the hundreds, so this rounds to 3400

0.002681
The 2nd sig fig is in the 4th decimal place so this rounds to 0.0027

Estimating by first rounding

Estimate $\frac{75.21}{4.891}$

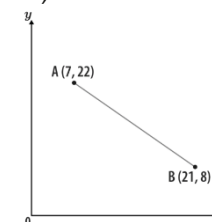
We can estimate the value of a calculation by making the numbers easier to work with. So, we round them to 1 significant figure. Here we would round 75.21 to 80 and 4.891 to 5. Then $80 \div 5 = 16$ is a good estimate to the actual answer.

Finding the mid-point

To find the mid-point between two values, add the values together and half the result. So, the midpoint of 18 and 37 is $(18+37) \div 2 = 27.5$

The same can be applied to Coordinates. Find the mid-point of x-ordinates and y-ordinates separately. So here the midpoint is

(14,15)





WORD REVOLUTION

Area	The amount of space inside a 2D shape found by counting the squares inside it
Parallelogram	A quadrilateral where opposite sides are parallel to one another
Trapezium	A quadrilateral with just one pair of parallel sides
Circumference	The name given to the perimeter of a circle
Radius	The distance from the centre to the circumference of a circle
Diameter	The distance across a circle through its centre. Diameter = 2 x Radius
Π (pi)	A Greek letter that represents the ratio of a circle's diameter to its circumference

What will I study in this topic?

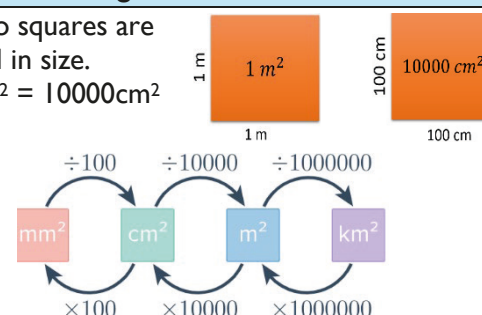
You will learn how to calculate the area of parallelograms and trapezia (plural of trapezium). You will learn how to convert between units of area. You will learn how to recognise the radius and diameter of a circle and find the circles area and circumference.

What will I be able to do by the end of this topic?

- Find the area of a parallelogram
- Find the area of a trapezium
- Convert between units of area (e.g. cm^2 into m^2)
- Know the relationship between a radius and diameter
- Be able to recognise the value of pi (π) and know its uses
- Find the area and circumference of a circle

Converting between units of area

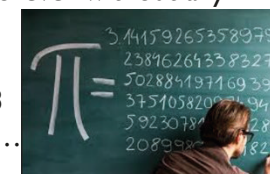
The two squares are equal in size.
So $1\text{m}^2 = 10000\text{cm}^2$



Π (pi)

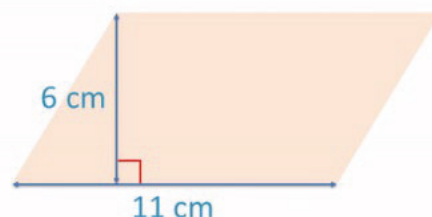
Π is a Greek letter that represents a very important number in mathematics relating to circles. It is an irrational number, which means its decimal values continue forever without any repeats.

$\Pi = 3.141592653589793238662643383279502\dots$

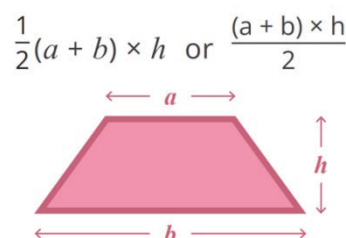


AREA

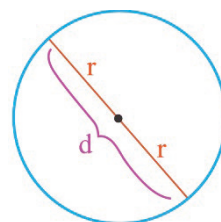
A parallelogram has two pairs of parallel sides like the one shown here.
The formula for area of a parallelogram is:
Base x Perpendicular Height
So here the area is 66cm^2



A trapezium has one set of parallel sides, like the shape here (a and b are parallel).
To calculate the area, add together the parallel sides, multiply by the perpendicular distance between them, and divide by 2.



Circumference of a Circle



$$C = 2\pi r$$

or

$$C = \pi d$$

To find the circumference of a circle, you multiply the diameter by π . Another formula is $2\pi r$, since the diameter is twice the radius.

Area of a Circle

The area is found using the formula:

$$A = \pi r^2$$



$$A = \pi r^2$$

In the example of the right, the radius is 7mm. Ensure that you square the 7 before multiplying by π .

$$A = \pi (7)^2$$

$$A = \pi \times 49$$

$$A = 49\pi$$

$$A = 153.9\text{mm}^2$$

SUBJECT: Science

YEAR: 8

TOPIC: Aspiring Scientist + Cell Biology

SEMESTER: I



WORD REVOLUTION

Hazard	What is dangerous about the apparatus or method used
Independent variable	What you change in the experiment
Dependent variable	What you measure in the experiment
Control variable	What you keep the same in the experiment
Mass	Measured in grams – this tells you how much of something you have
Volume	Measured in cm ³ or ml – this is the amount of liquid you have
Risk assessment	This identifies hazards, risks and how to control them
Observations	What you can see or sense is happening
Cell membrane	Allows certain substances to enter and leave the cell
Chloroplast	Where photosynthesis happens in cells
Photosynthesis	The process of plants making their own food
Mitochondria	Where respiration occurs in cells, which releases energy
Ribosomes	Where proteins are made in cells
Diffusion	The movement of particles from high to low concentration

What will I study in this topic?

Develop your working scientifically skills by identifying hazards and creating risk assessments.

The difference between animal, plant and bacteria cells and how particles move in and out of cells.

What will I be able to do by the end of this topic?

By the end of this unit, you will be able to:

- Create your own risk assessments for different experiments
- Understand the difference between a hazard and a risk
- Give examples where diffusion takes place in animals, plants and bacteria
- Describe the functions of organelles
- Describe similarities and differences between animal, plant and bacteria cells

What goes into a risk assessment:

Hazard: Anything that can cause harm (e.g., chemicals, heat, sharp objects).

Risk: The chance, high or low, that someone could be harmed by a hazard.

Control Measures: Actions taken to reduce the risk of harm, such as using safety equipment or modifying procedures.

Common lab hazards:



Flammable - Sets on fire easily.



Corrosive - Destroys living tissue such as skin and eyes.

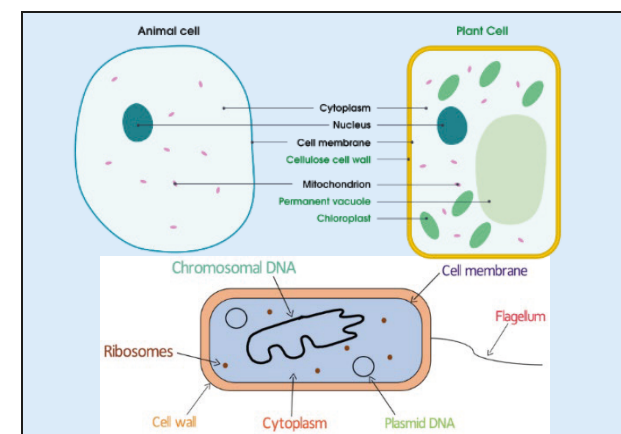


Moderate Hazard – Chemicals may be an irritant or harmful

Bacterial cells: How are they different?

Animals and plants are made up of lots of cells. They are **multicellular** organisms. Bacterial cells are **unicellular** organisms. They are made up of only one cell.

Bacterial cells are **smaller** than animal and plant cells and they have **no nucleus**. Instead, they have **plasmids**- rings of DNA. They have a **cell wall** like a plant cell and sometimes have a **flagella**- a tail-like structure that helps them to move.



SUBJECT: Science

YEAR: 8

TOPIC: Aspiring Scientist + Cell Biology

SEMESTER: I



Key Questions:	How is a plant, animal and bacteria cell similar and how are they different? What is the difference between a hazard and a risk? What diffuses in and out of cells?	
Curriculum Connections:	Previous (Yr 7): - Identifying variables - Graph skills - Forming conclusions - Differences between animal and plant cells - Functions of organelles	Future: - Evaluation skills - Osmosis and active transport - Abiotic and Biotic factors - Estimating population density

Diffusion of particles in cells:

Cell Membrane:

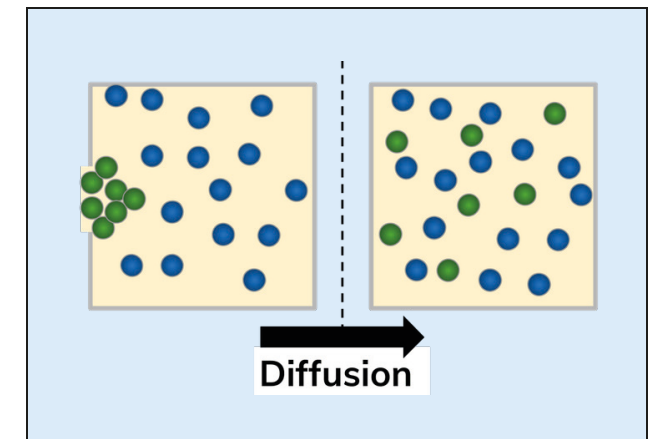
The cell membrane acts as a barrier, but it's partially permeable, meaning some substances can pass through while others can't.

Substances Moving Into Cells:

Cells need things like oxygen and glucose for respiration. These substances diffuse into the cell from areas where they are more concentrated (like the blood) to the cell where they are less concentrated.

Substances Moving Out of Cells:

Cells produce waste products like carbon dioxide, which need to be removed. These diffuse out of the cell into areas where they are less concentrated (like the blood).



Which graph to draw:

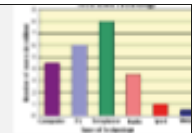
When to use a bar chart:

Categorical data represents information that can be sorted into distinct categories or groups, often using words or labels. The number of people with different coloured eyes in class would be an example of this. The colours (blue, brown) are words and how many have that colour are numbers (3=blue, 14=brown)

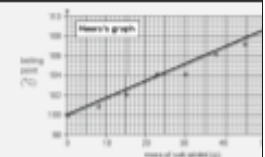
When to use a line graph:

Continuous data represents measurements that can take any value within a range. This is when your results are both numbers (volume of gas in cm³ made every 10 seconds).

Use if your **independent variable** is **categorical**.



Use if your **independent variable** is **continuous**.



SUBJECT: Science

YEAR: 8

TOPIC: Chemical Reactions + Organisation

SEMESTER: I



WORD REVOLUTION

Reactants	The substances that are present at the beginning of the reaction
Products	The substances that are formed after the reactants have reacted
Irreversible	A change that you can't change back
Conservation of mass	No atoms are lost or made in a chemical reaction so the mass of a reaction stays the same
Chemical change	An irreversible change where new substances are made
Physical change	A reversible change where a change in state occurs
Alveoli	Tiny air sacs found at the end of bronchioles in your lungs
Excretion	The process where organisms get rid of waste products and substances
Carbohydrase	The enzyme that breaks down carbohydrates
Lipase	The enzyme that breaks down lipids (fats)
Protease	The enzyme that breaks down protein
Enzymes	A biological catalyst (used to speed up a reaction)
Soluble	A substance that can dissolve in a solvent

What will I study in this topic?

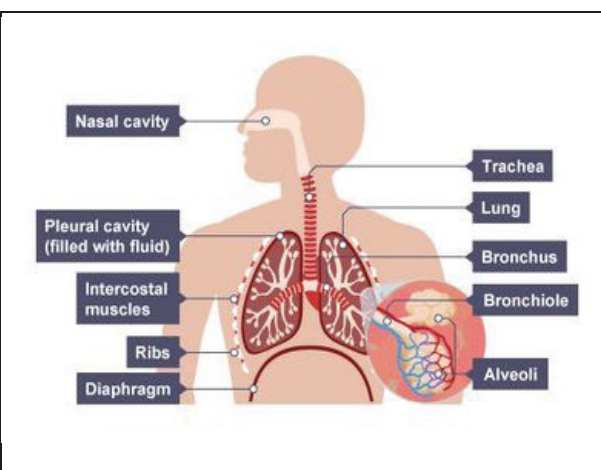
Identify chemical and physical changes.
State and apply the conservation of mass.
The digestive system and how nutrients are broken down so the body can absorb them.
The function of nutrients in making a balanced diet.

What will I be able to do by the end of this topic?

Separate changes into chemical and physical changes based on observations.
Calculate the mass of an unknown reactant or product.
Label the digestive system and explain how food is digested.
Explain what nutrients are in different food types and why they are needed in a healthy balanced diet.
Label the respiratory system and describe the process of breathing
Explain how the lungs are adapted to allow for gas exchange

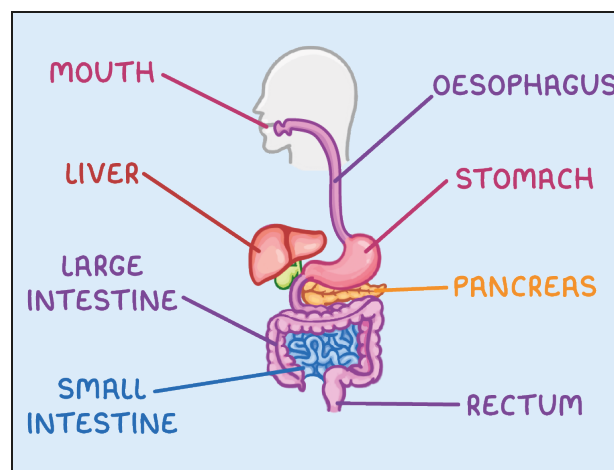
Respiratory system:

This is the body system that is responsible for bringing oxygen into the body and removing carbon dioxide. This is the process of breathing, inhaling (breathing in) and exhaling (breathing out).



Digestive system:

This is a group of organs working together to break down food into smaller molecules that the body can use for energy, growth, and tissue repair.



SUBJECT: Science

YEAR: 8

TOPIC: Chemical Reactions + Organisation

SEMESTER: I



Key Questions:	What is the difference between a chemical and physical change? How does digestion work? Why is that nutrient important? How are the lungs adapted to allow for gas exchange?	
Curriculum Connections:	Previous (Yr 7): - Hierarchy in the body - Forming conclusions - Functions of organelles Previous (Yr 8): - Diffusion	Future: - Food testing - Quantitative Chemistry - Reactions of acids with metals and compounds - Chemical formulae

Physical Change:	Chemical Change:
Examples: - Changes in state (melting, freezing, boiling, condensing). - Dissolving. - Changes in shape or size. Key Characteristics: Often reversible, no new substance formed, mass is conserved. Visual: A physical change might alter the appearance, like turning ice into water, but the water is still H ₂ O	Examples: - Burning wood. - Rusting of iron. - Cooking an egg. Key Characteristics: Often irreversible, new substance formed, may involve energy transfer (heat or light) Visual: A chemical change might involve a colour change, a gas being produced, or a temperature change.

Chemical change: A chemical reaction forms new products.

Combustion Rotting Rusting Digestion

Physical change: Matter changes form but not chemical identity.

Melting Shredding Boiling Chopping

28 g + 22 g

Calcium carbonate

→

28 g

Calcium oxide

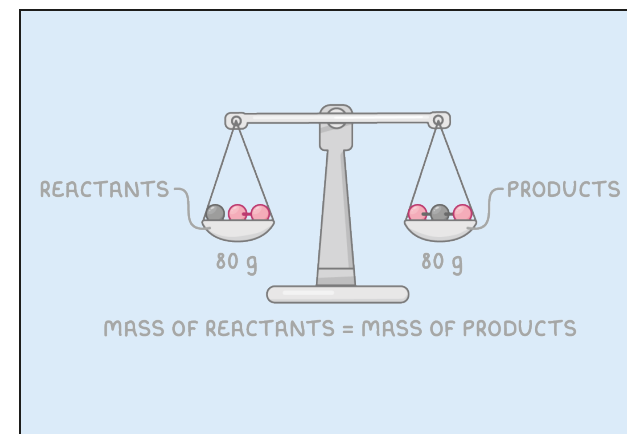
+

22 g

Carbon dioxide

You can work out the mass of an unknown reactant or product by using the masses of the known chemicals. In the example above, the total mass of the products = the mass of the reactant. This is why there must have been 28+22 = 50g of calcium carbonate to start the reaction.

Sometimes if the system is 'open' – so doesn't have a lid. Some products that are gas may escape and it looks like the mass has decreased. To stop this from happening, you need to do the experiment in a 'closed system' this means with a lid on to stop the products from escaping.



SUBJECT: Science

TOPIC: Bioenergetics + Waves

YEAR: 8

SEMESTER: I



WORD REVOLUTION

Aerobic respiration	The process of releasing energy from glucose using oxygen
Anaerobic respiration	The process of releasing energy from glucose without using oxygen
Oxygen Debt	The extra oxygen the body needs after exercise to recover, specifically to remove lactic acid
Photosynthesis	The process of plants making their own food
Chloroplast	Where photosynthesis happens in cells
Mitochondria	Where respiration occurs in cells, which releases energy
Transverse	The particles vibrate perpendicular to the direction the wave travels
Longitudinal	The particles vibrate parallel to the direction the wave travels
Undulation	The rising and falling of a wave
Refraction	The bending of light as it passes from one material to another
Ultrasound	Sound waves with frequencies higher than human hearing
Frequency	Number of waves produced in 1 second
Amplitude	The height of a wave

What will I study in this topic?

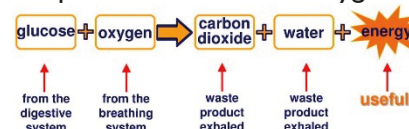
You will describe how aerobic and anaerobic respiration supply the body with oxygen.
Describe the process of photosynthesis and adaptations of plants.
To understand what a wave is and to give examples of waves.
To categorise waves and investigate their properties.

What will I be able to do by the end of this topic?

State the equations for aerobic respiration and anaerobic respiration.
To explain how and why the body changes during exercise.
To use keywords to label waves and explain how to change volume and pitch.
Describe and give examples of transverse and longitudinal waves.
Explain how the eye helps us to focus and see.

Respiration:

Aerobic respiration means 'with oxygen'.



Anaerobic respiration means 'without oxygen'.

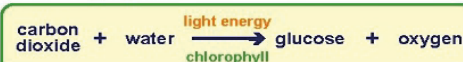
In animals $\text{glucose} \rightarrow \text{lactic acid} + \text{energy}$

In yeast $\text{glucose} \rightarrow \text{ethanol} + \text{carbon dioxide} + \text{energy}$

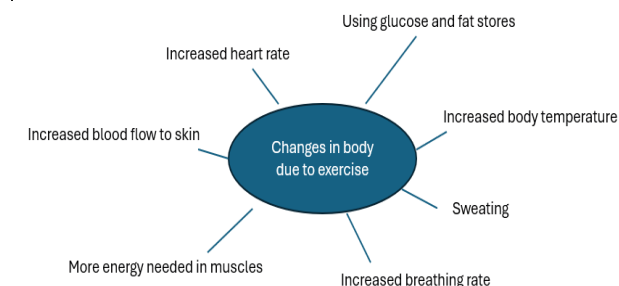
Photosynthesis

Photosynthesis makes food from sunlight. Four things are needed for photosynthesis-

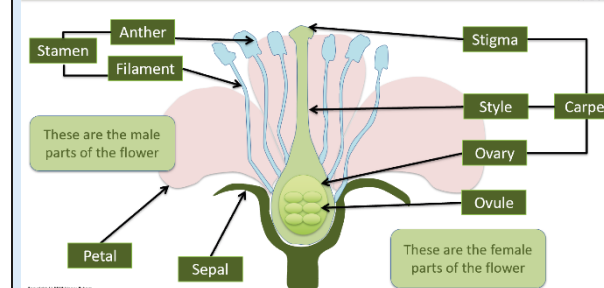
1. Sunlight.
2. Chlorophyll- the green pigment in chloroplasts.
3. Carbon dioxide- diffuses into the leaves.
4. Water- absorbed by the plants.



Effects of Exercise on the body:



Plant Reproduction



SUBJECT: Science

YEAR: 8

TOPIC: Bioenergetics + Waves

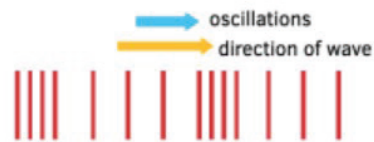
SEMESTER: I



Key Questions:	How do plants make their own food? How does our body react to exercise? Describe the difference between transverse and longitudinal waves. Describe how the eye allows us to see.	
Curriculum Connections:	Previous (Year 6 + Year 7): • How sounds are made and travel • Specialised cells – adaptations • Mitochondria function Now: • Identifying variables • Planning and recording data	Future: • Investigating wave speed • EM spectrum • Fermentation and metabolism • Rate of photosynthesis • Homeostasis

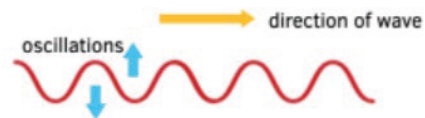
Types of waves:

Longitudinal Waves



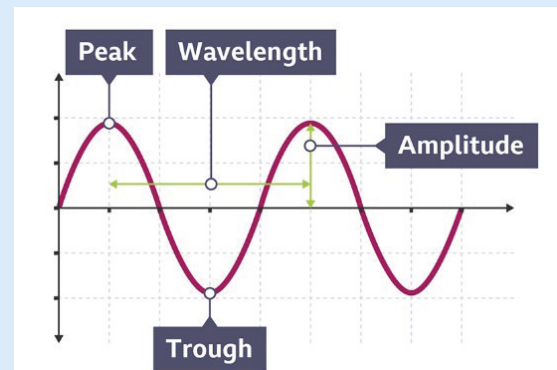
other to pass on the energy – there are areas where the particles squash together (compression) and spread apart (rarefaction). Examples of longitudinal waves are sound waves, ultrasound waves, seismic P-waves.

Transverse Waves



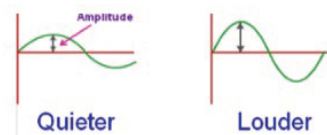
Transverse waves are the shape you usually think about when thinking about a wave. Examples of transverse waves are: Water waves, light waves, radio signal waves and seismic S-waves. Longitudinal waves are caused when particles bump into each

Wave characteristics

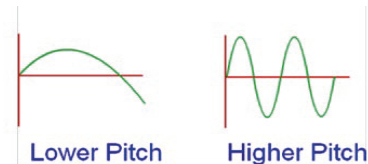


Changing Sounds

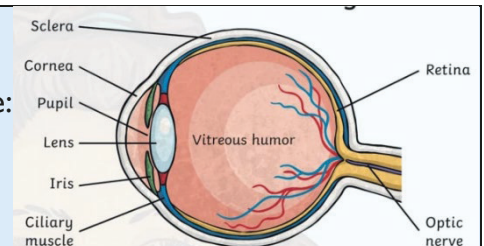
The amplitude determines volume.



The frequency determines pitch.



Structure of the eye:



SUBJECT: Science

TOPIC: All semester 1 assessments

YEAR: 8

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 have a Year 8 assessment – within this there will be questions based on the science content and skills from all Semester 1 topics.

Assessment advice

- Always read the question carefully- most mistakes are made by students who think they know the answer, even before fully reading the question.
- Take your time and don't panic.
- Are the certain keywords you can include in your answer, make sure you know the definitions of all keywords from your knowledge organiser pages.

Extra Nuggets!

A great way to remember keywords and definitions is to use quiz cards. Write the keyword on one side and the definition on the back. You can then test yourself, get someone at home to help or a friend. Keep going through the cards you get wrong until you get them all right. Then repeat this process the next week and you'll steadily get better.



Extra Nuggets!

Scientific Variable	Mnemonic Device/Sound
Controlled Variables	"CON"trolled variables stay "CON"stant
Independent Variable	"I", the scientist, only change this
Dependent Variable	The "D"ependent variable is your "D"ata

Further Reading and Other Resources

- <https://sparxscience.com/> - here you have your weekly homework but you can also use the independent learning tab and choose whichever topics you need extra help with
- <https://www.bbc.co.uk/bitesize/subjects/zng4d2p> - bitesize has lots of useful information, quizzes and videos to watch about the topics you have been studying
- KS3 CGP revision guides – we have discounted revision guides available through Parentpay
- <https://mmerevise.co.uk/ks3-revision/key-stage-3-science/> - KS3 past exam papers are available here with the mark schemes

Recall Questions

1. What are the equations for aerobic and anaerobic respiration?
2. What is the difference between transverse and longitudinal waves?
3. Describe using keywords what a high pitch loud sound looks like
4. What is an enzyme and what does it do?
5. Why do we need to digest food?
6. How do we inhale? What are the steps?
7. Define a physical change
8. Why is a chemical change 'irreversible'?
9. What does conservation of mass actually mean?
10. Name 4 organelles found in a bacteria cell
11. Explain diffusion
12. When would we draw a bar chart and when would we draw a line graph?

SUBJECT: Geography

YEAR: 8



TOPIC: Fieldwork

SEMESTER: I

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

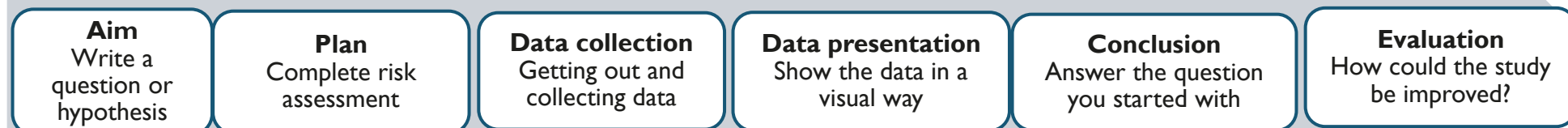
- ✓ **Geographical:** to do with geography
- ✓ **Open ended:** not a yes/no question
- ✓ **Achievable:** not in a dangerous environment, possible to travel to

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

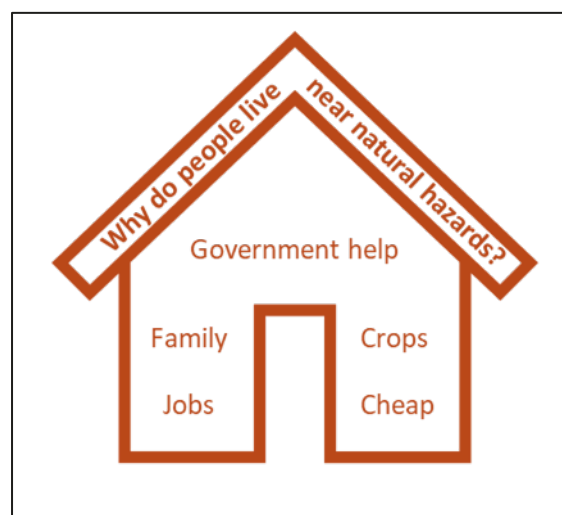
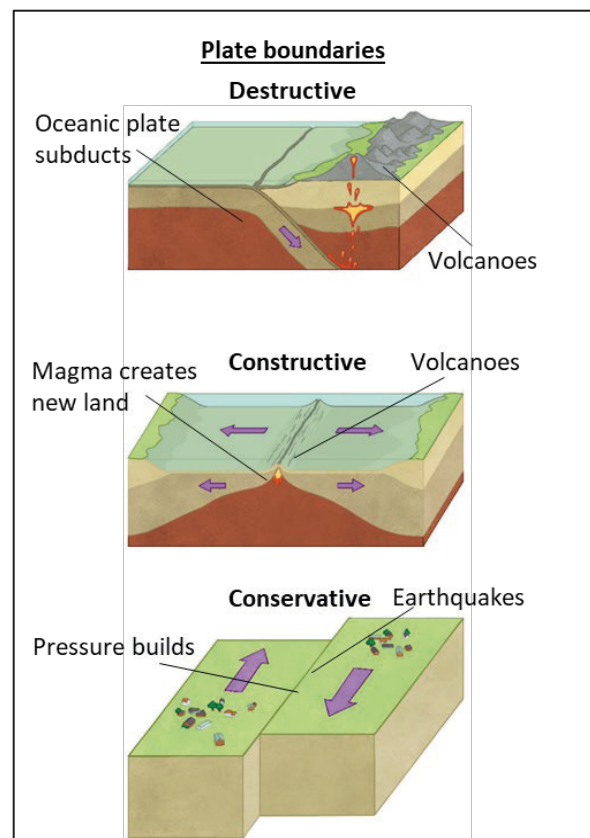
4. DATA COLLECTION

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

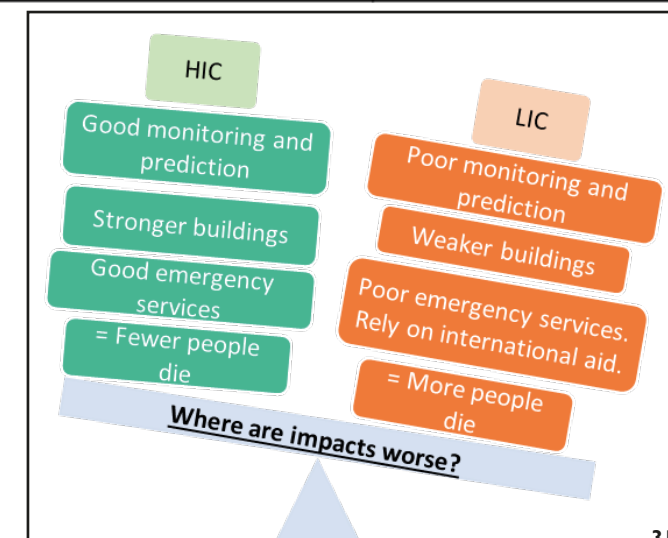
2. FIELDWORK ENQUIRY PROCESS



Word Revolution	
Natural hazard 	A non-humanmade event that causes destruction.
Hazard risk 	The probability that a natural hazard will affect a population → magnitude, population density, location.
Plate boundaries 	The edges where two or more tectonic plates meet.
Tectonic hazard 	A natural hazard caused by the movement of the earth's plates.
Atmospheric/ climatic hazard 	A natural hazard caused by changes in the atmosphere.
Primary effect 	Directly caused by the hazard, happens straight away.
Secondary effect 	Isn't directly caused by the hazard, happens in the days, weeks, and months after.
Immediate response 	A response that takes place in the hours and days after the event.
Long term response 	A response that takes place in the months and years after the event.

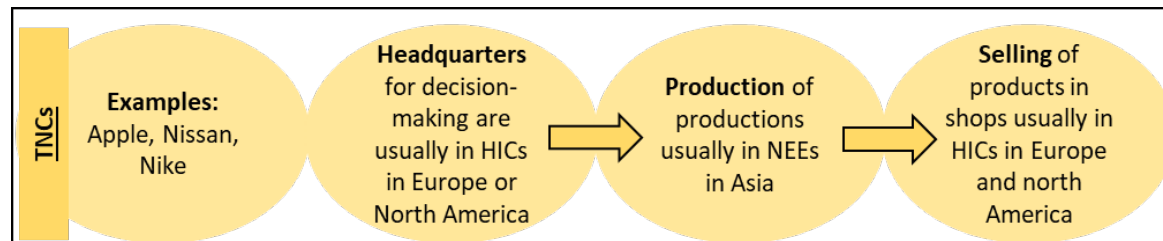
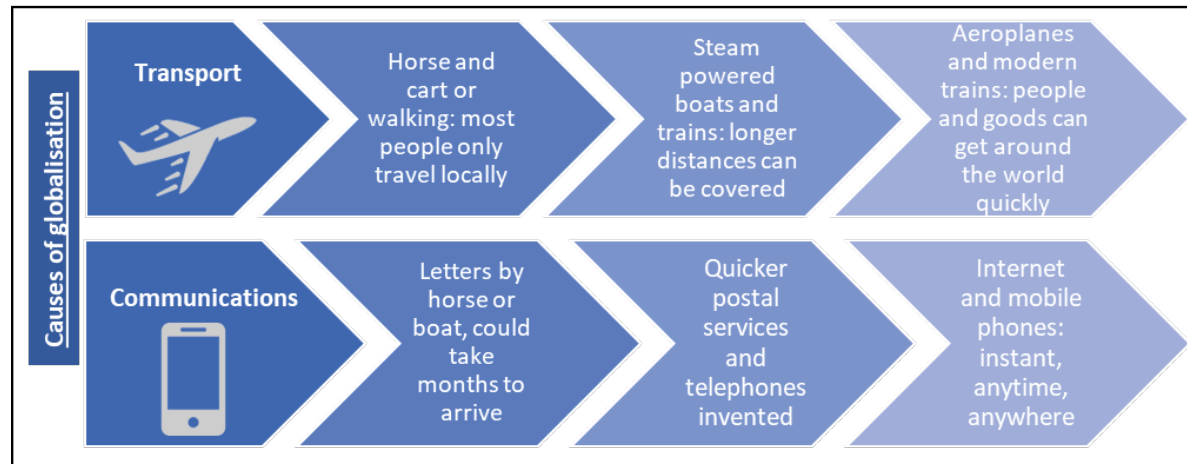


Primary Effects	Secondary Effects
Earthquakes - Buildings collapse - Infrastructure is damaged/ destroyed - People are injured/ killed	Earthquakes - Homelessness - Aid can't reach area - Unemployment - Lack of clean water = disease and death
Volcanoes - Buildings and farmland destroyed - Water supplies are contaminated - Air travel is disrupted - People are injured/ killed	Volcanoes - Homelessness - Aid can't reach area - Unemployment - Fertile farmland - Tourism can increase
Immediate responses	Long term responses
- Rescue teams - Provide shelter, food, water and medical supplies	- Repair damage and rebuild - Improve building regulations - Improve monitoring/ prediction/ warnings





Word Revolution	
Globalisation 	The world becoming more interconnected.
Transportation 	The act of moving something or someone.
Communication 	The exchanging of information (speaking, writing, etc.)
TNC 	Transnational corporation: a company that operates in more than one country.
Deindustrialisation 	Decline of secondary industries.
Primary industry 	Jobs that involve taking raw materials from the earth: farming.
Secondary industry 	Jobs that involve turning raw materials into products: car manufacturer.
Tertiary industry 	Jobs that involve providing a service: nurse.



Advantages of globalisation	Disadvantages of globalisation
☺ Cultures and food ☺ Travel to new locations ☺ Work together to tackle global issues TNCs ☺ Jobs in NEEs – positive multiplier effect ☺ Improved infrastructure in NEEs	☹ Traditional culture lost in LICs and NEEs ☹ More travel = more greenhouse gas emissions ☹ Unequal benefits: HICs benefit the most ☹ Deindustrialisation in HICs= job losses TNCs ☹ Poorly paid jobs in poor conditions ☹ Economic leakage ☹ Pollution & resource over-exploitation

SUBJECT: Geography

YEAR: 8



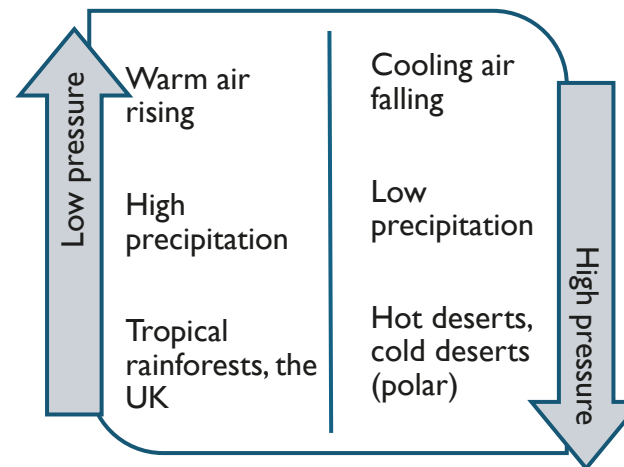
TOPIC: Weather and climate

SEMESTER: I

1. WORD REVOLUTION

Atmosphere	The layer of gas that surrounds the earth
Weather	Day-to-day changes in the atmosphere
Climate	Average weather conditions in an area
Precipitation	Water falling from the sky
Forecast	Prediction of future weather conditions
Drought	A long period with little or no rainfall
Tornado	A fast-spinning column of air that touches the ground

2. HIGH and LOW PRESSURE



3. GLOBAL CLIMATE

Latitude: distance from the Equator	Further from the Equator = generally cooler
Altitude: height above sea level	Higher above sea level = cooler
Distance from the sea	Closer to the sea = milder (less extreme)

4. WEATHER FORECAST

	Sunshine
	Rainfall
	Snow
	Thunderstorms

5. UK EXTREME WEATHER

Type	Cause	Effect
Heatwave	High pressure traps hot air	Health risks, water shortages, wildfires
Flood	Heavy rainfall or storms	Roads, homes, fields damaged or underwater
Snow	Cold air meets moist air	Travel disruption, schools closed

6. TORNADOES

Formation: Warm, moist air meets cold, dry air, causing strong rotating winds under a thunderstorm

Location: Central USA – ‘Tornado Alley’

Subject: History

Topic: Empire

Year: 8
Semester: I



WORD REVOLUTION

Empire	A group of countries, people or land controlled and ruled by one single powerful country.
Colony	A country that is part of an Empire
Exploitation	Treating people unfairly by using their work or resources to get money

2. Reasons for Expansion

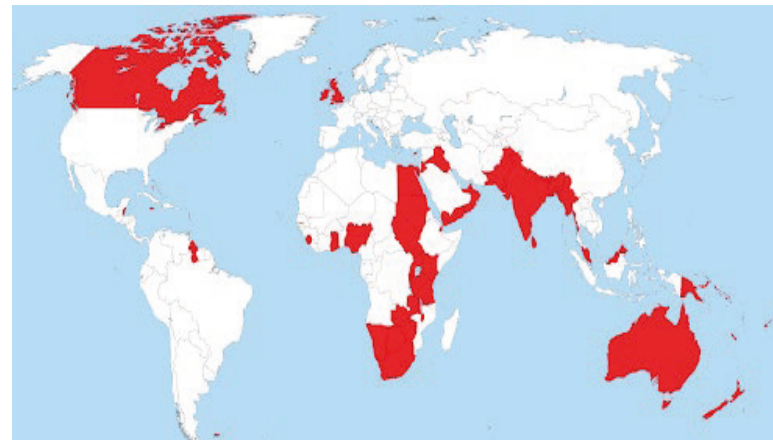
1. Trade and wealth: Access to resources like gold, spices, cotton.
2. Power and prestige: Britain wanted to be the most powerful nation.
3. Strategic control: Important for military and trade routes.

3. Key colonies

India	Caribbean islands	Jordan
Parts of Africa (e.g., South Africa, Kenya)	Australia	Palestine

1. What was the British Empire?

The British Empire was a global empire made up of territories and colonies ruled by Britain from the 16th century until the mid-20th century. At its largest, it covered about a quarter of the world's land and included millions of people from different cultures. The Empire was built through conquest and colonisation, which often involved violence, war, and the oppression of native peoples.



4. Legacy of the British Empire

It is a controversial and sensitive history because there are strong feelings about it both then and the time and today.

Legal and political systems: Many former colonies kept British-style governments, laws, and institutions.

Exploitation and inequality: Many colonies were forced to provide resources and labour without fair benefits, causing poverty.

Cultural loss: Indigenous traditions, languages, and cultures were often suppressed or destroyed.

Borders and conflicts: Artificial borders drawn by the British sometimes caused ethnic tensions and conflicts that continue today.

Economic dependence: Some countries struggled to develop independent economies after losing British support.

Debates continue about how to remember the Empire—some see it as a time of progress, others focus on its harms and injustices.

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



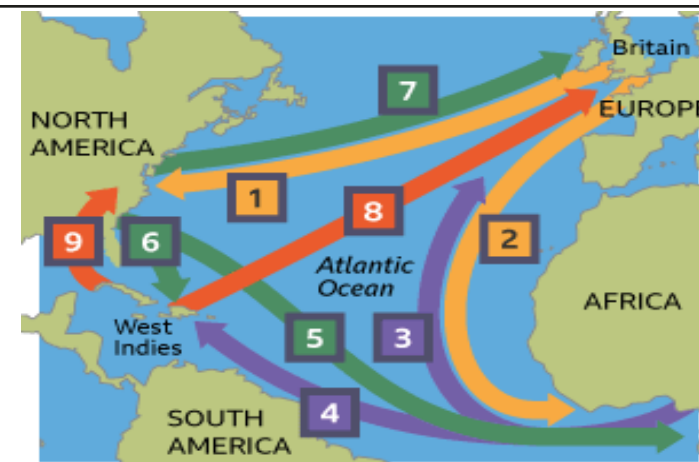
WORD REVOLUTION	
Slavery	When a human being is owned by another.
Transatlantic slave trade	The trade of enslaved people across the Atlantic ocean.
Royal African Company	(RAC) English company that had a monopoly on slave trade in the West coast of Africa
Raw materials	Basic materials used to produce other goods.
Plantation	Large farm that only grows one type of crop
Resistance	Fighting something and refusing to accept it
Abolition	Making something illegal, stopping it.

2. The Triangular Trade
British sailors followed a triangular trade route during the transatlantic slave trade, with three key stages connecting Europe, Africa, and the Americas. Each region supplied goods or labour that the others demanded.
An estimated 12.4 million people were enslaved between 1532 and 1832. About one-third of them were transported on British ships. Children born to enslaved individuals were automatically enslaved as well — a system known as chattel slavery .

4. Impact on Britain	
Port cities: Liverpool, Glasgow and Bristol grew from small ports into large, important cities in just 100 years. The shipping industry got bigger, and slave owners made more money.	Industrial Revolution: The growth of British industries depended on raw materials made by slaves, like cotton. Mills and factories were often built using money made from slavery.
5. Resistance and Abolition	
Resistance: Enslaved people fought back in many ways — by working slowly, damaging equipment, escaping, secretly learning to read and write, and at times using force. Those caught often faced harsh punishment. Abolitionists: Some white Europeans, driven by Christian values of justice and equality, pushed for the abolition of slavery through campaigns and debates in Parliament. Economic decline: In the late 1700s, sugar prices fell, reducing profits for plantation owners and slave traders. As a result, many plantations were forced to shut down.	

1. Pre-colonial Africa
Before European colonization, West Africa was home to many powerful kingdoms, including Mali, Kongo, and Songhai. One of the most influential was the Kingdom of Benin: Established by the Edo people; Governed by rulers known as Obas, who were highly revered and seen as divine; Renowned for their intricate bronze and brass artwork; Situated in what is now southern Nigeria.

3. Life as an enslaved person		
Middle Passage	Auction	Plantation
- 2 million people died on the journey. - It was cramped, people chained together, terrible food, filth, disease and abuse.	After arriving in the Americas, They were sold by: 1) Auction: to the highest bidder; or 2) Scramble: where buyers paid an agreed fixed sum.	- Had to obey the overseer (the person who prevented escapes and punished those who tried) - Slept in small shacks Were considered the legal property of the “master”

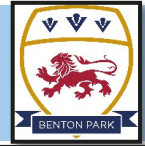


Medieval period					Renaissance		Industrial Period		Modern Period
1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1750	1750-1800	1800-1900	1900-present

Subject: History

Topic: India

Year: 8
Semester: I



WORD REVOLUTION

Empire	A group of states or countries ruled over by a single person
Economy	The money within a country, this could also refer to the buying and selling of goods.
Architecture	The designing and construction of buildings.
Devout	To have deep religious beliefs
Mughal	An early modern empire in India

I. What was the Mughal Empire?

The Mughal Empire was a powerful Muslim dynasty that ruled much of India from the early 1500s to the mid-1800s.

The Mughals were known for their rich culture, beautiful buildings (like the Taj Mahal), and their influence on Indian music, art, and cuisine. At its height, the Empire was one of the largest and wealthiest in the world.

By the 18th century, it weakened due to internal problems and attacks, and it eventually came under British control.

2. Famous rulers

Akbar the Great (1556–1605): The best-known Mughal ruler. Created a strong administration and promoted religious tolerance.



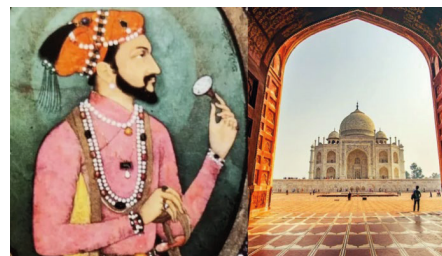
Jahangir (1605–1627): Son of Akbar. Known for supporting the arts and allowing Nur Jahan to have significant influence in the court.



Nur Jahan (wife of Jahangir): Not an official emperor, but a very powerful and influential figure. She acted as the power behind the throne and made important decisions.



Shah Jahan (1628–1658): Created the **Taj Mahal** in memory of his wife, Mumtaz Mahal. The Mughal Empire was very wealthy and impressive during his reign.



Aurangzeb (1658–1707): The last major Mughal Emperor. Expanded the Empire to its largest size but was less tolerant towards other religions.



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: Religious Studies

YEAR: 8

TOPIC: Contemplating God

SEMESTER: I



WORD REVOLUTION

Contemplate	To think deeply about things
Evil	Something very bad, causing harm, pain, or suffering on purpose
Evolution	How simple life forms slowly changed into more complex ones
Free Will	The idea that people have the freedom to make their own decisions
Gurdwara	Sikh place of worship
Guru Granth Sahib	The Holy Book of Sikhism
Miracles	Events that seem to break the laws of nature - seen as signs of God's power.
Mool Mantar	The key text for understanding Sikh beliefs about God
Original Sin	The idea that everyone is born with a natural tendency to do wrong
Suffering	When someone experiences pain, sadness, or hardship
Synagogue	Jewish place of worship
The Big Bang Theory	The Universe started a long time ago from a tiny point and has been growing
The Fall	The story in the Bible when Adam and Eve disobeyed God
Torah	The holy book of Judaism

What will I study in this topic?

In this unit, you'll explore what it means to believe in a religion and how it shapes people's lives, through looking at Christianity, Judaism and Sikhism. We'll also look at some of life's biggest questions—such as “Does God exist and what is He like?”, “How was the Universe created?”, “Do miracles really happen?”, and “Why is there evil and suffering in the world?” Get ready to discover how different faiths think about these deep and important topics!

Curriculum Connections:

You will build on foundational knowledge you learned in Year 7, including beliefs about faith, ethics, creation, and life after death. You'll explore how different religions answer big questions about God, the Universe, miracles, and why suffering exists. This learning will prepare you to explore even deeper questions in Year 9 and at GCSE.

What does it mean to be Christian?

 **Believing in God and Jesus**
Christians believe in one God and that Jesus is God's Son who came to help and save people.

 **Following Jesus' Teachings**
Christians try to live like Jesus by being kind, loving, and forgiving.



What does it mean to be Christian?

 **Reading the Bible**
The Bible is the special book that teaches Christians about God and how to live a good life.

 **Praying and Going to Church**
Christians pray to talk to God and often go to church to worship with other

The Nature of God



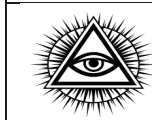
Omnibenevolent
The belief that God is all good and all loving.



Omnipresent
The belief that God is everywhere at the same time.



Omnipotent
The belief that God is all powerful and uses his power for good.



Omniscient
The belief that God knows everything that has happened and will happen.

SUBJECT: Religious Studies

YEAR: 8

TOPIC: Contemplating God

SEMESTER: I



What does it mean to be Jewish?

Believing in One God

Jewish people believe in one God who created the world and cares for everyone.

Following the Torah

The Torah is the Jewish holy book that teaches how to live a good and holy life.

What does it mean to be Jewish?

Celebrating Special Days

Jewish people celebrate festivals like Shabbat (the day of rest), Passover, and Hanukkah.

Worship and Family Traditions

Worship often happens in a synagogue, and family traditions are very important in Jewish life.

A miracle is something amazing that seems to break the laws of nature.

It's often seen as a sign of God's power or help.

Miracles can't usually be explained by science. They are rare and surprising events.

Examples of miracles:

- Jesus healing a blind man (**Christianity**)
- The splitting of the Red Sea (**Judaism**)
- Muhammad splitting the moon (**Islam**)

What does it mean to be Sikh?

Believing in One God

Sikhs believe in one God who is loving, powerful, and present in everything.

Following the Guru Granth Sahib

This is the Sikh holy book, filled with teachings from the Gurus about how to live a good life.

Treating Everyone Equally

Sikhs believe all people are equal, no matter their background, gender, or religion.

Worship and Helping Others

Sikhs worship in a Gurdwara and serve free food (langar) to anyone, showing kindness and sharing.

Why Do Some People Say Miracles aren't real?

- Science can explain things
- Different beliefs
- Miracles could be symbolic stories
- The mind can play trick

The problem of evil

The Problem

God is said to be:

- All-powerful/Omnipotent (can do anything)
- All-loving/Omnibenevolent (cares for everyone)
- All-knowing/Omniscient (knows everything)

But there is still evil and suffering in the world

? So why does God let bad things happen?

Religious Responses

Free Will - God gave people freedom to choose right or wrong — sometimes people make bad choices.

Test of Faith - Suffering can be a test to see how strong someone's faith is.

Bigger Plan - Evil and suffering may be part of a bigger plan that humans don't understand.

How did the world get here?

Religion

Judaism, Christianity and Islam – God Created the world and everything in it in 6 days OR 6 periods of time.
Literal Vs Symbolic

Science

The Big Bang started the universe, which has been expanding for billions of years. Life on earth was due to the theory of Evolution.

SUBJECT: Religious Studies

YEAR: 8

TOPIC: Introduction to Buddhism

SEMESTER: I



WORD REVOLUTION

Anicca	Everything changes / nothing stays the same forever
Ascetic	Living a simple strict lifestyle with few pleasures or possessions
Buddha	Siddhartha Gautama, founder of Buddhism
Eightfold Path	Eight steps/practices to follow to reach enlightenment
Enlightenment	Gaining of true knowledge about the nature of reality
Five Moral Precepts	Five rules / guidance from the Buddha on how to live
Four Sights	Old age, sickness, death, holy man
Luxury	A state of great comfort
Meditate	To think deeply about things to find understanding and peace
Middleway	Finding a balance between having too much and not having enough
Monk	A man who has dedicated his life to religion by living a simple life
Pilgrimage	A special journey made by religious believers
Suffer	To feel pain, distress (mental and physical)
Vihara	Buddhist monastery or temple

What will I study in this topic?

You will learn about some important Buddhist beliefs, such as how Buddhism began, key events in the life of the Buddha and how Buddhists make moral decisions. You will also explore Buddhist practices such as worship and celebrating festivals, as well as looking at the life of a Buddhist monk.

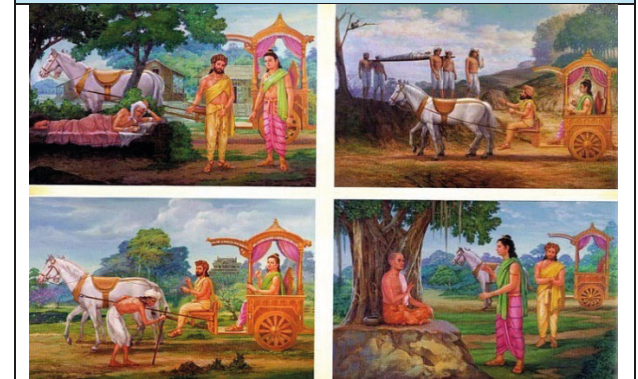
Curriculum Connections:

The foundational knowledge you learn about Buddhism and its key ethical teachings (such as how to live a good life, how to treat others, how religious belief influences practical action) will be further explored and expanded on in Year 8 and 9 alongside other religious views on a variety of ethical and philosophical topics.

The Buddha's Birth



The Four Sights



Siddhartha Gautama's Story

- Siddhartha Gautama was born over 2,500 years ago as a prince in what is now Nepal.
- He lived a comfortable life but was curious about the world beyond his palace.
- When he saw sickness, old age, and death for the first time, he wanted to understand why people suffer. These are known as the Four Sights
- Siddhartha left his royal life to search for answers about suffering and how to stop it
- After years of meditation, he found enlightenment under a tree called the Bodhi tree.
- He became known as the Buddha, which means "The Awakened One."

SUBJECT: Religious Studies

YEAR: 8

TOPIC: World Religions

SEMESTER: I



Religion	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



KEY VOCABULARY

connectives	Introductions
und – and	Guten Tag – Hello / good day
aber – but	Wie geht's ? – how are you ?
oder – or	Gut danke – good thank you
opinion verbs	nicht schlecht – not bad
ich mag - I like	und dir? – and how are you?
ich liebe – I love	key verbs
ich hasse – I hate	wohnen – to live
ich finde – I find	kommen aus – to come from
ich denke – I think	heissen – to be called
es geht mir auf die Nerven – it gets on my nerves	
ich kann nicht leiden – I can't stand	
Compound Nouns	
Schokoladeneis – ice cream	
Orangensaft – orange juice	
Milchkaffee – coffee with milk	
Krankenhaus – hospital	
Hausschuhe - slippers	
Fußballschuhe – football boots	
Schildkröte - turtle	
Kühlschrank - refrigerator	

What will I study in this topic?

- ☐ 1: Phonics, cognates, sound and spelling
- ☐ 2: Nouns: understanding compound nouns
- ☐ 3: Opinions: giving opinions
- ☐ 4: Using connectives
- ☐ 5: Extending writing skills

What will I be able to do by the end of this topic?

Write 📝 and speak 🗣️ in German about things I like and don't like. Understand simple 📖 reading and listening 🎧 texts. Introduce myself 🗨️ and give a few details about myself in German.

Grammar: Opinion verbs

- ✓ **Opinion verbs** are introduced to describe what students like and don't like

❤️ ❤️ ich liebe	I love
❤️ ich mag	I like
💔 ich mag nicht	I don't like
💔 💔 ich hasse	I hate

Grammar: What is a verb?

- ✓ We know that a verb is a 'doing' word but it can also be abstract. For example 'to be'. Confusing.
- ✓ To test if a word is a verb, see if you can put a pronoun in front, I, she, you, we.

I see, you see, she sees. See is a verb ✓

I school, you school. School is not a verb ✗

Grammar: Compound Nouns

- ✓ Compound nouns are formed by joining nouns together
- ✓ They always start with a capital letter



Regular present tense verbs -en

wohnen – to live

ich wohne	I live
du wohnst	you (sing. inf) live
er/sie/man wohnt	he/she/one lives
wir wohnen	we live
ihr wohnt	you (inf, plural) live
Sie/sie wohnen	you (formal)/they live

SUBJECT: LANGUAGES: GERMAN

YEAR: 8

TOPIC 1: Tool kit & All about me

SEMESTER: I



Key Questions:	Wie heisst du? <i>What is your name?</i> Wo wohnst du? <i>Where do you live?</i> Wie geht's? / Wie geht es dir? <i>How are you ?</i> Wie alt bist du? <i>How old are you?</i> Was magst du? Was magst du nicht? <i>What do you like? What do you dislike?</i>
Cultural links:	An introduction to the German language and the German-speaking world. Have you ever thought – because compound nouns are possible in German, there are some incredibly long words. For example, the classic “Donaudampfschiffahrtsgesellschaftskapitän” (Danube steamship company captain). This is the captain of a steamship company who sails on the river Danube.

Numbers		
1 – eins	11 – elf	21 – einundzwanzig
2 – zwei	12 – zwölf	22 – zweiundzwanzig
3 – drei	13 – dreizehn	23 – dreiundzwanzig
4 – vier	14 – vierzehn	24 – vierundzwanzig
5 – fünf	15 – fünfzehn	25 – fünfundzwanzig
6 – sechs	16 – sechzehn	26 – sechsundzwanzig
7 – sieben	17 – siebzehn	27 – siebendzwanzig
8 – acht	18 – achtzehn	28 – achtundzwanzig
9 – neun	19 – neunzehn	29 – neunundzwanzig
10 – zehn	20 - zwanzig	30 - dreißig

Curriculum Connections: ☐ Opinions : students talk about what they like and don't like ☐ C ☐ Reference to others: students say where other people live ☐ D ☐ N ☐ F

German in context
Ich heiße Matteo und ich wohne in Leeds. I am called Matteo and I live in Leeds. Ich bin elf Jahre alt. I am eleven years old. Lina kommt aus Leeds, aber sie wohnt in Manchester. Lina comes from Leeds, but she lives in Manchester. Ich liebe Orangensaft und ich mag Milchkafee. I love orange juice and I like coffee with milk.

Negation: nicht... (= don't) In German you make a negative (e.g. not, no, don't) by adding no after the verb. ich wohne in = I live in ich wohne nicht in = I don't live



KEY VOCABULARY

family vocabulary	Key verbs
der Vater – the father	dekoriere – to decorate
die Mutter – the mother	tanzen – to dance
der Bruder – the brother	tragen – to wear
die Schwester – the sister	singen – to sing
der Großvater – the grandfather	bekommen – to get
	gehen – to go
die Großmutter – the grandma	kaufen – to buy
	Karneval vocabulary
der Onkel – the uncle	Köln – Cologne (a city)
die Tante – the aunt	es gibt – there is/are
der Cousin – the cousin (m)	die Leute – the people
die Cousine – the cousin (f)	die Kostüme – the costumes
der Freund – the friend (m)	die Krapfen – the doughnuts
die Freundin – the friend (f)	
adjectives	Papierhüte – paper hats
jung - young	
laut – loud	Papierschlängen - streamers
kalt - cold	
lustig - funny	die Kamellen – the sweets
lecker - tasty	
glücklich / froh - happy	die Musik – the music

What will I study in this topic?

- ☐ 1: Describing who is in our family
- ☐ 2: Discussing what happens at Karneval
- ☐ 3: Comparing festivals
- ☐ 4: Describing Christmas

What will I be able to do by the end of this topic?

Discuss the German festival of Karneval and differences and similarities between how we celebrate Christmas 🎉🎄🌟👶🎁

Grammar: Capitals for nouns

- ✓ In German, **all nouns** must start with a **capital letter**, not just proper nouns such as names and places.

der F eiertag (m)	the bank holiday
die M usik (f)	the music
das W etter (n)	the weather
die K inder (pl)	the children

Grammar: What is an infinitive verb ?

- ✓ An **infinitive verb** is a base verb. It doesn't have a **subject** or an **object**. It isn't present, past or future.
- ✓ You **conjugate** an **infinitive verb** or place it after a **conjugated verb**.

infinitive: **kaufen** – to buy
 conjugated: ich **kaufe** – I buy
 after a conjugated verb : ich mag **kaufen**

Grammar: Nominative determiners and articles

- ✓ A **determiner** is a small word that comes before a noun (my, some, this)
- ✓ An **article** is a type of **determiner**, either **the** or **a**
- ✓ In German, determiners **show gender**: **masculine** and **feminine and neuter**
- ✓ They also show **plural**

the	der (m) die (f) das (neut) die (pl)
a	ein (m) eine (f) ein (neut)

Regular present tense verb -en

singen – to sing
ich singe – I sing
du singst – you (sing, inf) sing
er/sie/man singt - he/she/one sings
wir singen – we sing
ihr singt – you (informal, plural) sing
Sie/sie singen – you (formal)/ they sing



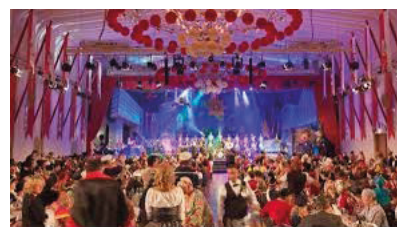
Key Questions:	Welche Personen gibt es in deiner Familie ? Which people are in your family? Beschreib Karneval. Describe Karneval Was ist besser, Halloween oder Weihnachten? What is better, Halloween or Christmas?
Cultural links:	Karneval is a big festival held in Cologne, Germany. Traditionally, the festival begins on the 11th November at 11:11am. There are processions in the street, special costumes and tents where people meet for special meetings (Karnevalssitzungen). Children get sweets, people eat doughnuts (Krapfen) and there is a atmosphere of celebration. Karneval is suspended during the advent and Christmas season, but picks up again after the Epiphany on 6th January.

The city of Cologne (Köln)



im Foto – in the photo
gibt es – there is
in der Mitte – in the centre
auf der rechten Seite – on the right
auf der linken Seite – on the left
im Hintergrund – in the background
im Vordergrund – in the foreground

Karnevalssitzungen



🧐 🤔 🐘 ✗ 📅 Curriculum Connections:

- ☐ **Opinions:** about festivals
- ☐ **Comparison:** of two festivals
- ☐ **Reference to others:** talking about someone else (with a conjugated verb)
- ☐ D
- ☐ N
- ☐ F

German in context

Ich habe einen Bruder und eine Schwester.

I have a brother and a sister.

Die Leute tragen Kostüme und bekommen Kamellen.

The people wear costumes and get sweets.

Die Kinder tragen Papierhüte und dekorieren mit Papierschlängen.

The children wear paper hats and decorate with streamers.

Halloween ist besser als Weihnachten!

Halloween is better than Christmas!

Grammar: Accusative Case

In German, the nominative case is used for the subject of the sentence. The accusative case is used for the object of the sentence.

Masculine: ich habe **einen Bruder**

Feminine: ich habe **eine Schwester**

Neuter : ich habe **ein Kaninchen**

SUBJECT: Computer Science

YEAR: 8

TOPIC: Technology in the House

SEMESTER: I



WORD REVOLUTION

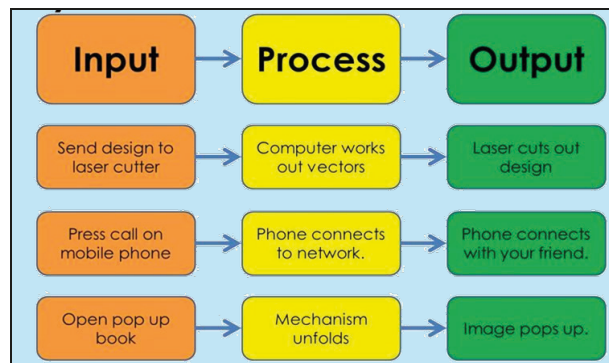
Input	Data that is entered into a
Process	The steps a computer takes to carry out instructions or complete a task.
Output	The result produced by a computer after processing.
User Interface	The way a user interacts with a computer or app.
Hyperlink	A clickable link that takes you to another slide or webpage.
Presentation	A set of slides used to share information clearly.
Programming	Writing instructions that a computer can follow to do a task.
Block-based programming	A way of programming where you drag and drop blocks of code instead of typing it out.
Loops	A set of instructions that repeat again and again until something tells them to stop.
Iteration	Another word for repeating steps in a program, usually using a loop.
Application	A software program that allows a user to perform a specific task.

What will I study in this topic?

You will learn about user interfaces and how they make technology easy to use. You'll study the input, process, output (IPO) cycle to understand how computers work with data. You'll also develop PowerPoint skills to create presentations, and, you'll explore computer crimes to understand online dangers and how to stay safe.

What will I be able to do by the end of this topic?

By the end of this topic, you will be able to design simple user interfaces, explain how data moves through the input, process, and output cycle, create clear and engaging PowerPoint presentations, use spreadsheets to organise data and perform calculations with formulas, and understand different types of computer crimes and how to protect yourself online.



User Interface Design

Topic	Summary
UI Design	How a digital product looks and works for the user.
Purpose	Makes screens, buttons, and menus easy to use and understand.
Key Features	Layout, colours, icons, and navigation.
Benefits	Clear, simple, and enjoyable user experience.
Examples	- Instagram/YouTube: Simple layouts, clear buttons - Amazon: Menus, filters, search - Games: Health bars, menus, controls

SUBJECT: Computer Science

YEAR: 8

TOPIC: Computer Crime

SEMESTER: I



Key Questions:

1. What makes a good user interface, and why is it important?
2. How does the input, process, output (IPO) cycle work in a computer system?
3. How can I create an effective PowerPoint presentation?
4. What are computer crimes, and how can I protect myself from them?
5. What are loops in programming, and why are they useful?
6. How can RoboMind help me learn programming concepts like loops and sequences?

Curriculum Connections:

This unit links to the Computing curriculum by covering key areas such as designing user interfaces, understanding how computers process data through the input, process, output (IPO) cycle, and developing skills in common software like PowerPoint, and text/block-based programming tools like Scratch. It supports the curriculum's focus on using computational thinking to solve problems and create digital solutions. Additionally, learning about computer crimes aligns with the curriculum's emphasis on staying safe and responsible online.

Remote	Loops	Main Commands
We will start by using the remote to program our robot and eventually use the programming panel on the left hand side to give the robot instructions. 	A loop in RoboMind is a way to make the robot repeat a set of instructions multiple times without writing the same code again and again. It helps the robot do tasks faster and saves you from typing lots of commands. <pre>repeat 5 { forward(1) }</pre>	forward(n) – move forward <i>n</i> steps backward(n) – move backward <i>n</i> steps left – turn 90° left right – turn 90° right paintWhite - paint the path white paintBlack - paint the path black

Careers related to databases, Scratch programming, and RoboMind include jobs like database administrator, game developer, and robotics engineer. Database administrators manage data and earn around £45,500 a year on average in the UK, with experienced professionals making up to £80,000. Game developers, who create video games, usually earn between £30,000 and £52,000 per year. Robotics engineers design and build robots and can expect salaries from about £45,500 up to £70,000. These jobs use skills such as coding, problem-solving, and logical thinking, which you can start learning through Scratch and RoboMind.

SUBJECT: Computer Science

YEAR: 8

TOPIC: Computer Crime

SEMESTER: I



How to protect yourself online and the laws in place to help

Computer Crime	Potential Risks	UK Laws Broken	How to Protect Yourself
Hacking	Theft of personal information (like passwords or bank details), damage to computer systems or networks, disruption of services (like websites going offline), stealing or deleting important data, financial loss, privacy invasion.	Computer Misuse Act 1990 (unauthorised access) Data Protection Act 2018 & GDPR (if personal data is stolen)	Use strong passwords, update software.
Identity Theft	Personal data stolen and used without permission to open accounts, take loans, or commit crimes; damage to reputation; financial loss; difficulty proving your true identity.	Data Protection Act 2018 & GDPR Fraud Act 2006 (using stolen info)	Don't share personal info online.
Phishing	Being tricked into giving away passwords, bank details, or money; installing malware accidentally; losing access to important accounts; financial loss.	Fraud Act 2006 (fraudulent activity) Computer Misuse Act 1990 (if hacking involved)	Check email sources, don't click unknown links.
Malware (viruses)	Damage to or control of your device; data theft or loss; slowing down or crashing devices; spying on your activity; ransomware locking your files demanding payment; spreading viruses to others.	Computer Misuse Act 1990 (unauthorised access or damage) Serious Crime Act 2015 (if used to harm others)	Install antivirus software, don't download unknown files.

What is GDPR?

GDPR (General Data Protection Regulation) is a law that helps protect people's personal information. It makes sure that companies and websites handle data safely and fairly, and it gives people rights to see, change, or delete their data. This helps keep personal information private and secure online.

Jamie's Homework Mistake

Jamie was working on a school project about video game design. To make their presentation look more exciting, Jamie downloaded a cool game logo from the internet and copied some code from a website that showed how to make a simple game. Jamie also used a friend's login to access a paid coding tool they didn't have at home. Jamie added everything to their PowerPoint and handed it in.

Jamie didn't realise that **copying the logo and code without permission** broke copyright rules. Using **someone else's login** to access software also broke the law. Jamie thought they were just being clever and saving time, but they had actually broken two important laws.

What laws did Jamie break?

Jamie broke the **Copyright, Designs and Patents Act (1988)** by copying and using creative work (the logo and code) without permission. This law protects original work like images, music, and writing.

Jamie also broke the **Computer Misuse Act (1990)** by using someone else's login to access software, which counts as unauthorised access to a computer system

SUBJECT: Art & Design

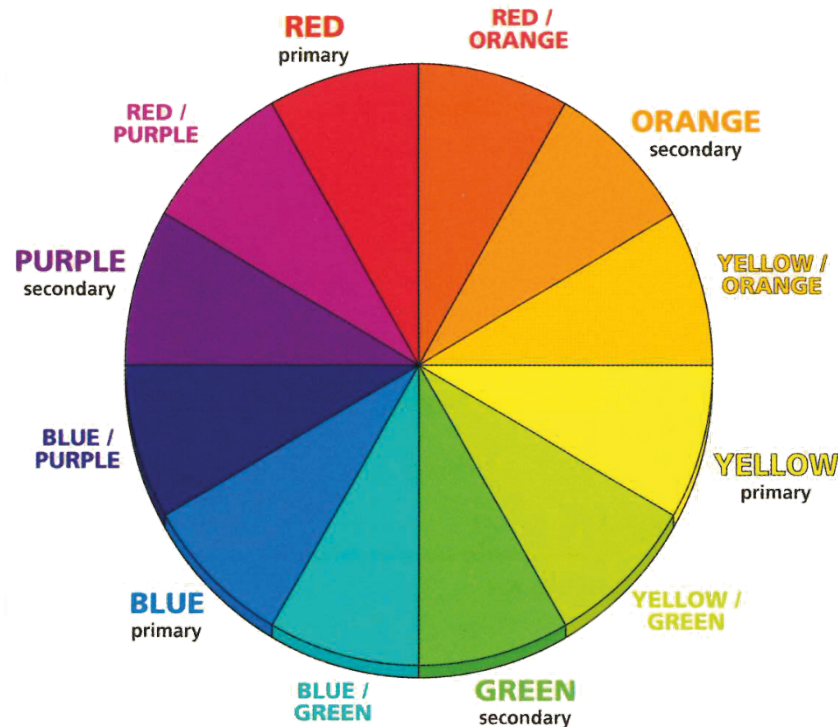
TOPIC: Formal Elements

YEAR: KS3

SEMESTER: I



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.



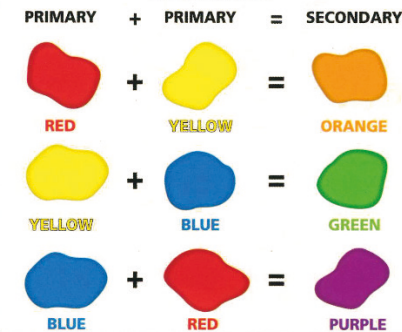
PRIMARY COLOURS

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



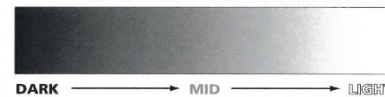
SECONDARY COLOURS

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).

BLUE ———→ ADDING WHITE



This tonal scale shows the gradation in tone of the colour blue by adding white.

RED ———→ ADDING BLACK



This tonal scale shows the gradation in tone of the colour red by adding black.

TINTING AND SHADING WITH COLOUR

RED ———→ ORANGE ———→ YELLOW

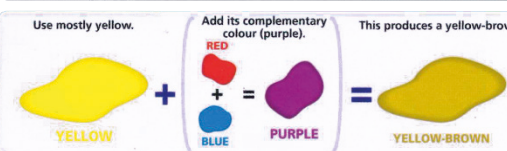


This tonal scale shows the gradation in tone of the orange when mixing different quantities of red and yellow.

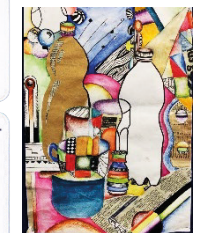
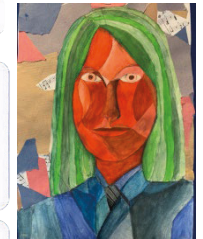
TERTIARY COLOURS

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

PORTRAIT OBSERVATION FACIAL - PROPORTION EXPRESSION TONE TINT SHADE CUBISM CONTOUR DISTORTION GRADATION COMPLIMENTARY - COLOUR	VIEWPOINT SYMMETRICAL STILL-LIFE ELLIPSE VERTICAL DEPTH PROPORTION ACCURACY LIMITED PALETTE MONOCHROME COLLAGE DEFINE COMPOSITION DIAGONAL METHOD PERSPECTIVE	GRAPHIC ART ILLUSTRATION FINE ART ICONOGRAPHY SYMBOLISM ZENTANGLE MARK-MAKING HATCHING CROSS HATCHING STIPPLING TONAL RANGE COMPOSITION CONTEXTUAL ANALYSIS PERSONAL LAYERING VISUAL IDENTITY
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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

An ellipse is a circle tilted away from you - a circle in perspective.

HOW A CIRCLE BECOMES AN ELLIPSE

A circle can be drawn in a square. By tilting the square, it is now in perspective.

HOW TO DRAW AN ELLIPSE

1. Draw a square in perspective.
2. Find the perspective centre of the square by drawing diagonal lines.
3. Mark the perspective centre of each side of the square.
4. Now draw an ellipse so the curve touches each of the four sides.

LIGHT AND SHADE

The above flat (2-dimensional) objects appear solid (3-dimensional) when drawn in perspective as shown below.

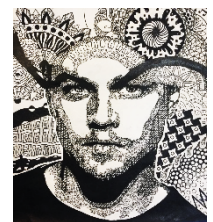
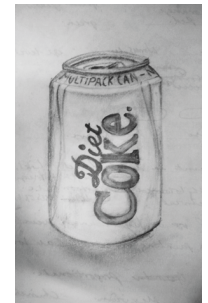
Light helps show the volume of an object. When light falls on an object, shadows and highlights occur.

HIGHLIGHTS occur when light falls directly on to an object.

SHADOWS are caused when the object blocks the light.

ANALYSING IMAGES

CONTENT	FORM
• What is the image about? • Is it a representational or an abstract piece of work? Pablo Picasso (1881-1973) Portrait of Dora Maar (1937) • Are there any hidden meanings in the picture?	• What colours have been used? • Is it realistic, harmonious or contrasting? Jacobus van Heemskerck (1576-1923) Landscape (1915) • Are there any recurrent shapes, lines, forms, patterns or textures?
PROCESS	MOOD
• How was the piece produced and of what was it made? Jackson Pollock (1912-1956) Number 33 (1946) • What techniques and processes were used?	• Does the work capture a mood, feeling or emotion? Joseph Mallord William Turner (1775-1851) Rain, Steam, and Great Bridge (1810) • What techniques has the artist used to convey the mood?



FORMAL ELEMENTS

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

LINE Connection between two points.	SHAPE Created by a closed line or by a solid colour.
TEXTURE Visual and tactile surface.	COLOUR Primary, secondary, tertiary, complementary colours.
TOPE Shadows, mid-tones, highlights.	PATTERN Natural, man-made, repeat or mirrored.



WORD REVOLUTION

The Elements of Music	Dynamics, Rhythm, Pitch, Structure, Metre, Instruments (sonority), Tonality, Texture, Tempo
Syncopation	Off beat rhythms
Mode	A set of notes that creates a specific mood or sound e.g. dorian mode, pentatonic scale, blues scale.
Hook	A hook line is the catchiest part of a song.
Riff	A catchy group of notes repeated in a song
Improvisation	Where musicians make up music on the spot
Bass line	A bass line is the low, deep part of music.
Root note	The root note is the main note of a chord e.g. C is the root note of the C chord.
Harmony	Use of chords and accompaniment. Major, minor and extension chords (7ths etc.)
Sharp and Flat	Sharp # Flat b

What will I study this year?

What will I be able to do by the end of this year?

Performing: Keyboard, drums, guitar and vocal skills.

Reading Music: Learn more symbols for notes, rhythms and chords

Composing: Make longer melodies and chord sequences in different styles

Technology: Use GarageBand to make and save and export music

Listening: Identify different genre and be able to describe them using the Elements

Context: Understand music's origins and emotions

Compose: Create music using modes on GarageBand. Improvise melodies.

Understand: Treble clef notes, rhythms, and time values

Identify Styles: E.g. Classical era, Jazz, Rock, Pop, Blues

Perform: Use instruments or voice in time confidently as a soloist or ensemble

Dynamics

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

Rhythm

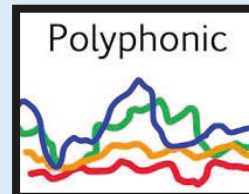
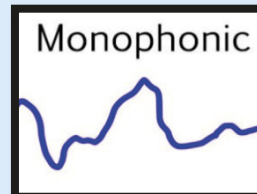
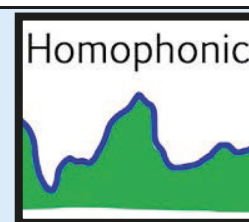
Semibreve	
Minim	
Crotchet	
Quaver	
Semiquaver	

= tea
 = coffee
 = Coca-Cola

The Blues

Origins	Developed from African-American emotions, spirituals, and work songs during and after the slave trade in the USA (late 1800s).
Musical Features	- 12-bar blues structure - Walking bass lines - Blue notes (flattened 3rds, 5ths, and 7ths) - Call and response
Future Connections	Influenced genres such as rock, jazz, R&B, and hip-hop.

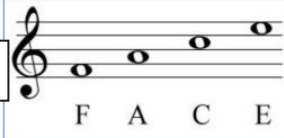
Texture is the way the musical layers are combined. Basic texture can be described as 'thick' or 'thin'



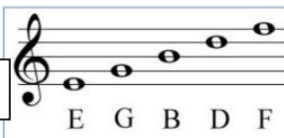
SUBJECT: MUSIC

YEAR: 8

Space notes

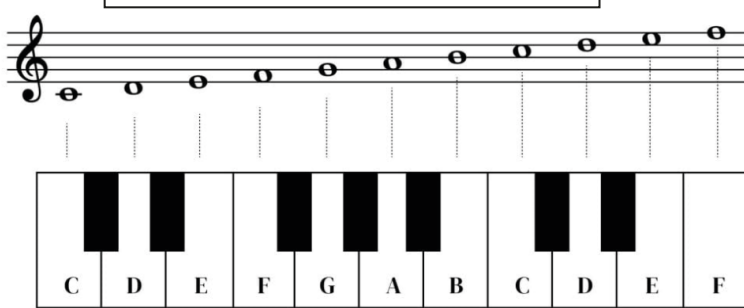


Line notes



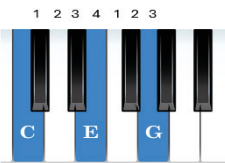
Every **G**reen **B**us **D**rives **F**ast

Treble clef notes and keyboard

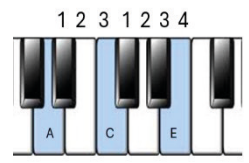


How to work out major and minor chords

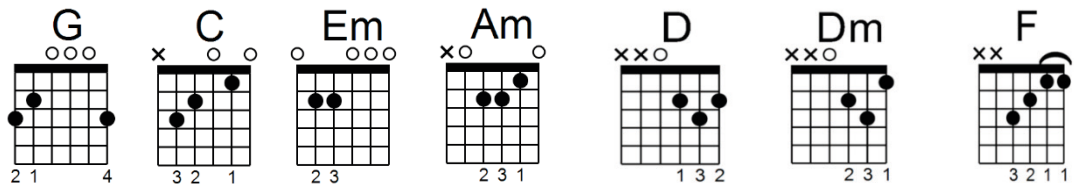
Major
4 steps then 3 steps



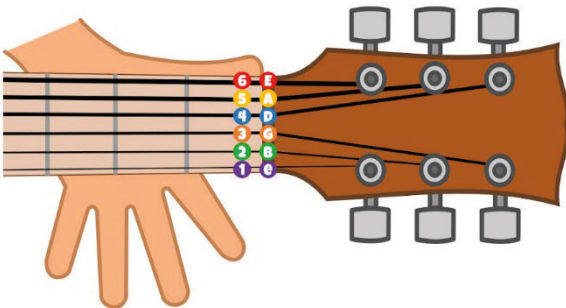
Minor
3 steps then 4 steps



Guitar Chords



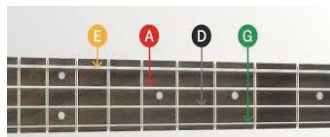
Drumbeat

1st string (high E)
Fret numbers
6th string (low E)



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: Drama

TOPIC: Performance Skills



YEAR: 8

SEMESTER: 1 & 2



WORD REVOLUTION

Characterisation	How an actor uses voice, movement, and emotion to show a character's personality.
Genre	The style or type of drama, like comedy, horror, or tragedy.
Improvisation	Making up a scene or lines on the spot without a script.
Ensemble	A group of performers working together equally.
Physical Theatre	Telling a story using the body and movement, not just words.
Non-verbal Communication	Using facial expressions, body language, and gestures instead of words.
Text Analysis	Looking closely at a script to understand the characters, themes, and meaning.
Conflict	A struggle or problem between characters that drives the drama.
Motivation	What a character wants or needs that drives their actions.
Devising	Creating a performance from ideas, images, or themes instead of a script.

Devising Challenge:

Imagine a moment when a character's life suddenly changes—like losing a friend, discovering a secret, or making a big choice. Think about who the character is, how they feel, and what happens in that moment. Then, write a short plan for a drama scene showing how the character changes, using ideas for what they might say, how they might move, or how they would show their emotions.

What will I study in this topic?

- You will create and perform more detailed characters, including their backstories and emotions.
- You will explore different drama styles, like comedy, tragedy, and melodrama.
- You will work closely in groups, learning how to perform as a team (ensemble).
- You will use your body and movement to tell stories through physical theatre.
- You will improvise scenes, learning how to make up dialogue and action in the moment.

What will I be able to do by the end of this topic?

- Perform a character with real emotions and clear motivation.
- Change your acting style to suit different genres and scenes.
- Create and perform scenes without a script, using improvisation techniques.
- Work well in a group, sharing ideas and performing together smoothly.
- Use your body and expressions to tell a story without needing words.

Physical Theatre

- Physical theatre uses the body—not just words—to tell a story or show emotions.
- It involves movement, gestures, and shapes to create meaning, often in a stylised or abstract way.
- Performers work as individuals or in groups to create powerful images or scenes using timing, space, and physical control.
- It focuses on showing, not telling the story and is mostly told through movement.

Frantic Assembly

- Frantic Assembly is a modern theatre company known for mixing movement, music, and text to tell exciting stories.
- They use physical theatre to create bold, energetic scenes with lifts, partner work, and sharp choreography.
- Their work often explores real-life emotions and relationships, using everyday movement in creative ways on stage.

What Is Devising in Drama and How Do You Do It?

- Devising means creating your own performance from scratch and not using a script.
- You start with a theme, idea, or image, then work in a group to build scenes through discussion, improvisation, and rehearsal.
- It involves teamwork, creativity, and problem-solving, as everyone helps shape the story, characters, and style of the piece.

DEFINITION OF PROXEMICS

proxemics



the study of space and how we use it, how it makes us feel more or less comfortable, and how we arrange objects and ourselves in relation to space

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SUBJECT: Design & Technology
TOPIC: Product Design

YEAR: 8
SEMESTER: 1 & 2



WORD REVOLUTION		What will I study in this topic?	• An introduction to design movements and iconic designers • Designing against a brief and specification • Electronics- Inputs, Processes and Outputs • Metal Fabrication
Design Movement	A group of designers with a common style or philosophy.	What will I be able to do by the end of this topic?	• Design with basic knowledge of multiple design movements, and their key features. • Independently use a range of advanced tools and equipment, safely and effectively. • Solder an electrical circuit accurately and understand it's components.
Design Specification	A list of clear, measurable points that a product must meet to be successful.		
Product Analysis	Examining an existing product to understand how it works, how it is made, and how well it meets user needs.		
Sustainability	Designing and making products in a way that reduces harm to the environment and conserves resources for the future.		
Adapt	To change or modify something to make it suitable for a new purpose or situation.	Key Tools:	Curriculum Connections:
Render	To add colour, texture, and detail to a drawing to make it look more realistic.	 File  Centre punch  Metal Vice  Junior Hacksaw	This year builds further on the key skills that you developed in Year 7, such as: • Designing with purpose through designing, manufacturing, and testing. • Learning about basic electronics and more material properties. • Use of further hand tools. • Safe and effective use of the soldering iron and power drill.
Evaluate	To judge how well something meets its purpose and suggest improvements.	Burn First Aid:	How will I be assessed?
Engrave	To carve a design or text into a surface, often for decorative or functional purposes.	 Alert your teacher that you have injured yourself.  Hold it under the cool tap straight away.  If it still burns, alert your teacher who will contact first aid.	 Design Ideas  Practical outcomes  End of unit test
Laser Cutter	A machine that uses a focused laser beam to cut or engrave materials with high precision.		
Centre Punch	A tool used to create a small indentation to guide drilling.		
Wet and Dry	A type of sandpaper used with or without water.		
Input	A component that receives signals from an external source to power or control the circuit.		
Microcontroller	A tiny computer that controls devices by reading inputs and giving outputs.		
Output	The result or action produced by a circuit after processing an input.		

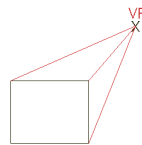
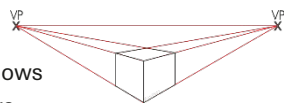
SUBJECT: Design & Technology

TOPIC: Product Design

YEAR: 8

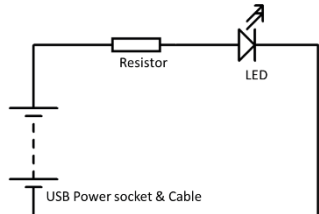
SEMESTER: I & 2



Key practical skill: Using a Power Drill	Power Drill:  Direction switch Chuck Trigger Handle	Step 1 Mark out where you need to drill, this should be where 2 lines meet or your centre-point.	Step 2 Place the material on a flat surface and use a clamp to hold it securely.	Step 3 Hold the drill with both hands, line up with your marking out and gently press the trigger. Drill slowly at first, then apply steady pressure.	Step 4 Drill your required depth, release the trigger, remove the drill carefully.
Key Technical Knowledge: Drawing in Perspective	A vanishing point is the spot on the horizon where parallel lines appear to meet and disappear. 	1-point perspective A one-point perspective drawing shows objects getting smaller as they move towards the vanishing point, making the drawing look 3D and more realistic.		2-point perspective A two-point perspective drawing shows objects getting smaller towards two vanishing points, making the drawing look 3D from a corner view instead of straight on.	

Electrical Components

The circuit you will solder is represented here with a **circuit diagram**.



This diagram shows you the components of your circuit.



“High Power” LED

A super bright, long-lasting, and energy-saving light.



Resistor

This limits the electrical current flowing through the circuit.



Black wire

Typically the negative or ground connection, where the current returns in a circuit.



USB Power Socket

A small connector used for fast charging and data transfer

Soldering

Step 1: Prepare your equipment.

Get your soldering iron, solder, circuit and wire strippers ready.



Step 2: Heat the soldering iron and strip your black wire:

Turn on the soldering iron and let it heat up for a few minutes. While this happens, use the “V” in your wire strippers to strip the wire.

Step 3: Melt the solder:

Touch the tip of the iron to the joint where the components meet, then push a small amount of solder onto the joint.

Step 4: Cool and check:

Wipe your soldering iron on your sponge and put it back on your stand then let the solder cool. Check that the joint is shiny and solid.

Design Movements



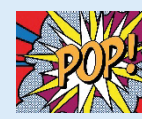
Art Nouveau: 1890-1910 Decorative style with flowing lines and nature-inspired forms.



Bauhaus: 1919-1933 Functional, geometric design emphasizing simplicity and industrial materials.



Space Age: 1950-1970 Futuristic designs with smooth curves and modern materials like plastic and metal.



Pop Art: 1950-1970 Bright, bold designs using imagery from pop culture and advertising.



Memphis: 1981-1989 Bold, colourful designs with clashing patterns and geometric shapes.



WORD REVOLUTION

Design Movement	A group of designers with a common style or philosophy, often from a specific time period
Design Specification	A list of clear, measurable points that a product must meet to be successful
Product Analysis	Examining an existing product to understand how it works, how it is made, & how well it meets user needs
Adapt	To change or modify something to make it suitable for a new purpose
Render	To add colour, texture, and detail to a drawing to make it look more realistic
Evaluate	To judge how well something meets its purpose & suggest improvements
Decorative Technique	A way of adding decoration to the surface of a textile product
Needle	A thin pointed tool with a hole in one end used to sew with
Thread	The string-like material that forms stitches when sewing
Embroidery	A decorative sewing stitch technique
Sample	A practice version to test out the idea before creating the final piece
Seams	The line where two or more pieces of material are joined together

What will I study in this topic?

- Designing from Influence (Design Movements)
- How to decorate fabric using a range of techniques
- How to construct a 3D textiles product by sewing panels of fabric together
- What fabrics are made from (their sources) and how they behave (their properties)

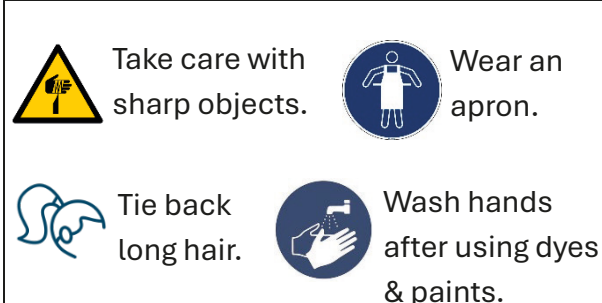
What will I be able to do by the end of this topic?

- Follow the design process: research, design, make and evaluate
- Use a range of specialist equipment safely and effectively including the sewing machine, batik pot and fabric paints and dyes.
- Understand that design is influenced by the work of others, society, culture and environmental considerations.

Key Tools:



Health & Safety

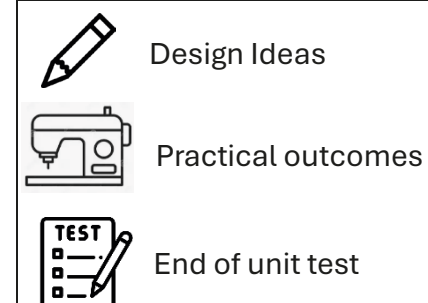


Curriculum Connections:

Builds upon transferable skills from year 7 Technology & introduces key skills essential in year 9 and beyond.

- Developing ideas through sampling
- Use of hand tools including needles and pins
- Safe and effective use of the sewing machine
- Testing and evaluating a range of decorative techniques
- Understanding that fabrics have different properties and this impacts their suitability.

How will I be assessed?



SUBJECT: Design & Technology

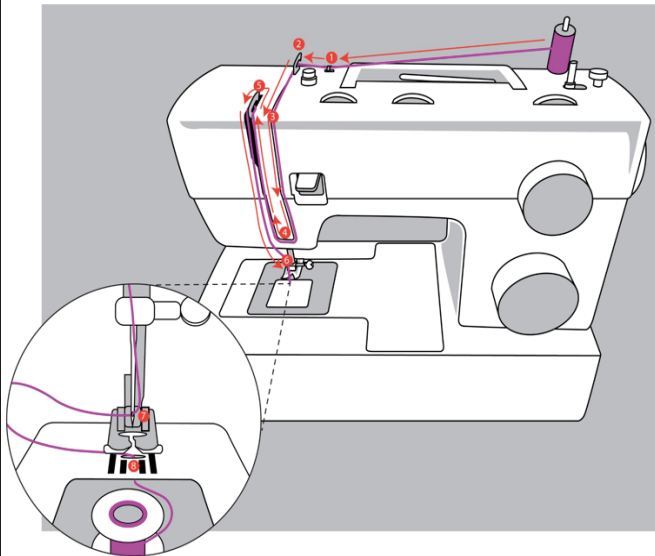
TOPIC: Textiles

YEAR: 8

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 comes from another, smaller spool of thread called the bobbin.

Fibres Cotton VS Polyester

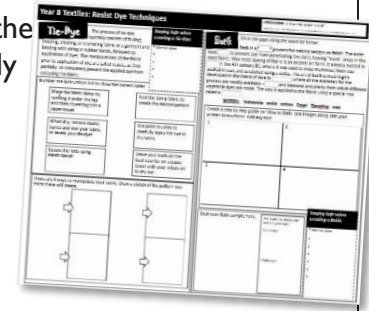
One comes from a plant, whilst the other originates from crude oil, but which is more SUSTAINABLE?



RESEARCH TASK: The Origins of Batik

Use the below information to help you complete your Resist Dye Techniques worksheet

Batik is a "resist" process for making designs on fabric. The artist uses wax to prevent dye from penetrating the cloth, leaving blank areas in the dyed fabric. Wax resist dyeing of fabric is an ancient art form. It already existed in Egypt in the 4th century BC, where it was used to wrap mummies; linen was soaked in wax, and scratched using a stylus. The art of batik is most highly developed in the island of Java in Indonesia, where all the materials for the process are readily available – cotton, beeswax and plants from which different vegetable dyes are made. The wax is applied to the fabric using a special tool called a tjanting.



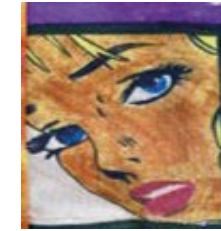
Decorative Techniques



Tie Dye



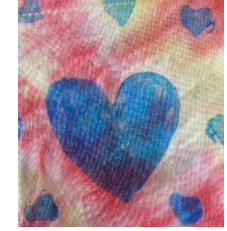
Batik



Transfer Paint



Embroidery



Block Printing

Specialist Equipment and Materials

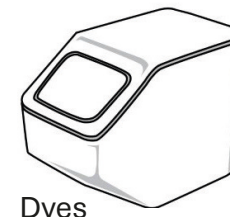
You will use a variety of textiles equipment and materials to create your decorative techniques:



Wax Pot



Tjanting Tool



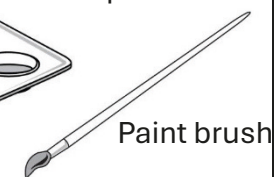
Dyes



Elastic bands



Fabric paints



Paint brush

SUBJECT: Physical Education

YEAR: 8

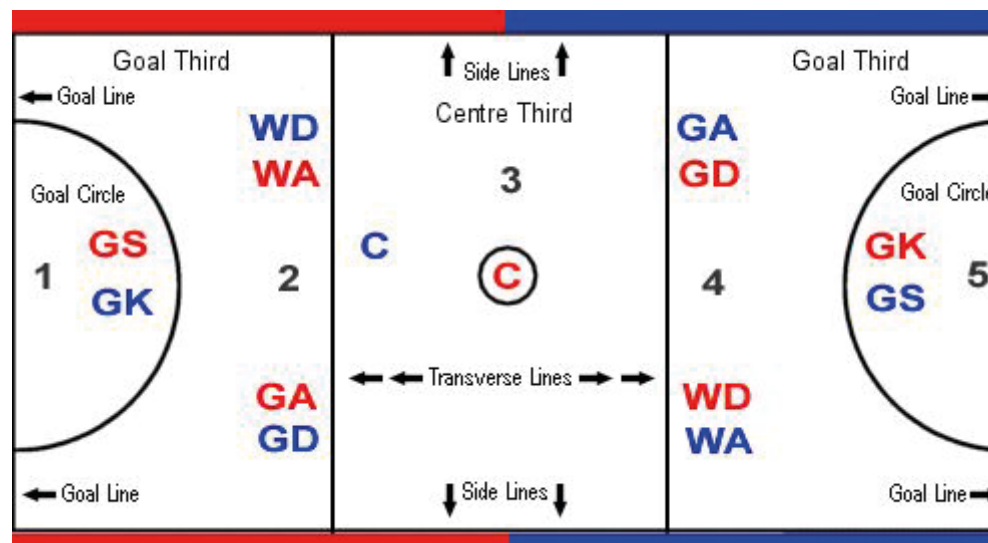


TOPIC: Winter Sports

SEMESTER: I

WORD REVOLUTION

Zonal Marking	A defensive strategy where players guard specific areas of the court rather than individual opponents.
High Press	A tactical approach where players apply pressure high up the pitch to win the ball back quickly from the opposition.
Grubber Kick	A low, bouncing kick used to move the ball past defenders.
Front Landing	A controlled landing on the front of the body with arms extended and legs.
Cardiovascular Endurance	The ability of the heart and lungs to supply oxygen to the muscles during sustained physical activity.
Muscular Strength	The maximum amount of force a muscle or muscle group can exert in a single effort.
Interval Training	A type of training that alternates between periods of high-intensity exercise and periods of rest or low-intensity activity.
HIIT	A form of interval training that involves short bursts of very intense activity followed by brief recovery periods.
Compose	To create and arrange movements into a structured dance routine
Plantar flexion	A movement at the ankle where the toes point downward, away from the shin.



What areas can each position go in?

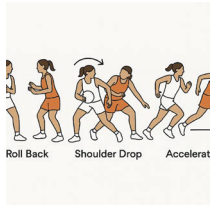
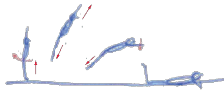
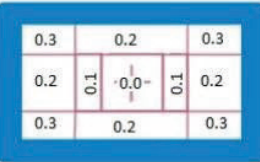
What is the GS's job?

What does WA stand for?

Where does the centre pass need to be received?

Peer Feedback Key Points for PE

Be Positive First	Start with something they did well. "Your footwork was really quick during that drill."
Be Specific	Focus on one or two clear aspects of performance. "Your arm set was strong, but your kick-out could be earlier."
Use Technical Vocabulary	Include key terms from the lesson or sport. "You maintained good plantarflexion in your jump." "Your marking was effective in man-to-man defence."
2 stars and 1 wish	Give two positives too very one improvement.
Focus on Effort and Progress	Recognise improvement and persistence. "You've improved your timing since last week." "You kept trying even when the routine was challenging."
Keep It Constructive and Respectful	Avoid negative or vague comments. ✓ "Next time, try to keep your arms tighter in the pike." ✗ "That was bad."

Netball	Football	Rugby	Trampolining	Fitness	Dance
Footwork Rule Land on one foot and pivot. Avoid dragging or hopping. Pass before moving the landing foot. Evading (Roll Back & Shoulder Drop) Roll away from the defender. Drop the shoulder to fake direction. Accelerate into space.  Shooting Stand tall and balanced – feet shoulder-width apart, eyes on the ring. Hold the ball high – elbows bent, fingertips on the ball, ready to shoot. Push and flick – use legs and arms together, finish with a wrist flick and follow through. 	Body Feint Keep the ball close to your feet. Drop your shoulder to one side to fake a movement. Shift your weight quickly to the opposite side. Accelerate into the space created.  High Press Close down space quickly. Work as a unit to force errors. Anticipate passes and intercept. Examples of Expanded Answers Using Football Terminology: ✓ Basic Answer: “I passed the ball to my teammate.” ✉ Expanded with Terminology: “I used a short inside-foot pass to maintain possession and create a triangle passing option, supporting our build-up play.” ✓ Basic Answer: “We defended well.” ✉ Expanded with Terminology: “We used a high press to win the ball back quickly, with our midfielders cutting passing lanes and our defenders holding a compact shape.”	Grubber Kick Drop the ball low and kick it to bounce along the ground. Use for attacking space behind the defensive line.  Tackle Head to the side, not in front. Wrap arms around the legs or waist. Drive with legs and bring the player to ground safely. 	Front Landing Land flat on the front with arms extended. Keep body tension to absorb impact. Bounce back to feet or into next move.  Horizontal Displacement (HD) Judges how well the performer stays in the centre of the trampoline bed. Deductions are made for landing away from the centre. Zones are marked on the bed to guide scoring.  Back Landing Land flat on your back with legs slightly raised. Keep body tight to absorb the bounce. Bounce back to feet or into the next move. 	Fartlek Training Definition: A form of continuous training that involves changes in speed, terrain, or intensity. It combines aerobic and anaerobic systems. Encourages self-paced intervals (e.g., jog-sprint-walk). Develops cardiovascular endurance, speed, and mental resilience. (used in sports that need a change in speed and intensity football, hockey). Continuous Training Definition: Sustained activity at a steady pace for a prolonged period. It improves aerobic endurance and cardiovascular health. Low to moderate intensity (e.g., jogging, cycling, swimming). Suitable for beginners and long-distance athletes. Interval Training Definition: Alternating periods of high-intensity work with rest or low-intensity recovery. It improves aerobic and anaerobic capacity. Work-to-rest ratios can be adjusted. Develops speed, power, and muscular endurance. Useful for team sports and track athletes.	Zorba's Dance Formation: Dancers stand in a line or semi-circle, arms on shoulders. Tempo: Starts slow (Hasapiko) and gradually speeds up (Hasaposerviko). Steps: Slow section: step forward, step back, cross behind, side step. Fast section: hop, kick, cross steps, quick directional changes.  Kuduro Style: High-energy, fast-paced, often improvisational. Movements: Sharp, angular arm and leg movements. Isolated body pops and robotic motions. Grounded footwork with explosive bursts. Structure: Often performed in battles or freestyle circles. 

