



Year 8 Learning Cycle 2

Student Name: _____

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Home Learning timetable - when I am going to complete my home learning

| | Mon A | Tues A | Weds A | Thurs A | Fri A | Mon B | Tues B | Weds B | Thurs B | Fri B |
|-----|-----------|-----------|-----------|-----------|------------|----------|----------|---------|----------|-------|
| 8X1 | Eng /Geog | Ma/MFL | His | Art/Sci | DT | Ma/Drama | Music | Eng | Comp/RE | |
| 8X2 | Eng/MFL | Ma/Drama | Geog/RE | Music/Sci | His | Ma/DT | Eng/Art | | | Comp |
| 8X3 | Eng/RE | Ma/MFL | Drama | Geog/Sci | Comp/Music | Eng | Ma/DT | His/Art | | |
| 8X4 | Eng/Geog | Ma/Art | Music/Sci | DT/MFL | His | Eng/Comp | Ma | | Drama | RE |
| 8Y1 | Ma/His | Eng/Music | MFL | Comp/DT | RE/Art | Ma | Eng/Geog | Sci | | Drama |
| 8Y2 | Ma/MFL | Art/RE | Comp/Eng | Geog | DT/Drama | Eng | Ma/His | Sci | Music | |
| 8Y3 | MFL | Ma/DT | RE | Eng/Geog | His | Music | Ma/Art | Sci | Eng/Comp | Drama |
| 8Y4 | MFL/Ma | Eng/DT | Geog | Ma/His | | Art | Eng/RE | Comp | Ma | His |

Expected time home learning will take:

| Subject | Homework |
|--|-------------------------------|
| English (Eng) | 60 minutes (weekly) |
| Maths (Ma) | 60 minutes (weekly) |
| Science (Biology/Chemistry/Physics) | 30 minutes (every two weeks) |
| Computing (Comp) | 30 minutes (every two weeks) |
| Spanish (MFL) | 30 minutes (every two weeks) |
| Geography (Geog) | 30 minutes (every two weeks) |
| History (His) | 30 minutes (every two weeks) |
| Creative Learning (Music/DT/Art/Performing Arts) – Creative | 30 minutes (every two weeks) |

My Computer passwords:

| Platform | Username | Password |
|----------|----------|----------|
| | | |
| | | |
| | | |
| | | |

Summative Assessment Timetable

| Lesson | 17/03/25 | 18/03/25 | 19/03/25 | 20/03/25 | 21/03/25 | 24/03/25 | 25/03/25 | 26/03/25 | 27/03/25 | 28/03/25 | |
|--------|----------|----------|----------|-----------|-----------|-----------|-----------|----------|-------------|-------------|-------|
| | B | | | | | A | | | | | |
| | Mon | Tue | Wed | Thu | Fri | Mon | Tue | Wed | Thu | Fri | |
| 1 | 8X1 | Drama | | | RE | | | Spanish | | Art | DT |
| | 8X2 | DT | | | History | | | | | Music | |
| | 8X3 | | | Food | Geography | Drama | | | | | Drama |
| | 8X4 | | | | Drama | | English | Spanish | Food | | |
| | 8Y1 | | | | | History | | Music | | | |
| | 8Y2 | | | | | | | | | | Food |
| | 8Y3 | Music | | Science | Food | | Spanish | | | | |
| | 8Y4 | Art | | | | | Spanish | DT | | | |
| 2 | 8X1 | | Music | History | Science | | English | | | | |
| | 8X2 | | | | | | English | Food | RE | | |
| | 8X3 | | DT | Art | Science | | RE | | | | Music |
| | 8X4 | | | | | | | | | | |
| | 8Y1 | | | | Geography | | | English | | DT | |
| | 8Y2 | | RE | | Music | | Spanish | Art | | | |
| | 8Y3 | | Art | | | | | DT | | | |
| | 8Y4 | | Food | | Geography | | | | | Drama | |
| 3 | 8X1 | | | | | Food | Geography | | | | |
| | 8X2 | | | | | | | | | | |
| | 8X3 | | | | | | English | Spanish | | DT | |
| | 8X4 | | | | | | | | Music | | |
| | 8Y1 | | | | | | Food | | Mathematics | | |
| | 8Y2 | | | | | Geography | | English | Mathematics | | Drama |
| | 8Y3 | | | Geography | | Drama | | | Mathematics | | |
| | 8Y4 | | | | History | | | English | | Mathematics | |
| 4 | 8X1 | | | | | | | | Mathematics | | |
| | 8X2 | | Art | Geography | Science | | Spanish | Drama | | Mathematics | |
| | 8X3 | | | History | | | | | Mathematics | | |
| | 8X4 | | History | Geography | Science | RE | | Art | | Mathematics | |
| | 8Y1 | | | Science | | Drama | | Spanish | | Art | RE |
| | 8Y2 | | | | Science | History | | | | | DT |
| | 8Y3 | | | | | History | English | | RE | | |
| | 8Y4 | | RE | | Science | | Music | | | | |

Summative Assessment Scores – Learning Cycle 1

| Subject | Summative Score | Next Steps | Subject | Summative Score | Next Steps |
|-------------|-----------------|------------|---------------------|-----------------|------------|
| English | | | Art | | |
| Mathematics | | | Computing | | |
| Science | | | Drama | | |
| Geography | | | Design Technology | | |
| History | | | Music | | |
| Spanish | | | Religious Education | | |

How to Use your Learning Cycle Knowledge Organiser

Poltair School believe that the Learning Cycle Knowledge Organiser should be used daily for classwork and home learning. The Learning Cycle Knowledge Organiser will inform students and parents of topics that are being covered in class during each learning cycle, enabling all students to extend their learning outside of the classroom.

Students should be using their Learning Cycle Knowledge Organiser as a revision guide for assessments and using their SORT strategies to revise for each subject prior to assessments.




At Poltair we **SORT** it!

What are the SORT strategies?

| Select | Organise | Recall | Test |
|--|---|---|---|
| Select your revision materials by topic/subtopic. Traffic light your PLC sheets to identify areas of weakness or gaps (Red/Amber) that need to be prioritised. | Organise and condense any class notes, revision guides and revision. | Use active recall and spaced repetition to memorise your knowledge organisers until you can recall the information e.g.. Look, cover, write or self-testing | Use low stakes online tests/quizzes and answer high stakes past paper/sample questions to check and apply knowledge and understanding |
| Strategies | | | |
| <ul style="list-style-type: none"> • How to use your PLC • How to schedule your home learning and stick to it! • How to select the correct knowledge to study | <ul style="list-style-type: none"> • Cornell Notes • Flash cards • Mind mapping • Revision clocks • Dual coding • Summary | <ul style="list-style-type: none"> • Look cover & test • Leitner system • Blur it • Transform it | <ul style="list-style-type: none"> • Low stakes • Self-quizzing • Quiz each other • Online quizzes • High stakes • Exam style questions |

How to use SORT

| Step 1: Select | Step 2: Organise | Step 3: Recall | Step 4: Test |
|--|--|---|---|
| <p>When you revise for a specific topic use your knowledge organiser, revision guide, website etc to select the key knowledge you need to learn.</p> <p>a. Use the daily planner on page 10 to identify all the times when you will complete your home learning and when you will complete independent revision</p> <p>b. RAG each of the PLCs so you identify your RED topics – the ones that you are unsure of or you do not fully understand</p> <p>c. Write your RED topics into your daily planner for when you will revise that subject.</p> | <p>Organise the knowledge that you have selected using a range of strategies:</p> <ul style="list-style-type: none"> • Flashcards • Mindmaps • Cornell Notes • Revision Clocks • Summary <p>For more details go to the SORT webpage: https://www.poltairschool.co.uk/sort</p>  | <p>Once you have summarized the knowledge, you need to actively memorise it. This is the most important part of the revision process!</p> <p>You could use any of the following strategies to help:</p> <ul style="list-style-type: none"> • Lietner System • Blurt It • Look, say, cover, write, test | <p>The last step in revision is to be confident that you can recall and retrieve the knowledge. To do this you need to test yourself. Quick and simple ways are to ask someone else to quiz you on the knowledge or to complete an online quiz. You can also answer past exam questions.</p> <p>If you can not confidently recall the knowledge you will need to repeat step 3.</p> |



At Poltair we **S O R T** it!

ATTENDANCE FOCUS



ATTENDANCE FOCUS



Attendance Reflection Sheet

| | |
|---|--|
| What is your current attendance? | |
| How many sessions have you missed of school? | |
| How many 'I' coded sessions have you had? | |
| How many 'M' coded sessions have you had? | |
| How many 'L' coded sessions have you had? | |
| How many 'U' coded sessions have you had? | |
| How many 'O' coded sessions have you had? | |
| How many days does this equate to so far this year? | |
| If this attendance continued, how many days off would you have this year? | |

To improve my attendance, I commit to the following:

| | |
|---|--|
| 1. | |
| 2. | |
| 3. | |
| What attendance do you want to end this term with? | |
| What is your end of year attendance target? | |
| What is our minimum expected attendance to be rewarded? | |

Possible strategies to REACH MY attendance Goals

- I will make attending school every day a priority.
- I will keep track of my attendance and absences.
- I will set my alarm clock for _____a.m.
- I will attend school everyday unless I am truly sick.

- If I am absent, I will contact my teachers to find out what I missed.
- I will set up medical and dental appointments for weekdays after school. If I must make a medical appointment during the school day, I will try to attend school for most of the day.
- When I am struggling with a challenge that is keeping me from school I will confide in an adult at school and seek help.

Revision Planner

| Time | Monday | Tuesday | Wednesday | Thursday | Friday | Time | Saturday | Sunday |
|--------------|--------|---------|-----------|----------|--------|--------------|----------|--------|
| 8.30am - 4pm | | | | | | 8.30am - 4pm | | |
| 4pm - 5pm | | | | | | 4pm - 5pm | | |
| 5pm - 6pm | | | | | | 5pm - 6pm | | |
| 6pm - 7pm | | | | | | 6pm - 7pm | | |
| 7pm - 8pm | | | | | | 7pm - 8pm | | |
| 8pm - 9pm | | | | | | 8pm - 9pm | | |

Personal Learning Checklists

English

| Key Ideas | S | O | R | T |
|---|---|---|---|---|
| What is context and why is it important when reading war literature (poems, novels, plays)? | | | | |
| Can I identify and discuss poets' ideas and feelings about war? | | | | |
| What methods used by poets can I identify and analyse? | | | | |
| Can I write a thoughtful what, how, why paragraph using a key quotation from a poem? | | | | |
| Can I write a thesis introduction to an extended analysis of a poem? | | | | |
| How can I compare writer's ideas and methods? | | | | |
| Am I able to recall the key characters and plot of Journey's End? | | | | |
| Can I identify the features of a play? | | | | |
| How do I create a persona? | | | | |
| How do I structure a letter? | | | | |
| How do I use a range of structural methods in my own creative writing? | | | | |
| How many sentence structures and forms can I used effectively in my own creative writing? | | | | |

Maths

| Key Ideas | Sparx Code | S | O | R | T |
|--|-----------------|---|---|---|---|
| I can form and simplify ratios | M885 | | | | |
| I can write ratios in the form 1:n and n:1 | M543 | | | | |
| I can write ratios and fractions and fractions as ratios | M267 | | | | |
| I can share in a ratio | M525 | | | | |
| I can use a ratio to scale 2 quantities | M478 | | | | |
| I can substitute into expressions | M417, M327 | | | | |
| I understand key algebraic vocabulary | M813 | | | | |
| I can collect like terms | M531 | | | | |
| I can expand and factorise single brackets | M237 | | | | |
| I can solve one and 2 step equations | M707 | | | | |
| I can solve equations where the variable is on the denominator and equations with brackets | M634, M902 | | | | |
| I can solve equations with unknowns on both sides | M543 | | | | |
| I can form and simplify ratios | M885 | | | | |
| I can find the area of a circle | M231 | | | | |
| I can find the circumference of a circle | M169 | | | | |
| I can find the area & circumference of Sectors. | M280,m430 | | | | |
| I can identify circle parts | M595 | | | | |
| I can identify factors | M823 | | | | |
| I can identify multiples | M227 | | | | |
| I can find the HCF & LCM | M698 | | | | |
| I can write a number as the product of its prime factors | M108 | | | | |
| I can use the 4 rules with negative numbers | M106, M288 | | | | |
| I can find missing angles in triangles, on a straight line and around a point | M818, M351,M319 | | | | |
| I Can use and apply angles in par | | | | | |

Personal Learning Checklists

Science

| Key Ideas | S | O | R | T |
|---|---|---|---|---|
| I can describe the different pathway that current takes in series and parallel circuits | | | | |
| I can draw series and parallel circuits using symbol components | | | | |
| I can define current | | | | |
| I can define potential difference | | | | |
| I can define resistance | | | | |
| I can calculate potential difference using the equation $V = I \times R$ | | | | |

Science

| Key Ideas | S | O | R | T |
|---|---|---|---|---|
| I can calculate gravitational potential energy | | | | |
| I can calculate kinetic energy | | | | |
| I can compare conduction, convection and radiation | | | | |
| I can identify how waves travel on the electromagnetic spectrum | | | | |
| I can compare conduction, convection and radiation | | | | |
| I can identify how waves travel on the electromagnetic spectrum | | | | |
| I can compare conduction, convection and radiation | | | | |
| I can identify how waves travel on the electromagnetic spectrum | | | | |

Personal Learning Checklists

Art

| Key Ideas | S | O | R | T |
|---|---|---|---|---|
| I can use tone, texture, line, shape, scale and composition in observational drawing | | | | |
| I can explain the work of Halima Cassell , Barbara Hepworth and Peter Randall-Page understanding how they develop texture and form from observation | | | | |
| I can explain how to develop my ideas into an abstract 3D form | | | | |
| I have experimented with a range of materials. | | | | |
| I can refine my work through annotation | | | | |

Computing

| Key Ideas | S | O | R | T |
|---|---|---|---|---|
| I know that the binary number system uses only two digits 1 and 0, like a switch (on and off) | | | | |
| I know how to convert between binary and decimal numbers | | | | |
| I know that binary is also called Base 2 because it only uses two digits and Denary is also called Base 10. | | | | |
| I know why computers use binary | | | | |
| I know the units of binary measurements | | | | |
| I can add 4-digit Binary numbers | | | | |
| I can apply Boolean logic to real world problems | | | | |

Design Technology

| Key Ideas | S | O | R | T |
|---|---|---|---|---|
| I can recall and define the tier three vocabulary in this Unit | | | | |
| I can select material combinations that are aesthetically pleasing | | | | |
| I can create a design on paper | | | | |
| I can use 2D Design to create a design | | | | |
| I can use hand tools safely and with precision | | | | |
| I can use a laser cutting machine to accurately produce my components | | | | |
| I can join materials using an appropriate method | | | | |
| I can evaluate the finish of my work and link this to how precisely I have used tools | | | | |

Personal Learning Checklists

Drama

| Key Ideas | S | O | R | T |
|--|---|---|---|---|
| I can identify the main features of different types of theatre - Ancient Greek, melodrama, Commedia Dell'Arte | | | | |
| I can use exaggerated physical and vocal skills to characterise stock characters | | | | |
| I can structure a performance effectively and apply dramatic techniques to good effect | | | | |
| I can perform with confidence and stay in role | | | | |

Food

| Key Ideas | S | O | R | T |
|---|---|---|---|---|
| I can explain how to thicken a white sauce using gelatinisation | | | | |
| I know how to remove lumps from a white sauce | | | | |
| I can explain the four conditions yeast needs to be activated | | | | |
| I understand the importance of kneading bread | | | | |
| I can give examples of bread from different cultures | | | | |
| I can explain the importance of presentation | | | | |

Geography

| Key Ideas | S | O | R | T |
|---|---|---|---|---|
| Define key terms and give examples of case studies | | | | |
| Explain the importance of the world's oceans | | | | |
| Explain how warm and cold ocean currents distribute heat around the world | | | | |
| Name all the world's oceans | | | | |
| Explain the causes and effects of ocean plastic | | | | |
| Explain how ocean gyres transport ocean plastic around the world | | | | |
| Explain the impacts of ocean plastic pollution upon Henderson Island | | | | |
| Explain the solutions to ocean plastic pollution | | | | |
| Explain the impacts of marine pollution upon Kenya's coastline | | | | |

Personal Learning Checklists

Geography

| Key Ideas | S | O | R | T |
|---|---|---|---|---|
| Define key terms and give examples of case studies | | | | |
| Explain how plants and adapt to hot desert climates | | | | |
| Explain the four main challenges facing hot deserts | | | | |
| Describe the polar biome physical characteristics | | | | |
| Explain how plans adapt to a cold desert environment | | | | |
| Explain how animals adapt to a cold desert environment | | | | |
| Describe the strategies used to protect fragile desert biomes | | | | |

History

| Key Ideas | S | O | R | T |
|---|---|---|---|---|
| I can name examples of countries in Britain's Empire | | | | |
| I can explain how certain countries experienced life in Britain's Empire | | | | |
| I can analyse the impact the Empire had on certain countries | | | | |
| I can give examples of groups in Britain who experienced prejudice | | | | |
| I can state how treatment of certain groups in Britain changed | | | | |
| I can explain why the treatment of certain groups in Britain changed | | | | |
| I can make supported judgments about my enquiry questions | | | | |
| I can evaluate the finish of my work and link this to how precisely I have used tools | | | | |

Music

| Key Ideas | S | O | R | T |
|---|---|---|---|---|
| I understand what minimalism is and some of the key features of it | | | | |
| I understand how to use different compositional features to add or change a theme to make small differences | | | | |
| I know what a pedal is in music and how it is used | | | | |
| I have understood what the difference between major and minor is and how to form a major and minor scale | | | | |
| I understand what an ostinato is and how to describe it | | | | |
| I can name two famous minimalist composers | | | | |

Personal Learning Checklists

PSHE

| Key Ideas | S | O | R | T |
|---|---|---|---|---|
| I can identify sources of caffeine and their uses | | | | |
| I can consider the potential side effects and harms of caffeine | | | | |
| I can identify risks related to tobacco/e-cigarette use | | | | |
| I can identify the risks of alcohol misuse | | | | |
| I can describe and evaluate strategies to manage the influence of alcohol and its use | | | | |
| I can identify physical, mental, social and environmental impacts on alcohol use | | | | |
| I can outline the key laws related to drugs | | | | |
| I can identify sources of caffeine and their uses | | | | |

Religious Education

| Key Ideas | S | O | R | T |
|---|---|---|---|---|
| I can explain the historical evidence for Jesus's existence | | | | |
| I can explain how Jesus taught marginalised groups | | | | |
| I can outline Jesus's teachings about love and forgiveness | | | | |
| I can support these teachings with a quote or story from the Bible | | | | |
| I can explain how Jesus's actions towards the religious authorities were radical | | | | |
| I can explain how Christians put Jesus's teachings into action in their own lives | | | | |
| I can explain the events leading to Jesus's death | | | | |
| I can define all of the key terms for this unit | | | | |

Spanish

| Key Ideas | S | O | R | T |
|---|---|---|---|---|
| I can use the present tense to talk about my hobbies and freetime | | | | |
| I can use frequency phrases in spoken and written sentences | | | | |
| I can give an opinion and a reason in Spanish | | | | |
| I can form the preterite tense of regular verbs | | | | |
| I can use the verbs 'hacer', 'ver', 'tener' & 'ir' in the preterite tense | | | | |
| I can use the near future tense to talk about my weekend plans | | | | |
| I can describe a photo | | | | |

English - War poetry

1. How to Analyse a Poem

| | |
|---------------------------------|---|
| S Structure | What is interesting about line length or stanza length ? How does the poem begin and end ? How does the poet use punctuation marks (or lack of!)? |
| M Meanings & messages | What is the poem about ? Who or what does it focus on? What idea(s) are most important? |
| I Imagery | What are the most important images in the poem? How do they support the poet's idea(s)? |
| L Language | Which words are most important? What are their meanings and connotations ? Has the writer used any similes, metaphors or personification ? Are their sounds important? What tone does the poet adopt? |
| E Effects | What does the poet want the reader to think about or realise? What do they want the reader to imagine, picture or feel ? How do they want us to respond ? |

2. What, How, Why Paragraphs

WHAT is the writer saying about character/ theme/ setting?

HOW are they revealing information and creating effects for the reader? Quotation? Language methods?

ZOOM in on key words / ideas in the quote.

WHY have they chosen to do this? Purpose?

In the opening lines of the poem, the poet presents the sea as intimidating. The adjective "giant" conveys the huge size of the sea and its great force. It might suggest that the sea is far bigger and more powerful than human beings. Furthermore, the use of the word "giant" might allude to the mythical, super-human creature, which might again make the reader picture the sea as a colossal and aggressive being.

3. War poems

3a = The Iliad by Homer An epic poem by the ancient Greek poet Homer in around the 8th century BCE, which recounts some of the events of the final weeks of the Trojan War. It includes stirring scenes of bloody battle, the anger of Achilles and the involvement of the gods.

3b = Who's for the Game? By Jessie Pope A poem whose purpose was a 'call-to-arms', a targeted address to young men with the aim of getting them to enlist in the British Army. The poem was first published in a newspaper in 1915, before signing up to fight was made compulsory.

3c = The Gift of India by Sarojini Naidu In this poem Naidu is paying tribute to the service of the Indian Army, but also making a statement about how their sacrifice should be recognized.

3d = Attack by Siegfried Sassoon A haunting poem that discusses the reality of war and what happens when a soldier is out on the battlefield. Written by British poet and World War I soldier Siegfried Sassoon, it describes the moment when soldiers, following the order to "attack," go over the trenches and into the line of enemy fire. This often resulted in a catastrophic loss of life.

3e = Dulce Et Decorum Est by Wilfred Owen This poem illustrates the brutal everyday struggle of a company of WWI soldiers, focuses on the story of one soldier's agonising death, and discusses the trauma that this event left behind.

3f = Last Post by Carol Ann Duffy This poem imagines the poet an alternative course of events in a war, in which time

runs backwards, so that British soldiers lift themselves out of the violence, drop their guns and return home.

3g = Invasion by Choman Hardi Hardi's poem focuses on the ongoing conflict between Saddam Hussein's government and her own people, the Iraqi Kurds.

4. Subject Vocabulary

4a = poem (noun) a piece of writing in which the words are arranged in separate lines and are chosen for their beauty and sound.

4b = stanza (noun) A group of lines in a poem; a verse.

4c = language (noun) Words or methods (techniques) used by writers to present their meanings or create effects.

4d = structure (noun) The way the poet has organised the poem on the page, including stanza length, line length, title and ending.

4e = connotations (noun) A feeling or idea that is suggested by a particular word.

4f = imagery (noun) The use of language to create vivid pictures in the readers' minds.

4g = simile (noun) Comparing one thing to another to highlight their similarities.

4h = symbol (noun) A character, idea, image or setting that represents a bigger idea

4i = tone (noun) The attitude a writer shows towards a topic using words.

English - Journey's End

1. Characters

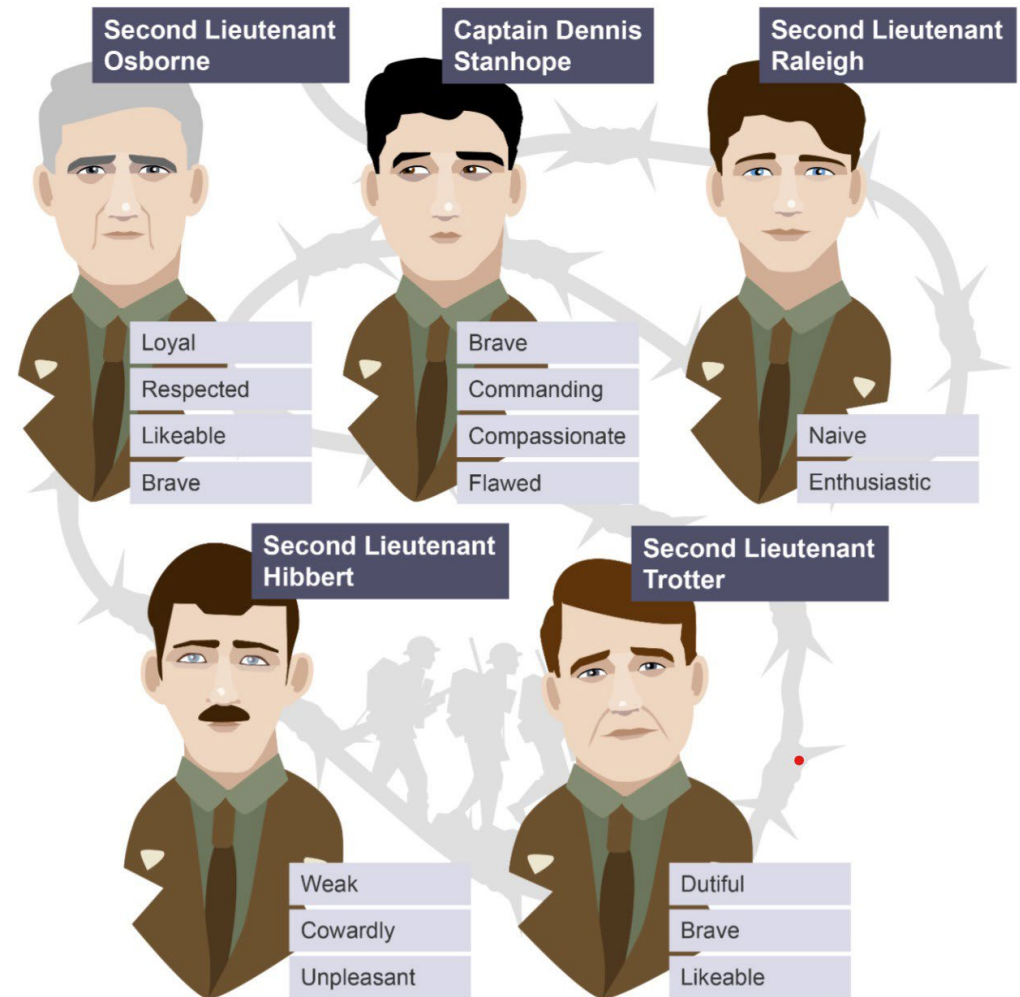
1a = Captain Dennis Stanhope A young man, but he has already seen three years of combat and his men see him as a brave leader. The war has changed him, turning him from a rugby captain and school hero into a hard-drinking man with ruined nerves. He knows Raleigh from before the war and Stanhope is romantically involved with Raleigh's sister. Because of this, Stanhope is wary of Raleigh, as he thinks Raleigh will write letters to his sister telling her that he drinks too much. However, he continues to drink, eventually admitting that it is a result of his fear of the war.

1b = Second Lieutenant Raleigh A young officer who has always admired Stanhope from school. However, when he arrives in the trenches and sees Stanhope, he is surprised to find his role model significantly changed. Raleigh remains eager as he becomes accustomed to life in the trenches. When Osborne is killed, this changes Raleigh, making him sombre and sad. When the Germans attack the British trenches, Raleigh is badly injured, and Stanhope stays with him until the end.

1c = Second Lieutenant Osborne The second-in-command to Stanhope. Osborne is a bit older than the other soldiers, but he is well-liked. He helps to keep Stanhope—his superior—calm. Osborne talks to the men about the nature of war and gives them advice. However, he has trouble seeing the point of the war. He dies in a raid.

1d = Second Lieutenant Hibbert An officer who is so afraid of dying in the trenches that he pretends to suffer from neuralgia (intense nerve pain). However, Stanhope tells him that can't leave or go to the doctor. He admits that the real reason he wants to leave is because he can't stand the stress and fear of being at war. He then forms an unlikely bond with Stanhope. When the Germans finally stage their massive attack, Hibbert eventually leaves the safety of the dugout to face the enemy.

1e = Second Lieutenant Trotter An officer who is jovial, mocking, and gluttonous, frequently giving Mason—the cook—a hard time about the food served in the dugout. He provides comedic relief in the play. He creates a chart that outlines the remaining hours he and his fellow officers have to spend in the trenches before going back to a safer area.



English - Journey's End

2. Plot

| | |
|----------------|--|
| Act 1 | <p>The play opens in a dugout in the British trenches in Northern France. The action begins on the evening of Monday 18 March 1918 and continues over three days. The play begins with Captain Hardy and Osborne discussing Stanhope. After Hardy leaves, Raleigh - enters. Osborne tries to hint to Raleigh that Stanhope is a changed man but Raleigh fails to understand. Raleigh is excited and enthusiastic about being on the front line.</p> <p>When Stanhope enters it is clear he is shocked and uncomfortable at Raleigh's presence. Through a conversation with Osborne we discover that Stanhope's addiction was caused by the terrible realities of trench life.</p> |
| Act 2, Scene 1 | <p>Early on Tuesday morning Osborne and Raleigh discuss their past lives before the war. They talk about rugby and how slowly time passes in the trenches. They reflect on how the Germans are just normal people. Stanhope tells his officers that a captured German soldier has revealed that an attack on their men is planned for two days' time. Stanhope - because he is so worried about Raleigh revealing his alcoholism to his sister - insists on checking his letter home but on reading it he finds that Raleigh has only the highest praise for Stanhope. Stanhope seems to feel ashamed.</p> |
| Act 2, Scene 2 | <p>The Colonel arrives to inform Stanhope that Raleigh and Osborne will participate in an imminent raid on the Germans. Hibbert tells Stanhope that he is suffering from neuralgia and can no longer cope. Stanhope will not allow him to go sick and threatens execution for desertion if he does. Eventually Stanhope - using the powers of persuasion and leadership - convinces Hibbert to stay. Osborne and Trotter disapprove of the timing of the raid. Raleigh is unaware of the danger and is excited for the battle.</p> |
| Act 3, Scene 1 | <p>Stanhope too thinks a daylight raid is ridiculous and dangerous, but the Colonel is adamant. Osborne talks acceptingly about the plans and Stanhope insists - unconvincingly - that all will be well. Osborne and Raleigh quote a passage from Alice in Wonderland. They are trying to keep calm, but admit they are nervous. A young German soldier is captured in the raid, but Osborne and six other men are killed. Raleigh is wounded. Stanhope finds it difficult to hide his contempt for the Colonel's apathy about their deaths.</p> |
| Act 3, Scene 2 | <p>The officers are having a post-raid celebratory dinner. Stanhope seems in a bad mood. He has an argument with Hibbert and gets angry with Raleigh for not attending the dinner. Raleigh explains that he is grieving for Osborne. Stanhope shows his devastation at Osborne's death and the audience realise that his drinking and jovial dinner chat has all been to cover up his grief.</p> |
| Act 3, Scene 3 | <p>This final scene takes place at dawn on Thursday morning. It is pitch dark and there is silence apart from the sound of guns. Stanhope is woken by Private Mason - the cook - and is drowsy and cold.</p> <p>There is tension in the dugout as the men and the audience wait for the attack.</p> <p>It is finally here, having first been mentioned two days earlier. Hibbert is frightened and reluctant to go out, but with encouragement he leaves to fight. The battle begins. The Sergeant Major arrives to tell Stanhope that Raleigh has been badly injured, his spine is broken. Raleigh is carried into the dugout. It becomes clear that Raleigh is dying. Stanhope stays by his side, comforting him. He attempts conversation, but there is no reply. Stanhope is called to leave as the battle intensifies. As he ascends the steps the roof collapses, with Raleigh's body inside. The fate of the other characters is unknown.</p> |

English - Journey's End

3. Context

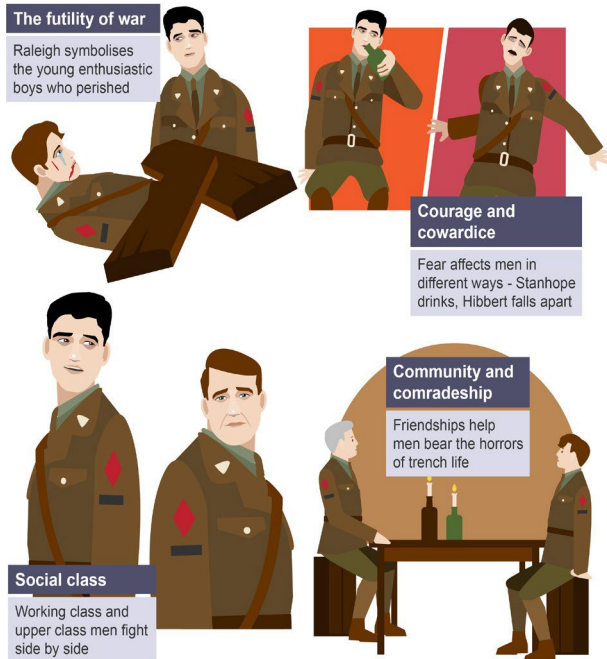
3a = R.C. Sherriff Sherriff served in the East Surrey Regiment, fighting in several notable battles until he was finally injured in 1917. At this point, he returned to his original line of work. During this period, he began to write plays, drawing upon his wartime experiences in works like Journey's End, his most celebrated play.

3b = Setting Journey's End takes place during the final year of the war. More specifically, the play elapses over the days leading up to the Battle of St. Quentin, which began on March 21st and marked the beginning of Operation Michael, a German offensive attempt to advance through Allied lines.

3c = Dugouts and Trenches Long, narrow and deep ditches dug into the ground at the front, usually by the soldiers who would occupy them for weeks at a time, trenches were designed to protect troops from machine-gun fire and artillery attacks from the air. Steps would allow the soldiers to climb up onto the battlefield.

Dugouts were protective holes dug out of the sides of trenches. The size of dugouts varied a great deal and sometimes could house over ten men.

4. Themes



5. Vocabulary

5a = reputation (abstract noun) the opinion that people in general have about someone or something, based on their behaviour or actions

5b = fascinating (adjective) extremely interesting

5c = decent (adjective) behaving in a good or socially acceptable way

5d = solitary (adjective) alone, the only one thing or person in a place

5e = uncanny (adjective) strange or mysterious, often in a way that is slightly frightening

5f = coward (noun) a person who is not brave and is too eager to avoid danger, difficulty or pain

5g = chap (noun) a man

5h = sob (noun) a noisy cry of sadness or pain

5i = strain (noun) something that makes you nervous or worried; a force that stretches or puts pressure on something

5j = deceive (verb) to keep the truth hidden from someone for your own advantage.

5k = desert (verb) to leave the armed forces without permission

5l = disobey (verb) to refuse to do something you are told to do

6. Subject Vocabulary

6a = play (noun) A dramatic piece of literature intended to be acted out on the stage.

6b = act (noun) A way of dividing a play. Each act is a group of scenes.

6c = scene (noun) A dramatic part of the story of a play, at a particular time and place and a way of dividing acts into smaller parts.

6d = stage direction (noun) An instruction in a play that tells actors how to move or speak, or gives information about the setting, sound effects or lighting.

6e = entrance (noun) The act of an actor walking on to the stage.

6f = exit (noun) The act of an actor walking off the stage.

6g = dramatic irony (noun) a moment when the audience is aware of something the character(s) is not aware of.

6h = language (noun) Words or methods (techniques) used by writers to present their meanings or create effects.

6i = imagery (noun) The use of language to create pictures in the readers' minds.

6j = characterisation (noun) The creation or construction of a fictional character.

6k = foreshadowing (noun/verb) An indication or hint of what is to come later in the story.

6l = subtext (noun) The underlying and often unspoken thoughts and motives of characters – what they really think and believe.

Maths - Key Words

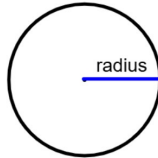
| | |
|------------------------|---|
| Prime Number | A number whose only factors are one and itself |
| Highest Common Factor | The highest number which goes into both quantities given |
| Lowest Common Multiple | The first number which is a multiple of all of the quantities given |
| Factor | A number which divides into another e.g. 6 is a factor of 12 |
| Variable | A letter which is used to represent an unknown quantity |
| Expression | An algebraic statement including terms and operations |
| Term | A collection of variables and numbers |
| Equation | An algebraic statement with an equals sign in the middle |
| Circumference | The distance around the outside of a circle |
| Radius | The line from the centre of a circle to its circumference |
| Diameter | The distance across the whole of the circle (twice the radius) |
| pi | A Greek letter which is the number 3.14159..... It is used to find the area and circumference of circles |
| Sector | A part of a circle |
| Chord | A line which goes through a circle touching the circumference at both ends-it doesn't go through the centre |
| Parallel | Lines which have the same gradient and are always the same distance apart |
| Perpendicular | When lines meet at right angles |
| Scalene | A type of triangle with all 3 sides and all 3 angles different sizes |
| Isosceles | A type of triangle that has 2 equal sides and 2 equal angles |
| Equilateral | A type of triangle with all 3 sides the same and all 3 angles are 60° |

Maths - Circles

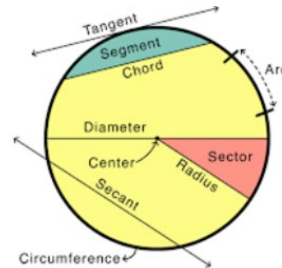
1. Circles Overview

π (pi) is an irrational number that goes on forever. It begins with 3.14159.....

The radius of a circle is the distance from the centre to the Circumference.



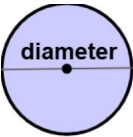
2. Parts of A circle



3. Circumference of a circle

- The distance around a circle is called the circumference.
- The distance is π (pi) x diameter where

$$C = \pi d$$

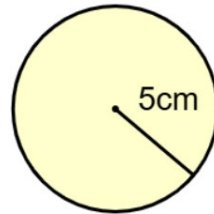


4. Area of a circle

The area of a circle is equal to π x the square of its radius.

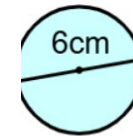
$$\text{Area of a Circle} = \pi r^2$$

5. Area of a circle example



$$\begin{aligned} A &= \pi r^2 \\ A &= \pi \times 5^2 \\ A &= 25\pi \text{ cm}^2 \\ A &= 78.5 \text{ cm}^2 \end{aligned}$$

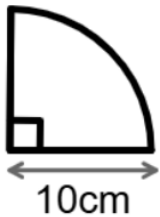
6. Circumference of a circle example



The diameter is 6cm

$$\begin{aligned} C &= \pi \times \text{diameter} \\ C &= \pi \times 6 = 6\pi \text{ cm} \\ C &= 18.84955... \\ C &= 18.8 \text{ cm} \end{aligned}$$

7. Area of a sector



$$\begin{aligned} \text{radius} &= 10 \\ \text{area} &= \\ &= \frac{1}{4}(\pi \times 10^2) \\ &= 78.5 \text{ cm}^2 \end{aligned}$$

This is a $\frac{1}{4}$ of a full circle

8. Perimeter of a semi circle



$$\begin{aligned} \text{Circumference of circle} &= \pi \times 14 \\ \text{Curve length} &= \frac{1}{2} \times \pi \times 14 \\ \text{Perimeter} &= \frac{1}{2} \times \pi \times 14 + 14 \\ P &= (7\pi + 14) \text{ cm} \end{aligned}$$

Use s.d button on a calculator to change to a decimal.

Maths – Number calculations

1. Multiples

- Multiples are numbers which are in the times tables.
- For example 18 is a multiple of 6

| | |
|-----------------|----|
| $6 \times 0 =$ | 0 |
| $6 \times 1 =$ | 6 |
| $6 \times 2 =$ | 12 |
| $6 \times 3 =$ | 18 |
| $6 \times 4 =$ | 24 |
| $6 \times 5 =$ | 30 |
| $6 \times 6 =$ | 36 |
| $6 \times 7 =$ | 42 |
| $6 \times 8 =$ | 48 |
| $6 \times 9 =$ | 54 |
| $6 \times 10 =$ | 60 |

A few Multiples of 6

2. Factors

- Factors are numbers that will divide into another number. For example 5 and 6 are both factors of 30

Factors of 30

| | |
|--------------|----|
| Factor pairs | |
| 1 | 30 |
| 2 | 15 |
| 3 | 10 |
| 5 | 6 |

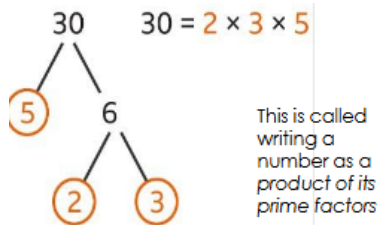
3. Prime numbers

Prime numbers only have two factors: 1 and itself (only 2 numbers will divide into it)

| | | | | | | |
|----|----|----|----|----|----|----|
| 2 | 3 | 5 | 7 | 11 | 13 | 17 |
| 19 | 23 | 29 | 31 | 37 | 41 | |
| 43 | 47 | 53 | 59 | 61 | 67 | |
| 71 | 73 | 79 | 83 | 89 | 97 | |

4. Prime factor decomposition

- Break a number down into factor pairs.
- Circle the primes.
- Write the circled numbers as a product.



5. Lowest common multiple from a list

- LCM means the lowest number in both times tables.
- List both times tables and stop when you find a number in both lists.

Example LCM of 4 & 5 is 20

Multiples of 4: 4 8 12 16 20 24 28 32 36 40

Multiples of 5: 5 10 15 20 25 30 35 40

6. Highest common factor

- The HCF is the highest number that goes into both. For example the HCF of 18 and 27 is 9.

Factors of 18 are: 1 2 3 6 9 18

Factors of 27 are: 1 3 9 27

7. Adding negative numbers

- When adding a negative number Move down the number line.

examples

| | |
|-----------|------------|
| $5 + -2$ | $-5 + -2$ |
| $= 5 - 2$ | $= -5 - 2$ |
| $= 3$ | $= -7$ |

8. Subtracting negative numbers

- When subtracting a negative number Move up the number line.

examples

| | |
|-----------|------------|
| $5 - -2$ | $-5 - -2$ |
| $= 5 + 2$ | $= -5 + 2$ |
| $= 7$ | $= -3$ |

Maths – Expressions & equations

1. Expanding, factorising, substituting

Factorising

$$3x + 6 \equiv 3(x + 2)$$

Expanding brackets

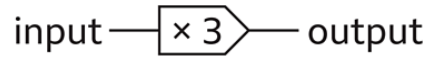
$$3a - 2b \quad (a = 10 \quad b = 4)$$

$$= 3(10) - 2(4)$$

$$= 30 - 8$$

$$= 22 \quad \checkmark$$

2. Function machines



3. 1-step & 2-step equations

$$\begin{array}{l} +24 \\ \div 10 \end{array} \left| \begin{array}{l} 10x - 24 = 82 \\ 10x = 106 \\ x = 10.6 \end{array} \right. \begin{array}{l} +24 \\ \div 10 \end{array}$$

4. Equations with variable on denominator

$$\begin{array}{l} +2 \\ \times y \\ \div 9 \end{array} \left| \begin{array}{l} \frac{108}{y} - 2 = 7 \\ \frac{108}{y} = 9 \\ 108 = 9y \\ 12 = y \end{array} \right. \begin{array}{l} +2 \\ \times y \\ \div 9 \end{array}$$

5. Equations with brackets

1. Expand the brackets
2. Solve as normal

6. Equations with variable on both sides


Subtract the smaller quantity of x's

$$\begin{array}{l} -2y \\ +21 \\ \div 6 \end{array} \left| \begin{array}{l} 2y + 9 = 8y - 21 \\ 2y + 9 - 2y = 8y - 21 - 2y \\ 9 = 6y - 21 \\ 30 = 6y \\ 5 = y \end{array} \right. \begin{array}{l} -2y \\ +21 \\ \div 6 \end{array}$$

7. Forming equations with shape

Perimeter = 56cm

$x + 12$



$$x + x + 12 + x + x + 12 = 56$$

$$44x + 24 = 56$$

8. Forming equations with words

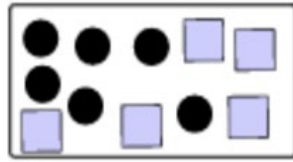
I think of a number.
I multiply the number
by 3 and then add 5.
The answer is 29.

$$3x + 5 = 29$$

Maths – Expressions & equations

1. Forming Ratio

Ratios describe the relationship between 2 quantities. Give the order the values were given in i.e. circles first.



Circles : squares
6:5

4. Sharing in a ratio

- Count the total number of parts.
- Find the value of 1 part by Division.
- Multiply to find the value of each group.

Nikki : Gemma

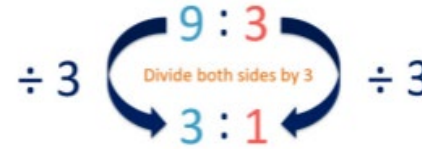
9 Boxes in total

Value of each box = £36 ÷ 9 = £4 per box

Nikki : Gemma

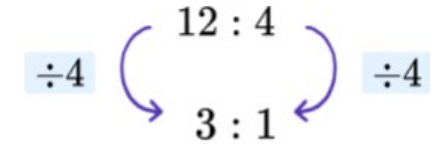
| | | | | | | | | | | |
|---|---|---|---|---|-----|-----|---|---|---|--|
| 4 | 4 | 4 | 4 | : | 4 | 4 | 4 | 4 | 4 | |
| | | | | | £16 | £20 | | | | |

2. Simplifying ratios



- Look for a common factor in the numbers which make up the ratio.
- Divide by the common factor.

3. Ratio in the form n:1



Simplify the ratio as before, but instead of choosing the common factor, divide so you get 1 (sometimes you are asked for 1:n instead).

5. Ratios as fractions

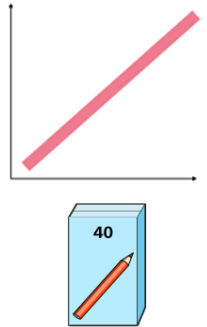
b : r
3 : 2



The fraction for blue is $3/(3+2)$ so $3/5$
The fraction for red is $2/(3+2)$ so $2/5$

6. Direct proportion

- As one quantity increases so does the other by the same rate. For example: 1 box of contains 40 Pencils so 2 boxes has 80 pencils.



7. Direct proportion with recipes

| | Eggs | Flour | Milk |
|-------------|------|-------|-------|
| 10 pancakes | 2 | 150g | 250ml |
| 5 pancakes | 1 | 75g | 125ml |
| 15 pancakes | 3 | 225g | 375ml |

Arrows on the left indicate ×3 from 5 to 15 pancakes and ÷2 from 10 to 5 pancakes. Arrows on the right indicate ÷2 from 10 to 5 pancakes and ×3 from 5 to 15 pancakes.

8. Combining ratios

The ratio $a : b$ is 4 : 3
The ratio $b : c$ is 2 : 5
Work out the ratio $a : c$

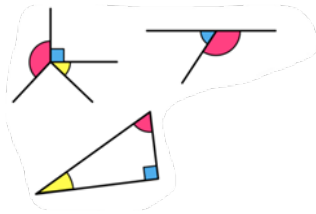
$$\begin{array}{l} a : b = \\ 4 : 3 = \\ 8 : 6 = \end{array} \quad \begin{array}{l} b : c = \\ 2 : 5 = \\ 6 : 15 = \end{array}$$

These ratios are connected by the part 'b', so make these equivalent

Maths – Angles and parallel lines

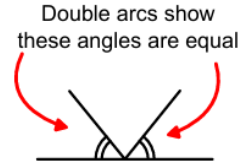
1. Basic angle facts

- Angles on a straight line sum to 180°
- Angles in a triangle sum to 180°
- Angles around a point sum to 360°



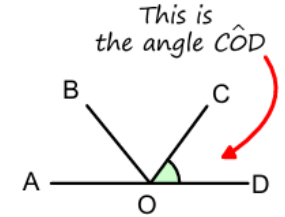
2. Angle concepts

- An angle is a measure of turn.
- **Acute:** less than 90° .
- **Right angle:** 90° .
- **Obtuse:** between 90° & 180°
- **Reflex:** more than 180° .



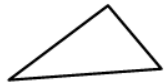
3. Naming angles

- We can refer to angles using 3 letters. Angle COD refers to the angle created between lines CO & OD



4. Types of triangle

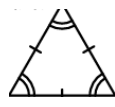
Scalene
No equal sides or angles



Isosceles
2 equal sides & 2 equal angles

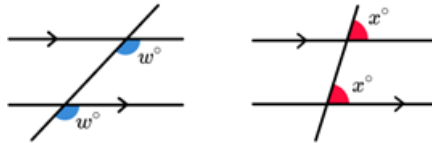


Equilateral
3 equal sides & 3 equal angles



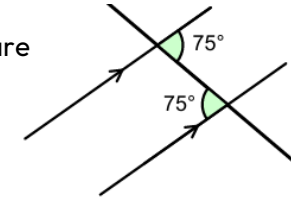
5. Corresponding angles

- Parallel lines are indicated by arrows.
- Corresponding angles are equal.



6. Alternate angles

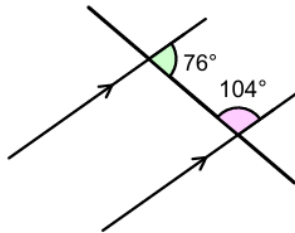
- Alternate angles are equal.



You might find it helpful to visualise these angles as being tucked into the corners of a Z shape

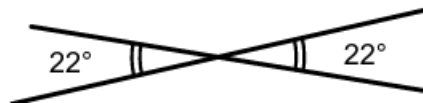
7. Co-Interior angles

- Co-interior angles add up to 180° .



8. Vertically opposite angles

- When 2 lines cross the angles that are opposite each other are equal.



Maths

| x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|----|----|----|----|----|----|----|----|----|-----|
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

Square numbers: 1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144

Cube Numbers : 1, 8, 27, 64, 125

Prime numbers: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47...

Useful features on your calculator:

FACT: this expresses a number as a product of its prime factors

RATIO (menu 4): this will find missing values within equivalent ratios

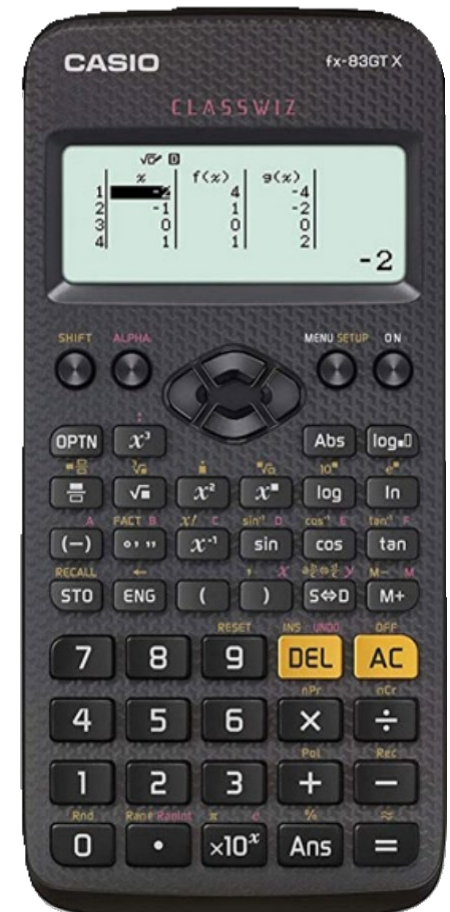
Table (menu 3): This is where you can generate values within a table- useful for plotting graphs and generating terms of a sequence

Statistics (menu 2): this will find all of the averages from a table of data

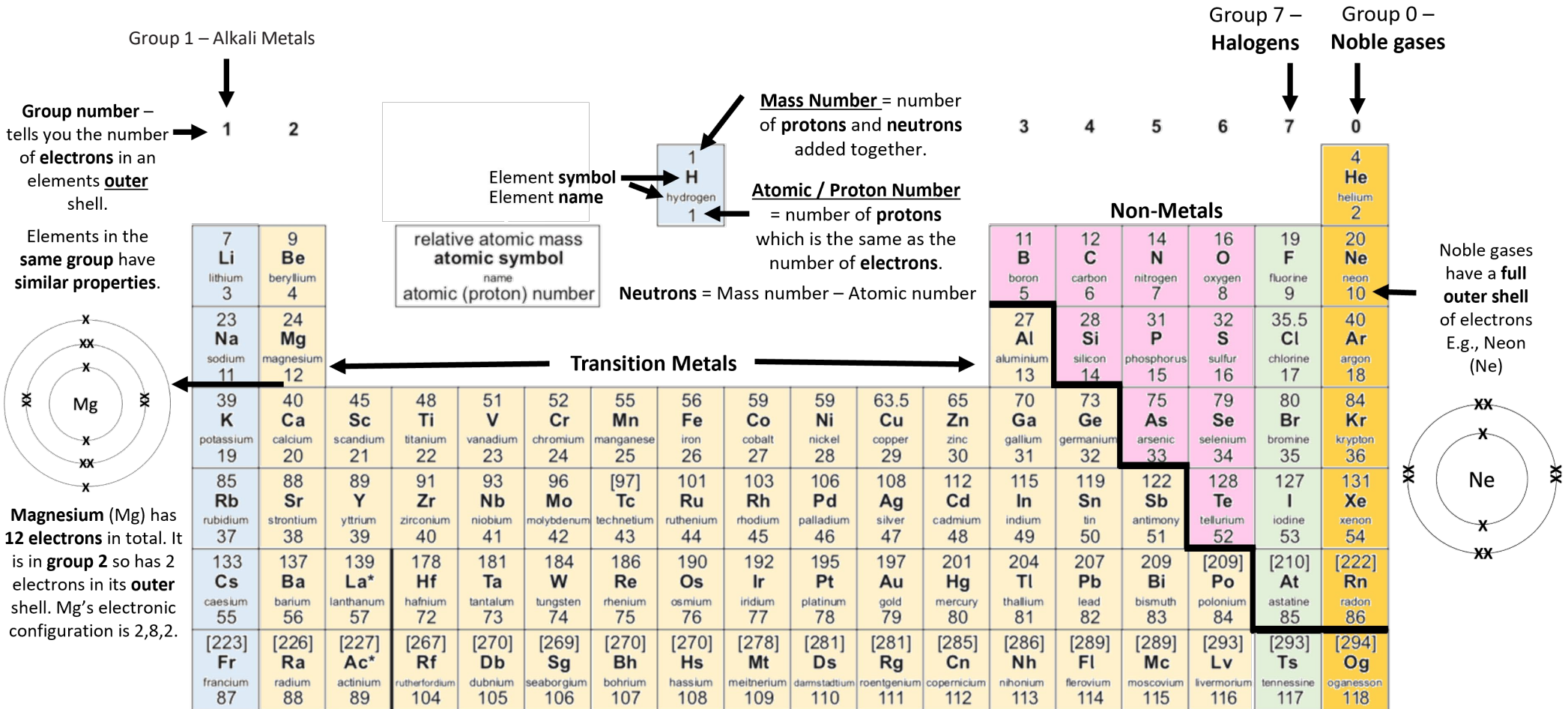
o'': This is the mean average time button and can do conversions between time units, as well as calculations with different times

Fraction button: can be used for any calculations with fractions

S-D: Converts decimal answers to fractions and vice versa

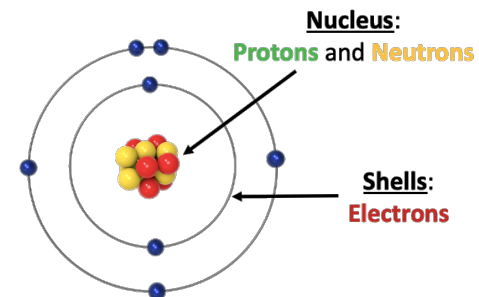


Science - How can I use the Periodic Table?



Magnesium (Mg) has **12 electrons** in total. It is in **group 2** so has 2 electrons in its **outer** shell. Mg's electronic configuration is 2,8,2.

| Subatomic Particle | Mass | Charge |
|--------------------|------------|--------|
| Proton | 1 | +1 |
| Neutron | 1 | 0 |
| Electron | Negligible | -1 |



Science - Experiments

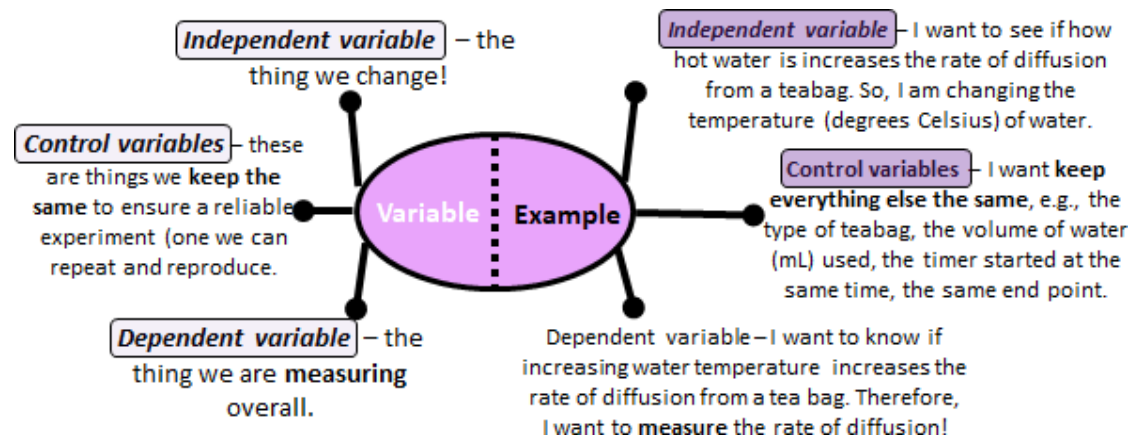
| 1. Key Terms | Description |
|----------------------|--|
| Independent variable | The variable you change in an investigation |
| Dependent variable | The variable you measure in an investigation |
| Control variable | The variable you keep the same in an investigation |
| Hypothesis | A prediction of what will happen in an investigation |
| Reliability | We use control variables to ensure a reliable experiment |
| Reproducible | To re-do our experiment and get similar results due to a reliable method |
| Mean | Doing an experiment 3 times then dividing by 3 to get an average |
| Fair test | An experiment where only the independent variable changes |
| Anomalous result | Result that does not fit with the rest of the data |

2. Designing and performing experiments

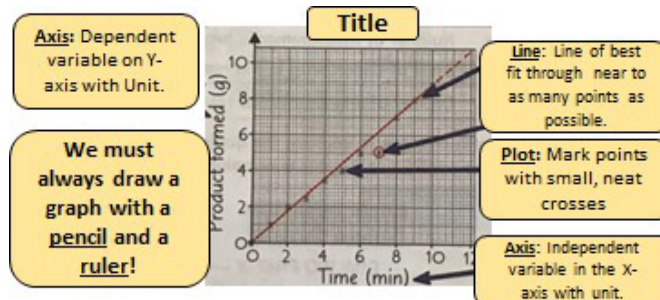
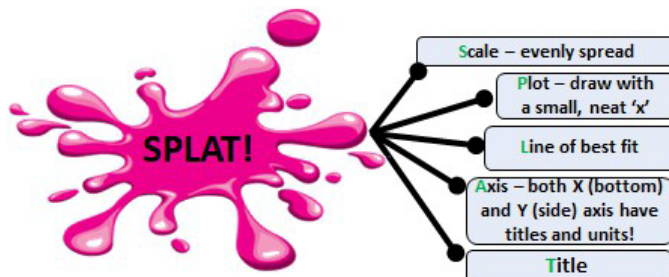
- 1 **Repeatable** – The same person gets the same results after repeating the experiment using the same method and equipment.
- 2 **Reproducible** – Similar results can be achieved by someone else or using a different method/piece of equipment.
- 3 **Accurate** – Results are close to the true answer
- 4 **Precise** – data is close to the mean (or the average!)

For data to be **reliable**, it must be **repeatable and reproducible**

3. The Variables



4. Presenting Data



Drawing conclusions from data:

- State the **relationship** between the independent and dependent variable, e.g. **'as the time increases the product formed increases.'**
- Use statistics to support your answer.** 'For example, at 10 minutes there was 50g of product, compared to 160g at 20 minutes'
- Refer to the original hypothesis – does the data support this?**

When **evaluating** think of the **positives** and **negatives** of the method (the validity – did they use enough controls? And of the results – were results **reliable, accurate, reproducible?**) and come to an overall conclusion.

| Key Terms | Description |
|----------------------|---|
| Circuit Component | A part of an electrical circuit, e.g. an ammeter, or a cell. |
| Series Circuit | A simple loop with components in series (one branch). Electrons have only one route. Current (A) is the same throughout, potential difference is shared between components. |
| Parallel Circuit | An electrical path which branches so current can divide – electrons have ‘choice’ of routes. Current is shared between branches; potential difference is the same throughout the circuit. |
| Current | The rate of flow of charge around a circuit measured in Amps using an Ammeter. |
| Potential Difference | The energy transferred per coulomb of charge transferred between 2 points in a circuit. Measured in Volts using a voltmeter |
| Resistance | Anything which opposes the flow of electrons (decreases the current), measured in ohms. Resistance = Voltage ÷ Current |
| Charge | Measured in Coulombs (C). A current of 1A = 1 coulomb of charge flowing per second (the size of the current is the rate of flow of electrical charge). |

1. Circuit symbol and functions

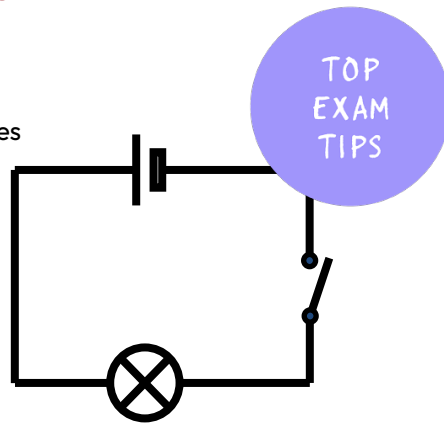
| Circuit Symbol | Circuit Component | Function |
|----------------|-------------------|---|
| | Cell | Provides electrical energy to charges in a circuit |
| | Battery | Provides electrical energy to charges in a circuit |
| | Switch | Turns electrical signals on and off. |
| | Bulb | Produces light from electricity. |
| | Buzzer | Sounding device – converts electrical signals into sound waves. |
| | Ammeter | Measures the current . Unit: Amps |
| | Voltmeter | Measures potential difference (voltage) between 2 points in a circuit. Unit: Volts (V) |
| | Motor | Converts electrical energy into mechanical energy |
| | Resistor | Limits or regulates the flow of electrical current in a circuit. Unit: Ohms |
| | Variable Resistor | Limits or regulates the flow of electrical current in a circuit. Can change the degree of resistance. Unit: Ohms |
| | Thermistor | A temperature-dependent Resistor. As temperature increases, resistance decreases. |
| | LDR | A light-dependent resistor. As light intensity increases, resistance decreases. |
| | Diode | Current passes through diode in one direction only. |
| | LED | A light-emitting diode converts electrical energy into light. |

Science - Science in action (Electricity and Circuits)

2. Rules when drawing circuits

What rules might there be when drawing circuits?

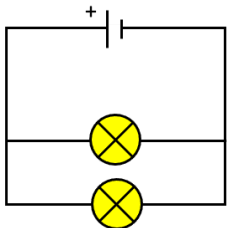
1. Cables and wires drawn as straight lines
2. Wires never cross each other
3. Use correct circuit symbols
4. Circuit must form a closed loop.
5. Ammeters drawn in series
6. Voltmeters drawn in parallel to the component of interest.



3. Units and symbols

| | Unit | Unit Symbol | What do I use to find it? |
|----------------------|----------|-------------|--|
| Current | Amps | A | Ammeter |
| Charge | Coulombs | C | $Q = I \times t$ (Charge = current x time) |
| Potential Difference | Volts | V | Voltmeter |
| Resistance | Ohms | Ω | $R = V \div I$ (Resistance = Voltage \div Current) |

4. Why are parallel circuits more beneficial than series?



1. If one bulb stops working in parallel, there is still a **complete circuit** to the other bulb(s), so they **stays alight**. If this bulb blew (broke) this bulb would stay lit!

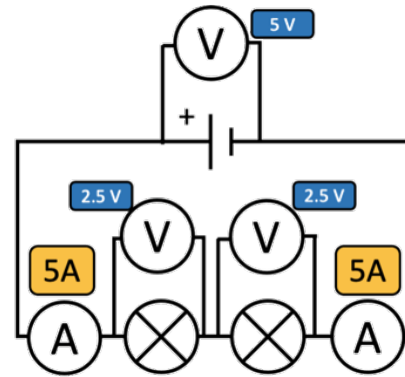


2. You can **control which branch to turn on individually** in parallel circuits - saves energy.



3. Each component in parallel gets full potential difference, so **bulbs will be brighter** than in series where potential difference is shared between components.

5. Series and parallel circuits

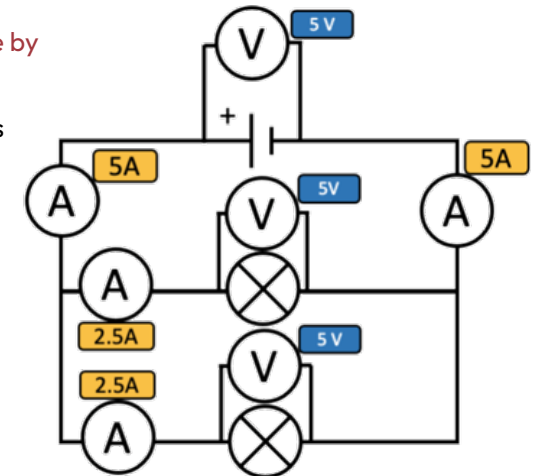


Series Circuits: A simple loop with components in series (one branch). **Electrons have only one route.**

- Current (A) is the **same** throughout.
- Potential difference (V) is **shared** between components.
- Total potential difference at the cell/battery is the **sum of all potential differences** across circuit components.

Parallel Circuits: An electrical path which branches so **current can divide** - electrons have '**choice**' of routes.

- The components are connected **side by side in parallel**.
- Current is **shared** between branches
- Potential difference is the **same** throughout.











Science - Energy

| 1. Key Terms | Description |
|--------------------------------|--|
| Energy | The ability to do work, measured in joules (J). |
| Work | This is done when energy is transferred. |
| Conservation of energy | Energy can not be created or destroyed it can only be conserved |
| Kinetic energy | The amount of energy in the kinetic energy store depends on the speed of the object. |
| Gravitational potential energy | The amount of energy in the gravitational potential energy store depends on the height of the object. |
| Power | The energy transferred each second, measured in watts (W). |
| Conduction | Energy transfer by heating through a solid due to collisions between particles. |
| Convection | When particles with a lot of thermal energy in a liquid or gas move and take the place of particles with less thermal energy. |
| Radiation | The transfer of heat energy by electromagnetic waves without involving particles. |
| Insulation | A material which reduces the loss of thermal energy from a system. |
| Payback Time | The time taken (in years) for the overall cost of an item, e.g. loft insulation, to be 'paid back'. Calculated using: $\text{cost of product} \div \text{annual saving}$. |
| Electromagnetic Spectrum | The full range of electromagnetic radiation, organized by frequency or wavelength. |

2. Energy stores

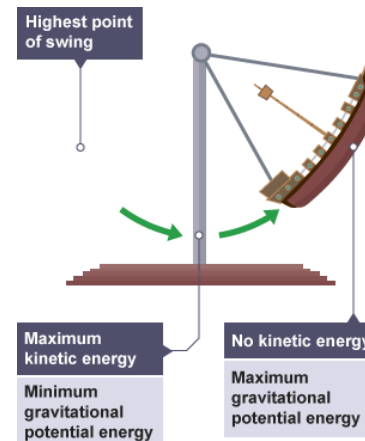
Law of conservation of energy – energy can not be created or destroyed, only transferred between stores.

| Energy Store | Image | Description | Examples |
|-------------------------|---|--|--------------------------------------|
| Magnetic |  | Energy stored when repelling poles have been pushed closer together or when attracting poles have been pulled further apart. | Fridge magnet, maglev trains |
| Internal (thermal) |  | Total Kinetic and Potential energy of particles in an object. | Human body, hot coffee, stoves. |
| Chemical |  | Energy stored between bonds, such as those between molecules. | Food, muscles, electrical cells. |
| Kinetic |  | Energy of moving objects. | Runner, Bus, comets. |
| Electrostatic |  | Energy stored when repelling charges are moved closer or attracting charges pulled further apart. | Thunderclouds, Van De Graaf. |
| Elastic Potential |  | Energy stored when an object is stretched or squashed. | Drawn catapults, compressed balloon. |
| Gravitational Potential |  | Energy stored of an object at height. | Aeroplanes, kites, book on a table. |
| Nuclear |  | Energy stored in the nucleus of an atom. | Uranium nuclear power. |

3. Energy transfers

Energy can be transferred between stores in 4 ways:

- Mechanically (by a force doing work) e.g. moving a book.
- Electrically (work done by moving charges through a potential difference).
- Heating
- Radiation (e.g. light or sound)

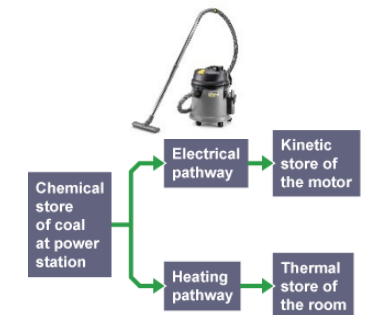
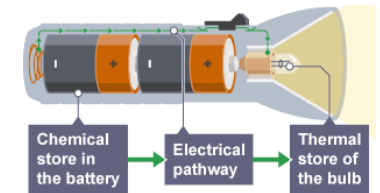


4. Energy transfers in domestic appliances

No energy transfer is 100% efficient – some energy is always wasted, often as heat or sound.

In a torch, the chemical energy stored in the battery is transferred:

- Usefully to light store in the bulb
- Wastefully into the thermal store of the filament bulb (electrical transfer)



In a Hoover, energy is usefully transferred from the chemical store of the power station:

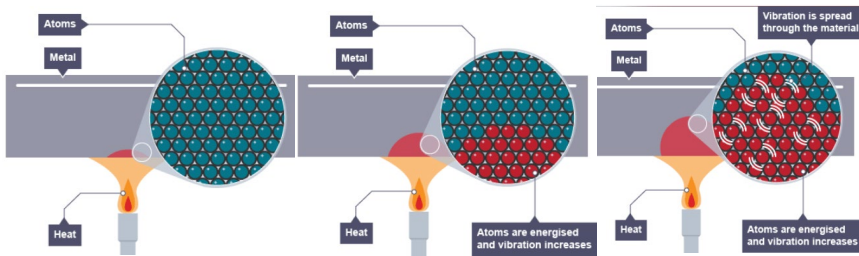
- Usefully to the kinetic store of a spinning motor.
- Wastefully into the room through sound and heat.

Science - Energy

5. Conduction

Conduction is the transfer of energy through a solid material, by transferring kinetic energy from one particle to another.

- Metals have free electrons.
- Higher temperature → higher kinetic energy store of particles.
- This means electrons will flow through a metal and transfer energy.
- This is why metals are good thermal conductors (allow heat to pass through easily)

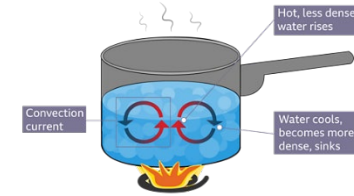


6. Convection and radiation

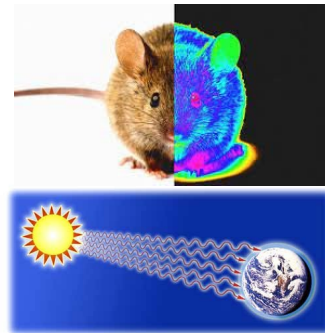
Convection is the transfer of energy through a moving liquid or gas.

Convection

- Higher temperature → higher kinetic energy store of particles.
- More energetic particles move away from less energetic particles via diffusion.
- Warmer fluid/gas becomes less density so rises.
- Temperature decreases as particles rise, so particles lose kinetic energy and become more dense so fall.
- → Convection Current.



Radiation is the transfer of thermal (heat) energy from a region of high temperature to a region of low temperature by infrared radiation.



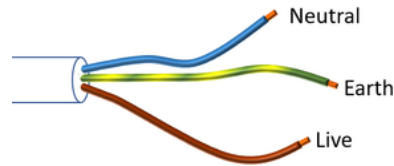
Radiation

- All objects emit infrared radiation.
- The hotter an object is, the more infrared radiation it gives off.
- We can't see infrared only feel it as heat.
- Anything with a temperature above absolute zero has heat energy.

Science - Energy

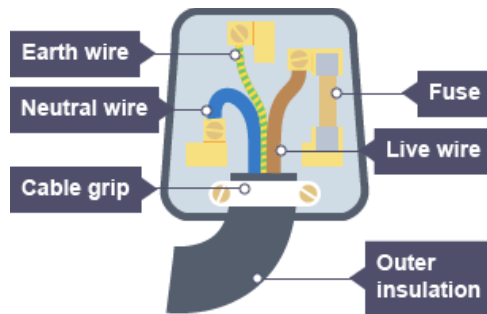
7. Plugs

- Electrical appliances in the UK are connected to the mains supply by **three-core cables**.
- The wires each have a core of copper and a **coloured** plastic coating.
- Wire **colour** shows wire **function**.
- The colours mean the same for **EVERY** appliance.



Why do we use copper in wiring?

- Copper** - good electrical conductor
- Plastic** - good insulator



| Wire name | Colour of the wire | Where in a plug? | Wire's purpose | Potential difference (V) |
|---------------------|----------------------|------------------|---|--------------------------|
| Live wire | Brown | Right | The live wire is where the current enters the device . | 230V |
| Neutral Wire | Blue | Left | The neutral wire completes the circuit – current is carried away . | 0V |
| Earth Wire | Green/Yellow Striped | Top | The Earth Wire is for safety– it earths the charge (current flows to the ground) if there is a fault. | 0V |

8. Energy Calculations

| Equation and units | Conversions | Triangle? |
|--|-------------|-----------|
| $E = Pt$ <p>Energy Transferred = Power x Time</p> <ul style="list-style-type: none"> Energy transferred (E) = Joules (J) or Kilojoules (KJ) Power (P) = Watts (W) or Kilowatts (KW) Time (t) = seconds (s) or minutes | | |

Question: A hairdryer is switched on for **120 seconds** and exerts **23W** of power. Calculate the **energy transferred**.

Step 1: Give, Give, Want

- Give: Time = **120s**
- Give: Power = **23W**
- Want: **Energy Transferred**

Step 2: Write the equation (place finger on triangle over what you want)

- Energy Transferred = Power x Time**

Step 3: Substitute Values

- Energy Transferred = 23 x 120**

Step 4: Answer with units

- Energy Transferred = 2760 J**

Challenge Question: A laptop charger is switched on for **182 seconds**, with **4900J** of energy being transferred. Calculate the **power**.

Step 1: Give, Give, Want

- Give: Time = **182s**
- Give: Energy Transferred = **4900 J**
- Want: **Power**

Step 2: Write the equation (place finger on triangle over what you want)

- Power = Energy Transferred ÷ Time**

Step 3: Substitute Values

- Power = 4900 ÷ 182**

Step 4: Answer with units

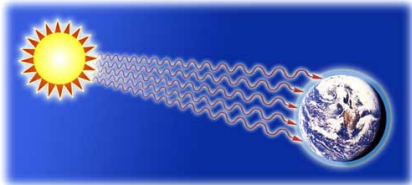
- Power = 26.92 W**

Science - Energy

9. Waves

Transverse Waves

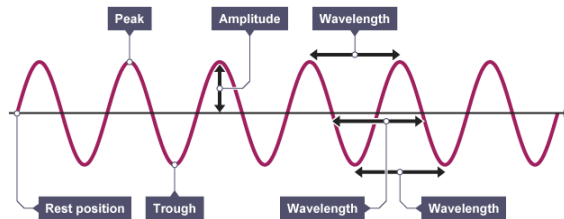
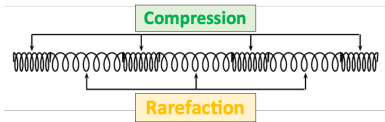
- Vibrations are **perpendicular** to the direction of wave travel
- Energy is transferred**
- Light waves**
- Will travel in space.



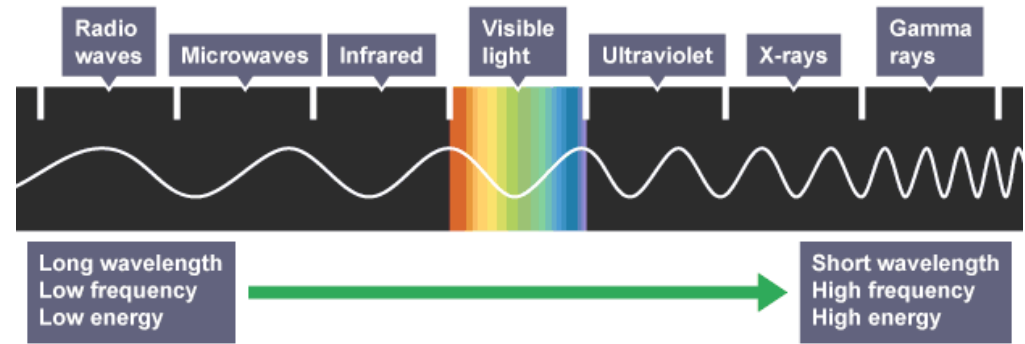
| Key Term | Image | Definition |
|--------------------|-------|--|
| Transverse Waves | | Vibrations are perpendicular to the direction of wave travel. Energy is transferred , e.g., light waves, ripples in water. |
| Longitudinal Waves | | Vibrations are parallel to the direction of wave travel. Energy is transferred e.g., as Sound waves. |
| Amplitude | | The maximum displacement of a point on a wave from the undisturbed position. |
| Wavelength | | The distance from one point of a wave to the equivalent point on the adjacent wave (wave next to it) |
| Frequency | | The number of waves passing a point each second. $f = 1 \div t$ or V (wave speed) = f (frequency) $\times \lambda$ (wavelength) |
| Period | | The amount of time it takes for a complete wave to occur. $T = 1 \div f$ |

Longitudinal Waves

- Vibrations are **parallel** to the direction of wave travel
- Energy is transferred**
- Sound waves**
- Will **NOT** travel in space.



10. Electromagnetic Spectrum



| Wave | Use |
|---------------|--|
| Radio | <ul style="list-style-type: none"> Communication (radio and TV) |
| Microwave | <ul style="list-style-type: none"> Heating food Communication (wifi, satellites) |
| Infrared | <ul style="list-style-type: none"> Remote controls Thermal imaging Infrared cameras |
| Visible Light | <ul style="list-style-type: none"> Seeing and taking photos Fibre optic communications |
| Ultraviolet | <ul style="list-style-type: none"> Security marking (fluorescence) Fluorescent bulbs |
| X-Rays | <ul style="list-style-type: none"> X-Ray imaging – medicine, airport security |
| Gamma Rays | <ul style="list-style-type: none"> Sterilising medical instruments Cancer treatment |

Science - Energy

| Unit | Topic | Link | QR Code | Revised? |
|----------------------------|-----------------------------|--|---|----------|
| Physics: Science in Action | Circuit Components | https://www.bbc.co.uk/bitesize/guides/zgvq4qt/revision/1 |  | |
| Physics: Science in Action | Series Circuits | https://www.bbc.co.uk/bitesize/guides/zgvq4qt/revision/6 |  | |
| Physics: Science in Action | Parallel Circuits | https://www.bbc.co.uk/bitesize/guides/zgvq4qt/revision/7 |  | |
| Physics: Science in Action | UK plugs | https://www.bbc.co.uk/bitesize/guides/zw8n2nb/revision/2 |  | |
| Physics: Energy | Energy Stores and Transfers | https://www.bbc.co.uk/bitesize/guides/z8hsrwx/revision/1 https://www.bbc.co.uk/bitesize/guides/z8hsrwx/revision/2 |   | |
| Physics: Energy | Energy Dissipation | https://www.bbc.co.uk/bitesize/guides/z8hsrwx/revision/3 |  | |
| Physics: Energy | Sankey Diagrams | https://www.bbc.co.uk/bitesize/guides/znr8nrd/revision/4 |  | |
| Physics: Energy | Energy in food | https://www.bbc.co.uk/bitesize/guides/zs9krwx/revision/3 |  | |
| Physics: Energy | $E = P \times T$ | https://www.bbc.co.uk/bitesize/guides/z96mv9q/revision/2 |  | |

Science - What enrichment opportunities can enhance my understanding of science?

1. Science reading opportunities

Reciprocal Reading
The Fab 5

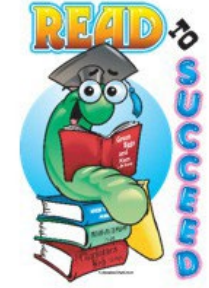
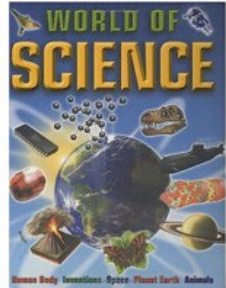
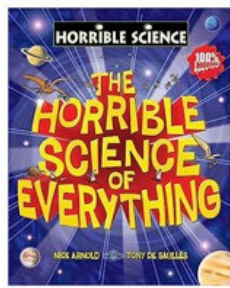
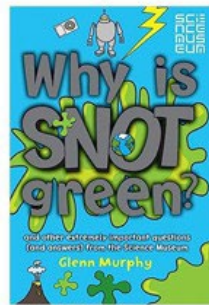
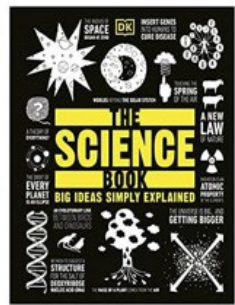
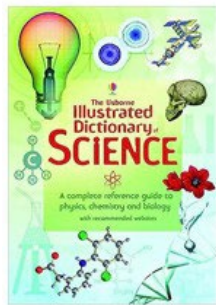
PREDICT
I think... I predict...
I wonder...
I imagine... I suppose...

QUESTION
I wonder... Who? What? Where?
When? Why? How? What if?
What does?

CLARIFY
I'm not sure of this word... section... image...
diagram... label...
what does this mean?
I think I recognise this word...
does it link to... can I have help with a synonym...

TALK THE TEXT
Why is this text important?
How does it link to my learning?
What key information can I take from the text?

SUMMARISE
Label the key points / Paragraphs...
bullet point key ideas...
highlight key words...
The most important part is...
next... also... finally...

3. Science discovery websites

Spectacular Science
National Geographic

<https://kids.nationalgeographic.com/videos/topic/spectacular-science>



Discover Natural History Museum

<https://www.nhm.ac.uk/discover.html>



Cornwall Wildlife Trust

<https://www.cornwallwildlifetrust.org.uk/>



KS3 Science Bitesize

<https://www.bbc.co.uk/bitesize/subjects/zng4d2p>



Science Experiments for Kids

<https://www.science-sparks.com/>



Eden at home

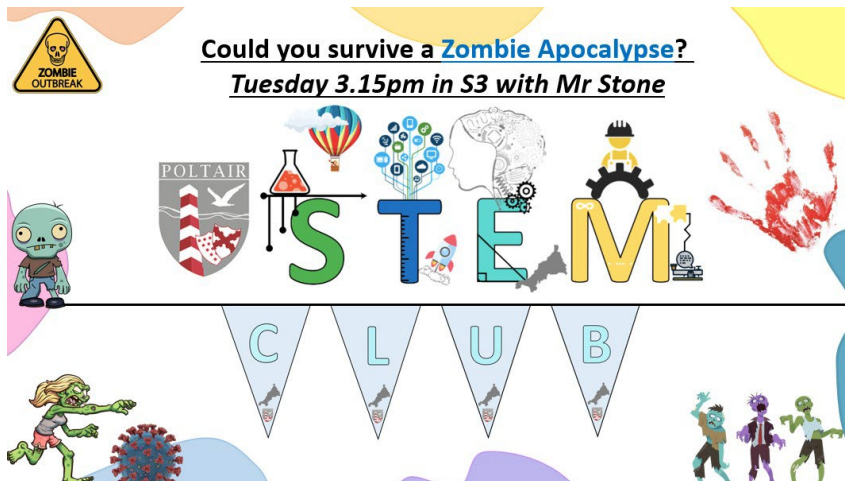
<https://www.edenproject.com/learn/eden-at-home>



2. STEM club

ZOMBIE OUTBREAK

Could you survive a Zombie Apocalypse?
Tuesday 3.15pm in S3 with Mr Stone



NASA

<https://www.nasa.gov/>



Art - El Dia De Los Muertos

1. Tier Three Vocabulary

| Key Words | Definitions |
|--------------------|--|
| Papel Picado | Cut out / pecked out , shapes from tissue paper used to decorate the streets. |
| Resource Materials | Images, pictures selected by you to develop your ideas. |
| Lino print | Lino is a materials that will be carved into to create a print. |
| Motif | A symbol or image that is used in a repeated pattern or is used as a signature. |
| Mexico | A central American country. The capital is Mexico City. The Aztecs are the indigenous culture of Mexico. |
| Pattern | A line, shape or symbol used in repetition. |

2. What will I learn?

What?

El día de los Muertos or Day of the Dead is an annual celebration in Mexico on 1st & 2nd November.

Why?

Looking at other cultures, traditions and peoples helps develop understanding and tolerance.

How?

We will research the festival, looking at the costumes, sculptures, textiles, colours, textures, illustrations and art of Day of the Dead to inspire us to design and create a 3D outcome.



3. Designers, artists & craftspeople



4. Task

You will be introduced to the Mexican celebration and look at the symbols, shapes and motifs that are used to decorate people, houses and the streets. You will develop your own designs inspired by this cultural celebration. These designs will be developed into lino prints that can be used for decoration.

Computing - Representing Data

1. Binary Number

| Key Words | Definitions |
|----------------|---|
| Switch | Early computers used simple switches to store data. The switch was either ON or OFF |
| Binary Numbers | Binary is a number system that only uses two digits: 1 and 0. All information that is processed by a computer is in the form of a sequence of 1s and 0s |
| Base 2 | Binary is also known as base 2 because there are only 2 possible numbers for each digit |

| 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 | Decimal |
|-----|----|----|----|---|---|---|---|---------|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 5 |
| 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 6 |
| 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 7 |

2. Units of measurement

| Measurement | Abbreviation | Conversion |
|-------------|--------------|----------------|
| Bit | b | 1 bit |
| Byte | B | 8 bits |
| Kilobyte | KB | 1000 bytes |
| Megabyte | MB | 1000 Kilobytes |
| Gigabyte | GB | 1000 megabytes |
| Terabyte | TB | 1000 gigabytes |
| Petabyte | PB | 1000 terabytes |

3. Adding Binary numbers

| | |
|------------------|----------------------------|
| $0 + 0 = 0$ | Zero + zero = zero |
| $1 + 0 = 1$ | One + zero = one |
| $1 + 1 = 10$ | 10 in binary = 2 in denary |
| $1 + 1 + 1 = 11$ | 11 in binary = 3 in denary |

4. Binary in the real world

| | |
|---------------|---|
| Boolean Logic | Boolean logic is a form of algebra where all values are either True or False. It can be used to describe real world situations. |
|---------------|---|

Design Technology - Clocks

| 1. Key Words | Definitions |
|-----------------------|--|
| CAD | Computer Aided Design – Using software on a computer to produce 2D or 3D designs |
| CAM | Computer Aided Manufacturing – Using computer-generated code to control machinery used to make a product |
| Acrylic | A type of plastic that is available in a variety of different colours |
| Mechanism | A system of moving parts that work together in a product |
| Laser Cutting Machine | A tool that uses a narrow laser beam to melt, burn or vaporise materials to cut or etch them |
| 2-D Design | A piece of CAD software used to produce designs on a computer |
| Target-Market | A group of potential customers that a product is aimed at |
| Budget | A plan of the total cost of producing a product |
| Design period | The style of design used for a product, such as Art Deco, Pop Art or Steampunk |
| User-Centred Design | A design process that focuses on the users and their needs when designing a product |

4. Using CAD/CAM

At Poltair School, we use a piece of CAD software called 2-D Design.

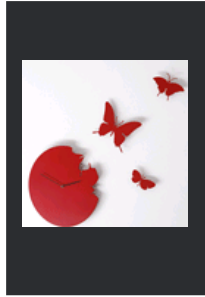
Designs can be produced in 2-D Design and then the file exported to be turned into machine code.

Machine code can then be used by a device such as a laser cutting machine to physically cut out or etch the original design using materials like wood or acrylic.

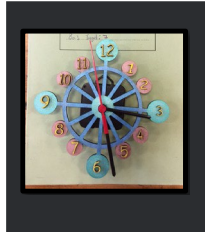
2. Analysing Existing Designs



The face of this clock has been made using blocks of softwood that have then been painted. Unlike hardwoods, softwoods are fast growing and relatively cheap. This makes them a more sustainable resource. The colours can be customised to make personal clocks for different users, but the lack of numbers may make this clock face difficult to read.



The face of this clock has been made using coloured acrylic. Unlike wood, acrylic is NOT a sustainable resource as it is usually made from crude oil that is finite. The shapes have been designed using CAD and cut using a laser cutting machine. Different designs and colours could be made for different users but the small hands and lack of numbers may also make this clock face difficult to read.



The face of this clock has been made using plywood. Unlike hardwoods or acrylic, plywood is a more sustainable resource. The product has been cut using a laser cutting machine. The colours can easily be changed and customised to make clocks to suit the needs of different users.

5. Workshop Safety

1. Always wear goggles when using tools. This includes hand tools as well as machine tools.
2. Do not use a tool unless your teacher has shown you how to use the tool safely. Ask to be shown again if you have forgotten how to use the tool safely.
3. The solvents used to bond acrylic can be harmful. They will only be handled by staff and we will only use them in small quantities in a well-ventilated room. We call these actions Control Measures and they help to ensure that everyone stays safe.

3. Identifying Target Markets

Designers need to collect information about the needs and preferences of the users that they are designing products for. This can include age, gender, favourite colours, hobbies/interests and physical needs.



Once the information has been collected, a designer can create a moodboard of images, colours and ideas based on the user's needs and preferences to help inform their design.

6. Links and further reading

User-Centred Design:

<https://www.bbc.co.uk/bitesize/guides/z6jkw6f/revision/2>



Identifying Target Markets:

<https://www.bbc.co.uk/bitesize/guides/zbn6pbk/revision/2>

Revise: Mindmap Maker
[is.gd/mindmapmaker](https://www.is.gd/mindmapmaker)



Drama - Theatre Through Time

1. History of Theatre

The History of Theatre is an exciting journey through different styles and time periods.

Ancient **Greek Theatre** flourished between 550BC and 220BC. A festival honouring the god Dionysus was held in Athens, out of which three dramatic genres emerged: **tragedy**, **comedy** and the **satyr** play.

Western theatre that we recognise today has its roots in the theatre of Ancient Greece and the plays that originated there.

Another style is **Commedia dell'arte** from Italy in the 16th century, a type of improvisational theatre with colourful costumes and comedic, exaggerated characters. In the 19th century, there was Victorian melodrama, which had heightened emotions and drama and exaggerated characters. These different styles have influenced theatre and made it what it is today.

2. Commedia dell'arte

| Key Words | Definitions |
|------------------------|--|
| Archetypal Characters | type of character in a narrative with distinguished characteristics whom audiences recognise across many narratives or as part of a storytelling tradition |
| Prepared Improvisation | When the actors are given the time to plan and discuss ideas before presenting or performing a piece of drama |
| Soggetto | The 'idea' that inspires the prepared improvisation |
| Gesture | A movement of part of the body, especially a hand or the head, to express an idea or meaning |
| Gait | A person's manner or way of walking |

Further links:



The World of Commedia

https://www.youtube.com/watch?v=h_OTAXWt8hY

3. Greek Theatre

| Key Words | Definitions |
|-----------------------|--|
| Greek chorus | The chorus consisted of between 12 and 50 players, who variously danced, sang or spoke their lines in unison, and sometimes wore masks |
| Tragedy | A play dealing with tragic events which have an unhappy ending |
| Choral speaking | Speaking as part of a group |
| Synchronised movement | Moving together |
| Unison | Means to speak at the same time |
| Mirroring | Executing the same movement as another performer but in mirror image |
| Echo | The repetition of a sound caused by reflection of sound waves |

Further links:



National Theatre

www.youtube.com/watch?v=aSRLK7SogvE

4. Victorian Melodrama

| Key Words | Definitions |
|------------------|--|
| Stock Characters | A stereotypical character in a melodrama |
| Exaggeration | The representation of something more extreme than it really is |
| Aside | A remark that is intended to be heard by the audience but unheard by other characters in the play |
| Provocation | The initial cause for setting action into motion – jealousy or greed forces an evil character to plan an offence |
| Pangs | The consequential sufferings of the good and innocent characters who are caught up in the evil plot |
| Penalty | In a last minute twist of fate, the wicked character has their plans foiled and receives a punishment for his/her evil actions |

Further links:

Melodrama Narrative

<https://www.britannica.com/art/melodrama>

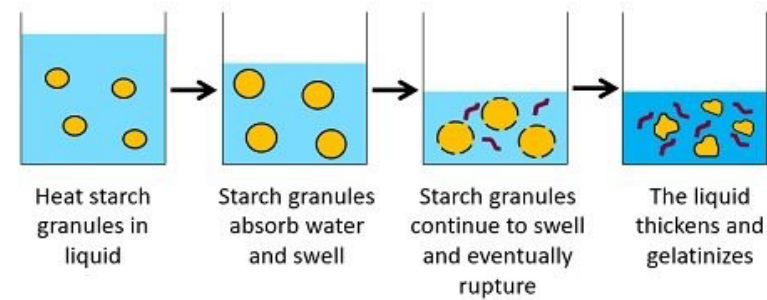


Food - Knead to Know

| 1. Key Terms | Description |
|-----------------|---|
| Gelatinisation | The scientific process of a sauce thickening by flour |
| Starch Granules | Starch Granules are found in flour and enable a sauce to thicken by absorbing liquid and bursting |
| Al Dente | 'French term meaning 'to the tooth,' used when cooking pasta to ensure it isn't over or under cooked but slightly chewy |
| Fermentation | The scientific process used when yeast ferments to produce carbon dioxide which helps the bread rise |
| Activate | Yeast needs food, warmth, moisture and time to become active and react, creating carbon dioxide for the bread to rise |
| Knead | Skill used to stretch the gluten in the bread |
| Prove | Skill used to allow the bread to rest and rise |
| Gluten Network | During kneading the dough is stretched, the gluten inside the flour causes the dough to stretch |

2. Gelatinisation

During the thickening process of making a flour-based sauce gelatinisation occurs. The process of gelatinisation starts at 60°, the sauce begins to thicken at about 85° but it's not fully completed until it reaches 100°. During heating, the starch grains swell to more than five times their normal size

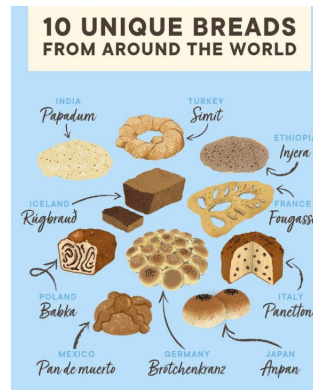


3. Functions of bread ingredients

| | |
|--------------------|--|
| Strong plain flour | Strong plain flour contains more gluten which enables the bread to become stretchy holding the carbon dioxide and rising |
| Yeast | Yeast ferments releasing carbon dioxide which is needed for the bread to rise |
| Warm Water | Warm water activates the yeast with moisture and warmth as well as making the flour form a dough |
| Salt | Salt helps the crust form and gives flavour |
| Sugar | Sugar helps activate the yeast as food |

4. Bread as a staple food

Bread is a staple food, meaning it is often a large part of a meal and is cheap. Bread is served around the world in many different shapes, sizes and flavour.



5. Activating yeast

Yeast needs four conditions to be activated:

- Warmth
- Food
- Moisture
- Time

The yeast will become activated releasing carbon dioxide.



6. Links and further reading

Video:Gelatinisation
<https://www.youtube.com/watch?v=Y7YYa1yhzro>



Article:Bread in culture facts for kids
<https://is.gd/BreadinCulture>



Revise:Mindmap Maker
is.gd/mindmapmaker



Geography – Climate change

1. Tree rings



The rings found within a tree trunk can show how old the tree is and what the climate was like during the life of the tree. Some trees can live for thousands of years. Very old trees can give information about past climates.

2. Ice cover

Areas such as Greenland and the Arctic have seen thinning of ice sheets. In September 2020, Arctic sea ice reached its minimum extent for that year at 3.74 million square kilometres. According to scientists at the National Snow and Ice Data Centre (NSIDC), this is the second lowest since the 42-year record.

3. Ice cores

Locked inside ice are molecules and trapped air, which are preserved year on year as more snow falls. Subtle changes in temperature can be measured from ice cores extracted in Antarctica. This gives scientists long-term evidence of climate change.

4. Rocks and fossils

Rocks and fossils can be studied for information also covering longer time periods. For instance, limestone found in Yorkshire was formed on the bottom of a warm seabed millions of years ago.

5. Pollen analysis

Different types of plant are adapted better to different conditions. Study of plant pollen preserved in sediment can show changes in the type of vegetation in a particular. This provides a guide to what the climate was like at different times.

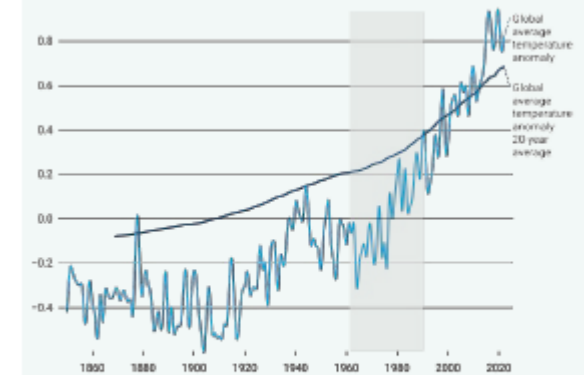
The greenhouse effect



1. Solar energy passes through the Earth's atmosphere.
2. Most of this energy is absorbed by the Earth's surface and it warms up.
3. The Earth also radiates some of this energy back into space.
4. Some of the energy is absorbed by greenhouse gases (e.g. water vapour, carbon dioxide, and methane).
5. This heats up the lower atmosphere.
6. The more greenhouse gases there are in the atmosphere, the more heat is absorbed.

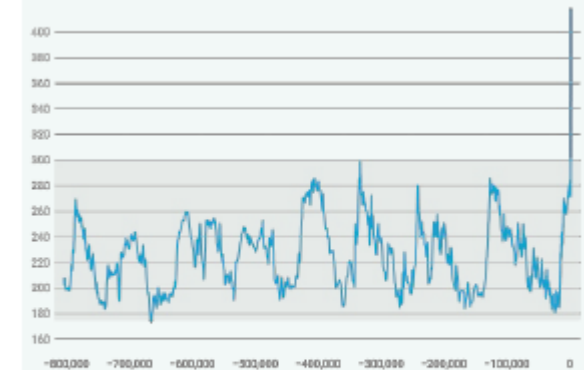
Note: the greenhouse effect is important. Without it, the Earth would be 18°C cooler. The issue now is that there is too much heat being trapped.

Climate change over time



This graph shows the average global temperature anomaly in degrees Celsius. The anomaly means the difference between the temperature in a year, compared to the average for 1961 to 1990.

Atmospheric CO₂ over time



This graph shows the concentrations of carbon dioxide in the atmosphere in parts per million (ppm) over the past 800,000 years. Only since 1914, has the level exceeded 300 ppm, and in 2022 reached 417 ppm.

Geography – Climate change

1. Natural causes of climate change

Orbital change

Milankovitch cycles are variations in the tilt/orbit of the Earth around the Sun, causing natural warming and cooling.

Solar output

Solar radiation fluctuates overtime, when levels of radiation are high this leads to an increase in the Earth's temperature

Human causes

Burning fossil fuels

When coal, oil and gas are burned, carbon-dioxide is released into the atmosphere.

Agriculture

Increased pastoral farming leads to more methane being released into the atmosphere.

Deforestation

Trees absorb carbon dioxide, when trees are cut down carbon is released into the atmosphere

2. Effects of climate change

Social effects

- Increased risk of diseases such as skin cancers.
- Crop yield affected, maize in sub-Saharan Africa decreased by 12% in South America.
- Drought reduces food and water. Water scarcity in the south and south-east of the UK.
- Flood risk increases, 70% of Asia at risk of flooding due to rising sea levels.
- Extreme weather events become more intense, e.g., tropical storms

3. Mitigation

Alternative energy production

- Developing renewable energy solutions such as wind, solar and tidal energy reduces our reliance on fossil fuel burning power stations.

Planting trees

- Planting trees helps to reduce the amount of carbon in the atmosphere as trees absorb it as part of photosynthesis

International Agreements

- International agreements encourage countries to take responsibility for reducing CO2 emissions. Financial support is offered to help low-income countries achieve this goal.

4. Adaptation

Changing agriculture

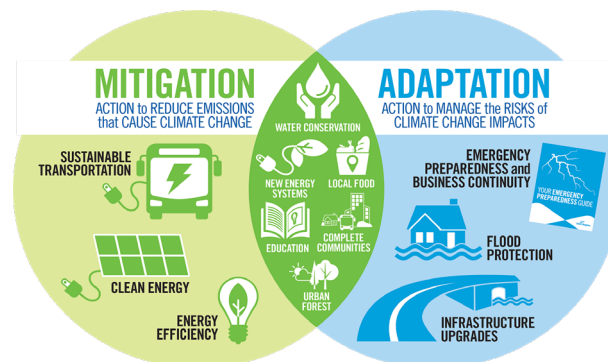
- Farmers can change the types of crops they grow to better suit a warm climate, e.g., grapes

Managing water supplies

- Water transfer schemes move water from areas of surplus to those of water deficit. This can be achieved by water transfer pipelines

Reducing the risk of rising sea levels

- Coastal defences aim to reduce the risk of erosion. It is estimated that sea levels will rise by up to 43cm by 2100 putting settlements and farmland at risk.



Geography – Deserts

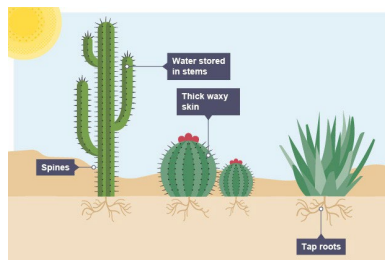
| 1. Key Terms | Description |
|-----------------|--|
| Abiotic | Non-living elements of an ecosystem, such as climate, temperature, water, and soil type |
| Adaptation | A feature of an organism's body which helps it to survive |
| Biotic | Living elements of an ecosystem, such as plants and animals |
| Climate change | The long-term alteration of weather patterns |
| Desertification | The spread of desert conditions in arid regions due to human activities, drought or climate change |
| Species | A type of organism that is the basic unit of classification. Individuals of different species are not able to interbreed successfully. |

2. Plant adaptations

Small leaves - these ensure that less water is lost from the plant by transpiration because the leaf has a smaller surface area.

Tap roots - these are long roots (7-10 metres long) that reach deep under the ground to access water supplies. The tap roots are much longer and bigger than the plant.

Spines - some plants have spines instead of leaves, e.g. **cactuses**. Spines lose less water than leaves so are very efficient in a hot climate. Spines also prevent



animals from eating the plant.

Waxy skin - some leaves have a thick, waxy skin on their surface. This reduces water loss by transpiration.

Water storage - some plants, known as **succulents**, store water in their stems, leaves, roots or even fruits. Plants which store water in their leaves and stems also have a **thick waxy skin** so that they lose less water by transpiration.

3. Development challenges in hot deserts

Agriculture - Large-scale irrigation means that desert areas can be farmed. Crops include dates & figs.

Energy production - The clear skies and high levels of solar energy in deserts are ideal for generating electricity.

Mining - Large oil and gas reserves are often found in desert regions, e.g., Saudi Arabia has the second largest proven oil reserves in the world

Tourism - Many desert countries are now using the landscape to generate income from tourists. Activities include camel rides, dune buggy trips and sandboarding.

4. Polar biome characteristics

Polar biomes are areas close to the North and South Pole that have long, cold winters. Average temperatures are mostly below freezing. Very little rain falls. Small plants, such as mosses can survive the harsh conditions.

Antarctica's seasons are opposite to the seasons that we're familiar with in the UK. Antarctic summers happen at the same time as UK winters. This is because Antarctica is in the Southern Hemisphere, which faces the Sun during our winter time.

5. Plant and animal adaptations

Some animal species have adapted to survive the hostile conditions in Antarctica. For example, penguins have flippers to help them to swim and feathers to trap warm air close to their bodies. Plant species such as lichen and mosses grow, particularly around coastal



regions. The ocean contains a range of life, including krill and whales.

6. How can we protect Antarctica?

The Antarctic Treaty effectively stops nations from making territorial claims or from exploiting Antarctic resources.

The Antarctic Treaty was negotiated by 12 countries in 1959: Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, UK, USA and USSR.

The fundamental aim of the Antarctic Treaty is that Antarctica "shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord"

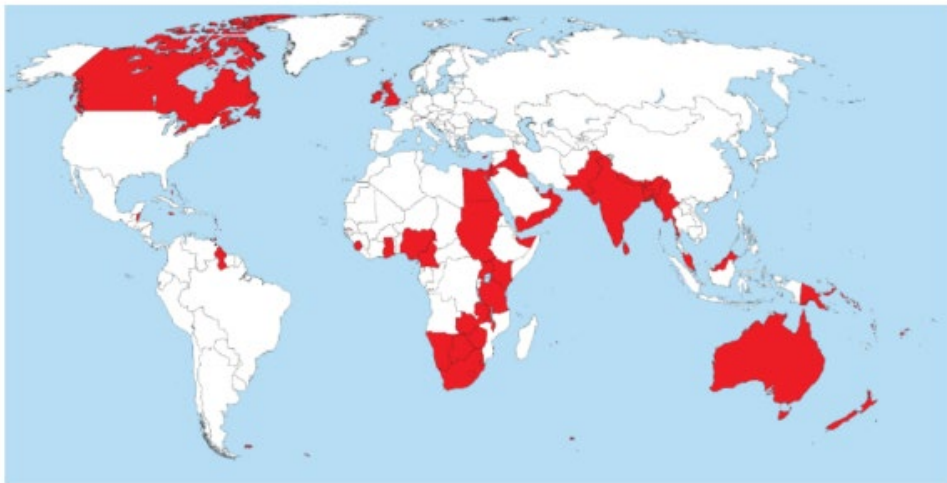
History - Enquiry Question: What were people's experiences of the British Empire?

1. Historical Skills we will develop in this Enquiry;

- ✓ Our understanding of cause and consequence
- ✓ Our ability to use interpretations to explore and explain the past

2. Historical analysis and interpretation:

- Is about argument, interpretation, and consequence
- Involves using suitable evidence, assessing it properly, and making conclusions based on this evidence
- Is the process by which we describe, analyse, evaluate, and create an explanation of past events
- Is based on primary [firsthand] and secondary [scholarly] historical sources
- Moves historical research from being a chronicle of events to providing a larger understanding of why things were as they were in the past
- Tells you about the past and why the past was as it was



Map to show the control of the British Empire at its height

<https://www.msn.com/en-gb/entertainment/music/starmer-prepares-to-give-ground-on-commonwealth-demands-for-reparations/ar-AA1sU91e>

Scan to read a recent article of Keir Starmer discussing the idea of Britain and reparations



| 1. Key Terms | Description |
|----------------|---|
| Empire | A large group of states or countries under the control of a single power |
| Colony | A country or area under the full or partial political control of another country (a country that is part of an Empire) and people from the Empire live there |
| Colonist | Someone from the controlling country of an Empire who then settles in another country which is part of the Empire. E.g. People who moved from Britain to settle in Australia were colonists |
| Indigenous | The people (and animals/plants) who are native to a country or place |
| Exploit | To make full use of and get a benefit from something |
| Raw materials | The basic material from which a product is made. e.g, cotton, gold |
| Sepoy | An Indian soldier serving under the British Army |
| Independence | To gain freedom from outside control, to be able to do things for oneself |
| Decolonisation | The action or process of a state leaving a former colony, leaving it independent. E.g. Britain leaving India in 1947 |
| Reparations | Money given as compensation for something (to repair) |

Timeline

1600 – The Formation of the East India Company.

1607 – First permanent settlement of Americas at Jamestown.

1770 – James Cook claims the East coast of Australia for Britain.

1775-1783 – American War of Independence

1787 – First shipment of prisoners to Australia.

1857 – India comes under the control of Britain

1876 – Queen Victoria is named the 'Empress of India.'

Post 1918: Attitudes towards imperialism begin to change.

1947 – India gains independence.

1957 – Ghana becomes the first African country to gain independence from Britain.

History - Enquiry Question: What were people's experiences of the British Empire?

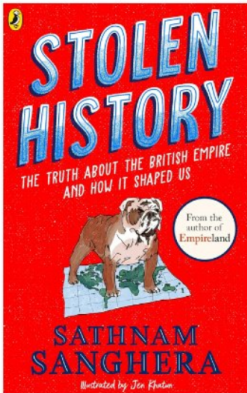
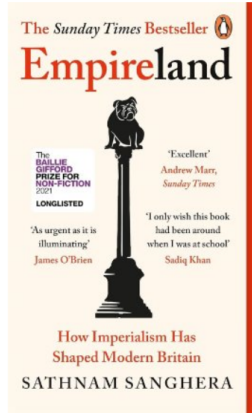


Bringing the past back to life at Poltair!

Reading like a historian



Empireland: How Imperialism Has Shaped Modern Britain, Sathnam Sanghera (Author)



Stolen History: The truth about the British Empire and how it shaped us, Sathnam Sanghera (Author), Jen Khatun (Illustrator)

These are **suggestions** of reading that might help boost your history knowledge for the current enquiry.

Anything you can read linked to our enquiry questions is amazing and if you tell your teacher what you've been reading and make suggestions to us for books students might like then we will be rewarding you with Merits!

Remember to check out the library; there are some fantastic history books in there too!



Basic knowledge

| Question | Answer |
|--|---|
| 1 Where was the first successful British colony? | Jamestown (America), 1607 |
| 2 What was the 'Scramble for Africa'? | European countries fighting to control countries in Africa |
| 3 How much of the continent of Africa was controlled by the British? | At its height 30% of Africa was under British control |
| 4 Why did Europe want control in Africa? | Access to raw materials like; gold, rubber, diamonds, silver etc. |
| 5 Who was James Cook? | British explorer and naval officer famous for his three voyages between 1768 and 1779 in the Pacific Ocean and to New Zealand and Australia in particular |
| 6 Who were the indigenous people of Australia? | Aboriginals |
| 7 What company initially gained control of India? | The East India Company |
| 8 What happened to India in 1857? | It was now ruled by Britain (British Raj) |
| 9 What was the Indian Mutiny, 1857? | Sepoy Mutiny/Rebellion was a major uprising in India in 1857–58 against the rule of the British East India Company when the sepoys (Indian soldiers serving under British) sparked by the soldiers being asked to use paper cases for their gunpowder which had grease used rumoured to include beef (offensive to Hindus) and pork (offensive to Muslims). |
| 10 Who led the independence movement in India? | Mohandas Gandhi |

Scan for an interview with Sathnam Sanghera discussing *Stolen History*



<https://www.youtube.com/watch?v=FyPmHwqQ4fw>

Scan to access a guide to Historical writing



<https://uta.pressbooks.pub/historicalresearch/part/thinking-historically/>

History - Enquiry Question: Why wasn't the First World War the 'war to end all wars'?

Historical Skills we will develop in this Enquiry;

- ✓ Our understanding of significance
- ✓ Our ability to use sources to explore the past

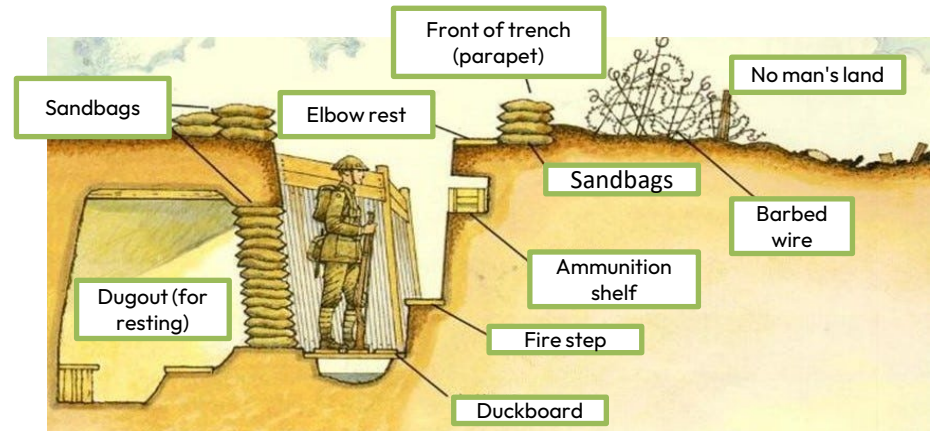
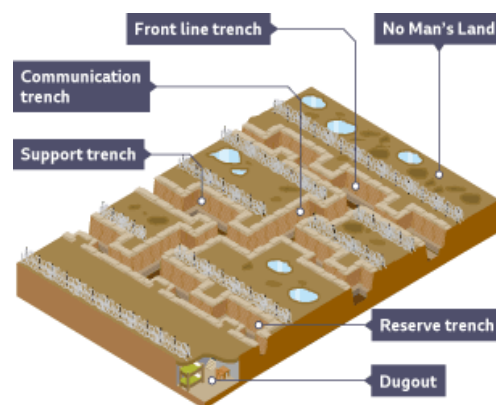
Historical analysis and sources:

- **Newspapers** - Report on daily events and show public opinion. They can be really useful for getting a 'feeling' of the time and what people were thinking about certain events
- **Diaries and letters** - These are very personal to those writing them. People would share views, ideas and emotions that they may not say out loud to others, so it gives us a real 'insider' view on what people really thought or felt.
- **Original photographs** - These capture a snapshot of the past. They obviously are only useful for the exact moment and not the before or after, but they can be useful for showing the exact view of an event/person/place etc.
- **Statistics** - Statistics are great for giving us specific data on a 'bigger picture' of something. E.g. How many people died during a battle or the number of people working in certain professions etc.
- **Government reports** - These are usually confidential when they are created so they should give us a true reflection of how the government thought about a particular issue and their reasons for doing something
- **Original paintings, drawings, sketches** - These can be useful to show us attitudes about people at the time; e.g. cartoons drawn about events or issues like those that might end up in the newspaper. They are also useful to show us how people like Queen Elizabeth I wanted to be viewed and even just what they looked like. They are even useful to show us what an event like a key battle might have looked like at a time when there was no photography (think Battle of Hastings, events in the English Civil War etc.)

| Key Terms | Description |
|---------------|--|
| Alliance | When countries sign an agreement to support each other |
| Imperial | Having/building Empires |
| Militarism | Building up military forces (often to intimidate others) |
| Assassination | When someone is killed after planning (usually someone important) |
| Terrorism | The use of violence and intimidation to try to achieve a political aim |
| Troops | Soldiers |
| Trench | A long narrow ditch |
| No man's land | The land in between 2 trenches that belong to no one |
| Cease Fire | Agreement to stop fighting to organise peace |
| Treaty | An agreement signed by 2 or more countries, often to agree peace |



Soldiers in a waterlogged trench in WWI



History - Enquiry Question: Why wasn't the First World War the 'war to end all wars'?



Bringing the past back to life at Poltair!

Reading like a historian

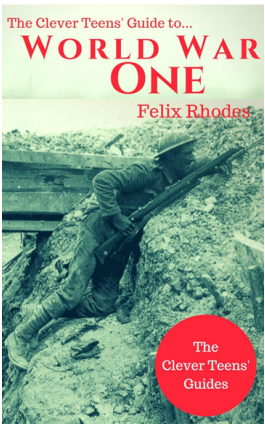


Daring Deeds - World War I Short Stories for Kids KLG History



These are **suggestions** of reading that might help boost your history knowledge for the current enquiry.

Anything you can read linked to our enquiry questions is amazing and if you tell your teacher what you've been reading and make suggestions to us for books students might like then we will be rewarding you with Merits!



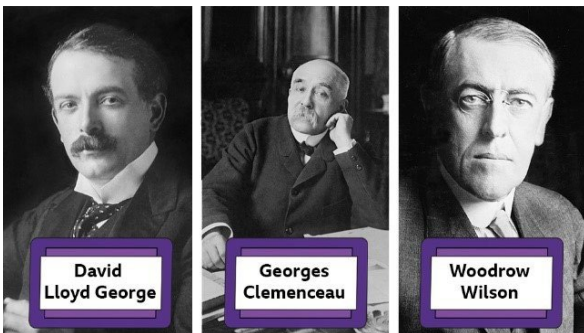
The Clever Teens' Guide to World War One Felix Rhodes (Author)

Remember to check out the library; there are some fantastic history books in there too!

<https://www.bbc.co.uk/bitesize/topics/z94cwmn/articles/zwj9cmn#zsftxbk>



Scan to read about the problems for Germany after the Treaty of Versailles



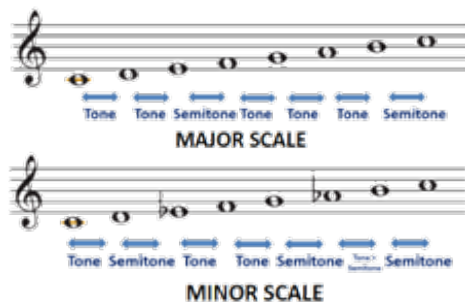
| Question | Answer |
|--|---|
| 1 What were the long-term causes of WWI? | Alliances, Militarism, Imperialism |
| 2 What was the short-term cause of WWI? | The assassination of Archduke Franz Ferdinand |
| 3 What was the German plan to take control of France in 6 weeks? | The Schlieffen Plan, it failed and led to the creation of trench warfare |
| 4 How was the war on the Western Front Fought? | Mostly using the Trench System, each side defended their trenches and fought to take control of others trenches to make progress |
| 5 What roles did the Empires play in WWI? | It wasn't just one of the causes but those who were parts of the Empires fought in WWI for their countries too; for example, India, Australia fought for the British. |
| 6 What advancements in warfare were there in WWI? | There was the creation of the tank, use of machine guns, poison gas, shells, bombs with huge amounts of shrapnel in them, hand grenades |
| 7 How did the war come to an end? | Germany had to unconditionally surrender in November 1918, leading to the armistice |
| 8 What decided the end of the war? | The Paris Peace Treaty; the Treaty of Versailles. This was signed in June 1919 and officially ended WWI |
| 9 What problems were there in the Treaty? | Germany was forced to sign with humiliating conditions for themselves. |
| 10 Why was the treaty so harsh to Germany? | Links to the reasons why the war began but also France were in a powerful position, and they had suffered huge damages because of the Trench system and so were desperate for a harsh treatment of Germany. |

Music - Variations

| 1. Key Words | Definitions |
|----------------|--|
| Melody | The catchy tune that sticks in your head and makes a song memorable |
| Variation | Changing small bits of the music to keep it interesting, but still recognisable |
| Theme | The main idea or musical building block that the whole piece is based on |
| Variation Form | A musical structure where the main theme is repeated with changes each time |
| Duration | How long a sound lasts in music - think of it as musical time |
| Augmentation | Making the notes of a melody longer to give it a more majestic feel |
| Diminution | Making the notes of a melody shorter to make it sound faster or more playful |
| Ostinato | A repeating musical pattern that stays in the background while other things change |
| Ground Bass | A repeating bassline that stays the same while the melody above it changes |
| Minimalism | A style of music where simple musical ideas are repeated and slowly change over time |

4. Tonality - Major and Minor

TONALITY refers to whether a **THEME** or **MELODY** is in a **MAJOR** or **MINOR** key. Changing the tonality from major to minor, or minor to major is one way of providing a variation of the theme of melody. Major and minor scales follow a certain pattern of tones and semitones.

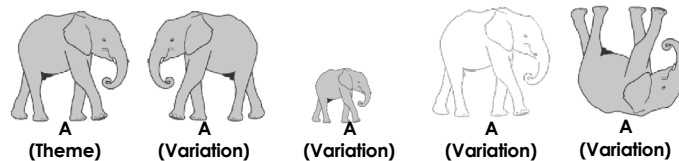


2. Theme and Variations

A melody is a tune or succession of notes, varying in pitch, that have an organised and recognisable shape. Often called the main **TUNE** or **THEME** of a piece of music or song and easily remembered.

A variation is where a **THEME** is altered or changed musically, while retaining some of the primary elements, notes and structure of the original.

VARIATION FORM:



5. Variation Techniques

| | |
|--------------------|---|
| Pitch | Change the highness or lowness of the theme - play the same notes, but at different pitches |
| Tempo | Change the speed of the theme - play it faster or slower |
| Dynamics | Change the volume of the theme - play it louder or softer |
| Texture | Change the amount of sounds we hear - play as a solo or add an accompaniment, or chords |
| Timbre & Sonority | Change the sound of the theme and play it on a different instrument |
| Articulation | Change the way the theme is played - smoothly (LEGATO) or short and detached (STACCATO) |
| Pedal | A long (often very long!) note in the bass line of the music over which other parts are played |
| Drone | A long or series of repeated (often long) notes using the TONIC (1st) and the DOMINANT (5th) notes |
| Melodic Decoration | Adding in extra notes to the theme such as trills, turns, mordents (ornaments) |
| Ostinato | Adding a repeated musical pattern (rhythmic or melodic) to the main theme as a variation |
| Canon/ Round | A song or piece of music in which different performers sing the same theme starting one after the other |
| Ground Bass | A repeated musical pattern in the bass part upon which chords, and melodies can be performed over |

3. Different Durations of Notes

When creating minimalism and 'theme and variation', we can use **AUGMENTATION** or **DIMINUTION** to alter our music and lengthen or shorten the notes we play.

AUGMENTATION is the process of doubling note values. **DIMINUTION** is the process of halving note values.

| Symbol | Name | Duration |
|--------|-----------|---------------------------|
| | Breve | Hold for 8 beats |
| | Brev | (this one is rarely used) |
| | Semibreve | Hold for 4 beats |
| | Minim | Hold for 2 beats |
| | Crotchet | Hold for 1 beat |
| | Quaver | Hold for 1/2 a beat |
| | Quaver | Hold for 1/2 a beat |

6. Links & Further Reading

Lesson: Theme & Variation in Music: Definition, Form & Examples

[is.gd/themeandvariationlesson](https://www.is.gd/themeandvariationlesson)



Lesson: Music Theory - Note Durations

[is.gd/notedurations](https://www.is.gd/notedurations)

Revise: Flash Card Maker

[is.gd/flashcardmaker](https://www.is.gd/flashcardmaker)



PSHE – Choices and Consequences

| 1. Key Terms | Description |
|--------------|--|
| Side Effects | An impact of something that is in addition to, or beyond its desired effect. |
| Caffeine | A substance that increases brain activity, alertness, attention and energy. Can be found in coffee, tea, and can be added into soft drinks or medicines. |
| Vaping | The practice of inhaling and exhaling vapour that contains nicotine and flavouring in an attempt to replace smoking as a habit. |
| E-cigarettes | An electronic cigarette that can take the place of smoking. |
| Nicotine | A highly addictive chemical found in tobacco that causes an increased heart rate and can cause someone to feel more relaxed. |
| Alcohol | A chemical substance found in drinks such as beer and wine that is classed as a depressant drug due to its impact being to slow the body down. |
| Recreational | When something is done or completed with enjoyment being the primary purpose |

6. Links to External Support

BROOK

www.brook.org.uk

0808 802 1234

Talk To Frank

www.talktofrank.com

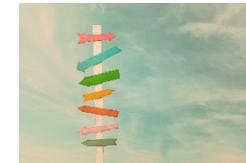
2. Caffeine

Caffeine is a big part of some people's daily routines and it is something people can feel reliant upon. If someone consumes too much caffeine it could lead to issues surrounding sleep, anxiety, and physical health issues such as headaches and chest pains. Caffeine is classified as a stimulant as it causes our body systems to speed up such as our heart rate.



4. Drinking Alcohol

Alcohol is commonly misconceived to not be a drug, but it is indeed classed as a drug. Alcohol has a wide range of effects on humans physically; mentally; socially and environmentally. Drinking in excess can lead to alcohol poisoning due to the high levels of toxins found in alcohol. You must be 18 or older to purchase and consume alcohol in the UK legally. Long term effects of alcohol use can increase the likelihood of health conditions developing further into the future.



3. Smoking

The smoking of cigarettes results in us consuming high levels of nicotine which is a highly addictive chemical found in tobacco. The health issues surrounding smoking are widely known but yet some people still choose to smoke. This is partly to do with the addictive traits of nicotine but also the effects it may have. Smoking can help to reduce people's anxieties and help them to relax. The risks of smoking are vast but the majority of them link to the increased risk of health conditions in the future. In the UK, you must be 18 years old to purchase and smoke cigarettes.



5. Choices and Consequences

With all of the substances mentioned, there are choices to be made and potential consequences to face. Our conscience weighs up the for and against of decisions we must make. Some consequences of using drugs and alcohol can be positive, when they are used in moderation. But excessive use of any substance runs the risk of seeing unwanted side effects come to light. They can all lead to an increased risk of health conditions later in life, with some also posing a risk of getting into trouble with the law depending on the substance being used and the age of the user. By learning about drugs and alcohol, and being educated around the risks involved with them, we are in a greater position to make informed choices when we come to scenarios where they are involved.

Childline

www.childline.org.uk
0800 1111



We Are With You (YZUP)

www.wearewithyou.org.uk



Religious Education - What is so radical about Jesus?

| 3. Key Words | Definitions |
|--------------|---|
| Radical | Significantly different to other people/what is expected |
| Incarnate | In the flesh/human form |
| Messiah | Anointed one/chosen saviour |
| Sinners | People who break God's rules |
| Marginalised | People who are mistreated, treated differently or ignored by society. |
| Agape | Greek word meaning unconditional love |
| Parable | A story told by Jesus to help people to understand his message |
| Hypocrite | A person who acts in a way that goes against the beliefs or values they claim they have |

How did Jesus treat the marginalised in society?

Jesus spent the majority of his time associating with those people who were considered marginalised. He chose to eat with tax collectors and sinners, and when questioned about this, replied that the good people did not require his help, since they were already doing the right thing, whereas sinners needed him to guide them ('Healthy people do not need a doctor, sick people do. I did not come to help the righteous, I came to help sinners').

Jesus also stood up for the rights of the poor and told people that if they did not use their wealth to help others they did not love God. He also said that it would be incredibly hard for a rich person to get to heaven ('It is easier for a camel to pass through the eye of the needle, than for a rich man to enter the Kingdom of God').

The society Jesus lived in was extremely patriarchal, but Jesus challenged this by allowing women to listen to him teach (when others said they should be at home) and by having women amongst his close followers. When the religious leaders asked him if they should stone a woman who had committed adultery, Jesus saved her life by saying that no one should be allowed to judge her unless they had never sinned themselves ('Let he who is without sin cast the first stone').

What did Jesus teach about love and forgiveness?

The Parable of the Lost Sheep

Jesus told the story of a shepherd with 100 sheep who, when 1 sheep went missing, left all the other sheep to go and search for it. When he eventually found the sheep and brought it back to the rest of the flock, he celebrated because it had come back.

Jesus says that God will celebrate in the same way when just one sinner returns to him because he has unconditional love for everyone (agape love).

The Parable of the Good Samaritan

Jesus tells this story to answer the question 'Lord, who is my neighbour'. He tells the story of a Jewish man who is attacked when he is walking along the road and left for dead. A Priest walks past him and does not help him. A Priest's assistant walks past and also ignores him. Finally, a Samaritan (a neighbouring community hated by the Jews) stops and helps him.

Jesus's message is that everyone is our neighbour, even if they are our enemy and when we are commanded to 'Love thy neighbour', this means we should love everyone.

The Parable of the Unforgiving Servant

Jesus tells the story of a servant who owes the king a huge sum of money. When he can't pay it back, the king wipes the debt clean. However, when the servant finds out that someone is unable to pay him back a much smaller amount he insists on payment. When the king finds out, he has the servant thrown in jail and tortured.

Jesus says that if we want to receive forgiveness from God, we should be willing to forgive each other.

Later, when asked how many times people should forgive, Jesus said 77 times. The number, however, is not important, what he meant was that forgiveness should be unlimited.

Man or Myth?

There is no physical proof that Jesus existed, however we do have a number of historical texts that make reference to him. Alongside the 4 Gospels (Matthew, Mark, Luke and John), there are also mentions of Jesus among historical writings from the time which support some of the evidence contained in the Christian scripture. This suggests that there probably was a Jewish teacher called Jesus who had a number of followers and was crucified by Pontius Pilate.

Whether he could perform miracles, was the son of God and was able to come back from the dead, remains, however, a matter of faith.



Scan here to listen to New Testament scholar Bart D. Ehrman discuss his book 'Did Jesus Exist?'

Religious Education - What is so radical about Jesus?

| | |
|----------------|--|
| Salvation Army | A Church who put Jesus's teachings into practice through actions such as organising soup kitchens, visiting prisoners, running addiction services, helping the elderly etc |
| Holy Week | The week leading up to Jesus's death and resurrection/Easter |
| Crucifixion | A Roman form of execution involving death by being hung from a cross |
| Resurrection | Coming back from the dead |
| Easter | The celebration of Jesus's resurrection |

How radical were Jesus's actions?

When Jesus arrived in Jerusalem he headed straight to the Temple to pray. On arriving there, he found people changing money and selling animals for sacrifice. Angry that these people were exploiting the poor who had come to pray, Jesus knocked over their tables and forced the traders out of the Temple. This makes the religious leaders angry and they begin looking for a way to kill Jesus.

Later, when preaching to his followers, Jesus talks about the Pharisees, a group of men who are highly educated about Jewish law and consider themselves to be incredibly good Jews. He tells the crowd that they should do what they say, but not what they do because they are hypocrites. This angers the religious leaders further.

How do Christians follow Jesus's teachings in their lives?

Some ways that Christians might follow the teachings and example of Jesus include:

- Charitable giving
- Being willing to forgive others
- Showing compassion to all
- Visiting people in prison
- Running soup kitchens/food banks
- Campaigning for equality – for example Martin Luther King, who fought for black civil rights in America
- Helping the sick and poor – for example Mother Teresa, who dedicated her life to helping the poor communities in India
- Helping the planet – for example Christian Climate Action who campaign against climate change
- Working with addicts – for example Pastor Mick, a former addict who now runs his own Church



Scan here to find out more about how the Salvation Army put Jesus's teachings into practice

How did Jesus's radical nature lead to his death?

Guide to Holy Week



Palm Sunday

Sunday before Easter. Celebration of Jesus' triumphal entry into Jerusalem. Observed with palm branches, parades, and celebration.



Maundy Thursday

Thursday before Easter. Commemorates the Last Supper. Often observed with foot washing, stripping of the altar, and overnight prayer vigil to keep watch with Jesus in the garden.



Good Friday

Friday before Easter. Most solemn day of the church year. Observes the day Jesus was crucified. Observed by praying the Stations of the Cross and three hours of silent prayer while Jesus was on the cross.



Holy Saturday

Saturday before Easter. Observes the day Jesus was in the tomb. This is a day of somber reflection, reflecting on what we'd miss in a world without Jesus.



Easter Sunday

Hallelujah! Christ has risen! This day we celebrate the resurrection of Jesus. Sing hallelujahs and celebrate with great joy.



Spanish

1. Classroom language

| | |
|--------------------------------------|--|
| ¿Cómo se dice ... en español/inglés? | How do you say... in Spanish/ English? |
| ¿Cómo se escribe...? | How do you spell...? |
| ¿Cómo se pronuncia? | How do you pronounce (it)? |
| ¿Me das? | Can you give me...? |
| ¿Puedes repetir? | Can you repeat that? |
| ¿Puedo ir a mi clase de música? | Can I go to my music class? |
| (No) entiendo | I (don't) understand |
| Lo siento | I'm sorry |
| (Casi) he terminado | I have (almost) finished |
| por favor | please |
| gracias | thank you |
| Objetos en la clase | Classroom objects |
| un bolígrafo | a pen |
| una regla | a ruler |
| un cuaderno | an exercise book |

2. My own key vocab

| | |
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Phonics – Sound Symbol Correspondence (SSCs)

These sounds never change!

a = cat e = egg i = feet o = hot u = woo

ca - ce - ci - co - cu

Stick your tongue out like the English /th/ for /ce/ and /ci/ and also z, /que/ = ke - /qui/ = key

ga - ge - gi - go - gu

Soft /g/ sound, except for /ge/ and /gi/ these are pronounced like a Spanish /j/ in the back of your throat. Soft /gue/ = get and /gui/ = geese

h = silent, ll = like an English y, v like an English b, ñ = ny, roll your rs if they come at the beginning of a word, or are a double rr

Spanish

3. Week 1 – Sport I play

| jugar + al + ballsports | |
|-------------------------|--------------|
| jugar | to play |
| juego al | I play |
| juega al | he/she plays |
| jugamos al | we play |
| deporte | sport |
| baloncesto | basketball |
| fútbol | football |
| tenis | tennis |
| voleibol | volleyball |
| un partido | a match |
| un equipo | a team |
| 1. | |
| 2. | |
| 3. | |
| 4. | |

4. Week 2 – Activities I do

| hacer + non-ball sport | |
|------------------------|-----------------------|
| cada día | each day |
| cada sábado | each Saturday |
| una vez al mes | once a month |
| una vez a la semana | once a week |
| dos veces a la semana | twice a week |
| de vez en cuando | from time to time |
| hacer | to do (go + activity) |
| hago | I do |
| hace | he / she does |
| hacemos | we do |
| ciclismo | Cycling |
| natación | Swimming |
| gimnasia | Gymnastics |
| baile | Dance |
| atletismo | Athletics |
| vela | sailing |

5. Week 3 – My hobbies

| Infinitive verbs | |
|--------------------------|------------------------|
| montar a caballo | to ride a horse |
| montar en bicicleta | to ride a bike |
| pasear | to go for a walk |
| ver la tele | to watch TV |
| escuchar música | to listen to music |
| tocar un instrumento | to play an instrument |
| jugar en mi videoconsola | to play on my console |
| usar el ordenador | to use a computer |
| ir de compras | to go shopping |
| mandar mensajes | to send messages |
| leer libros | to read books |
| salir con amigos | to go out with friends |
| ir al cine | to go to the cinema |
| ir al parque | to go to the park |

6. Week 4 – Past tense

| Past time frames and non-negotiable verbs | |
|---|-----------------------|
| la semana pasada | last week |
| el fin de semana pasado | last weekend |
| el sábado pasado | last Saturday |
| el domingo pasado | last Sunday |
| la última vez | the last time |
| fui | I went |
| vi | I saw/watched |
| tuve | I had |
| fue/era | it was |
| había | there was/ were |
| lo pasé bien/ mal | I had a good/bad time |
| me divertí | I had fun |

7. Week 5 – Picture based task

| Describing a photo | |
|---------------------------------------|------------------------------|
| En la foto hay... | In the photo there is/are... |
| mucha gente | lots of people |
| dos personas | two people |
| lleva(n)... | he/she is wearing |
| ropa de deporte | sports clothing |
| está(n)... | he is/ they are |
| dentro | inside |
| fuera | outside |
| hablando | talking |
| sonriendo | smiling |
| jugando | playing |
| General conversation questions | |
| ¿Qué haces en tu tiempo libre? | What is your school like? |
| ¿Qué hiciste el fin de semana pasado? | What did you do last weekend |

8. Week 6 – Non-negotiable verbs

| If you know these, you can talk about anything in three tenses! | |
|---|-----------------------|
| fui | I went |
| vi | I saw/watched |
| tuve | I had |
| fue/era | it was |
| había | there was/ were |
| lo pasé bien/ mal | I had a good/bad time |
| me divertí | I had fun |
| me gusta | I like |
| le gusta | he/she likes |
| iré | I will go |
| veré | I will see |

Spanish

9. Week 7 – Future aspirations

| Las ambiciones para el futuro | |
|-------------------------------|------------------|
| Me gustaría | I would like |
| Quiero | I want |
| trabajar | to work |
| ser | to be |
| como | as |
| al aire libre | in the open air |
| en equipo | in a team |
| un trabajo | a job |
| cantante | a singer |
| presidente | the president |
| policía | a police officer |
| médico | a doctor |
| el jefe / la jefa | the boss |
| jugador(a) | player |
| actor / actriz | actor / actress |

10. Week 8 – The importance of languages

| Las lenguas son importantes | |
|-----------------------------|--------------------------|
| los idiomas | languages |
| las lenguas | languages |
| el inglés | English |
| el español | Spanish |
| un segundo idioma | a second language |
| 1. | |
| hablar | to speak |
| viajar | to travel |
| conocer a gente nueva | to meet new people |
| encontrar un trabajo | to find a job |
| ir a la universidad | to go to university |
| ayudar | to help |
| descubrir nuevas culturas | to discover new cultures |
| al extranjero | abroad |

11. Week 9 – Revision - holidays

| Word you might have forgotten! | |
|--------------------------------|-------------------|
| pueblo | town |
| calle | street |
| lugar / sitio | place |
| edificio | building |
| campo | countryside |
| vista | view |
| puente | bridge |
| cerca de | closeto |
| lejos de | far from |
| ir de vacaciones | to go on holiday |
| hacer turismo | to go sightseeing |
| disfrutar | to enjoy |
| llegar | to arrive |
| reservar una habitación | to reserve a room |
| me quedo / me alojo | I stay |

12. Week 10 – Question words

| Las preguntas | |
|-------------------|------------------|
| qué | what |
| cómo | how |
| por qué | why |
| dónde | where |
| adónde | where to |
| de dónde | from where |
| cuándo | when |
| cuánto/a | how much |
| cuántos/as | how many |
| cuál | which |
| quién | who |
| a qué hora | at what time |
| a la una | at one o'clock |
| a las dos y media | at half past two |

13. Week 11 – Easter in Spain

| La Pascua | Easter |
|-----------------------|---------------------------|
| la Semana Santa | Holy Week |
| la Cuaresma | Lent |
| la primavera | Spring |
| el chocolate | chocolate |
| el huevo | egg |
| el conejo | rabbit |
| las hojas de palmeras | palm leaves |
| una vela | a candle |
| un paso | a float (in a procession) |
| un cruz | cross |
| un crucifijo | a crucifix |
| las flores | the flowers |
| un Nazareno | a penitent |
| un capirote | a conical hat |

14. Week 12 – Holiday plans

| The near future- just add the infinitive | |
|--|-----------------------|
| el sábado que viene | next Saturday |
| el fin de semana que viene | next weekend |
| la semana que viene | next week |
| durante las vacaciones | during the holidays |
| primero | first |
| luego | then |
| después | after that |
| más tarde | later |
| finalmente | finally |
| voy a | I'm going to |
| vas a | you are going to |
| vamos a | we are going to |
| vais a | you (pl) are going to |
| van a | they are going to |
| me gustaría | I would like |

Sport – Basketball

Key Knowledge, Skills and Tactics

1. Passing and receiving - being able to pass a ball backwards and forwards with teammates using a variety of passing techniques whilst static and on the move.
2. Dribbling (pressured) - being able to dribble the ball at speed and under control whilst being under pressure from a defender. Using all dribbling skills to make progress up the court maintaining possession.
3. Jump Shot - combining your set shot technique with an added jump, to try and generate extra momentum and distance in your shot.
4. Rebounding - collecting the rebound after a shot comes off of the backboard or rim, to maintain possession and continue the attack, or alternatively as the defender, regain possession of the ball and begin building your own attack.
5. Lay-up - a shot performed by a player often dribbling towards the basket and bouncing the ball off the back board before it drops into the hoop.

Key Vocabulary

Cool down
Jump shot
Rebound
Offence
Defence
Lay-up
Accuracy
Shoulder pass
Overhead pass



Sport - Football

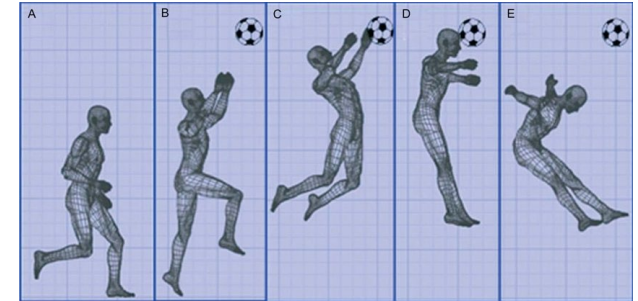
Key Knowledge, Skills and Tactics

1. Dribbling and turns – how we can move the ball at our feet, whilst it is under control and incorporate a change of direction.
2. Beating a defender/Shielding – Being able to keep the ball in possession and getting beyond a defender into space behind or beside them. Shielding the ball means you use your body positioning to get between the defender and the ball to maintain and protect possession of the ball.
3. Instep and Laces (complex skill) - Being able to use the correct parts of your foot to strike the ball, avoiding toe-punts and using the laces for power or the instep for accuracy and control of passing the ball.
4. Controlling the ball (parts of the body) - Being able to use varied parts of the body (head, chest, legs, feet) to gain control of the ball and get the ball back onto the ground and be ready to dribble/pass/shoot.
5. Shooting (laces) - again, using the correct part of your foot (instep) to strike the ball when shooting to maximise power as well as control of the shot. This will in turn maximise the likelihood of you hitting the target/scoring against a goalkeeper.
6. Tackling/defending - Being able to take the ball off an opponent to regain possession. Understanding when and where to use a standing/sliding tackle and being able to perform these effectively and safely to avoid conceding a foul
7. Games (conditioned) - build up the playing of conditioned games, to introduce the playing of a football match whilst still having an underlying focus that will extend the learning and development of skills.



Key Vocabulary

Replicate
Turns
Fluency
Communicate
Confident
Officiate
Cool down
Space
Movement



Notes Pages

Notes Pages

Notes Pages

Notes Pages

