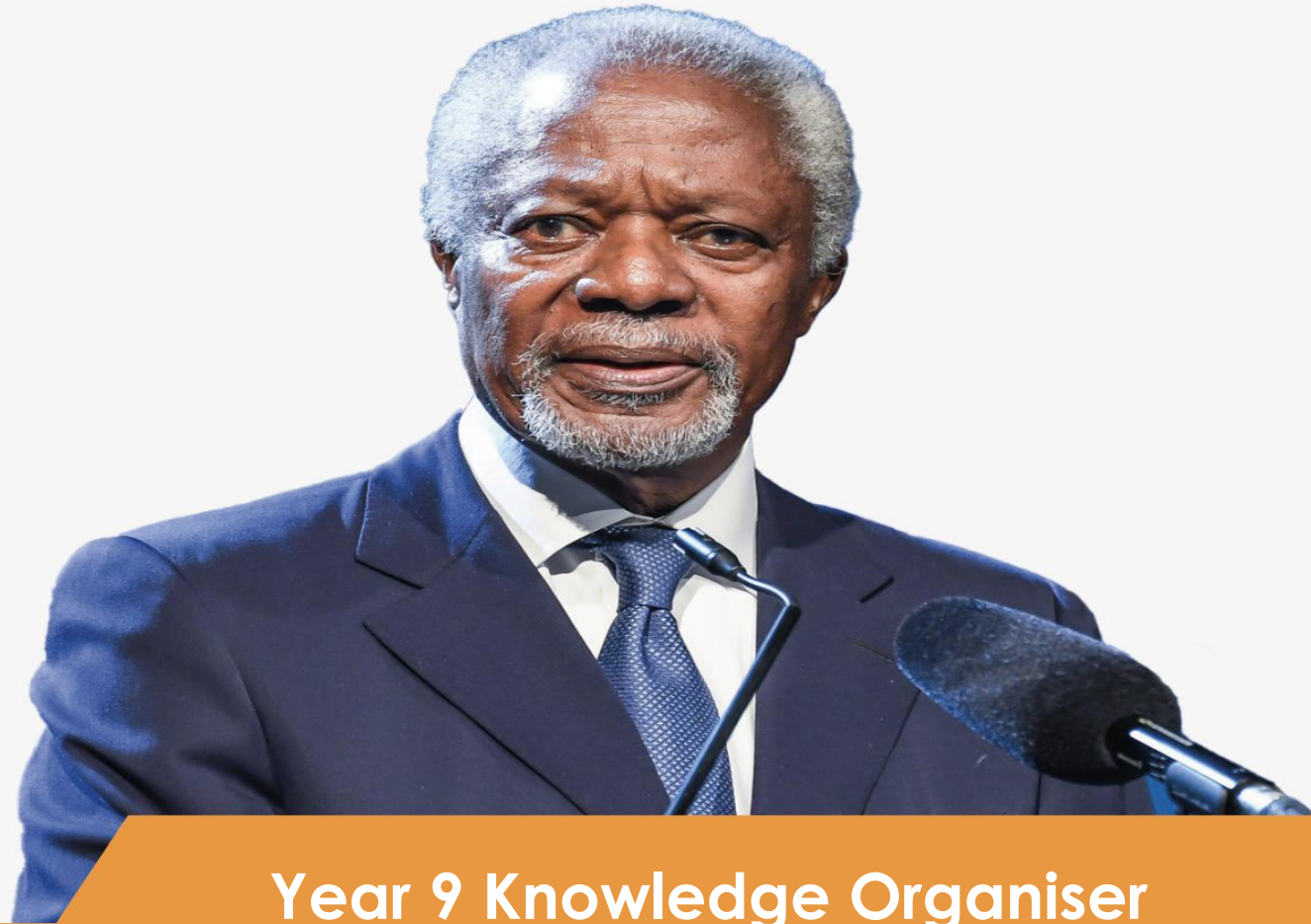




Frank Field
Education Trust

*“Knowledge is power.
Information is liberating.
Education is the premise
of progress, in every
society, in every family”*

- Kofi Annan



Year 9 Knowledge Organiser

Learning Programme 2

Pupil Name:

Form Group:

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Instructions to use the Knowledge Organiser

Use of the Knowledge Organiser

Every school day you should be studying at least 1 section of your Knowledge Organiser (KO) for homework.

The timetable outlines the tasks you will study during that week.

Your subject teacher will set the relevant homework task from the Knowledge Organiser booklet and inform you of when the homework is to be handed in.

Your homework is to be completed in your subject exercise book, unless the instructions are different within the task.

You need to bring your Knowledge Organiser and exercise books with you EVERYDAY to the academy.

You will also be tested in your lessons on knowledge from the organisers every week to ensure that the core knowledge is retained over time.

You should also be developing your core knowledge by developing your self-testing, revision and study skills techniques alongside the homework tasks.

You can use any of the adjacent techniques on top of the core homework tasks to enhance your revision skills.

Self-testing, revision and study skills techniques

You can use your KOs and book in a number of different ways but you should not just copy from the Knowledge Organiser into your book. Use the 'How to self-test with the Knowledge Organiser' booklet to help you.

Below are some possible tasks you could do in your workbooks, no matter which task you do you should always check and correct your work in a different coloured pen.

- Ask someone to write questions for you
- Write your own challenging questions and then leave it overnight to answer them the next day
- Create mind maps
- Create flashcards
- Put the key words into new sentences
- Look, cover, write and check
- Mnemonics
- Draw a comic strip of a timeline
- Use the 'clock' template to divide the information into smaller sections. Then test yourself on different sections
- Give yourself spelling tests
- Definition tests
- Draw diagrams of processes
- Draw images and annotate/label them with extra information
- Create fact files

How do I self quiz?

How to use...Flashcards

1. On one side of the flash card, write the word or question.
2. On the other side, write the definition for the word, or answer to the question.
3. Once you have completed your set of cards, put them in a pile. Then for each card, see if you can remember the definition or answer to the question. Tick or cross when you get it right or wrong.
4. When you get the card right, place it in the 'correct' pile. When you get it wrong, place it in the 'wrong' pile. Repeat until all cards are in the 'correct' pile.

You can also use the Leitner Method: <https://www.youtube.com/watch?v=C20EvKtdJwQ>

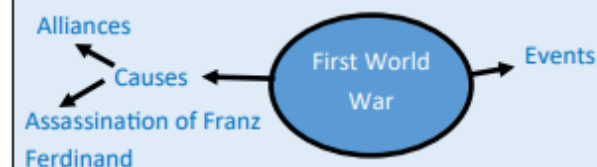
How to use... Look, Cover, Write, Check and Correct

1. Write your key words into the 'Look, Cover' column and then cover it.
2. Write out the meaning, definition or spelling in the 'Write' column.
3. Put a 'tick' or 'cross' in the 'Check' column depending on if you got the answer right.
4. If you got the answer incorrect, write the correct answer in the 'Correct' column.

Look , Cover	Write	Check	Correct
Noun	A person, place or	✓	
Algorithm	Algorithm	X	Algorithm

How to use... Mind Maps

1. Write out your topic or idea in the centre. E.g. The First World War.
2. Off of the main bubble, write out important categories to organise your ideas. E.g. causes of WWI and events in WWI
3. Then add your knowledge off of these branches. You might even be able to make connections between them.
4. Once made, then redraw as many of the connections as possible from memory. Correct any errors.



How to use... Explaining a process/ idea further

Your teacher might ask you to explain a key idea, process or event from your learning. This could be the water cycle (Geography), photosynthesis (Science) or something else. In your answer, try to use the words **because**, **but**, and **so**. These will help you to:

1. **Because:** helps to explain a reason, cause or why something works.
2. **But:** helps to explain a limitation or problem.
3. **So:** helps to explain what happens next in a sequence, process or event.

Check your sentences to see if your explanations or right or wrong. Correct any errors.

How to... Summarise a process/idea

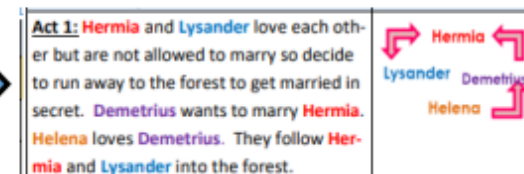
Rather than expand or explain a process, your teacher might ask you to summarise it into its key parts. E.g. summarising the plot 'A Midsummer Night's Dream' in English.

1. Read through the relevant part of your knowledge organiser as directed by your teacher.
2. Write out the (up to) 5 most important parts in your KO book, leaving a two lines in-between.
3. For each part, add **one** main idea.
4. E.g. here, the 4 key characters are picked out, and the direction of love is shown through the arrows. Check and correct any errors.

How to use... Subject Specific Tasks or Questions

Your teacher might choose to set a task that is not outlined here, and which is specific to that topic or their subject.

In this case, your teacher will outline specifically what it is you need to do, and how. This will still include you checking and correcting any errors.



Homework tasks

Week	Subject	Task
LP2.1	English	Complete the English homework task set on Sparx Reader.
	Maths	Complete the Maths homework task set on Sparx Maths.
	Science	Complete the Science homework task set on Sparx Science.
	History	Look, cover, write, check 5 of the key words and definitions.
	RE	Create a mind map about religious attitudes to war.
	Art	To create a list of artists' that look at colour theory in their work.
	Technology	Create a poster explaining how cross contamination happens.
	IT	Complete the relevant task in the homework booklet.

Week	Subject	Task
LP2.2	English	Complete the English homework task set on Sparx Reader.
	Maths	Complete the Maths homework task set on Sparx Maths.
	Science	Complete the Science homework task set on Sparx Science.
	Geography	Create summary diagrams of the plate boundaries.
	Spanish	Use your knowledge organiser to revise the vocabulary for a short vocabulary test.
	Drama	Read your knowledge organiser and memorise 5 pieces of information that you can use in your lessons, when devising your play.
	Music	Create a revision poster about how Reggae grew out of Mento, Ska and Rocksteady.
	PE	Use the 'Look, cover, write, check' method to list the key training principles/key terms of your sport or activity.

Week	Subject	Task
LP2.RLW	ALL	This week is an opportunity to work on knowledge that has been identified during lessons as key areas for development. This could be additional revision and recall tasks from the knowledge organisers or it could be specific tasks set by classroom teacher.

Homework tasks

Week	Subject	Task
LP2.3	English	Complete the English homework task set on Sparx Reader.
	Maths	Complete the Maths homework task set on Sparx Maths.
	Science	Complete the Science homework task set on Sparx Science.
	History	Explain using a PEE paragraph the consequences of the French Revolution.
	RE	Create a comparison table showing the differences between Holy war, Jihad and Just war.
	Art	To create a spider diagram of your favourite artist and explore their artwork, describing the features.
	Technology	Research the 'Bacteria Escape Room'.
	IT	Complete the relevant task in the homework booklet.

Week	Subject	Task
LP2.4	English	Complete the English homework task set on Sparx Reader.
	Maths	Complete the Maths homework task set on Sparx Maths.
	Science	Complete the Science homework task set on Sparx Science.
	Geography	Create a fact file for a recent tectonic event.
	Spanish	Use your knowledge organiser to revise the vocabulary for a short vocabulary test.
	Drama	Learn your lines from the script paying particular attention to tone, expression and characterisation. Bring in costumes. Try to use the correct accent when you do this.
	Music	Create a revision card about reggae music for your assessment.
	PE	Make flashcards on the tactics you could use within your sport/activity to gain an advantage (e.g. how to get a head start).

Homework tasks

Week	Subject	Task
LP2.5	English	Complete the English homework task set on Sparx Reader.
	Maths	Complete the Maths homework task set on Sparx Maths.
	Science	Complete the Science homework task set on Sparx Science.
	History	Create a timeline of events for the Russian Revolution.
	RE	'Religious believers should focus more on solving human suffering that explaining it.' Evaluate this statement.
	Art	To draw a full outline of a natural form.
	Technology	Create a 'Prevention Poster'.
	IT	Complete the relevant task in the homework booklet.

Week	Subject	Task
LP2.6	English	Complete the English homework task set on Sparx Reader.
	Maths	Complete the Maths homework task set on Sparx Maths.
	Science	Complete the Science homework task set on Sparx Science.
	Geography	Research a past eruption of your choice and list the effects.
	Spanish	Use your knowledge organiser to revise the vocabulary for a short vocabulary test.
	Drama	Learn your lines from the script paying particular attention to tone, expression and characterisation.
	Music	Create a flashcard about the 'skank' and 'bubble' rhythms in Reggae – include a diagram of what each might look like when played.
	PE	Create a mind-map of the key movements in your sport/activity.

Week	Subject	Task
LP2.7	English	Complete the English homework task set on Sparx Reader.
	Maths	Complete the Maths homework task set on Sparx Maths.
	Science	Complete the Science homework task set on Sparx Science.

This Learning Programme you will be focusing on refining work by exploring ideas, selecting, and experimenting with appropriate media, materials, techniques, and processes.

1. How to refine your work.
2. How to select and explore multiple materials
3. Select key media to explore specific techniques
4. Identify successful use of materials
5. Explore multiple materials
6. Evaluate your use of processes
7. Identify successful experimentation.

KEYWORDS	DEFINITION
Media	The materials used
Tone	Shades, ranging from dark to light
Shape	The outside line, joined to create a shape
Texture	Representation of how something feels
Pattern	A design in which shapes, lines and colours are repeated
Line	Basic visual element, used to create shapes
Form	Three dimensional shape, height, width, and depth
Colour	Different shades and tones
Review	An evaluation of artwork
Reflect	Think carefully and make comments
Analyse	Examine in detail



AO2 Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes.

What does this mean?

You need to demonstrate that you are able to explore, progress and improve your ideas through a development journey of experimentation, trails, samples, working things out as you go.

Refinement means to improve. You will learn from doing something then working out how to do it better and then having another go. This may take many steps.

AO2 should be seen as an integral part of your creative journey and not a separate thing.

How does it link with AO1?

Experimenting in response to your chosen artists

How does it link with AO3?

Recording your ideas and observations as you experiment and as your ideas develop. Recording your decisions.

How does it link with AO4?

Your experimentation and refinement of ideas should lead to a skilful personal and meaningful response.

How do I show this in my work?

- Refine a dominant idea by trying various compositions
- Refined techniques in a variety of media
- Have you developed an idea and not just used your first idea?
- Clearly demonstrate purposeful trialling of materials supported by notes
- Attempts to mimic the style/technique of an artist in your own work
- Selection and rejection of ideas
- Problem solving
- Showing stages of development

Reaching for the level 8/9:

How do I show

A highly developed ability to thoughtfully refine ideas.

A highly developed ability to effectively select and purposefully experiment with appropriate media, materials, techniques and processes.

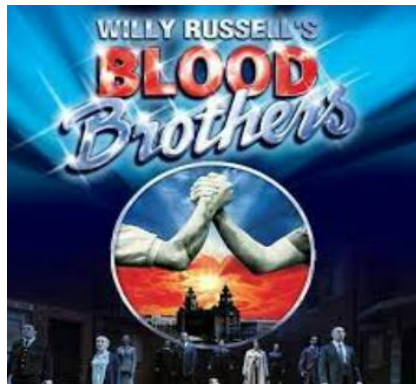
The level to which you experiment. Do you go through a number of processes refining along the way? Have you copied the artists work in a superficial way or have you really explored their technique? Have you taken risks and shown a highly developed creative journey as a result? Are your ideas unique?

Annotate your own work

- What have you produced and why?
- How does it link to the artist you have been looking at?
- Has the technique been successful and why?
- How might your work now develop?
- What have you learnt?
- What are your decisions?

Refinement is important, not just repetition

This Learning Programme you will be learning about Willy Russell's 'Blood Brothers' and Naturalistic Acting.



Key Vocabulary

Dramatic Irony	When the audience knows more than the character.
Breaking the fourth wall	Speaking directly to the audience.
Multi-rolling	Taking on multiple roles. Narrator also plays the milkman and gynaecologist.
Verfremdungseffekt	The alienation effect which separates the audience from the action.
Foreshadowing	an indication or warning of a future event.

Plot Summary:

'Blood Brothers' is a tragic musical play set in Liverpool, England. It tells the story of twin brothers separated at birth, Mickey and Edward. Mrs. Johnstone, their impoverished mother, gives one twin to the wealthy Mrs. Lyons, who cannot have children. The story follows the brothers as they grow up in contrasting environments, unaware of their true relationship. Their paths cross repeatedly, leading to a dramatic and heart-wrenching conclusion, the death of the twins.

Style

Blood Brothers was initially produced by Willy Russell as a play and later adapted into a musical. It has both naturalistic and non-naturalistic stylistic features. Non-naturalistic features include dramatic irony, breaking the fourth wall, multi-rolling and the alienation technique (verfremdungseffekt).

Aim / Intention

- To educate the audience on socio-political issues.
- To create an anti-Thatcher play to encourage the audience to think.
- To entertain.
- To decrease the divide between the working class and upper classes.

LP1.1> LP1.2> LP1.3> LP1.4> LP1.5> LP1.6> LP1.7

Hot seating	Answering question in role
Naturalism	Acting like you would in real life
Character	The role you take on
Cross cutting	Moving between 2 scenes on stage
Nature vs nurture	Are you born a certain way or does your environment make you who you become
Fate	Pre determined
Social class divide	The divide between working class, middle class and upper class
Emotion memory	Recalling emotions and using them in a scene

Influences

- Bertolt Brecht influenced through techniques such as educating the audience, narration and multi-rolling.
- Socio-political issues such as the recession, unemployment, and the widening of the social gap.
- Margaret Thatcher was the Prime Minister responsible for high rates of unemployment, closing the mines and factories.
- Marilyn Monroe was a famous Hollywood actress. She is known for her glamour but also struggled with depression which led to her suicide.

Year 9 Drama LP2 Knowledge Organiser

LP1.1 > LP1.2 > LP1.3 > LP1.4 > LP1.5 > LP1.6 > LP1.7

Author and Background: Willy Russell: British playwright, born in 1947. Known for his works exploring social issues and class divides. Other notable works include "Educating Rita" and "Shirley Valentine."

Social Context: Set in the 1960s-1980s, a period of significant social and economic changes in the UK. High unemployment rates and class disparities in Liverpool during that era. The play explores the impact of Margaret Thatcher's policies and the decline of the working class.

Character Profiles:

Mrs. Johnstone: Struggling mother of the twins, abandoned by her husband, and forced to make difficult choices.

Mrs. Lyons: Wealthy woman who adopts one of the twins, haunted by the fear of the truth being revealed.

Mickey: One of the twins raised in poverty, has a close bond with Edward.

Edward: One of the twins raised in privilege, unaware of his true origins.

Sammy: Mickey's older brother, involved in crime.

Linda: Childhood friend of Mickey and Edward, becomes a pivotal figure in their lives.

The Narrator serves as a Greek chorus, offering a commentary on the events and foreshadowing the tragic outcome. Represents the inevitable consequences of the characters' actions.

Social class divide – The divide between being upper class (rich) and Working class (poor)

Nature vs Nurture – Are we born they way we are or does our environment shape us?

Fate/Superstition – Do we have a choice in what happens to us or is it pre determined?



This Learning Programme you will be learning about narratives. You will look at a range of short stories, and analyse the various techniques they use to create an effective narrative, before trying them out yourself.

1

How to write a simple story that can interest your reader.

2

How to take an idea and turn it into a well thought out story.

3

How to use advanced writing techniques to keep your reader interested in your story.

4

How to change the tone of your story to best fit your audience.

5

How to write and layout your story using different techniques and varied sentence and paragraph length.

6

How to make sure your story makes sense, while making full use of your characters.

7

How to use advanced vocabulary, and ensure you have used spelling and punctuation correctly.

Structural technique: paragraphs.

The length of paragraphs affects the pace of your story. **Shorter paragraphs** speed your story up, perfect for action scenes. **Longer paragraphs** slow your story down, letting you explain in detail.

Structural technique: sentences.

Vary your sentence length to impact your reader. Use **short sentence** to have a sudden impact on your reader, **and long sentences** to slow down your story's pace.

Key Vocabulary

Atmosphere	The mood a story makes the reader feel.
Perspective	The point of view of a person.
Imply	When a story hints at something without saying it directly.
Tension	Making a reader feel worried, nervous or scared.
Contrast	When two opposites are put together, e.g. hot and cold.
Reveal	To tell the reader something that has been hidden from them.

1. Exposition

Introducing the characters and important information

3. Rising Action

Everything that happens as the story builds up

2. Inciting Incident

Something happens that gets the story going

4. Climax

The most tense, dangerous or challenging part of the story

5. Falling Action

The story begins to wind down

6. Resolution

The end of the story

Punctuation Guide:

Exclamation mark (!) – Shows strong emotion, usually anger.

How dare you eat my cake!

Question mark (?) – Asks a question

Why did you eat my cake?

Colon (:) – Introduces a list

The cake needs: eggs, flour and milk.

Semi colon (;) – separates clauses in a sentence

The cake; which was chocolate; had been stolen from the fridge.

Brackets () – introduces extra information.

Steve (who had secretly eaten the cake) felt guilty.

Year 9 English LP2 Knowledge Organiser

Verbs/Adjectives:

- drift
- breathe
- soothe
- murmur
- glide
- settle
- float
- unfold
- embrace
- linger
- gentle
- serene
- tranquil
- still
- restful
- dreamy
- hushed
- delicate
- balmy
- pastel
- lurk
- creep
- snarl
- slither
- stalk
- clutch
- shriek
- loom
- shudder
- choke
- ominous
- twisted
- grim
- malevolent
- shadowy
- grotesque
- rancid
- cold
- unholy
- jagged

Pathetic Fallacy:

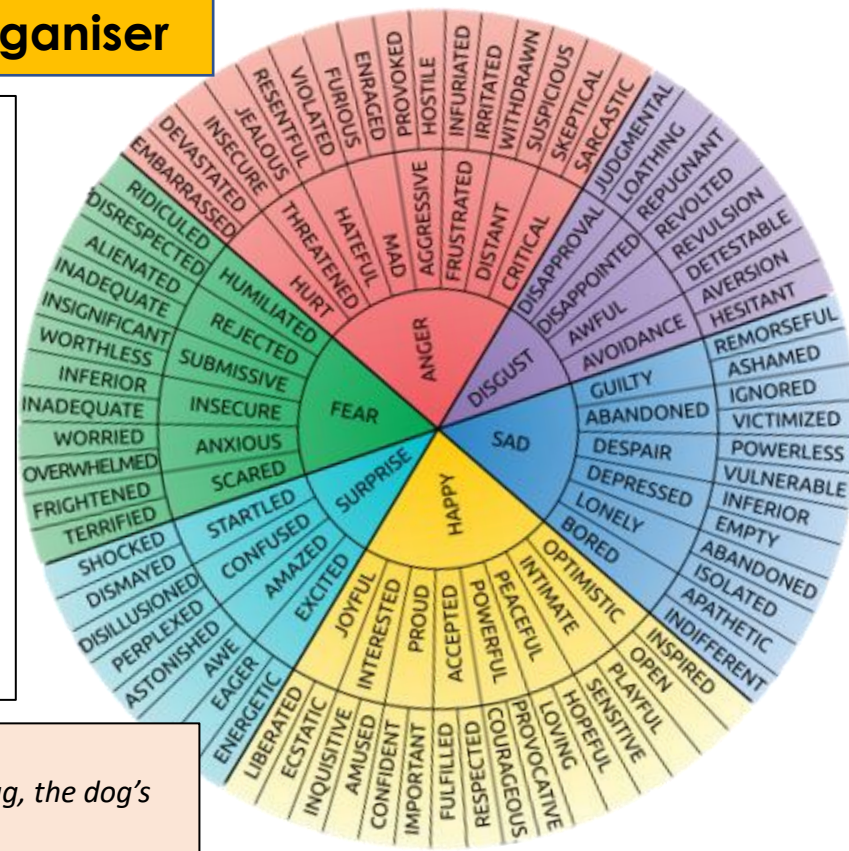
- A **clear sky** mirroring clarity of thought
- A **gentle breeze** expressing emotional ease
- **Sunlight filtering** through trees showing hope or warmth
- A **quiet stream** flowing like calm thoughts
- **Soft rain** soothing grief
- A **still lake** mirroring inner stillness
 - A **raging storm** foreshadowing chaos
 - **Thick fog** representing confusion or secrecy
 - **Withering trees** showing moral decay
 - **Howling wind** mimicking cries of anguish
 - A **blood-red sunset** signalling doom
 - **Shadows stretching** as fear creeps in
 - **Torrential rain** echoing uncontrollable grief or rage

COMMON ERRORS:

- Their means *theirs*
- There means a place
- They're means *they are*
- It's means *it is*

APOSTROPHES:

- Show belonging: *Bella's bag, the dog's ball*
- Show contractions: *Have not = haven't*



Oxymorons:

- *silent music*
- *still motion*
- *bittersweet peace*
- *deafening quiet*
- *peaceful storm*
- *gentle strength*
- *frozen warmth*
- *dark light*
- *screaming silence*
- *living death*
- *cold fire*
- *sweet poison*
- *burning chill*
- *beautiful nightmare*
- *kind cruelty*

Colours:

- | | |
|---------------|----------------|
| Soft blue | Blood red |
| Pale lavender | Midnight black |
| Mint green | Decayed brown |
| Blush pink | Charcoal grey |
| Warm sand | Toxic green |
| Cool grey | Ashen purple |

Onomatopoeia:

- *sigh*
- *murmur*
- *rustle*
- *patter*
- *hum*
- *whisper*
- *breeze*
- *lapping*
- *creak*
- *snap*
- *clang*
- *howl*
- *thud*
- *hiss*
- *crack*
- *screech*
- *slither*
- *groan*

Personality Traits:

- compassionate
- thoughtful
- patient
- soft-spoken
- optimistic
- wise
- tender
- grounded
- trusting
- content
- manipulative
- calculating
- vindictive
- obsessive
- ruthless
- secretive
- paranoid
- cold-hearted
- morbid
- unhinged

Common Spelling Errors:

- Should of → should have
- Could of → could have
- Would of → would have
- Alot → a lot
- Aswell → as well
- Your welcome → You're welcome
- Could care less → Couldn't care less
- Definately → Definitely
- Seperate → Separate
- Occured → Occurred
- I didn't do nothing → I didn't do anything

This Learning Programme you will be learning about global occurrences of tectonic hazards which I hear about in the news, enabling me to show empathy for those affected.

Key Vocabulary

Distribution	the way something is spread out or arranged over a geographic area.
Location	the place where a particular point or object exists
Management	Coordinated strategies to reduce a hazard's effects
Social	is the branch of human geography that is interested in the relationships between society and space e.g. people
Economic	Economics is a social science that deals with the production, distribution, and consumption of goods and services. It is also how much money is earned and how wealth is spread out.

The Earth has four main layers - the inner core, the outer core, the mantle and the crust.

-The inner core is extremely hot and is a very dense solid.

-The outer core is 2,000 km thick and is a liquid.

-The mantle is semi-molten and about 3,000 km thick.

-The crust is the rocky outer layer; it is thin compared to the other sections, approximately 5 to 70 km thick.

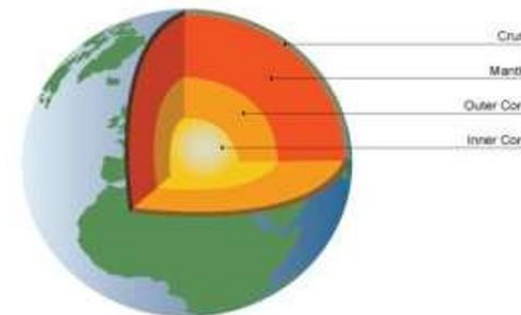


Plate tectonics

Plate margin: where two or more plates meet

Convection currents: movement within the Earth's mantle caused by the heat of the Core.

The Earth's crust is broken up into huge slabs called plates. The plates float on the mantle and are constantly moving by **convection currents**. When these plates move, they bump into, move away from, or rub up against other plates at the **plate margins**. How these plates move in relation to other plates dictates what type of plate margin it is and helps us understand what types of hazards will occur there.

Destructive plate margin

Destructive plate margins occur when tectonic plates move towards each other and collide. The effect this has depends on what kinds of plates are colliding.

Conservative plate margin

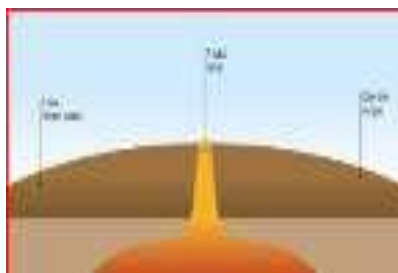
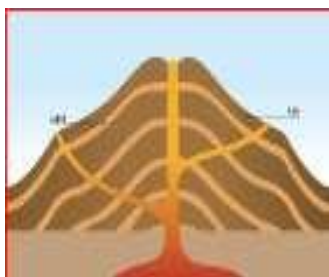
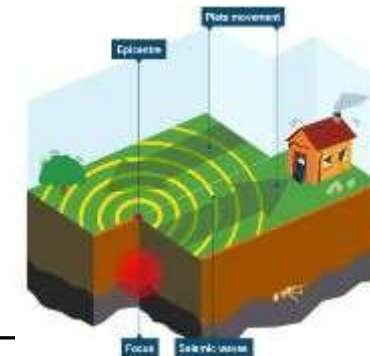
Conservative plate margin occurs where **plates slide past each other** in opposite directions, or in the same direction but at different speeds.

Constructive plate margin

A constructive plate margin occurs when **plates move apart**. Volcanoes are formed as magma wells up to fill the gap, and eventually new crust is formed.

Earthquakes

Earthquakes are the sudden violent shaking of the ground. This happens because the Earth's plates are constantly moving. Sometimes, because of **friction**, plates try to move and become stuck. **Pressure** builds up because the plates are still trying to move. When the pressure is released, it sends out huge amounts of **energy** causing the Earth's surface to shake violently. The point inside the Earth's crust where the earthquake originates from is known as the **focus**. The earthquake's energy is released in **seismic** waves and they spread out from the focus. The **epicentre** is the point on the Earth's surface directly above the focus. The seismic waves are most powerful at the epicentre.

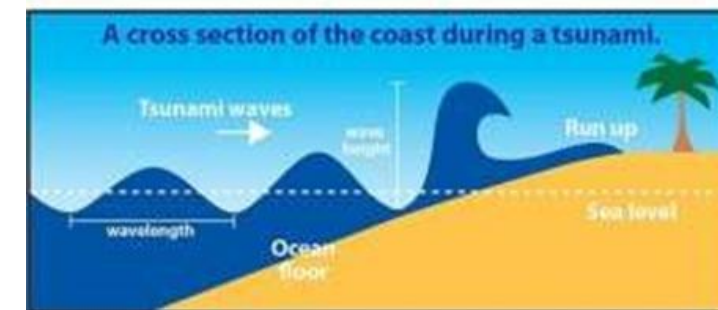


Volcanoes

Volcanoes are vents to the interior of the planet - they allow magma from the mantle to spill out as lava onto the Earth's crust. There are 2 types of volcanoes, shield and composite. A **shield volcano** has gently sloping sides and runny lava that covers a wide area. A **composite volcano** is steep sided and cone-shaped, it is made up of layers of ash and lava. The lava is sticky so it does not flow far.

Tsunami

Tsunami is a Japanese word which means '**harbour wave**'. A tsunami is a large sea wave caused by the displacement of a large volume of water. They can be caused by earthquakes triggered by moving sections of the Earth's crust under the ocean. Tsunamis have many social, economic, and environmental impacts depending on where they hit and their size.



Managing hazards

There are 3 things we can do to lessen the affects of earthquakes, the 3 Ps.

Prediction - Using technology to estimate when and where we think an earthquake is going to happen. **We often know where one will happen but it is difficult to figure out when it will.**

Protection - Putting measures in place to help protect people during an earthquake. The most important and common one is **building special buildings that will not collapse.**

Preparation - This is all about getting ready for when the next one comes. It includes **special drills and practices so people know what to do, and preparing materials in advance.**

Year 9 History LP2 Knowledge Organiser

1

What is a Revolution?

A **revolution** is a major change in a country's government, society or way of life, often brought about by people who are unhappy with those in power.

Revolutions usually happen when a large group of people wants to replace the existing system with a new one.

This Learning Programme you will be learning about how and why Revolution have occurred around the world. Examining the causes, key events and the consequences.

Key Vocabulary

Cause	Something that makes an event happen or helps bring it about
consequence	A result or effect of an event or action
Bastille	A fortress prison in Paris
Tsar	The title given to the rulers of Russia before 1917
Bolsheviks	The revolutionary group led by Vladimir Lenin that seized power in Russia during the October Revolution of 1917
Guerrilla	A type of fighter who uses surprise attacks, ambushes and irregular tactics against a larger or stronger enemy.
Legacy	The lasting impact or influence of a person, event or development.

Revolution 🗨️	Revolt 🗨️
A big change to a country or government.	A protest or rebellion against something people think is unfair.
Lots of people are involved.	Often a smaller group of people are involved.
Usually changes who is in charge or how the country is run.	Doesn't always change the government.
Often takes place over several years.	Can be shorter and more limited.
Creates long-lasting change.	May not lead to major change.
Example: American Revolution.	Example: Peasants' Revolt.

	French Revolution (1789-1799)
Causes	• Unfair Three Estates system • Government debt and financial crisis • Food shortages and high prices • Enlightenment ideas
Key Events	• Storming of the Bastille (1789) • Declaration of the Rights of Man (1789) • Execution of Louis XVI (1793) • Reign of Terror (1793-94) • Napoleon takes power (1799)
Consequences	• End of absolute monarchy • Rise of republican government • Political instability • Rise of Napoleon
Other Useful Knowledge	• The Bastille symbolised royal authority • Promoted ideas of liberty, equality and fraternity • Robespierre led the Terror • Influenced political movements across Europe

Easy Way to Remember

Revolt = Fight Against 🗨️

People rise up because they are unhappy.

Revolution = Change Everything 🗨️

People want to completely change who is in charge or how the country is run.

2

	American Revolution (1775-1783)
Causes	• Taxation without representation • Desire for self-government • Enlightenment ideas • Opposition to British control
Key Events	• Boston Tea Party (1773) • Lexington and Concord (1775) • Declaration of Independence (1776) • Saratoga (1777) • Yorktown (1781)
Consequences	• Independence from Britain • Creation of the USA • Constitution established • Inspired future revolutions
Other Useful Knowledge	• George Washington led the Continental Army • France supported the Americans after Saratoga • Treaty of Paris (1783) ended the war • First successful colonial revolution

3

Year 9 History LP2 Knowledge Organiser

4

	Russian Revolution (1917)
Causes	• Autocratic rule of the Tsar • Poverty and poor living conditions • Defeats in WWI • Lack of political freedom
Key Events	• February Revolution (1917) • Tsar abdicates • Provisional Government formed • October Revolution (1917) • Bolsheviks seize power
Consequences	• End of Tsarist rule • Communist government established • Russian Civil War • Formation of the USSR
Other Useful Knowledge	• Lenin led the Bolsheviks • "Peace, Bread and Land" was a key slogan • Soviets gained support from workers and soldiers • First communist state in the world

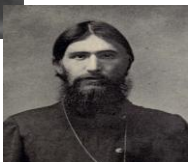
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	Cuban Revolution (1953-1959)
Causes	• Batista's dictatorship • Corruption and inequality • American influence over Cuba • Poverty among workers and peasants
Key Events	• Moncada Barracks attack (1953) • Castro imprisoned and exiled • Granma landing (1956) • Guerrilla campaign in Sierra Maestra • Batista flees Cuba (1959)
Consequences	• Castro came to power • Cuba became communist • Closer ties with the USSR • Increased tensions with the USA
Other Useful Knowledge	• Fidel Castro, Raúl Castro and Che Guevara were key figures • Guerrilla warfare was crucial to victory • Revolution became a symbol of anti-imperialism • Helped lead to the Cuban Missile Crisis (1962)

6

7

Person	Who Were They?	Why Are They Important?
Tsar Nicholas II	The last Tsar (ruler) of Russia.	His poor leadership, especially during WWI, caused many people to lose faith in the government. He abdicated in 1917.
Vladimir Lenin	Leader of the Bolsheviks.	Led the October Revolution and established the first communist government in Russia. Famous slogan: "Peace, Bread and Land."
Leon Trotsky	Leading Bolshevik revolutionary.	Helped organise the October Revolution and led the Red Army to victory in the Russian Civil War.
Rasputin	A religious mystic who advised the royal family.	His influence over Alexandra damaged the reputation of the Tsar and made many people distrust the monarchy.



This Learning Programme you will be learning about Databases

Key Vocabulary

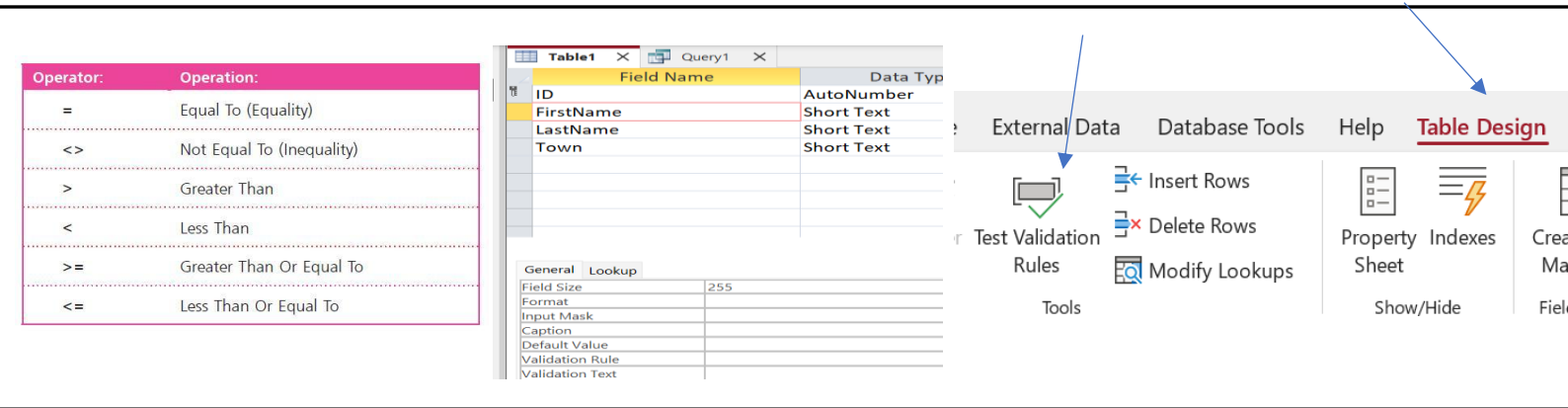
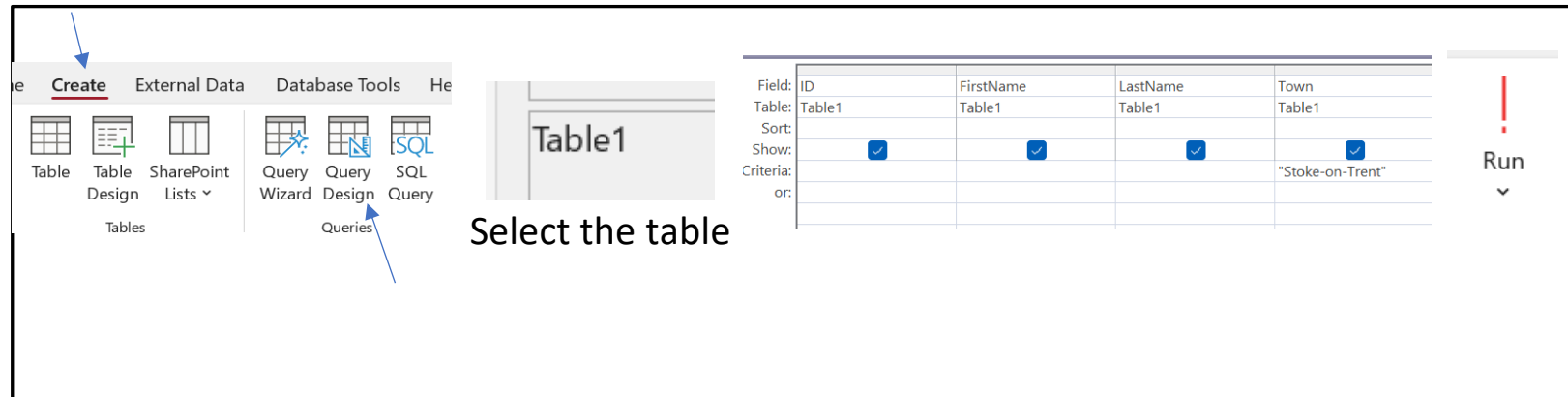
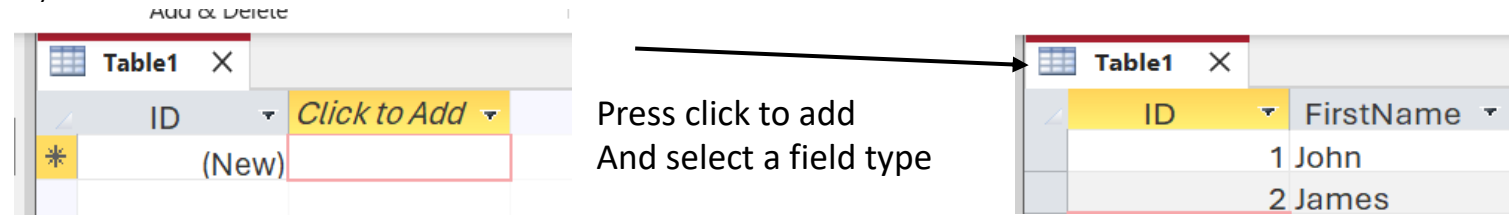
Database	A database is an organised collection of data.
Query	A request for information.
Validation	The process of checking data for accuracy.
Export	the process of saving or converting data from a database into a different file format so that it can be opened, read, or used by another software application
Criteria	A criteria is a condition used in databases to filter and retrieve specific records.
Form	a user-friendly window or screen that makes it easier to enter, view, or edit data, hiding the complex structure of underlying tables from the end user
Report	A report presents data that is returned from a query.
Testing	to identify errors and improve systems

Year 10 ICT LP2 Knowledge Organiser

Flat file database – A simple database that stores data in rows and columns. It does not use relationships between tables.

Field – A single piece of information that describes an entity. This could be something such as a name, age, or hair colour.

Record – A collection of fields that is treated as a single unit. It represents a complete entry about an entity.



Town

Table1



[What town?]

Parameter Query

Wrap a question in square brackets.

Wildcard query:

*- matches 0 or more characters

- matches any single numeric characters

Sort the data alphabetically.

Select or deselect data to be hidden

The screenshot shows the Microsoft Access interface. The 'Create' ribbon is active, with the 'Report' button highlighted by a red arrow. Below the ribbon, the 'Table1' and 'Query1' tabs are visible. The 'Query1' table is open, showing a list of records with columns ID, FirstName, LastName, and Town. The 'Report' ribbon is also visible, showing options for creating a report.

ID	FirstName	LastName	Town
1	Barry	Scott	London
4	Barry	Scott	London
5	Barry	Scott	London

A screenshot of a web application interface. At the top, there is a header bar with the text "MAIN MENU" in a bold, sans-serif font. Below the header, there is a grid of six blue rectangular buttons arranged in two rows of three. Each button contains a white icon of a person, representing a user profile or role. The buttons are separated by thin white lines.

Test number	What am I testing	What do I expect to happen	What happened?	Changes to be made
1	Does the Table1 macro work	It takes me to table 1	It didn't work	Double check the macro is set up correctly
2	Does table2 macro work	It takes me to table2	It worked	None

This Learning Programme you will learn about formulae, constructions, circles, rounding, 3D shapes and Pythagoras' theorem

Key Vocabulary

Formula	A formula is a mathematical rule or relationship expressed using symbols, letters, and numbers. It shows how to calculate a value based on other known values.
Bisector	A bisector is a line or ray that divides something into two equal parts. In geometry, it often refers to: Angle bisector: A line that splits an angle into two equal angles. Line segment bisector: A line that cuts a segment exactly in half at its midpoint.
Area	The space inside a 2D shape
Sector	A sector is a portion of a circle bounded by two radii and the arc between them. It looks like a "slice of pie."
Volume	The space inside a 3D shape.
Hypotenuse	The longest edge on a right-angle triangle
Square root	The square root of a number is a value which, when squared (multiplied by itself), equals the original number.

Year 9 Maths LP2 Knowledge Organiser

1

Changing the subject of formulae

Changing the subject of a formula

This follows the same rules as when solving equations.

e.g. make u the subject of the formula

$$\begin{array}{lcl}
 & q = 2u + 3p & \\
 -3p \swarrow & & \searrow -3p \\
 & q - 3p = 2u & \\
 \div 2 \swarrow & & \searrow \div 2 \\
 & \frac{q - 3p}{2} = u &
 \end{array}$$

e.g. make c the subject of the formula

$$m = 5(c - 1)$$

$$\begin{array}{lcl}
 & m = 5(c - 1) & \\
 \text{expand} \swarrow & & \searrow \text{expand} \\
 & m = 5c - 5 & \\
 +5 \swarrow & & \searrow +5 \\
 & m + 5 = 5c & \\
 \div 5 \swarrow & & \searrow \div 5 \\
 & \frac{m + 5}{5} = c &
 \end{array}$$

Make x the subject of $3x + 7 = y$

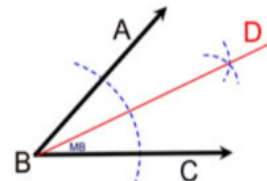
$$\begin{array}{lcl}
 -7 & 3x + 7 = y & -7 \\
 & 3x = y - 7 & \\
 \div 3 & x = \frac{y - 7}{3} & \div 3
 \end{array}$$

2

Constructions

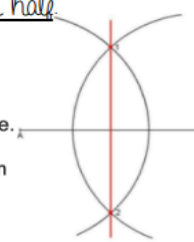
Angle bisector (cuts an angle in half)

1. Place the sharp end of a pair of compasses on the vertex.
2. Draw an arc, marking a point on each line.
3. Without changing the compass put the compass on each point and mark a centre point where two arcs cross over.
4. Use a ruler to draw a line through the vertex and centre point.



Perpendicular bisector (cuts a line in half at right angles)

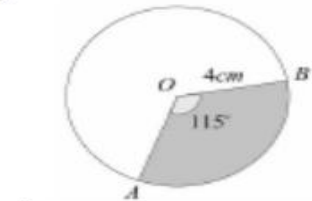
1. Put the sharp point of a pair of compasses on A.
2. Open the compass over half way on the line.
3. Draw an arc above and below the line.
4. Without changing the compass, repeat from point B.
5. Draw a straight line through the two intersecting arcs.



3

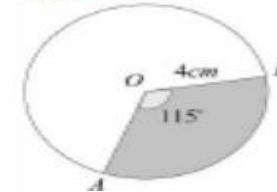
Area of a Sector

$$\text{Area} = \frac{115}{360} \times \pi \times 4^2 = 16.1\text{cm}^2$$



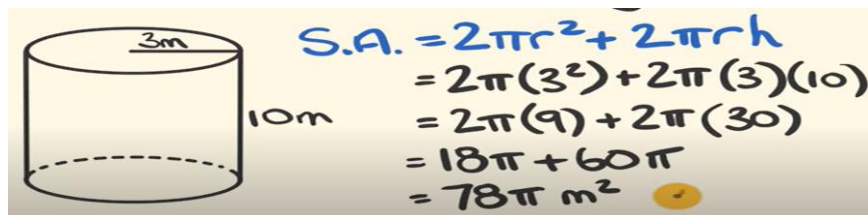
Arc Length of a Sector

$$\text{Arc Length} = \frac{115}{360} \times \pi \times 8 = 8.03\text{cm}$$



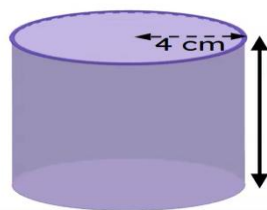
4

Surface Area of a Cylinder



Volume of a Cylinder

Volume of a cylinder = $\pi r^2 h$
where r is the radius and h is the height

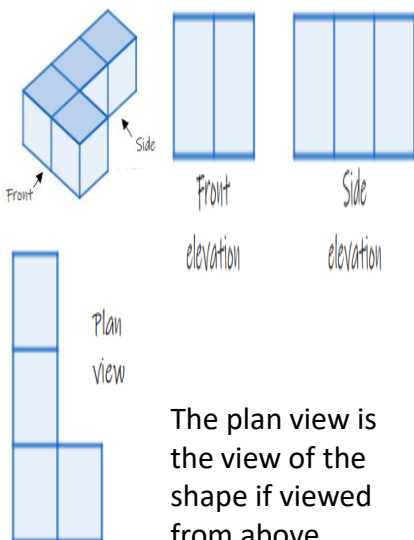


9 cm

$$\begin{aligned} V &= \pi \times 4^2 \times 9 \\ &= \pi \times 16 \times 9 \\ &= 144\pi \text{ cm}^3 \\ &= 452 \text{ cm}^3 \text{ (3 sf)} \end{aligned}$$

6

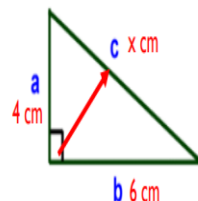
Plans and Elevations



The plan view is the view of the shape if viewed from above.

Pythagoras' Theorem - Hypotenuse

You should always label the hypotenuse first.
This is the side facing the right angle.



This is surd form.
Sometimes you will be asked to leave your answer like this.

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

1) Substitute your values into the formulae:

$$4^2 + 6^2 = x^2$$

2) Work out the values that you can.

$$16 + 36 = x^2$$

$$52 = x^2$$

3) Now use inverse operations to isolate x .

$$52 = x^2$$

$$(\sqrt{}) (\sqrt{})$$

$$\sqrt{52} = x$$

$$7.211102551 \text{ cm} = x \text{ or } 7.21 \text{ to 3 s.f.}$$

5

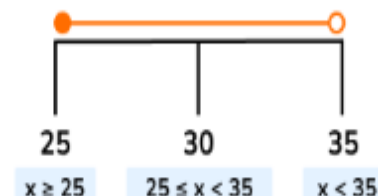
Truncation

Truncation comes from the word *truncate*, meaning "to shorten," and can be traced back to the Latin word for the trunk of a tree, which is *truncus*.

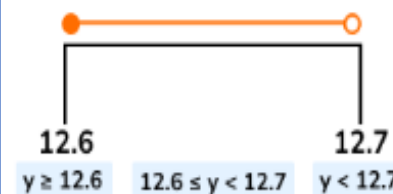
3.14159265... can be truncated to 3.1415 (note that if it had been rounded, it would become 3.1416).

Error Intervals

$x = 30\text{cm}$ to the nearest ten



$y = 12.6$ truncated to 1 d.p.



7

Pythagoras' Theorem – Shorter Sides

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

Sometimes you are asked to calculate the shorter sides, see below.

1) Substitute your values into the formulae:

$$10^2 + x^2 = 14^2$$

2) Work out the values that you can.

$$100 + x^2 = 196$$

3) Now use inverse operations to isolate x .

$$100 + x^2 = 196$$

$$(-100) \quad (-100)$$

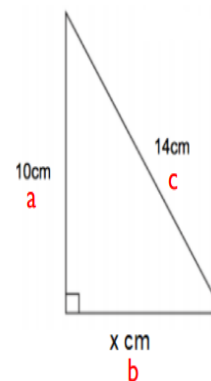
$$x^2 = 96$$

$$(\sqrt{}) \quad (\sqrt{})$$

$$\sqrt{96} = x$$

$$x = 9.797958971 \text{ cm or } 9.80\text{cm to 3 s.f.}$$

You need to get the numbers on one side, the x on it's own.
An extra step is needed.



Year 9 Spanish LP2 Knowledge Organiser

This Learning Programme you will be learning how to talk about your future and what job you would like

Key Vocabulary

Infinitive verb	A verb which tells you the action but not who is doing the action, or what time the action is happening
Adjectival agreement	Making adjectives agree with the gender of the noun
Adjective	A word which describes a noun
Present tense	Used to talk about things happening now, or things that happen regularly
Near future tense	Used to talk about the future and what is going to happen
Preterite tense	It is the past tense and is used to talk about completed actions in the past.

LP2.1/2.2 – Hotel catástrofe

Los trabajos en el hotel Hotel jobs

Soy...	I am...	jardinero/a	a gardener
camarero/a	a waiter	limpiador(a)	a cleaner
cocinero/a	a cook	peluquero/a	a hairdresser
dependiente/a	a shop assistant	recepcionista	a receptionist
esteticista	a beautician		
¿En qué consiste tu trabajo? What does your job involve?			
Tengo que...	I have to...	limpiar habitaciones	clean rooms
contestar al teléfono y ayudar a los clientes	answer the phone and help customers	preparar comida	prepare food
cortar el pelo a los clientes	cut customers' hair	servir la comida en el restaurante	serve food in the restaurant
cuidar las plantas	look after the plants	vender productos en la tienda	sell products in the shop
hacer manicuras	do manicures		

Opiniones Opinions

¿Te gusta tu trabajo?	Do you like your job?
(No) Me gusta (nada)	I (don't) like my job (at all)
mi trabajo porque es...	because it is...
difícil	difficult
duro	hard
estimulante	stimulating
estresante	stressful
interesante	interesting
monótono	monotonous
repetitivo	repetitive
¿Cómo es tu jefe?	What is your boss like?
Mi jefe/a (no) es muy educado/a.	My boss is (not) very polite.
¿Cómo son los clientes?	What are the customers like?
Los clientes son exigentes / maleducados.	The customers are demanding / rude.
Mis compañeros son simpáticos.	My colleagues are nice.

LP2.3/2.4 – ¿En qué te gustaría trabajar? – What job would you like to do?

¿Cómo eres? What are you like?

En mi opinión, soy...	In my opinion, I am...	organizado/a	organised
Creo / Pienso que soy...	I think I am...	paciente	patient
Soy muy / bastante...	I am very / quite...	práctico/a	practical
ambicioso/a	ambitious	responsable	responsible
creativo/a	creative	serio/a	serious
independiente	independent	sociable	sociable
inteligente	intelligent		

Me gustaría ser...	I would like to be...
Quiero ser...	I want to be...
abogado/a	a lawyer
cantante	a singer
diseñador(a)	a designer
enfermero/a	a nurse
mecánico/a	a mechanic
periodista	a journalist
policía	a police officer
taxista	a taxi driver

Me gustaría...	I would like...
No me gustaría (nada)...	I wouldn't like... (at all)
trabajar al aire libre	to work in the open air
trabajar con animales	to work with animals
trabajar con niños	to work with children
trabajar en equipo	to work in a team
trabajar en una oficina	to work in an office
trabajar solo/a	to work alone
hacer un trabajo creativo	to do a creative job
hacer un trabajo manual	to do a manual job

LP2.5 – ¿Cómo va a ser tu futuro? – What is your future going to be like?

¿Cómo va a ser tu futuro? What is your future going to be like?

En el futuro...	In the future...	ser voluntario/a	be a volunteer
Voy a...	I am going to...	tener hijos	have children
ganar mucho dinero	earn lots of money	viajar (mucho)	travel (a lot)
hacer un trabajo interesante	do an interesting job	vivir en el extranjero	live abroad
ir a la universidad	go to university	Va a ser (muy) interesante.	It is going to be (very) interesting.
ser famoso/a	be famous		

Year 9 Spanish LP2 Knowledge Organiser

LP2.6 – ¿Cómo es un día típico? – What is a typical day like?

¿En qué trabajas?	What do you do for a living?	¿Qué cualidades tienes que tener?	What qualities do you need to have?
¿Por qué decidiste ser...?	Why did you decide to be a...?	Tienes que ser...	You need to be...
Me gusta mucho... y por eso decidí ser...	I really like... and so I decided to be a...	En mi trabajo, los idiomas son muy importantes.	In my job, languages are very important.
Estudié... y me encantó.	I studied... and I loved it.	Hablo español, alemán e inglés.	I speak Spanish, German and English.
¿Cómo es un día de trabajo típico?	What is a typical working day like?	¿Cuáles son tus ambiciones para el futuro?	What are your future ambitions?
Hablo con clientes.	I talk to customers.	Voy a estudiar / trabajar en...	I am going to study / work in...
Leo mi agenda.	I read my diary.	¡Va a ser guay / fenomenal / flipante!	It is going to be cool / fantastic / awesome!
Preparo mis cosas.	I prepare my things.		
Trabajo con mi equipo.	I work with my team.		
Voy a la oficina.	I go to the office.		

Palabras muy frecuentes

High-frequency words

mi/mis	my	a ver / bueno / pues	well
tu/tus	your	por eso	so / therefore
además	what's more	así que	so / therefore
más	more	primero	first
a veces	at times	luego	then
también	also		

LP2.7 – ¿Cómo es un día típico? – What is a typical day like?

	infinitive	present	preterite	near future
regular verbs	trabajar leer decidir	trabajo leo decido	trabajé leí decidí	voy a trabajar voy a leer voy a decidir
irregular verbs	salir tener ir ser hacer	salgo tengo voy soy hago	salí tuve fui fui hice	voy a salir voy a tener voy a ir voy a ser voy a hacer

Helpful info:

	singular		plural	
	masculine	feminine	masculine	feminine
ending in -o	creativo	creativa	creativos	creativas
ending in -e	sociable	sociable	sociables	sociables
ending in a consonant	difícil	difícil	difíciles	difíciles
ending in -dor	trabajador	trabajadora	trabajadores	trabajadoras

tengo que	I have to	tenemos que	we have to
tienes que	you have to	tenéis que	you (pl) have to
tiene que	he/she has to	tienen que	they have to

Key Vocabulary

Reggae	A genre of music that originated in Jamaica.
Syncopation	Playing the music off the beat.
Rhythm	How long or short the notes are or how the music is played.
Bass	A low pitched part of the music.
Riff	A repeating phrase of a song.
Ostinato	A repeating musical pattern.
Bubble Rhythm	A pattern emphasising off beats usually played by a keyboard instrument.
Skank Rhythm	A rhythm emphasising off beats usually played on guitar.
Toasting	A type of vocal performance based around talking.
Improvisation	Making the music up on the spot, not rehearsing it.

1

Reggae is a unique form of rock music which originated in Jamaica. It has its roots in a number of other musical styles.

You can hear the influence of traditional Jamaican music as well as American rhythm 'n' blues, which would have been easily picked up in Jamaica in the early days of radio.

Music has always had a big role in the lives of Jamaican people. The roots of traditional Jamaican music can be traced back to African music due to number of Jamaicans who are descendants of Africans brought to the West Indies to work as slaves on sugar plantations.

MENTO - This style of Jamaican folk music was popular in the 1950s. Like calypso it is strophic in form and has light-hearted lyrics accompanied by offbeat chords on guitar and banjo

SKA - A fast dance style with offbeat chords that emerged in the late 1950s. The lyrics tended to be about serious social issues. Folk elements of mento were mixed with the electric guitars and horn sections of rhythm 'n' blues

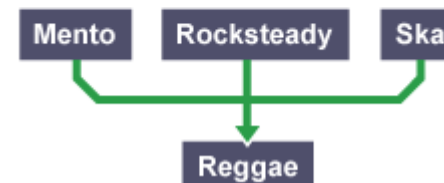
ROCKSTEADY - A slower style from the mid 1960s which followed on from ska. It featured a loud, repeated melody on bass guitar called a riff. The offbeat chords were emphasised and the lyrics were often political in nature.

2

3

The 'skank' rhythm is the most popular and well known rhythm in Reggae Music. It is often played by the guitar and sits at the top of the texture alongside the vocal. On the example opposite, you can see that the emphasis is on the second and fourth beats (SYNCOPATED)

This Learning Programme you will be learning about Reggae music, its cultural heritage and its important place in Music's rich history.



DEVELOPMENT OF REGGAE

Reggae emerged in the late 1960s:

- Time signature of 4/4 (common time) with heavy accent on the 2nd and 4th beat
- Strophic form – verse/chorus structure (this is typical of popular music)
- Typical rock instrumentation – vocals, backing vocals, electric guitar, bass guitar and drum kit (some versions of reggae use a horn section e.g. brass instruments)
- Prominent riff played on bass guitar
- Simple diatonic chord sequences (often in a major key)

REGGAE DRUM GROOVES

Have a listen...

One Drop	You don't hit on beat 1. You play the kick drum on beat 3.	'One Drop' – Bob Marley
Stepper	The kick drum is played on all 4 beats, which gives a strong driving rhythm.	'Exodus' – Bob Marley
Rocker	Beats 1 and 3 are emphasised.	'Night Nurse' – Gregory Issacs

Bob Marley

BOB MARLEY was a famous reggae singer, **SONGWRITER**, and musician who first became famous in his band The Wailers, and later as a **SOLO ARTIST**. He was born on February 6th, 1945 in Nine Mile, Jamaica. Although he grew up in poverty, he surrounded himself with music and the Rastafarian movement influenced his music style greatly. Bob Marley's career flourished and he became a cultural icon. He was the first international superstar to have been born in poverty in a Third-World country.



Sub genres such as dub also formed, consisting of recycled and remixed rocksteady and ska tunes, incorporating a toaster, essentially an MC, who spoke over the song with Rastafarian messages.

The dancehall genre also emerged using digital reggae influenced rhythms.

By 1978 a failing economy and political unease was at its peak and political issues along with the musical tradition all came together in reggae to form strong lyrics with an uplifting sound to empower.

Reggae's presence can still be felt today, influencing genres such as punk, hip hop and rock through artists such as Eric Clapton, Sean Paul, Rihanna, Protoje and Chronixx.

MENTO:

- Jamaican folk music popular in the 1950s
- Used guitar, banjo & drums
- Featured lots of verses (Strophic Form)
- Light-hearted lyrics of every day life

SKA:

- Fast dance music that emerged in the late 1950s
- Fuses American Rhythm & Blues with Mento rhythms
- Uses electric guitars and jazzy horn sections (trumpets, saxophones & trombone)
- Uses offbeat jumpy rhythms
- Has lyrics about local issues

REGGAE:

- Slower than Ska and emerged in the 1960s
- Amplified bass guitar riffs
- Associated with **rastafarianism** (a religious movement worshipping Haile Selassie)
- Characteristic rhythm in 4/4 with missing beat emphasis
- Repeated off beat quavers
- Verse & Chorus form

ROCK STEADY:

- Dance music that emerged in the mid-1960s
- Rhythms more relaxed than Ska
- Loud bass guitar playing steady 4/4 beat
- Political themes in lyrics

DUB:

- Popular in the 1970s
- Instrumental remixes of existing reggae tracks
- Most of the vocals would be removed
- Drum and bass parts emphasised
- Effects such as echo delay and reverb added.
- Early form of popular electronic music.

This Learning Programme you will master the fundamental movement skills and knowledge of team games. LP3 you will explore a new team game and the rules, regulations and scoring systems in that sport.

Key Vocabulary

Tactical Skills	The ability to make smart decisions and apply strategies during a game.
Attack	The actions taken by a player or team to try to score points or goals.
Defence	The actions and strategies used by a player or team to prevent the opponent from scoring.
Free space	An open areas on the field, court or pitch where no players are present, allowing an athlete to move, pass or shoot.
Losing an opponent	Successfully moving away from a defender to create space or gain advantage.
Coordination	The ability to use different parts of the body smoothly and efficiently together.
Agility	The ability to move quickly and easily while changing direction
Reaction Time	The speed at which an athlete responds to a stimulus
Power	The ability to perform a strong and explosive movement quickly.
Stamina	The ability to sustain physical and mental effort over a long period of time.

1

Students will know how to demonstrate different attacking principles with width and demonstrate a variety of passes with accuracy, control and fluency and evaluate the effectiveness of passing in a game situation.

2

Students will know how to demonstrate effective attacking using dodging, speed and agility to outwit a defender, students will develop team tactics of attack, including use of space and playing forward.

3

Students will know how to demonstrate good ball control and maintain possession in some competitive situations; students are able to explore the benefits of strategic and tactical approaches to outwit opponents.

4

Students will know how to explore defensive skills including zonal and man to man marking, students will learn the benefits of strategic and tactical approaches to outwit approaches.

5

Students will know how to explore the positions and strategic formation used to prevent attack from opposition and demonstrate strategic and tactical plays in a competitive situation.

6

Students will know how to demonstrate outstanding knowledge and understanding of the rules and regulations.

7

Students will know how to explore set plays within a game situation to defend and attack effectively and know how to evaluate their performance against the assessment grid.

This Learning Programme you will be learning about the nature, causes and impacts of conflict. From personal relationships to international relations, you will consider how conflict is caused and peace is achieved.

Key Vocabulary

Conflict	Disagreement which can lead to fighting or war
Pacifism	Being against conflict
Holy war	A war that is fought for religious reasons, usually backed by a religious leader
Jihad	Means 'struggle'. Either struggling to follow your religion or struggling to defend your religion from those who attack it
Peace	A state of harmony, calm and freedom from conflict or violence
Mediation	A process in which a neutral person helps others resolve a disagreement or conflict
Banality	Something that is ordinary, unoriginal or lacking in importance

1 What are the causes of conflict?

The causes of any war are complex. Wars are rarely about just one thing. They can be declared when a state or states act to:

- attack or invade another state, to gain territory or resources
- resist such an attack or invasion by an aggressor
- protect another state from attack by an aggressor
- impose domination or political change on another state, or to resist such domination
- challenge a threat to 'essential national interests' by another state
- counter perceived threats from a different ideology, religion or ethnic group
- defend the national honour when under threat



2

People are pacifists for one or some of these reasons:

- religious beliefs
- non-religious belief that life should not be taken
- beliefs that war costs money, destroys land and does not bring about peace.

Many believe that pacifism is more than believing war is wrong. They argue that it must include action to promote justice and human rights.

Absolute pacifism

An absolute pacifist believes that it is never right to take part in war, even in self-defence. They think that the value of human life is so high that nothing can justify killing a person deliberately.

Conditional pacifism

Conditional pacifists are against war and violence in principle, but they accept that there may be circumstances when war will be less bad than the alternative.

Selective pacifism

Oppose wars involving weapons of mass destruction - nuclear/chemical/biological weapons - either because these weapons can cause so much damage. Or that a war involving WMD really can't be won.

Active pacifism

Are heavily involved in political activity to promote peace. During a war, many pacifists will refuse to fight, but some might get involved in non-violent ways, such as by driving ambulances.

3

Just War is a war which is declared for right and noble reasons and fought in a certain way. A Just War is not a war that is 'good' as such – it is a war that some Catholics may feel to be necessary or 'just' in the circumstances, when all other solutions have been tried and have failed. It is a necessary evil and a last resort.

Christians agree a war is Just if it meets the following conditions:

- The reason for the war is good (e.g. self-defense)
- It is a last-resort,
- The war is being fought to bring peace
- There is a good chance of success
- Innocent people are not be hurt or killed on purpose

4

Holy War

Holy war is a war fought for a religious cause or God, often inspired by a religious leader. Fighters of holy wars may expect a place in paradise, or forgiveness for their sins. **For a war to be a holy war, religion has to be the driving force.** Holy wars usually have three elements:

- the achievement of a religious goal
- authorised by a religious leader
- a spiritual reward for those who take part



Lesser jihad is about defending Islam from threat. While the majority of Muslims see their religion as one of peace, sometimes Muslims have taken up arms against enemies when they or other Muslims have been persecuted. The Qur'an says: Permission [to fight] has been given to those who are being fought, because they were wronged. And indeed, Allah is competent to give them victory (Surah 22:39).

5

Weapons of Mass Destruction

A weapon of mass destruction is a nuclear, radiological, chemical, biological or other weapon that can kill and bring significant harm to a large number of humans. They can also cause great damage to human-made structures, natural structures, or the environment. WMDs are used as a deterrent in many countries. The idea is that other countries' leaders will see that a country they are targeting has WMDs and will not attack, in case that country retaliates with these weapons. Some arguments in favour of WMD include that they make war end more quickly, they are an effective deterrent, losses will only be felt by one side/the enemy, they cause as much destruction as possible, they are better than invading a country. However, there are many arguments against such as, they fail to meet the criteria of a Just War, innocent lives will be lost, they can cause long term ill-effects, and they go against the principle of sanctity of life.

6

The United Nations

The United Nations (UN) is a diplomatic and political international organisation with the intended purpose of:

- Maintaining international peace and security
- Developing friendly relations among nations
- Achieving international cooperation
- Serving as a centre for coordinating the actions of member nations



UNITED NATIONS



7

The problem of evil

The problem of evil questions why God lets bad things happen to the world. Various types of evil and suffering are evident in the world. If God is so loving and powerful, why does it exist at all?

There are two types of evil and suffering in the world:

- Moral evil and suffering – this is suffering caused by the actions of humans e.g. acts of murder and war.
- Natural evil and suffering – this is suffering that is caused by nature and has nothing to do with the actions of humans e.g. earthquakes, floods, tsunamis, disease.

In this learning programme, you will explore cellular structures and functions alongside learning about a variety of different chemical reactions.

Key Vocabulary

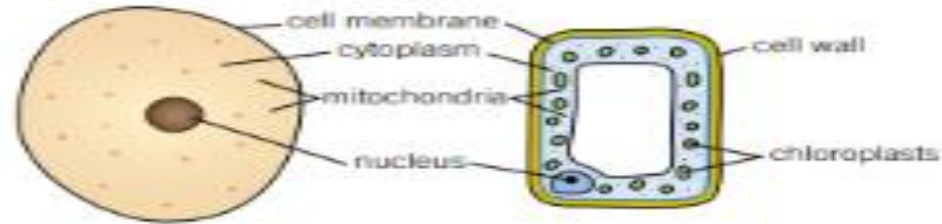
Organelle	An organelle is a specialised structure within a cell
Differentiation	Differentiation is the process by which an un specialised cell changes and develops into a specialised cell
Chromosome	A chromosome is a thread-like structure found in the nucleus of a cell that contains genetic information in the form of DNA.
Resolution	Resolution is the ability of a microscope or image to distinguish two close points as separate, producing a clearer and more detailed image.
Isotope	An isotope is an atom of the same element that has the same number of protons but a different number of neutrons.
Electron	An electron is a tiny negatively charged particle that moves around the nucleus of an atom.
Inert	Inert means chemically unreactive, so a substance does not easily take part in chemical reactions.

Year 9 Science LP2 Knowledge Organiser

1

Plant and animal cells

- To be able to **observe** a **cell** we need to use a **microscope**, this magnifies the cell to a point to which we can see it
- Plant and animal cells have small structures inside known as **organelles**, each of these performs a certain role which allows the cell to survive



2

Specialised cells

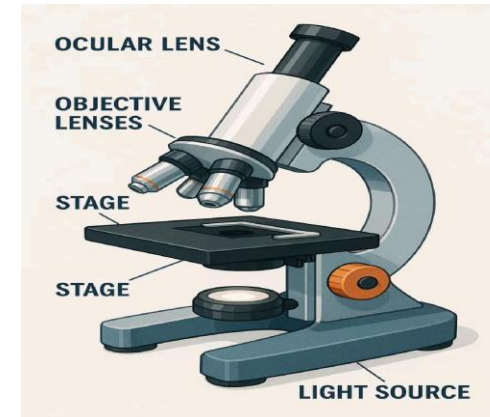
- Specialised cells** are designed to carry out a particular function, because of this they have specific features and adaptations to allow them to carry this out
- Both plant and animal cells can be specialised, with these specialised cells working together to help the organism to survive

3

$$\text{Actual Image} = \frac{\text{Image Size}}{\text{Magnification}}$$

$$\text{Magnification} = \frac{\text{Image Size}}{\text{Actual Image}}$$

$$\text{Image Size} = \text{Actual} \times \text{Magnification}$$



4

Elements and atoms

- An **element** is a substance that only contains one type of atom, it is found on the **Periodic Table**
- Each element has its own unique chemical symbol which is the same in every language, these are also found on the Periodic Table
- An **atom** is the smallest part of which an element can be broken down into
- As there are around 100 types of elements that can occur naturally, there are around 100 different atoms

Compounds

- Compounds** are formed when two or more different elements chemically bond together
- The compound will have different **physical properties** to the elements which make up the compound, for example water is a liquid, but it made from oxygen and hydrogen which are both gases
- Compounds are hard to separate and need a chemical reaction to do this
- When naming a compound, we always mention the metal first and the non metal second
- The name of the metal will not change but the name of the non metal will, for example oxygen can change to oxide
- Chemical formulae tells us how many atoms of each element are in the compound in relation to each other



- The small number tells us the number of each element which is in front of the number

Polymers

- Polymers** are long chains of groups of atoms which are repeated many times
- Natural polymers are not man-made and include wool, cotton, starch and rubber
- Synthetic polymers are man-made and include polythene, polystyrene and nylon

5

Groups and periods

- Groups** are the columns in the Periodic Table, they go downwards
- Periods** are the rows in the Periodic Table, they go sideways
- Elements in the same group normally follow the same trends in properties such as melting point, boiling point and reactivity
- By placing these elements into these groups, scientists can make predictions about their properties

1 2												group number						0
Li Be		H										3	4	5	6	7		He
Na Mg												B	C	N	O	F	Ne	
K Ca		Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr	
Rb Sr		Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe	
Cs Ba		La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn	
Fr Ra																		

Group 0

- Group 0** elements are known as the **noble gases**
- They are all non metals with low melting and boiling points, meaning all are gases at room temperature
- The boiling point decreases going down the group
- All of the group 0 elements are unreactive
- When electricity is passed through the gas, they emit a brightly coloured light, this can be seen in neon signs

Halogens

fluorine	↑ most reactive least reactive
chlorine	
bromine	
iodine	

6

Group 1

- Group 1** elements are also known as the **alkali metals**
- They share similar properties with other metals such as:
 - Being shiny when freshly cut
 - Being good conductors of electricity and heat
- Group 1 metals are much softer than other metals and also have much lower melting and boiling points
- Group 1 elements react with water to form alkali solutions

$$\text{lithium} + \text{water} \rightarrow \text{lithium hydroxide} + \text{hydrogen}$$

$$\text{metal} + \text{water} \rightarrow \text{metal hydroxide} + \text{hydrogen}$$
- The further down the group that the metal is, the more vigorous the reaction will be. This is called a **trend**
- Another trend seen in Group 1 is with the boiling and melting points: the further down the group, the lower the boiling and melting points are

7

Group 7

- Group 7** elements are also known as the **halogens**
- They share similar properties with other non metals such as:
 - Having low melting and boiling points
 - Not conducting electricity
 - Moving down the groups the elements have an increased melting and boiling point
- The halogens also react in a similar way to one another, for example with iron:

$$\text{iron} + \text{chlorine} \rightarrow \text{iron chloride}$$

$$\text{iron} + \text{bromine} \rightarrow \text{iron bromide}$$
- Halogens can undergo **displacement reactions**, this is where a more reactive halogen will take the place of a less reactive halogen
- The most reactive halogens are at the top of the group, and the least reactive halogens are at the bottom of the group
- If the most reactive halogen is on its own, it will take the place of the less reactive halogen in a compound

$$\text{calcium bromide} + \text{chlorine} \rightarrow \text{calcium chloride} + \text{bromine}$$

- 1: Identify what cross contamination is
- 2: Explore how bacteria grows
- 3: Understand the effects of temperature
- 4: Explore food poisoning and its symptoms



Sphere-shaped (cocci)



Rod-shaped (bacilli)



Spiral-shaped (spirochetes)

KEY VOCABULARY	DEFINITION
Cross contamination	The unintentional transfer of bacteria.
Bacteria	Small single cell organisms that can be seen with a microscope
Preparation	The process of preparing is being ready for an action
Temperature	The degree or intensity of heat/cold
Control	Being in charge of
Symptoms	A physical or mental feature
Visible	Can be seen
Non visible	Cannot be seen
Cuisine	A style or method of cooking

CULTURES & CUISINES



The cuisine of a country is influenced by many factors. These include:

- Religion
- Climate
- Terrain/Geography
- Availability of imported foods
- Migration/Immigration
- Culture
- Economy/wages/wealth

Wales



Ingredients:
Caerphilly Cheese, Lamb, Salmon

Dishes:
Cawl, Faggots, Welsh Rarebit

Scotland



Ingredients:
Salmon, Oats, Raspberries

Dishes:
Porridge, Haggis, Cullen Skink

France



Ingredients:
Foie Gras, Escargot, Cheese

Dishes:
Pate, Bouillabaisse, coq au vin



Spain




Ingredients:
Oranges, Chorizo, Olive oil

Dishes:
Tapas, Gazpacho, Paella

Italy



Ingredients:
Veal, Sardines, Parmesan, Mozzarella

Dishes:
Pizza, Ravioli, Focaccia, trinitu

Mexico



Ingredients:
Bananas, pineapple, beef, chocolate

Dishes:
Ceviche, quesadilla, empanada

India



Ingredients:
Chilli, garlic, ginger, mutton, paneer

Dishes:
Samosas, Dhal, Chutneys, Saag Aloo

China



Ingredients:
Lychee, ginger, rice, noodles

Dishes:
Dim sum, chow Mein, Peking duck

Japan



Ingredients:
Rice, udon noodles, soy sauce

Dishes:
Sushi, kabu curry, gyoza, teriyaki



England



Ingredients:
Apples, Potato, Beef

Dishes:
Shepherds Pie, Roast Beef, Scones

Ireland



Ingredients:
Potatoes, Bacon, Cabbage

Dishes:
Irish Stew, Soda Bread, Colcannon

Caribbean



Ingredients:
Okra, plantain, goat, coconut

Dishes:
Salt cod, metagee, curried goat



USA



Ingredients:
Beef, peanuts, Pumpkins, blueberries

Dishes:
Chowder, jambalaya, Meatloaf

Russia



Ingredients:
Beetroot, rye, caviar, potatoes

Dishes:
Borsch, Pelmeni, Blinis



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