



# Year 7 Knowledge Organiser

Learning Cycle 2 – February 2026

Student Name \_\_\_\_\_

Tutor Group \_\_\_\_\_



## The School Day

	Time
<b>Tutor</b>	8:45am – 9:15am
<b>Lesson 1</b>	9:15am – 10:30am
<b>Break 1</b>	10:30am – 11:00am
<b>Lesson 2</b>	11:00am – 12:15pm
<b>Lesson 3</b>	12:15pm – 1:30pm
<b>Break 2</b>	1:30pm – 2:00pm
<b>Lesson 4</b>	2:00pm – 3:15pm

## My Computer Log Ins

Platform	Username	Password
School System		
Sparx Maths		
Educake		
Memrise		

## How to use your 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 consolidate 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 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.	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"> <li>How to use your PLC</li> <li>How to schedule your <a href="#">home learning</a> and stick to it!</li> <li>How to select the correct knowledge to study</li> </ul>	<ul style="list-style-type: none"> <li>How to use your PLC</li> <li>How to schedule your home learning and stick to it!</li> </ul>	<ul style="list-style-type: none"> <li>Look cover &amp; test</li> <li>Leitner system</li> <li>Blurt it</li> <li>Transform it</li> </ul>	<ul style="list-style-type: none"> <li>Low stakes</li> <li>Self-quizzing</li> <li>Quiz each other</li> <li>Online quizzes</li> <li>High stakes</li> <li>Exam style questions</li> </ul>

## How to use SORT

Step 1: Organise	Step 2: Select	Step 3: Recall	Step 4: Test
<ol style="list-style-type: none"> <li>Use the daily planner on page 4 to identify all the times when you will complete your home learning and when you will complete independent study or revision.</li> <li>RAG each of the PLCs so you identify your RED topics – the ones that you are unsure of or you do not fully understand</li> <li>Write your RED topics into your daily planner for when you will revise that subject</li> </ol>	<p>When you revise for a specific topic use your knowledge organiser, revision guide, website etc to summarise the key knowledge you need to learn.</p> <p>Use any summarizing strategy, such as:</p> <ul style="list-style-type: none"> <li>Flashcards</li> <li>Mindmaps</li> <li>Cornell Notes</li> <li>Revision Clocks</li> </ul> <p>For more details go to the SORT webpage:</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"> <li>Lietner System</li> <li>Blurt It</li> <li>Look, say, cover, write, test</li> </ul>	<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>



# Home Learning Timetable

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Time	Saturday	Sunday
3:15pm – 4:15pm <i>Poltair+</i>						AM		
4:30pm – 5:30pm								
5:30pm – 6:30pm								
6:30pm – 7:30pm						PM		
7:30pm – 8:30pm								
8:30pm onwards								



# Personal Learning Checklists

## English

Key Ideas	S	O	R	T
I can support my ideas with evidence, including quotations.				
I can analyse language used by writers.				
I understand the plot of The Bone Sparrow.				
I can use my understanding of a character from across a whole text to create a thesis about them.				
I can analyse the meaning and effect of a range of key quotations.				
I can use context to enhance my analysis of a key character.				
I can write to express an opinion.				
I know how to use a range of sentence structures in my writing.				

Key Ideas	S	O	R	T
Can I identify methods that writers use to present their ideas?				
How can I compare writer's ideas and methods?				
Can I use figurative language methods in my writing?				
Am I able to recall the key characters and plot of The Tempest?				
What is context?				
Can I explain the context of The Tempest?				
Can I identify the features of a play?				
What is a monologue?				
Can I remember and apply a range of structure terms?				



# Personal Learning Checklists

## Maths

Key Ideas	Sparx Code	S	O	R	T
I can form and simplify ratios	M885				
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 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 substitute into expressions	M417 & M327				
I understand key algebraic vocabulary	M813				
I can simplify expressions.	M531				
I can calculate probabilities	M655				
I can expand brackets and factorise	M237				
I can find the area of parallelograms	M291				
I can find the area of a triangle	M610				
I can find the area of compound shapes	M269				

Key Ideas	Sparx Code	S	O	R	T
I can write probabilities as fractions	M941, M938				
I can find the probability of mutually exclusive events	M755				
I can find angles on a line and around a point	M818				
I understand vertically opposite angles	M163				
I can find angles in triangles	M351				
I can find angles in quadrilaterals	M679				
I can use properties of quadrilaterals to find angles	M393, M679				
I can calculate with roots	M135				



# Personal Learning Checklists

## Science – Biology - Lifestyle

Key Ideas	S	O	R	T
I can articulate what a healthy diet looks like, and what food groups are necessary for this.				
I can recall the energy = power x time equation.				
I can calculate temperature changes when heating water using food sources.				
I can articulate what an unbalanced diet might look like, and explain diseases this may contribute to.				
I understand what smoking does to the human body, and what diseases this may contribute to.				
I understand what drinking alcohol does to the human body and what diseases this may contribute to.				
I understand the effects drugs may have on the human body, and can articulate the difference between a medicinal and recreational drug.				

## Science – Physics – Forces and Pressure

Key Ideas	S	O	R	T
I can identify and describe contact and non-contact forces				
I can draw free body force diagrams				
I understand the terminology 'balanced' and 'unbalanced' in relation to forces.				
I can write a method to investigate frictional forces.				
I understand the difference between weight and mass and can use these in an equation.				
I can describe what is meant by Hooke's law.				
I can calculate speed and draw distance-time on a line graph using SPLAT.				
I can recall what factors may affect reaction time.				
I understand what is meant by atmospheric pressure and I can explain how increasing distance from the ground changes pressure.				
I can describe the relationship between ocean depth and pressure.				

## Science – Chemistry - pH

Key Ideas	S	O	R	T
I know what the pH scale is.				
I can describe what is meant by 'acid' 'alkali' and 'neutral'				
I can describe what colours acids, alkalis, and neutral will go if you add universal indicator.				
I can recall how to use filtration to separate samples of soil before testing these with universal indicator.				
I understand the concept of neutralisation and can apply this to an equation.				
I can be given different equations and identify if a reaction is neutralisation or not.				



# Personal Learning Checklists

## Science – Chemistry – The Periodic Table

Key Ideas	S	O	R	T
I can identify metals and non-metals from the periodic table				
I can calculate the number of protons, neutrons, and electrons of an element from the periodic table				
I can draw the electronic configuration of an element given the number of electrons.				
I can describe the differences between atoms, elements, compounds, and mixtures.				
I can name at least 5 metal properties (e.g., hard, shiny)				
I can define and give the difference between electrical and heat conductors and insulators.				
I can describe what an alloy is, and explain why they are harder than pure metals				
I can give the names and at least one property of groups 1, 7, and 0 of the periodic table.				

## Science – Biology – Wildlife Science

Key Ideas	S	O	R	T
I can define sexual reproduction				
I can give the word equation for photosynthesis without looking				
I can give the balanced symbol equation for photosynthesis without looking back				
I can state that photosynthesis occurs when light energy is absorbed in the chlorophyll in the chloroplasts.				
I can identify my dependent (measure), independent (change), and control (same) variables during the photosynthesis investigation.				
I can name 3 different biotic (living) and abiotic (non-living) factors in an ecosystem.				
I can explain the difference between aerobic and anaerobic respiration.				
I can explain how an ecosystem can be undermined by bioaccumulation.				

## Science – Physics - Space

Key Ideas	S	O	R	T
I can define a planet, solar system, star, galaxy, and orbit.				
I can describe the life cycle of a star and justify why different stars form.				
I can recall the names and order of our solar system planets.				
I can explain how the big bang theory is supported by evidence, and justify what this evidence is.				
I can explain how Earth's rotation and axis causes day and night and the seasons.				
I can describe and identify different phases of the moon.				



# Personal Learning Checklists

## Art

Key Ideas	S	O	R	T
I understand tone, texture, shape, pattern, scale, line and composition.				
I understand how Van Gogh used line to create tone, texture and pattern.				
I can experiment with a range of materials to create tone, texture and pattern.				
I can explain how to develop my ideas.				
I can explain how my ideas are linked to Van Gogh.				
I can explain how to create a monoprint.				

## Computing

Key Ideas	S	O	R	T
I know how to design a simple Scratch program				
I know what the menu block are and how to select in Scratch				
I understand the terms sequence and Selection				
I can create and use variables in scratch				
I can create my own blocks to simplify the code				
I can create Scratch code which uses selection.				
I can explain how iteration can be used to improve code using loops.				
I describe a network and the reasons for using one				
I can explain the difference between the WWW and internet				

## 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 use hand tools safely.				
I can use hand tools with precision.				
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.				

## Drama

Key Ideas	S	O	R	T
I can used accurate facial expressions and gestures in my performance				
I can use gait and movement appropriately to show intention and mood				
I can think about how each stock character would act				
I can think about how the audience will understand the story				



# Personal Learning Checklists

## Food

Key Ideas	S	O	R	T
I understand how to ensure a hygienic and safe kitchen.				
I can explain the importance of knife safety and knife skills to prevent injury.				
I can identify the five different sections of the eat well guide.				
I understand the importance of a healthy diet.				
I can name and describe a number of common pieces of equipment in the kitchen				
I can describe the difference between the bridge hold and claw grip.				

## Geography

Key Ideas	S	O	R	T
Define formal and informal sectors of industrial sectors				
Explain the advantages and disadvantages of informal and formal sectors				
Describe the location of the Middle East				
Name the countries of the Middle East				
Describe the human geography of the Middle East				

## Geography

Key Ideas	S	O	R	T
Describe the processes of erosion				
Describe the processes of transportation				
Describe the processes of weathering				
Describe the processes of mass movement				
Compare the characteristics of constructive and destructive waves				
Explain the stages in the formation of a stack				
Explain the stages in the formation of a headland and bay				
Explain the advantages and disadvantages of coastal defence schemes				
Describe the key terms of import and export				
Describe the processes of globalisation				
Describe the term TNC				
Name examples of multinational companies				
Explain the stages in the Clark Fisher model				
Explain the advantages and disadvantages of TNCs				

## History

Key Ideas	S	O	R	T
I can explain what a Crusade is				
I can explain some of the reasons for the Crusades				
I can explain how key figures in the Crusades have been viewed over time				
I can state an impact of the Crusades even today				
I can explain what life was like generally in Tudor England				
I can state examples of African people in Tudor England				
I can explain life for Tudor women				
I can explain why the civil war began				
I can explain what the witch craze was				
I can state what happened in England after the Civil War				
I can make judgments on and explain my views of our enquiry questions				



# Personal Learning Checklists

## Music

Key Ideas	S	O	R	T
I am able to understand the four different families of instruments and how they make a sound.				
I know what the definitions of the musical elements are.				
I know what 'timbre' is and how to identify different instruments just by their sound alone.				
I am able to understand what 'dynamics' are and can identify where they change.				
I am able to hear where the 'tempo' changes in a piece of music.				
I can understand what 'duration' is and when a note is long or short.				
I am able to identify the 'texture' of a piece of music by how many sounds are happening at once.				
I know what an orchestra is and what a conductor does.				

## Religious Studies

Key Ideas	S	O	R	T
I can outline the evidence that suggests was a real person				
I can explain the way Jesus treated the marginalised				
I can outline Christian teachings about love and forgiveness				
I can explain the ways that Jesus challenged the religious authorities				
I can give examples of how Christians put Jesus's teachings into practice today				
I can outline the events of Holy Week				
I can explain why there are different denominations of Islam				
I can explain what each of the Five Pillars of Islam are				
I can explain how the Five Pillars impact on a Muslim's life				
I can explain what Islamophobia is and how it impacts on Muslims				
I can outline the contribution made by the media to Islamophobia				

## Spanish

Key Ideas	S	O	R	T
I understand the rules for correct pronunciation				
I can talk / write about where I live				
I can talk / write about my school life				
I can talk / write about my opinions with reasons				
I can recognise simple comparatives				
I know how to form regular verbs in the present tense				
I can recall / use the verb 'ir' (to go) in the present				
I can use sequencers and time frames				
I can describe a picture				



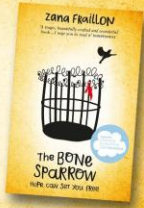
# Year 7 English – The Bone Sparrow

## 1. Plot

1a = Ch 1 - 10	<ol style="list-style-type: none"> <li>1. We learn about Subhi's life in a refugee detention centre, with his family Maa and his sister Queeny.</li> <li>2. Life within the detention centre and the harsh conditions are explained, along with the the superstition of the 'deadly' bone sparrow.</li> <li>3. Jimmie life is described.</li> <li>4. We read about Eli the tradesman, who delivers secret packages with Subhi to the centre.</li> <li>5. Subhi gets caught by Beaver.</li> <li>6. The reader learns about Jimmie's life without her mother.</li> <li>7. Subhi, disorientated from his fall, spots Jimmie in the distance.</li> <li>8. Harvey explains Beaver's circumstances. Eli is transferred to the adult section of the centre even though he is only a child.</li> <li>9. Jimmie's thinks about Subhi's existence and is eager to go back to the centre.</li> <li>10. Subhi finally meets Jimmie face to face. We learn that Jimmie can't read and wants Subhi to read her mum's story about her family history.</li> </ol>
1b = Ch 11-20	<ol style="list-style-type: none"> <li>11. Subhi reads the first story of Jimmie's ancestors in her mum' journal.</li> <li>12. Jimmie reflects on the story and hears her mum's voice.</li> <li>13. The reader learns it is Subhi's birthday in the centre and more about the identity of Nasir. Subhi learns from his mum about his identity.</li> <li>14. Subhi meets with Jimmie and reads the next part of her mum's story.</li> <li>15. Jimmie reflects on Subhi's life in the Detention Centre and is frustrated to hear how he lives..</li> <li>16. Queenie and Eli take secret pictures of the camp to send to the papers to inform the public about their horrific conditions.</li> <li>17. Nasir dies and Subhi continues to tell Jimmie's story.</li> <li>18. A sickness enters the camp. Subhi continues to read Jimmie's story.</li> <li>19. Subhi is reflecting and discovering his own identity.</li> <li>20. Jimmie finds a picture of Subhi's living conditions in the local paper.</li> </ol>
1b = Ch 21 - 30	<ol style="list-style-type: none"> <li>1. Jimmie brings Subhi a picnic and asks him to help her read.</li> <li>2. We learn about Jimmie going back to a home in which she is neglected.</li> <li>3. Eli and Queeny have an argument. Subhi finds a knife buried in the dirt but leaves it hidden in a different location.</li> <li>4. Jimmie's dad - to make up for his late working hours - gets her a present which reflects her bone sparrow.</li> <li>5. Hunger strikes and riots develops more seriously in the camp.</li> <li>6. Jimmie picks up flu and is weak from her sickness. She is unable to walk to meet Subhi.</li> <li>7. Subhi reads Jimmie's last part of the story while he waits for her. He is unaware of her illness.</li> <li>8. Huge change in atmosphere as the Jackets try to control the riots happening in the camp using force and brutality.</li> <li>9. Subhi escapes the centre to find Jimmie unconscious and rings for an ambulance.</li> <li>10. After a fire erupts In the centre and chaos descends, Eli dies trying to save people from the brutality.</li> </ol>
1b = Ch 30 - 37	<ol style="list-style-type: none"> <li>1. We learn about Eli's story about his journey as a refugee.</li> <li>2. Subhi is in shock after witnessing the death of Eli. Harvey is trying to console him through guilt.</li> <li>3. We learn more about the about Harvey's being a bystander to Eli's death. Subhi is feeling guilt and angry at Harvey.</li> <li>4. Subhi learns the truth about his Ba.</li> <li>5. Jimmie returns to good health and Subhi wants to write about Jimmie's story and his experience.</li> <li>6. We begin to see change and Subhi reads the final story to Jimmie.</li> <li>7. Subhi talks about new beginnings in his story to Maa and Queeny.</li> </ol>

## The BONE SPARROW

Zana Fraillon



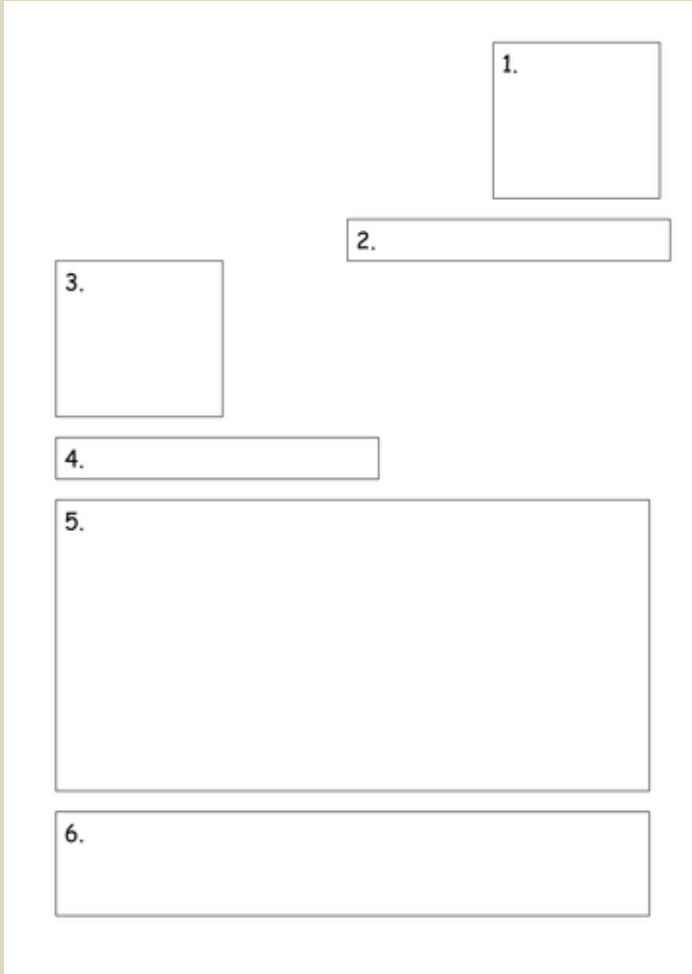
## 2. Context

**2a = The Bone Sparrow was based on experiences of refugees in Australian detention centres.** Immigration detention centres in Australia are used to detain people who are found in Australian waters fleeing from their countries. Similarly, people who have stayed longer in the country than their visa allows have also been reported to be seen in there. The centres have been likened to concentration camps by some critics.

**2b = In writing this book, Zana Fraillon hopes to draw attention to the plight of asylum seekers.** She says she was inspired by stories of real-life refugees in Australia and her horror at the way asylum seekers are treated worldwide.



# Year 7 English

3. Vocabulary	4. Subject Vocabulary	5. Formal Letter Layout
<b>7a = refugee (noun)</b> a person who has been forced to leave their country in order to escape war, persecution or disaster	<b>4a= language (noun)</b> Words or methods (techniques) used by writers to present their meanings or create effects.	 <p>The diagram shows a formal letter layout with numbered boxes: 1. Top right (Writer's address), 2. Top right (Date), 3. Top left (Recipient's address), 4. Middle left (Greeting / salutation), 5. Large central area (Main body), 6. Bottom left (Sign-off).</p>
<b>7b = displace (verb)</b> remove someone from the usual or proper place OR force someone to leave their home because of war or persecution	<b>4b = setting (noun)</b> Where or when the play takes place, usually introduced at the exposition (beginning) of a story.	
<b>7c = tragic</b> very sad, often involving death and suffering	<b>4c = characterisation (noun)</b> The creation or construction of a fictional character.	
<b>7d = illiterate</b> unable to read or write	<b>4d = narrator (noun)</b> the 'person' in the novel who tells the story; fictional construct the author has created to tell the story through.	
<b>7e= generations</b> groups of people of about the same age within a society	<b>4e = first person narrative voice (noun phrase)</b> a story told from the point of view of a character, using pronouns such as 'I' and 'we'	
<b>7f = undeniable</b> so obviously true that it cannot be said to be wrong	<b>4f = simile</b> comparing one thing to another using the words 'like' or 'as' to highlight qualities shared by the two things being compared	
<b>7g = stench</b> an intensely strong and unpleasant smell	<b>4g = metaphor</b> comparing one thing to another directly, to highlight qualities shared by the two things being compared	
<b>7h = guardian</b> a person who protects or defends something	<b>4h = personification (noun)</b> Verbs that express a command or an instruction e.g. 'Sit down' and 'Carry those logs.'	
<b>7i = imagination</b> the ability to form mental pictures of people or things, or to have new, creative ideas	<b>4i = pathetic fallacy (noun)</b> Giving human feelings and emotions to something not human, particularly the weather or environment, to enhance the mood of the writing.	
<b>7j = meagre</b> a small amount OR (of a person) thin and lean	<b>4i = symbol (noun)</b> a character, object, setting or colour that represents a broader idea, group of people or feeling	
<b>7k = raged</b> felt or expressed violent, uncontrollable anger		<ol style="list-style-type: none"> <li>1. <b>Writer's address</b></li> <li>2. <b>Date</b></li> <li>3. <b>Recipient's address</b></li> <li>4. <b>Greeting / salutation</b></li> <li>5. <b>Main body</b></li> <li>6. <b>Sign-off</b></li> </ol>
<b>7l = etched</b> to cut a pattern or picture into a smooth surface, especially on metal or glass		



# Year 7 English – Introduction to Shakespear & The Tempest

## 1. Shakespeare's Life and Times

**1a = Shakespeare** William Shakespeare was born in 1564. He was a playwright, poet and actor. Shakespeare spent most of his professional life with an acting company in London, the Lord Chamberlain's Men. In 1599, the acting company built the Globe Theatre. Shakespeare's plays were written and first performed during the reigns of Queen Elizabeth I and her successor, James I.

**1b = Theatre** In London, during the Elizabethan period, the first dedicated theatres appeared. Most people went to the theatre, from the poor to the very rich. It was the most popular form of entertainment in Elizabethan England. These theatres, which were also called playhouses, were visited by every class of people.

**1d = The Globe Theatre** This was built in 1599 by Shakespeare's theatre company, the Lord Chamberlain's Men. It was an open-air theatre and it is believed that it could hold around 3,000 people. The standing tickets in front of the stage only cost one penny, which meant everyone could afford to experience the theatre. People who stood to watch the play were called groundlings. Seats in the gallery were more expensive, and were higher up and covered.

**1e = Beliefs and Superstitions** Folklore are the traditions, beliefs and stories passed down by a community. In Shakespeare's time, folklore was an important part of life. For example, some people believed that fairies and goblins came out at night to

## 2. Genres

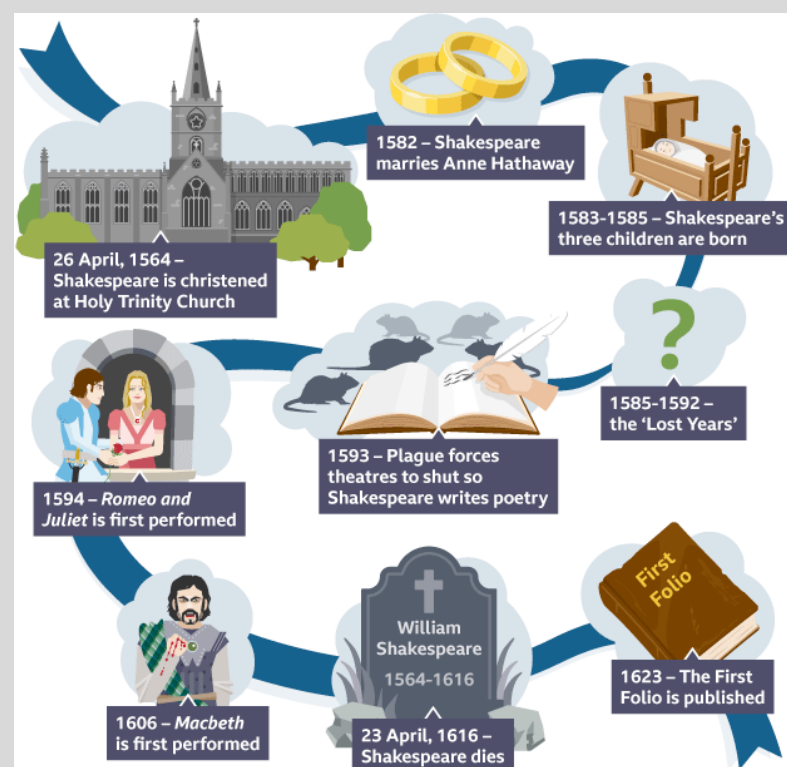
Shakespeare's plays can be categorised using three genres:

**2a = Comedies** These plays had happy endings and their plots move towards marriage. The humorous parts of these plays often arise from misunderstandings and use of disguise. Examples of comedies include 'The Merchant of Venice', 'The Taming of the Shrew', 'A Midsummer Night's Dream' and 'The Tempest'.

**2b = Tragedies** Shakespeare's tragedies ended in the downfall of the main character(s) and death. The protagonist is usually well respected or of high status at the start of the play. Examples of tragedies include 'Macbeth', 'Romeo and Juliet', 'Othello' and 'Hamlet'.

**2c = Histories** The ten plays that cover English history from the twelfth to the sixteenth centuries. Each historical play is named after, and

## 3. Timeline



## 4. Early Modern English Words

**anon** (adverb) soon, shortly, presently  
**art** (verb) are  
**ought** (pronoun) anything  
**dost** (verb) do  
**'ere** (adverb) before

**hast** (verb) have  
**hence** (verb) away from here!  
**hie** (verb) hurry  
**oft** (adverb) often  
**thou, thee** (pronoun) you

**thy** (pronoun) your  
**thine** (pronoun) yours  
**wherefore** (adverb) why  
**wit** (noun) intelligence, wisdom, good sense





# Year 7 English – The Tempest

## 5. Characters

**5a = Prospero** When we meet him, the most powerful character on the island. Miranda's father and the old Duke of Milan.

**5b = Miranda** Prospero's daughter. She lives on the island with her father and falls in love with Ferdinand.

**5c = Ariel** A spirit of the island and Prospero's servant.

**5d = Caliban** The son of Sycorax – a witch. He was born on the island and is Prospero's slave.

**5e = Ferdinand** The Prince of Naples and the son of Alonso. He falls in love with Miranda.

**5f = Trinculo** Alonso's jester and Stephano's friend.

**5g = Stephano** Alonso's butler and Trinculo's friend.

**5f = Alonso** King of Naples and Ferdinand's father.

**5g = Antonio** Prospero's brother. He became Duke of Milan after overthrowing his brother.

**5h = Gonzalo** Alonso's counsellor and trusted advisor.



## 6. Plot

**6a = Act 1** On board a ship caught in a violent storm are: Alonso, Ferdinand, Sebastian, Gonzalo, Antonio, the Duke of Milan; and two lords. The sailors try to control the ship but it seems the ship is about to sink. Miranda is upset, having watched the storm engulf the ship. Prospero reassures her, then tells her the story of how they ended up on the island. He explains he was the Duke of Milan, until his brother Antonio betrayed him. They were captured and put into an old boat, eventually washing up on the island. Prospero then uses his magic to put Miranda to sleep and calls to Ariel, who describes how he created the storm and that the ship is now safe. Prospero takes Miranda to see Caliban, who shouts curses at them. Ferdinand and Miranda fall in love at first sight. Prospero pretends to be angry, using his magic to imprison Ferdinand.

**6b = Act 2** Alonso, Antonio, Sebastian and Gonzalo awake on the island. Alonso is worried about Ferdinand. Ariel sends them all to sleep except for Antonio and Sebastian. Antonio persuades Sebastian to betray his brother Alonso. When they raise their swords as Alonso sleeps, Ariel wakes them up. Caliban sees Trinculo. Fearing him, he hides under a cloak. Trinculo crawls under the cloak too. Stephano enters, drunk. Seeing the two figures under the cloak he thinks it is a monster. He pours wine into Caliban's mouth. Trinculo recognises Stephano's voice, Caliban thinks Stephano is a god and offers to serve him.

**6c = Act 3** Ferdinand carries logs and says he is happy to do the tasks Prospero tells him to because of his love for Miranda. Prospero is actually watching as Miranda and Ferdinand express their love for each other. Stephano - still drunk and enjoying the status Caliban is giving him - Caliban and Trinculo enter. Caliban persuades Stephano to kill Prospero and rule the island himself. They are interrupted by Ariel's magical music. Alonso, Sebastian, Antonio, Gonzalo search for Ferdinand. Music plays and strange creatures lay out a banquet. Ariel appears as a harpy and says that the consequence of betraying Prospero was the storm and loss of Ferdinand.

**6d = Act 4** Prospero sets Ferdinand free. He agrees to the marriage of Miranda and Ferdinand, creating a magical show with the spirits to bless them. Ariel reports that Caliban, Stephano and Trinculo are drunk and he led them around the island. Prospero sends Ariel to distract the conspirators. Stephano and Trinculo are distracted from their plot to kill Prospero and punished.

**6e = Act 5** Prospero announces that his plans are coming together and he says he will forgive the nobles if they are sorry for what they have done. He plans to give up his magic. Ariel leads in the nobles and Prospero forgives them. Prospero reveals Miranda and Ferdinand playing chess together in his cell, much to Alonso's delight. Ariel leads in the Master and Boatswain who explain that strangely the ship fixed. Prospero sends Ariel to set Caliban and his companions free. Caliban regrets taking Stephano for a god. Prospero promises to tell the noblemen the story of his life since being sent away from Milan, before they all return to Naples. Prospero tells Ariel to ensure they get safely back to Naples and then sets him free. Prospero then speaks to the audience directly, asking for their applause to set him free.



# Year 7 English

## 7. Vocabulary

<b>7a = tempest (noun)</b> a violent windy storm
<b>7b = conflict (noun)</b> a serious disagreement or struggle between two people groups or forces
<b>7c = usurp (verb)</b> take a position of power illegally or by force
<b>7d = exile (verb)</b> to send someone away from their own country or city
<b>7e = solemn (adjective)</b> having or showing serious purpose and determination; very serious or formal in manner or behaviour
<b>7f = mankind (noun)</b> all human beings
<b>7g = mercy (noun)</b> compassion or forgiveness shown towards someone who you could punish or harm
<b>7h = plummet (verb)</b> fall or drop straight down at high speed
<b>7i = confined (verb)</b> kept someone or something within limits; restricted
<b>7j = enchant (verb)</b> fill someone with great delight; charm
<b>7k = plague (noun)</b> a contagious bacterial disease including fever and delirium
<b>7l = abhorred (adjective)</b> Intensely and deeply hated.
<b>7m = colonialism (noun)</b> A country taking control of another country or land (usually one less powerful).

## 8. Subject Vocabulary

<b>8a = play (noun)</b> A dramatic piece of literature intended to be acted out on the stage.
<b>8b = act (noun)</b> A way of dividing a <b>play</b> . Each act is a group of <b>scenes</b> .
<b>8c = scene (noun)</b> A dramatic part of the story of a play, at a particular time and place and a way of dividing <b>acts</b> into smaller parts.
<b>8d = stage direction (noun)</b> An instruction in a play that tells actors how to move or speak, or gives information about the setting, sound effects or lighting.
<b>8e = language (noun)</b> Words or methods (techniques) used by writers to present their meanings or create effects.
<b>8f = setting (noun)</b> Where or when the play takes place, usually introduced at the exposition (beginning) of a story.
<b>8g = characterisation (noun)</b> The creation or construction of a fictional character.
<b>8h = sonnet (noun)</b> A love poem of 14 lines (3 quatrains of 4 lines and one couplet of two lines).
<b>8i = pathetic fallacy (noun)</b> Giving human feelings and emotions to something not human, particularly the weather or environment, to enhance the mood of the writing.
<b>8j = imperative verbs (noun)</b> Verbs that express a command or an instruction e.g. 'Sit down' and 'Carry those logs.'



## 10. What, How, Zoom, 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 a key word

**WHY** have they chosen to do this?  
Purpose?

Shakespeare presents Caliban as enraged about the way he has been treated by Prospero and eager to get revenge. He says "A plague upon the tyrant that I serve!" Shakespeare's use of the word "tyrant" suggests Caliban feels he is being oppressed by Prospero, who has taken away the freedom he enjoyed. In addition, the exclamation mark shows his intense hatred of his master. Perhaps Shakespeare has included this to encourage his audience to think about the way in which British colonialism was taking away the freedom of people around the world.



## Year 7 Maths – Key Words

Key word	Definition
Integer	Whole number
Estimate	Finding a rough answer to a calculation by rounding each value to 1sf
Qualitative data	Data that is collected that is words e.g. colour of cars or people's eye colour
Quantitative data	Data that involves numbers e.g. the number of cars in a car park
Discrete data	Data that can only take limited values. For example, shoe size can only be a 6 or 6.5
Continuous data	Data that can take any value and could be measured on an ongoing scale and can be measured. For example, height.
Trapezium	Any quadrilateral with one pair of parallel sides
Parallelogram	A quadrilateral with 2 pairs of parallel sides and 2 pairs of equal sides
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
Mean	An average to represent a set of data. Add all of the numbers together, and divide by the quantity of numbers
Median	The middle number in a list, when the numbers have been ordered
Mode	The most common item in a list
Range	The difference between the largest number and the smallest number in a set of data
Substitution	Replacing a letter in an expression with a number
Factorise	Put an expression back into brackets
Simplify	When like terms are collected. For example, if you simplify $5a + 7a$ you get $12a$
Expand	When you multiply out a brackets. For example, when you expand $4(3x+8)$ you get $12x + 32$



# Year 7 Maths – Area

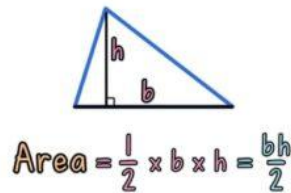
1

## Area of squares and rectangles

Area is the space inside a 2D shape. It is measured in  $\text{mm}^2$ ,  $\text{cm}^2$ ,  $\text{m}^2$  or  $\text{km}^2$ .

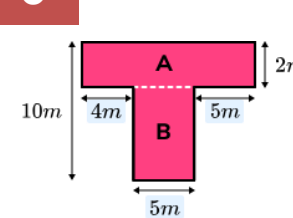
2

## Area of triangles



3

## Compound shapes



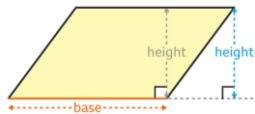
Split into regular shapes.

Find the areas of each.

Add together.

4

## Area of parallelograms

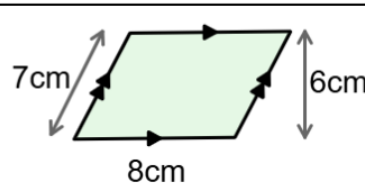


Area of parallelogram  
 $\text{base} \times \text{perpendicular height}$

### Example

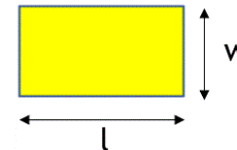
Calculate the area

$$= 8 \times 6$$
$$= 48\text{cm}^2$$



5

## Area of squares and rectangles



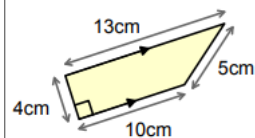
$$\text{Area} = l \times w$$

Units will be squared  
e.g.  $\text{cm}^2$

6

Area of a trapezium =  $\left(\frac{a+b}{2}\right) \times h$ , where  $a$  and  $b$  are parallel sides

Calculate the area:



$$= \frac{13 + 10}{2} \times 4$$
$$= 11.5 \times 4$$
$$= 46\text{cm}^2$$

**Remember:** A trapezium is any quadrilateral with **one pair** of parallel sides.



# Year 7 Maths – Linear Equations

## 1 Expanding, factorising, substituting

Factorising

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

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

$$= 30 - 8$$

$$= 22 \quad \checkmark$$

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

Expanding brackets

## 4 Equations with variable on denominator

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

## 7 Forming equations with shape

Perimeter = 56cm

$$x + 12$$



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

$$44x + 24 = 56$$

## 2 Function machines

input  $\rightarrow$   $\times 3$   $\rightarrow$  output

input  $\rightarrow$   $\div 3$   $\rightarrow$  output

## 3 1-step & 2-step equations

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

## 5 Equations with brackets

1. Expand the brackets
2. Solve as normal

## 6 Equations with Fractions

$$\begin{array}{l} \frac{x-3}{2} = 6 \\ \times 2 \qquad \qquad \times 2 \\ x - 3 = 12 \\ +3 \qquad \qquad +3 \\ x = 15 \end{array}$$

## 8 Forming equations with words

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

$$3x + 5 = 29$$



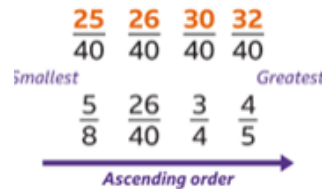
# Year 7 Maths – Fractions, Decimals & Percentages

## 1 Simplifying and Comparing Fractions

$$\frac{2}{8} \rightarrow \begin{array}{l} \text{Numerator} \\ \text{Denominator} \end{array} \quad \frac{4}{10} \div 2 = \frac{2}{5}$$

## 2 Comparing Fractions

- Convert the fractions to have the same numerators
- Compare the numerators.



## 3 Converting Between Mixed & Improper Fractions

- To find the numerator Multiply the whole number by the denominator.
- Then add the numerator

$$2\frac{3}{4} = \frac{(4 \times 2) + 3}{4} = \frac{11}{4}$$

## 4 Multiplying Fractions

$$\frac{3}{4} \times \frac{2}{5} = \frac{3 \times 2}{4 \times 5} = \frac{6}{20} \quad \text{Simplify?} \leftarrow$$

- Multiply the numerators.
- Multiply the denominators.
- Simplify if you can.

## 5 Dividing Fractions

### Example

- To divide proper fractions:
- Follow the example.

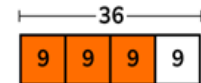
$$\text{Evaluate } \frac{4}{3} \div \frac{2}{5} = \frac{4}{3} \times \frac{5}{2} = \frac{20}{6}$$



- This bar model represents. It means how many quarters  $\frac{3}{4} \div \frac{1}{4}$  Are there in three quarters?

## 6 Fractions of Amounts

- Divide by the denominator.
- Multiply by the numerator.



$$\frac{1}{4} \text{ of } 36 = 9$$

$$\frac{3}{4} \text{ of } 36 = 27$$

## 7 How to Find a Percentage

- Without a calculator find simple % and build up.  $65\% \text{ of } 360$
- Remember to find:  $65\% = 50\% + 10\% + 5\%$
- 50% you  $\div 2$  ( $50\% = \frac{1}{2}$ )
- 25% you  $\div 4$  ( $25\% = \frac{1}{4}$ )
- 10% you  $\div 10$  ( $10\% = \frac{1}{10}$ )

## 8 Converting Between Fractions and %

- Write as a fraction with a denominator of 100.
- Simplify where possible

$$36\% = \frac{36}{100}$$

$$\frac{36}{100} \div 4 = \frac{9}{25}$$

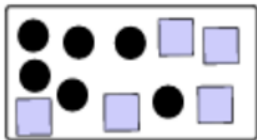


# Year 7 Maths – Ratio

1

## Forming Ratio

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



Circles : squares  
6:5

2

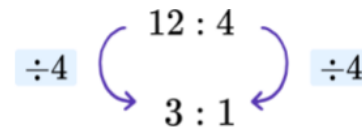
## Simplifying Ratios



- 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

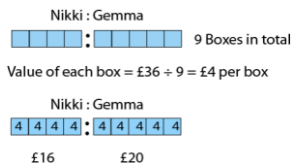


Simplify the ratio as before, but instead of choosing the common factor divide so you get 1 (sometimes you are asked for 1:n instead).

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.



5

## Ratios as Fractions

b : r

3 : 2

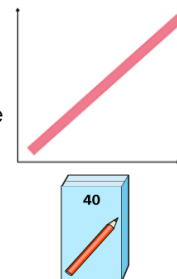


The fraction for blue is  $3/(3+2)$  so  $3/5$   
The fraction for red is  $2/(3+2)$  so  $2/5$

6

## Direct Proportion

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

÷ 2      × 3

8

## Combining Ratios

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

$a : b =$   
 $4 : 3 =$   
 $8 : 6$

$b : c =$   
 $2 : 5 =$   
 $6 : 15$

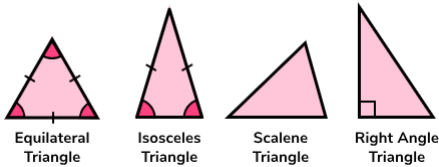
These ratios are connected by the part 'b', so make these equivalent



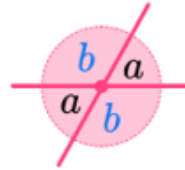


# Year 7 Maths – Lines & Angles

## 1 Types of Triangle



## 2 Vertically Opposite Angles



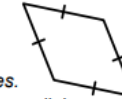
Vertically opposite Angles are equal  
To each other

## 3 Naming Quadrilaterals

**Quadrilaterals** are four sided shapes  
(quad meaning four, lateral meaning lines)

Rhombus

Four equal sides.  
Opposite sides parallel.



Trapezium

One pair of parallel sides.

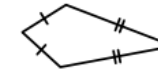


Parallelogram : Opposite sides  
are parallel



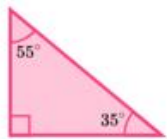
Kite

Two pairs of adjacent sides  
equal.

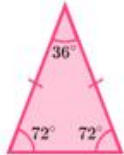


## 4 Angles In A Triangle

Angles in a Triangle sum to  $180^\circ$



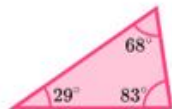
Right angled triangle  
One right angle  
 $90 + 55 + 35 = 180^\circ$



Isosceles triangle  
Two equal sides & angles  
 $72 + 72 + 36 = 180^\circ$



Equilateral triangle  
Three equal sides & angles  
 $60 + 60 + 60 = 180^\circ$



Scalene triangle  
All sides & angles different  
 $83 + 68 + 29 = 180^\circ$

## 5 Angles In A Quadrilateral Sum to $360^\circ$

We can prove this using the angle sum of a triangle.



This is the same for all types of quadrilaterals.

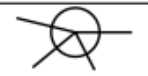


## 6 Angles On a Line and Around a point

Adjacent angles on a straight  
line add up to  $180^\circ$



Adjacent angles around a  
point add up to  $360^\circ$





# Year 7 Maths – Primes, Factors & Roots

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

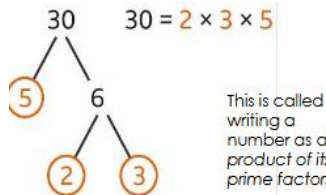
Prime numbers only have two factors: 1 and itself  
(only 2 numbers will divide into it)

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

## Square Numbers

Square Numbers

$1^2 = 1$ $1 \times 1$	$2^2 = 4$ $2 \times 2$	$3^2 = 9$ $3 \times 3$
---------------------------	---------------------------	---------------------------

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

8

## Square Roots

$\sqrt{\quad}$  is read 'square root'

Evaluate  $\sqrt{36}$   
 $= 6$

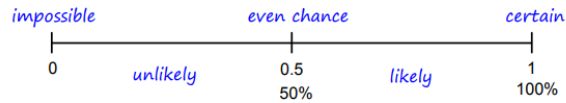


# Year 7 Maths – Probability

1

## The Probability Scale

The probability scale describes the chance of something happening:



2

## Probability Vocabulary

Probability: **the chance of an event occurring.**

We can describe probabilities in words:

**Impossible:** will never happen

**Unlikely:** will happen less than half the time

**Even chance:** as likely to happen as not

**Likely:** will happen more than half the time

**Certain:** will definitely happen

3

## Writing Probabilities

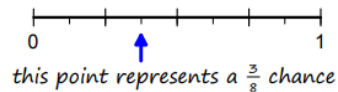
More accurately, we can describe probabilities using fractions, decimals or percentages. As a fraction, the probability of an event is:

$$\frac{\text{number of successful outcomes}}{\text{total number of equally likely outcomes}}$$

4

## Writing Probability

A bag contains 8 counters.  
3 of the counters are red.  
Mark the probability of picking a red counter on the number line:



5

## Mutually Exclusive Events

Mutually Exclusive Events can not happen at the same time. For example 'landing on a 5' and 'landing on a 6' on a dice are mutually exclusive events



6

## Twirling a spinner



$$P(\text{blue}) = \frac{\text{number of blue sectors}}{\text{total number of sectors}}$$

$$P(\text{blue}) = \frac{2}{3}$$

7

## Probability of an Event Not Happening

A spinner used in a game shows the numbers 1-5. The table shows the probability of it landing on each number. The chance of it landing on the number 4 is double the chance of it landing on 1. Complete the table.

No	1	2	3	4	5
Prob		0.2		0.3	0.1

Since it must land on one of the numbers 1-5, then these probabilities add up to 1.

$$1 - 0.2 - 0.3 - 0.1 = 0.4$$

$$P(1) = 0.3 \div 2 = 0.15$$

$$P(3) = 0.4 - 0.15 = 0.25$$



## Useful features on your calculator:

Product of Prime Factors (FACT on old calc) Type in the number, EXE, Format, Scroll to Prime Factor EXE

Table (menu 3): This is where you can generate values within a table- useful for plotting graphs and generating terms of a sequence.  
Home/table/press f(x) button and scroll to 'define f(x)'. Type in the function using the x button and then it will show the table.

°'": This is the time button and can do conversion between time units, as well as calculations with different times

Fraction button: can be used for any calculations with fractions. Example

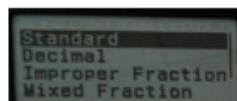
Enter  $\frac{217}{15}$  and press  $\text{EXE}$ .

To see the result as a mixed number, press:

$\text{Frac}$   $\text{V}$   $\text{V}$   $\text{V}$   $\text{V}$  to select **Mixed Fraction**  
 $\text{EXE}$

Use the format key to change to a decimal

Scroll to Decimal/ EXE



## Useful features on your calculator:

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

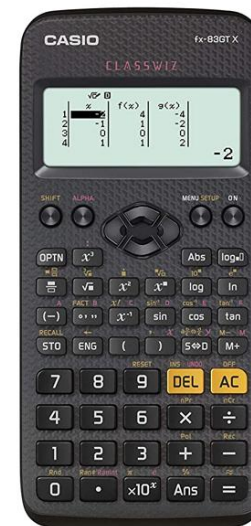
RATIO (menu 4): this will find missing values within equivalent ratios

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

°'": This is the time button and can do conversion between time units, as well as calculations with different times

Fraction button: can be used for any calculations with fractions

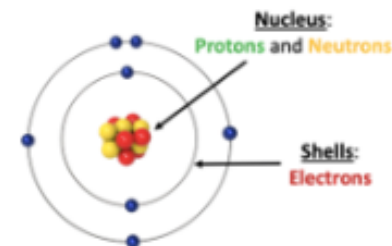
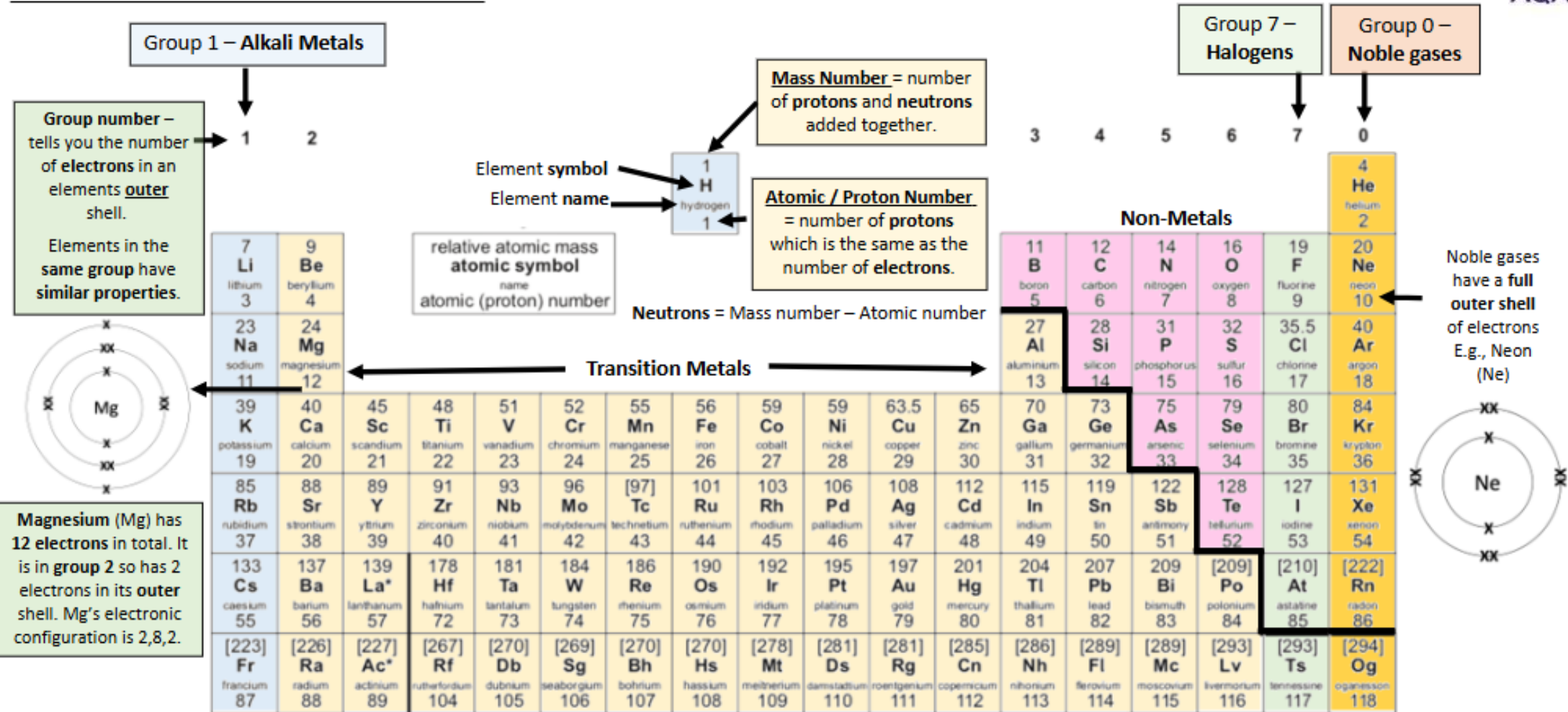
S-D: Converts decimal answers to fractions and vice versa





# Year 7 Science – The Periodic Table

## How can I use the Periodic Table?





# Year 7 Science – How Science Works

## 1. Key Terms

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. The Variables

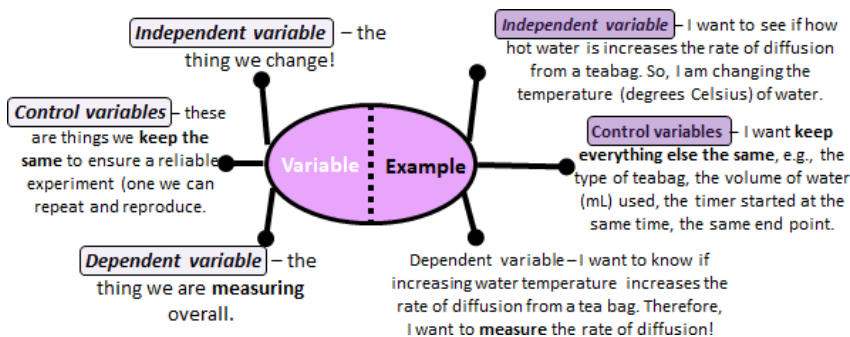
- Repeatable** – The same person gets the same results after repeating the experiment using the same method and equipment.
- Reproducible** – Similar results can be achieved by someone else or using a different method/piece of equipment.
- Accurate** – Results are close to the true answer
- Precise**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

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

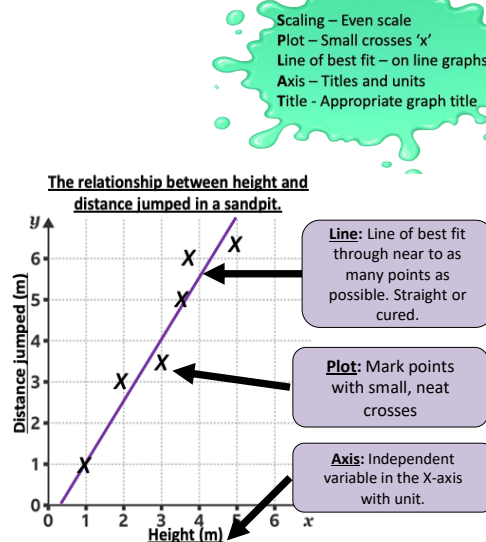


Dairy Milk Is Chocolate

Dependent variable Measure Independent variable Change

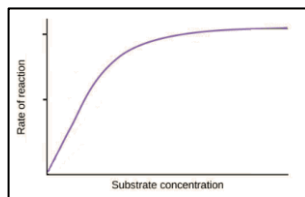


## 3. Graphs



## 4. Drawing conclusions from Graphs

- 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'
- Is the graph the same throughout or does it change? Split it into sections and describe each.



**Model Answer:** As the substrate concentration increases, the rate of reaction increases. For example... The rate increases more rapidly initially, then increases more slowly until the rate stays the same.

## 5. Sources of Error

Errors in investigations can be caused by **random, systematic, or zero errors**.

- Random errors** – you cannot control these, e.g., room temperature. **Random errors are reduced by repeating the experiment 3 times** to remove anomalies and calculate a mean.
- Systematic Errors** – Errors in the **equipment** used. E.g., the balance you are using is consistently 0.1g over the actual mass each time. You can reduce systematic errors by adding / taking away values. E.g., if a mass is always 0.1g higher than the true mass, subtract 0.1g from each value.
- Zero errors** – a piece of equipment should record 0 (e.g., grams, amps, volts etc) but reads a number above/below 0.

## 6. Common maths application

$$\text{Mean} = \frac{\text{Add all numbers}}{\text{Numbers you have}}$$

$$\% \text{ Change} = \frac{\text{End-Start Value}}{\text{Start Value}} \times 100$$

$$\text{Uncertainty} = \frac{\text{Range In values}}{2}$$



# Year 7 Science – Biology - Lifestyle

1

## Key Terms – Biology - Lifestyle

Key words	Definition
<b>Healthy Diet</b>	A healthy diet is one which consists of a balanced amount of each of the 7 food groups. Excessive amounts or insufficient amount of any food group results in an unbalanced diet.
<b>Deficiency</b>	A deficiency is a lack of insufficient amount of something. For a diet, this could be a mineral or vitamin deficiency. This has health consequences.
<b>Law of Energy</b>	Energy cannot be created or destroyed; it can only be transferred to different stores.
<b>Asthma</b>	A medical condition caused by inflammation of the oesophagus, causing breathing difficulties.
<b>Cirrhosis</b>	A medical condition where the liver becomes irreversibly scarred. Excessive alcohol consumption can cause cirrhosis.
<b>Carcinogen.</b>	A carcinogen is a chemical which contributes to DNA mutations, increasing your likelihood of cancers. Cigarette smoke is a carcinogen.
<b>Cancer</b>	Cancer is a disease caused by the progressive accumulation of DNA mutations in a cell. This cell begins to divide uncontrollably until it forms benign, and then metastatic tumours.,

2

## Healthy Diet: Food Groups

1. Starch is broken down to simple sugars like glucose used in **aerobic respiration**, this releases energy.

2. **Proteins** are needed for **growth** and **repair** of cells.

3. **Fats provide energy** to support cell function.

4. **Vitamins** help to **fight infections**, wound healing, strong bones.

5. Minerals help to regulate many **bodily functions**, e.g., **regulating water balance**.

6. **Fibre** Increases **gut health**.

7. Water is key for aerobic respiration and **thermoregulation** (regulation of the body's temperature)

Starch, proteins, and fats are **macromolecules** – this means they are **large** molecules!



A healthy diet is one which consists of a **balanced amount** of each of the 7 food groups.

Excessive (too much) amounts or insufficient (too little) amount of any food group results in an **unbalanced** diet.



# Year 7 Science – Biology - Lifestyle

## 1 Smoking

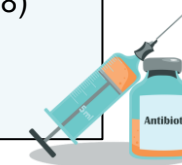
- Smoking causes **carcinogens** (chemicals which increase DNA mutations) to enter your bloodstream.
- Your **blood** flows throughout your **whole body**.
- Smoking is linked to **cancer** throughout the whole body.
- A mother and an unborn foetus share a bloodstream, so carcinogens in the mother's blood can be transmitted to the foetus' blood.



## 3 Drug Use

### Recreational Drugs:

- Drug taken for **enjoyment** rather than medicinal purposes. These can be **legal** or **illegal**. Examples:
- Cigarettes (legal above 18)
- Alcohol (legal above 18)
- Caffeine (legal)
- Cannabis (illegal)



Medicinal drugs are prescribed to patients to **treat diseases** or **relieve symptoms**.

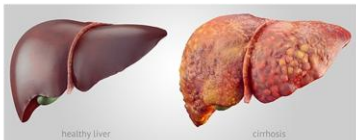
- **Digitalis** – a drug derived from **fox gloves** used to treat **heart conditions**.
- **Painkillers** don't kill pathogens, just relieve symptoms. E.g., **paracetamol** and **aspirin** (willow bark).
- **Antibiotics** – kill pathogens. E.g., **Penicillin**. **Specific** to certain bacteria.

## 2 Alcohol Use

Excessive (too much) alcohol consumption affects **brain function** and causes damage to **nerve cells** and decreased **brain volume**



- **Depressant** – decreases brain activity and slows responses



**Poison to brain and liver** → disease, e.g., cirrhosis



### What if a pregnant woman drinks alcohol?

- ↑ risk of **low baby birth weight**
- ↑ risk of **miscarriage of baby**
- ↑ chance of **neurological conditions**
- ↑ risk of **foetal alcohol syndrome disorder**
- ↑ risk of **stillbirth**
- ↑ risk of **premature** (birth before the foetus has fully grown) birth



# Year 7 Science – Physics – Forces & Pressure

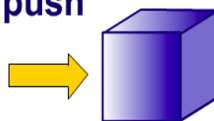
## 1 Key Terms – Physics – Forces, Motion, and Pressure

Key words	Definition
<b>Contact Force</b>	A force exerted where 2 objects must be physically touching. (e.g., tension force, friction, air resistance)
<b>Newtons, N</b>	The unit for force is Newtons, N.
<b>Non-Contact Force</b>	A force exerted where 2 are not physically touching. (e.g., gravity, electrostatic, magnetic)
<b>Balanced forces</b>	Where the horizontal or vertical forces of an object are equal (0 resultant force).
<b>Frictional Force</b>	A force exerted when 2 objects oppose each other. Thermal energy is released as a consequence.
<b>Weight</b>	Weight is the force exerted on a mass by gravity. Weight changes based on gravitational field strength. Measured in Newtons, N.
<b>Mass</b>	Mass is how much matter an object contains. This does NOT change with location.
<b>Extension</b>	Extension = New length – Original Length. Measured in metres (m)
<b>Hooke's Law</b>	The extension of a spring is directly proportional to force applied (N).
<b>Speed</b>	Speed is the distance travelled per second (measured in meters per second, m/s).
<b>Reaction Time</b>	A person's reaction time is the time taken (in seconds, s) from when a person sees/hears/tastes/smells/touches a stimulus, to their response.
<b>Pressure</b>	Pressure is the force (N) pushing on a certain area. Pressure is force divided by area and is measured in $\text{N/m}^2$

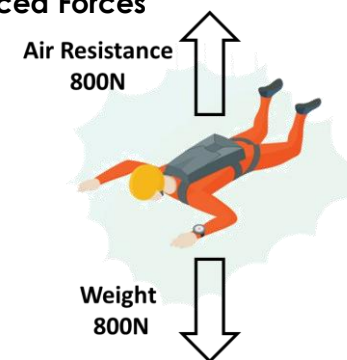
## 2 Resultant Forces, Balanced and Unbalanced Forces

A force is a **push** or a **pull** of an object. Measured in **Newtons!**

**push**



**pull**

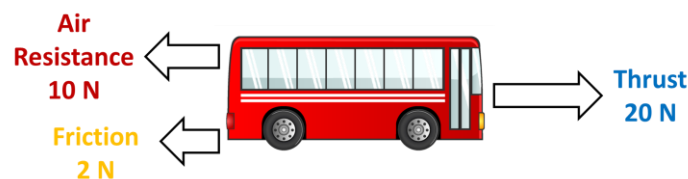


**Resultant force = 0N.**

Sky Diver is falling at a constant velocity.

These forces are balanced as **balanced forces** have a **resultant force of 0N**.

**Resultant Force:** The overall force acting on an object.



$$\text{➤ } 20 - 12 = 8\text{N}$$

➤ The bus is moving forwards – 8N to the right!











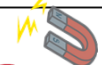

These forces are unbalanced as **balanced forces** have a **resultant force of 0N**.



# Year 7 Science – Physics – Forces & Pressure

1

## Key Terms – The forces – contact and non-contact

Force	Picture	Contact or Non-Contact?	Definition	Example
Elastic		Contact	The force that allows materials to return to their original shape after being stretched or compressed.	Catapult
Tension		Contact	A <b>pulling</b> exerted on an object by a string rope, or rod.	Tug-of-war
Gravity		Non-Contact	Force experienced by a mass when close enough to another. Always <b>attractive</b>	Earth and the Moon
Normal		Contact	Object <b>pushing</b> on a surface, the surface pushes back to balance.	Book on a desk
Thrust		Contact	A driving force exerted by an engine to make an object move.	Aeroplane or a Bus
Upthrust		Contact	Upwards force acting on an object in a liquid or gas.	Rocket, hot air balloon
Applied		Contact	The <b>push force</b> supplied by something or someone on an object.	Person pushing a chair
Air Resistance		Contact	An object moving through the air, the faster the object the greater the resistance.	A car driving, a professional skier
Water Resistance		Contact	An object moving through the water, the faster the object the greater the resistance.	A swimmer, a fish swimming
Friction		Contact	Force which <b>resists the motion of two objects sliding against each other.</b>	Tyres on the road
Magnetic		Non-Contact	A magnet or magnetic material e.g., iron. Attractive or repulsive.	Fridge magnet, Earth's magnetism
Electrostatic		Non-Contact	Experienced by a charged particle in an electric field. Attractive or Repulsive.	Static electricity



# Year 7 Science – Physics – Forces & Pressure

1

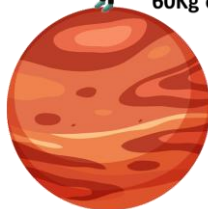
## Weight versus Mass. Mass

**Mass** is how much matter an object contains. This **does NOT** change with location.

Unit: Kg

Jerry has a mass of 60Kg on Earth

Jerry has a mass of 60Kg on Mars



## Weight

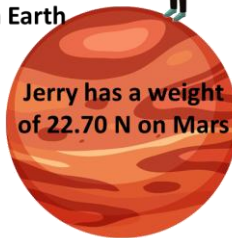
**Weight** is the force exerted on a mass by gravity.

Weight changes with location.

Unit: Newtons

Jerry has a weight of 589 N on Earth

Jerry has a weight of 22.70 N on Mars



2

## Weight, Mass, Gravity Calculations.

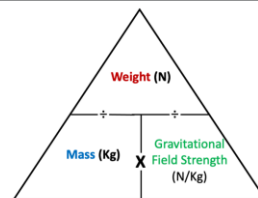
Equation and units

$$W = mg$$

Weight = mass x gravitational field strength

- Weight (W) = Newtons (N)
- Mass (m) = Kilograms (Kg)
- Gravitational field strength (g) = Newtons per Kilogram (N/Kg)

Triangle?



**Example:** A dog's **mass** is **7Kg** on Earth. Earth has a **Gravitational Field Strength** (GFS) of **9.8 N/Kg**. Calculate the **Weight** in Newtons.

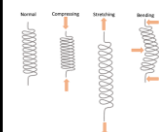
1. Give, Give, Want
  - ✓ Give: **Mass** = 7Kg
  - ✓ Give: **GFS** = 9.8 N/Kg
  - ✓ Want: **Weight** (N)
2. Cover up what you want to find (weight)
3. Write the equation.
  - ✓ Weight = Mass x Gravitational field strength
4. Substitute your values.
  - ✓ Weight = 7 x 9.8
5. Write your answer with units!
  - ✓ Weight = 68.9 N

**Challenge:** Rearrange: A dog's weight on Earth is 320N. Earth has a **Gravitational Field Strength** (GFS) of **9.8 N/Kg**. Calculate the dog's **mass** in Newtons.

1. Give, Give, Want
  - ✓ Give: **Weight** = 320N
  - ✓ Give: **GFS** = 9.8 N/Kg
  - ✓ Want: **Mass** (Kg)
2. Cover up what you want to find (Mass)
3. Write the equation.
  - ✓ Mass = Weight ÷ Gravitational Field Strength
4. Substitute your values.
  - ✓ Weight = 320 ÷ 9.8
5. Write your answer with units!
  - ✓ Mass = 32.65 Kg

3

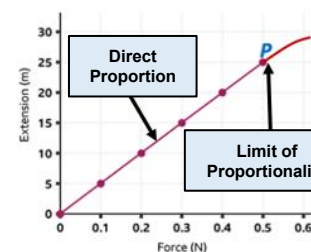
## Hooke's Law



Stretching, bending, or compressing **transfers energy**. This **elastically deforms** the spring – it will return to its original shape.

Extension = difference in length.

**Hooke's Law:** Extension is **directly proportional** to Force.  
The **spring constant (K)** depends on the **object** you are stretching.



**Limit of proportionality (P)** – extension is **no longer directly proportional** to force (N) – spring will not return to its original shape.

**1**  
Collect: Clamp stand, ruler, masses, spring.  
☐ Complete?

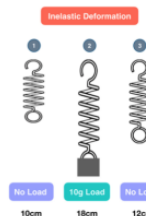
**2**  
Place the spring on clamp stand.  
☐ Complete?

**4**  
Add 1 mass (1N) to the base of your spring.  
☐ Complete?

**3**  
Use a ruler to measure the length of the spring (cm) and write this in your table.  
☐ Complete?

**5**  
Accurately record the length of the spring, record in results table.  
☐ Complete?

**6**  
Repeat steps 4-5 by adding 1 more mass each time (2N, 3N, 4N, 5N, 6N, 7N, 8N).  
☐ Complete?



**Inelastic deformity** = when an elastic object **cannot go back to its original length** and shape – it has been stretched too far.  
This point is called its **limit of proportionality**.



# Year 7 Science – Chemistry - pH

## 1 Key Terms – Chemistry – pH

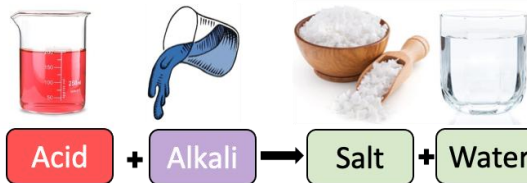
Key words	Definition
<b>pH Scale</b>	A scale from 1-14 which can be used to demonstrate the pH of a solution.
<b>Acid</b>	A solution or substance with a pH from 1-6 (anything less than 7). Hydrogen ions are in higher proportions in acids. When applying universal indicator, acid solutions turn red or orange.
<b>Alkali</b>	A solution or substance with a pH from 8-14 (anything above 7). Hydroxide ions are in higher proportions in alkalis. When applying universal indicator, alkaline solutions turn blue or purple.
<b>Neutral</b>	A solution which has a pH of exactly 7, for example pure water. This solution will turn green if universal indicator is applied to it.
<b>Universal Indicator</b>	A chemical used to visualize the pH of different solutions. This helps to test what pH the solutions are.
<b>Neutralisation</b>	Acid + Alkali → Salt + Water

## 3 Neutralisation

Naming salt rules:

Rules:

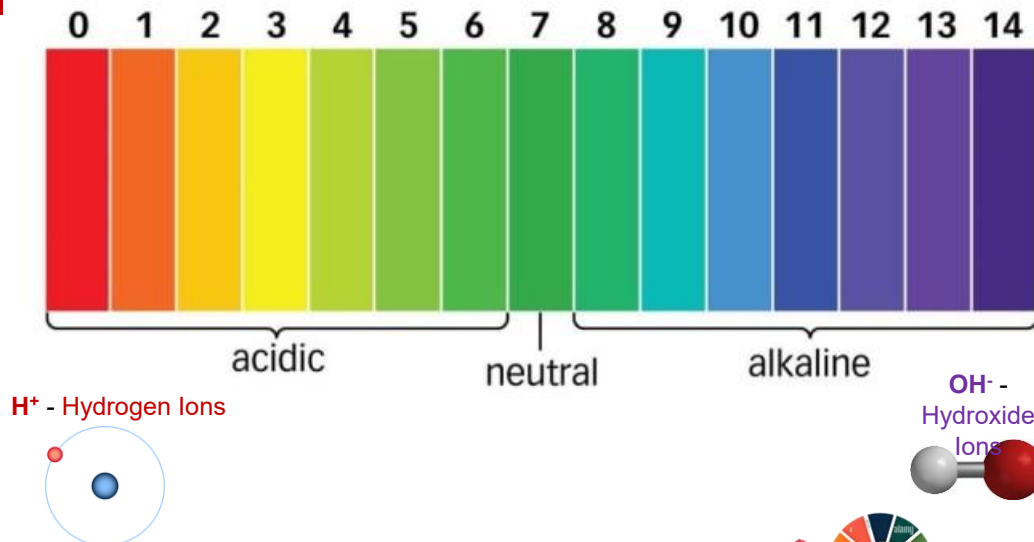
Hydrochloric acid = ..... Chloride  
Sulphuric acid = ..... Sulphate  
Nitric acid = ..... Nitrate



### Neutralisation Reaction Examples:

- Hydrochloric acid + Sodium carbonate → Sodium chloride + Water
- Nitric acid + Sodium carbonate → sodium nitrate + Water
- Sulfuric acid + Sodium carbonate → Sodium sulfate + Water.

## 2 pH



You can measure the pH of a solution using:

- **Universal Indicator = wide-range** indicator
- **A pH probe** attached to pH meter – measures specific pH number so is **more accurate** than universal indicator.



- Acids and Bases **neutralise** each other.
- **Acids** for **H<sup>+</sup>** (hydrogen ions) in water
- Bases have a pH greater than 7. **Alkalis** are bases that dissolve in water, forming solutions above 7. **Alkalis** form **OH<sup>-</sup>** (hydroxide ions) in water. Any 'hydroxide' is alkali!



## Year 7 Science – Revision Websites

Unit	Topic	Link	Revised?
<b>Physics:</b> Forces and pressure	Forces	<a href="https://www.bbc.co.uk/bitesize/articles/zs3896f">https://www.bbc.co.uk/bitesize/articles/zs3896f</a>	
<b>Physics:</b> Forces and pressure	Weight, Mass, Gravity	<a href="https://www.bbc.co.uk/bitesize/guides/z232k2p/revision/2">https://www.bbc.co.uk/bitesize/guides/z232k2p/revision/2</a>	
<b>Physics:</b> Forces and pressure	Elasticity and Hooke's Law	<a href="https://www.bbc.co.uk/bitesize/guides/z9hk3k7/revision/2">https://www.bbc.co.uk/bitesize/guides/z9hk3k7/revision/2</a>	
<b>Physics:</b> Forces and pressure	Reaction Time	<a href="https://www.bbc.co.uk/bitesize/guides/zpkhcj6/revision/3">https://www.bbc.co.uk/bitesize/guides/zpkhcj6/revision/3</a>	
<b>Physics:</b> Forces and pressure	Pressure	<a href="https://www.bbc.co.uk/bitesize/articles/zvdpf82#zhcmtrd">https://www.bbc.co.uk/bitesize/articles/zvdpf82#zhcmtrd</a>	
<b>Biology:</b> Lifestyle	Healthy Diet	<a href="https://www.bbc.co.uk/bitesize/articles/zmwvgdm">https://www.bbc.co.uk/bitesize/articles/zmwvgdm</a>	
<b>Biology:</b> Lifestyle	Smoking and Health Implications	<a href="https://www.bbc.co.uk/bitesize/articles/zb62jsg">https://www.bbc.co.uk/bitesize/articles/zb62jsg</a>	
<b>Biology:</b> Lifestyle	Alcohol and Healthy Implications	<a href="https://www.bbc.co.uk/bitesize/guides/z3t4xfr/revision/5">https://www.bbc.co.uk/bitesize/guides/z3t4xfr/revision/5</a>	
<b>Chemistry:</b> pH	The pH Scale	<a href="https://www.bbc.co.uk/bitesize/articles/z38bbqt">https://www.bbc.co.uk/bitesize/articles/z38bbqt</a>	
<b>Chemistry:</b> pH	Neutralisation	<a href="https://www.bbc.co.uk/bitesize/articles/z9gnn9q#z8xwwnb">https://www.bbc.co.uk/bitesize/articles/z9gnn9q#z8xwwnb</a>	



# Year 7 Science – Chemistry – The Periodic Table

## 1 Key Terms – Chemistry – The Periodic Table

Key words	Definition
Atom	The smallest part of an element which can exist.
Element	A substance made of only one type of atom.
Compound	A substance made of more than one element, chemically bonded together.
Nucleus	Contains protons and neutrons, has most of the mass of the atom.
Proton	Subatomic particle found in the nucleus of an atom. Has a charge of +1 and a relative atomic mass of 1.
Neutron	Subatomic particle found in the nucleus of an atom. Has no charge and a relative atomic mass of 1.
Electron	Subatomic particle found in the electron shells of an atom. Has a charge of -1 and a relative atomic mass of close to 0/negligible.
Reactive	The ability of matter to combine chemically with other substances, in a chemical reaction, causing a new substance to be formed.
Malleable	Being able to bend or shape easily.
Conductor	A material that allows electric currents (flow of electric charges) to pass through it.
Alloy	A mixture of 2 or more elements, one of which must be a metal.

## 2 The Periodic Table – Metals and Non-Metals

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



Metals

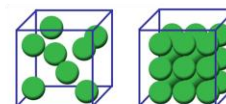


Non-metals

### Metal Properties:



Shiny



High Density



Strong



Good Heat Conductor



Malleable



Conduct Electricity



High melting and boiling point



Usually solid at room temperature



# Year 7 Science – Chemistry – The Periodic Table

## 1 The periodic table

Look at the periodic table on page \_\_\_\_ of the knowledge organizer.

**In the modern periodic table:**

- The elements are arranged in order of increasing **atomic number**.
- Metals are found on the left of the periodic table and non-metals on the right.
- The horizontal rows are called periods.
- The vertical columns are called groups.
- Elements in the same group have similar chemical properties.
- All element symbols start with a capital letter, but when a symbol has 2 letters in it the second letter is always lower case. For example, the element symbol of magnesium is Mg, not MG.

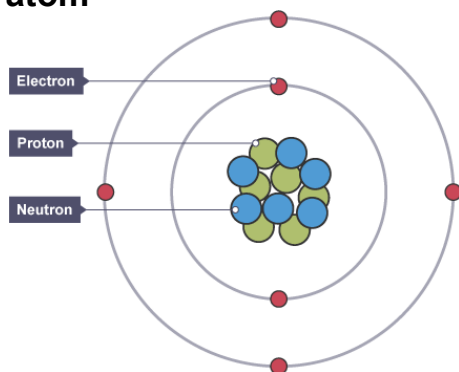
## 2 Structure of the atom

**Protons** and **neutrons** are both found in the **nucleus**.

**Electrons** are found on the electron **shells** orbiting the nucleus.

**Electron configuration is 2, 8, 8, 2.**

2 electrons can fit in the first shell, 8 in the second, 8 in the third, 2 in the fourth.



Subatomic particle	Relative mass	Relative charge
Proton	1	+1
Neutron	1	0
Electron	Very small	-1

## 3 Dmitri Mendeleev

Mendeleev arranged the elements in order of increasing **atomic mass**. When he did this, he noted that the **chemical properties** of the elements and their compounds showed a periodic **trend**.

He then arranged the elements by putting those with **similar properties** below each other into **groups**.

To make his classification work Mendeleev made a few changes to his order:

- He **left gaps** for yet to be discovered elements, these gaps meant he could **predict the properties** of these undiscovered elements.
- He switched the order of a few elements to keep the groups consistent



## 4 Properties of metals and non metals

Metal and non-metal elements have different properties:

- Most metals have high melting and boiling points
- Most non-metals have low melting and boiling points

The table shows some other differences in physical properties of metals and non-

Properties of a typical metal (when solid)	Properties of a typical non-metal (when solid)
Good conductor of electricity	Poor conductor of electricity
Good conductor of heat	Poor conductor of heat
Shiny	Dull
High density	Low density
Malleable	Brittle
Ductile	Brittle

## 5 Group 1,7 and 0

Properties as you go DOWN groups 1, 7 and 0:

Group 0 – Noble gases	Group 1 – Alkali metals	Group 7 – Halogens
Unreactive – has a stable full outer shell.	Reactivity increases – 1 electron in outermost shell	Reactivity decreases – 7 electrons in outermost shell
Boiling points increase	Melting and boiling points decrease	Melting and boiling points increase
	Soft	Colour gets darker
	Low density	

Group 0
He
Ne
Ar
Kr
Xe
Rn

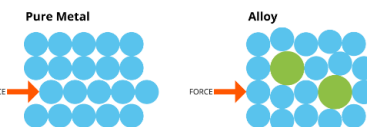
**Uses of the Noble gases:**

- Neon signs
- Balloons
- Double glazing

Group 1
Li
Na
K
Rb
Cs
Fr

Group 7
F
Cl
Br
I
At

## 6 Alloys



**Pure metals** are malleable as layers can slide over each other. **Alloys** are harder than pure metals because they have different sized particles, so it is harder to slide the layers over one another.

## 7 Further reading and websites

<https://www.bbc.co.uk/bitesize/topics/zv9nhcw> – Everything you need to know about the periodic table. Includes Physical and chemical properties, developing the periodic table, the modern periodic table, making predictions and metals and non-metals.



# Year 7 Science – Biology – Wildlife Science

1

## Key Terms – Biology – Wildlife Science

Key words	Definition
Sexual reproduction	The production of new organisms by combining DNA from two organisms of different sexes.
Photosynthesis	A chemical reaction in the chloroplast of a plant that makes glucose (sugar) by absorbing energy from the sun. Carbon dioxide + Water → Glucose + Oxygen
Fertiliser	A substance added to soil that improves the growth of plants.
Aerobic respiration	A chemical reaction inside cells that releases energy from glucose by reacting it in the presence of oxygen.
Anaerobic respiration	A chemical reaction inside cells that releases energy from glucose <b>without</b> oxygen.
Ecosystem	The living organisms in a particular area, together with the non-living components of the environment.
Community	All the organisms that live in a habitat (plants and animals).
Habitat	The place where an organism lives.
Biotic	The living parts of an environment e.g the number of predators.
Abiotic	The non-living parts of an environment e.g. the amount of water.
Bioaccumulation	The gradual build up of substances in an organism e.g. pesticides and heavy metals.

2

## Revision Links and Resources

### 2. Photosynthesis revision



<https://www.bbc.co.uk/bitesize/topics/zvrrd2p/articles/zjqfsk7?course=zdcg3j6>

### 3. Factors affecting photosynthesis revision



<https://www.bbc.co.uk/bitesize/topics/zvrrd2p/articles/ztd6xbk?course=zdcg3j6>

### 4. Respiration revision



<https://www.bbc.co.uk/bitesize/topics/zvrrd2p/articles/zdqx2v4>

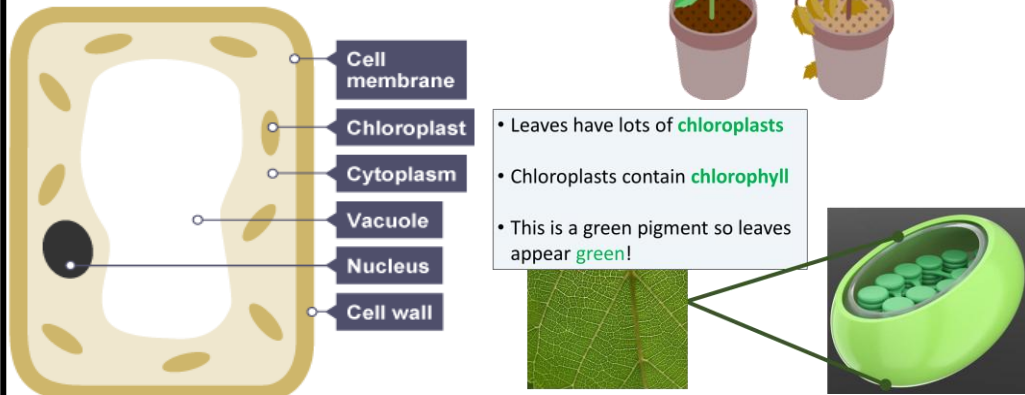
### 5. Ecosystems, food chains and bioaccumulation revision



<https://www.bbc.co.uk/bitesize/topics/z4brd2p/articles/zvdpf82>



## 1 Photosynthesis



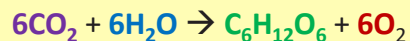
Photosynthesis occurs only in plant cells, inside their **chloroplasts** and only in the light so it cannot occur underground (i.e., in root hair cells).

- **Light energy** is absorbed from by the **chlorophyll (green pigment)** inside the chloroplasts where photosynthesis takes place.
- Plants get carbon dioxide from the air through their leaves, water from the ground, and light from the sun!. This produces glucose (food for the plant) and oxygen.
- If a plant's leaves cannot undergo photosynthesis, it will die.

**Word equation:**

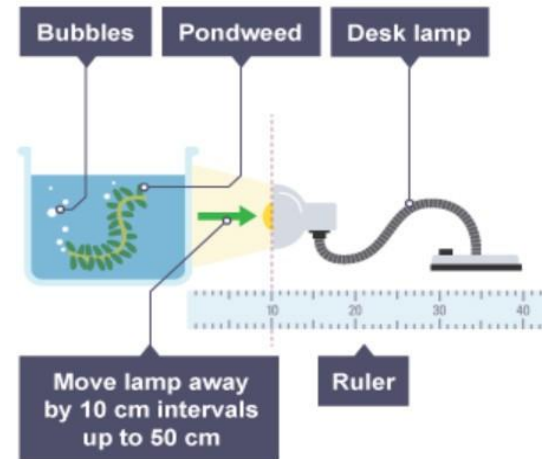
**Carbon dioxide + Water → Glucose + Oxygen**

**Balanced symbol equation:**



## 2 Photosynthesis Investigation

We can investigate the **rate of photosynthesis** (how much is happening **per second**) by changing the light intensity (how much light) a plant gets! The number of bubbles produced represents the rate of photosynthesis. The bubbles are the oxygen produced during photosynthesis.



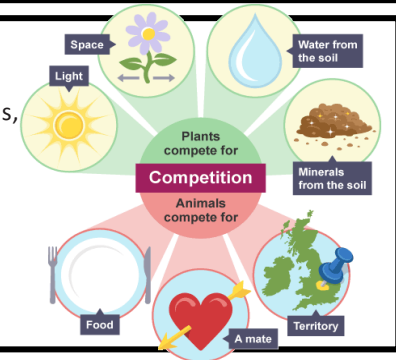
**Our variables can change depending on the context! Here are the variables for this investigation:**

- **Independent variable:** The light intensity (how close the light is)
- **Dependent Variable:** the number of oxygen particles produced (representing the rate of photosynthesis)
- **Control variables:** The mass of the pondweed, the volume of water used, the temperature.

## 3 Ecosystems: Competition and Habitats

An ecosystem is the **living (biotic)** organisms (plants, animals, competition for resources, bacteria) in a particular area together with the **non-living (abiotic)** components of the environment, such as minerals in soil, air flow and moisture levels.

A **habitat** is a place where organisms live in an ecosystem. A community is the populations of organisms that live in an ecosystem.



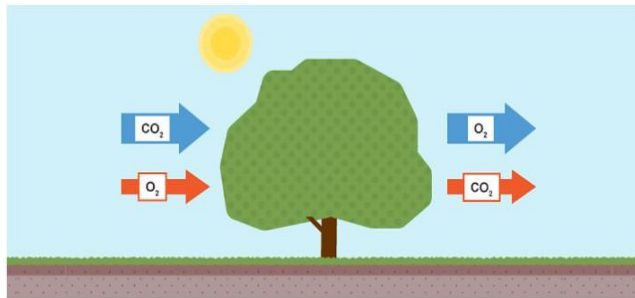


# Year 7 Science – Biology – Wildlife Science

1

## Respiration

Time	Photosynthesis	Respiration	Gases into leaf	Gases out of leaf
Day (Light)	✓	✓	Carbon Dioxide	oxygen, water vapour
Night (dark)	✗	✓	No gas exchange as stomata close at night	No gas exchange as stomata close at night

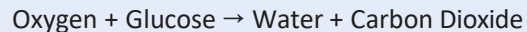


Photosynthesis Respiration

Type of Respiration	Image	When this happens	Where this happens	Energy	Equation
<b>Aerobic Respiration</b>		When there is sufficient (enough) oxygen supplied from the bloodstream into cells.	In the mitochondria of every cell in plants and animals.	More energy is released more slowly.	Glucose + Oxygen → Carbon dioxide + Water
<b>Anaerobic Respiration</b>		When there is an absence or insufficient oxygen	In the cytoplasm of some animal and plant cells.	Less energy is released more quickly.	Glucose → Lactic acid

Photosynthesis cannot occur during the night – it needs light from the sun!  
Respiration happens throughout the whole day.

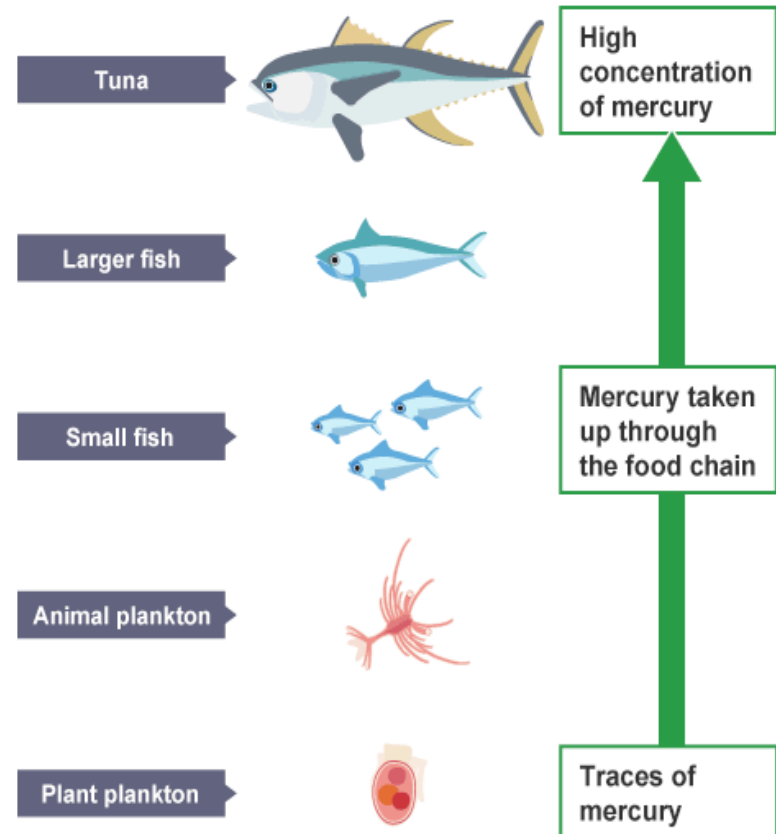
### Aerobic Respiration:



2

Bioaccumulation refers to the build up of often toxic substances in an organism over time.

E.g., the toxic build-up of mercury in tuna, or microplastics in whales.





# Year 7 Science – Physics - Space

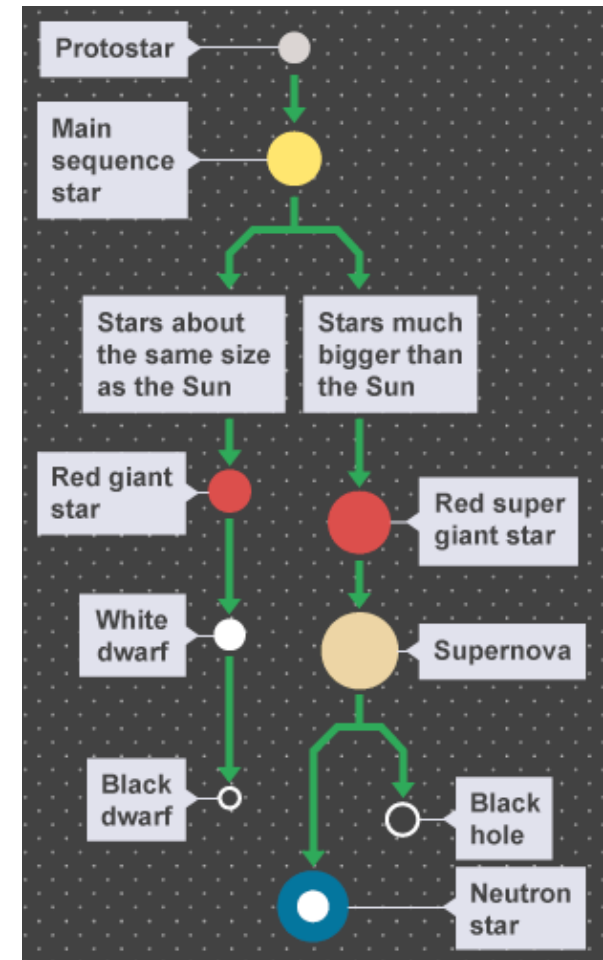
1

## Key Terms – Physics – Space

Key words	Definition
<b>Planet</b>	A spherical object much smaller than a star, made of rocky or gaseous material (or a combination), which orbits a star.
<b>Solar system</b>	Our solar system consists of The Sun, with planets and smaller objects such as asteroids and comets in orbit around it.
<b>Star</b>	A huge, compared to Earth, sphere of superhot gas undergoing nuclear fusion reactions.
<b>Galaxy</b>	Collections of thousands of millions of stars.
<b>Orbit</b>	When an object travels in a circular motion kept in orbit by gravity around a particular point in space.
<b>Satellite</b>	Any object that is in orbit around a planet. The Moon is a natural satellite of the Earth, but communication satellites are artificial satellites of the Earth.
<b>Seasons</b> (spring, summer, autumn, winter)	Caused by the Earth's position in relation to the Sun. Depending on how the Earth is tilted towards the Sun affects the temperatures and climates that different regions experience.
<b>Axis</b>	An invisible line, around which an object rotates or spins.
<b>Earth's Rotation</b>	Earth rotates around its axis, anticlockwise once every 24 hours
<b>Big bang theory</b>	According to the Big Bang. theory, about 13.8 billion years ago the whole Universe was a very small, extremely hot and dense region. From this tiny point, the whole Universe expanded outwards to what exists today.
<b>Aerodynamics</b>	The study of airflow over surfaces to allow the design of surfaces that reduce wind resistance, turbulence, friction and noise generation.

2

## Life Cycle of a Star

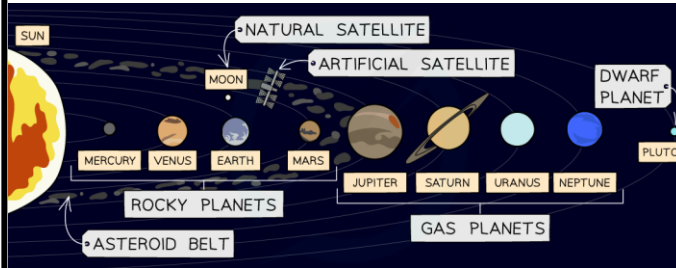




# Year 7 Science – Physics - Space

## 1 Solar Systems and Planets

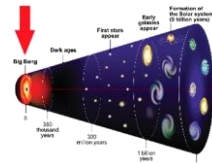
Use this acronym to help remember the order of the planets:



**My  
Very  
Easy  
Method  
Just  
Speeds  
Up  
Naming.**

## 2 The big bang theory

The Big Bang theory is a scientific approach to answering the question of how the world began. In answering this question, the Big Bang theory removes the need for a creator.



Put simply, the theory states that around 14 billion years ago all matter and energy in the universe was at a point of infinite density and temperature. It then expanded rapidly. Eventually stars, galaxies and planets formed. This expansion was the beginning of time and continues to this day.

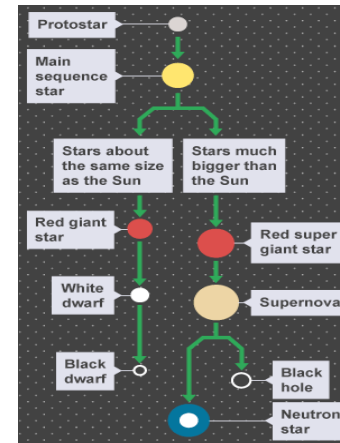
Prediction from Big Bang theory	Evidence observed	Does evidence support the Big Bang theory?
More distant galaxies should move away faster	More distant galaxies have greater red-shift	Yes
Initial heat from the Big Bang should now be thinly spread across the whole Universe	CMBR is everywhere at a temperature of about -270°C	Yes

All information resourced from BBC Bitesize

## 3 The life cycle of a star

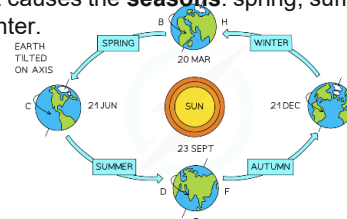
The life cycle for a particular star depends on its size. The diagram shows the life cycles of stars that are:

- About the same size as the sun
- Far greater than the sun in size



## 4 Earth's rotation and seasons

- As Earth orbits the Sun, it rotates on its axis. Each rotation of Earth on its axis takes 24 hours
- Earth takes approximately 365 days to orbit once around the Sun.
- As Earth moves through its orbit around the Sun, different parts of the planet are tilted closer or further from the Sun, because of the tilt in Earth's axis.
- This tilt causes the **seasons**: spring, summer, autumn and winter.



## 5 The Moon

- The Moon is a lot smaller and closer to Earth than the Sun.
- The Moon orbits the Earth. This takes 28 days or one lunar month.
- The Moon reflects light from the Sun and that is why we can see it. It is not a source of light but acts like a mirror.
- The gravitational pull of the Moon and the Sun cause the tides the ocean experiences on Earth.

### Phases of the Moon.

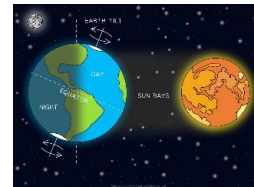
As the Moon orbits the Earth, we see the Moon from different angles each night. It appears to change shape as we see different parts of the surface lit up. These shapes are called the phases of the Moon.



## 6 Day and night

The Earth's rotation around its axis creates day and night

- Day is experienced by the half of the Earth's surface that is facing the Sun
- Night is the other half of the Earth's surface, facing away from the Sun



## 7 Further reading and websites

<https://www.bbc.co.uk/bitesize/topics/z8c9q6f> - Everything you need to know about space. Includes Features of our solar system, The Sun as a star, days, months, years and seasons, The phases of the moon, Tides and Will a human ever be born on Mars?



# Year 7 Science – Extended Writing

## How to approach 6-mark questions in Science – The periodic table

Topic	C2 Periodic Table
Qu	Explain the arrangement of the first 20 elements in today's periodic table. Identify and explain the changes that Mendeleev made to the periodic table. Explain why Mendeleev's periodic table was accepted over time.
Info	At least one of these questions is likely to come up. The examiner is going to be looking for a clear answer written in a logical sequence.
Top Tip	Be careful that you use key words/phrases accurately (these are in bold in your model answers below).
Model Answer	<p>Explain the arrangement of the first 20 elements in today's periodic table.</p> <p>The elements are arranged in order of their <b>atomic number</b>. Elements in the same group have the <b>same number of electrons</b> in their <b>outermost shell</b>.</p>
Model Answer	<p>Identify and explain the changes that Mendeleev made to the periodic table.</p> <p>Mendeleev <b>left gaps</b> for the discovery of new elements. He also rearranged the position of some of the elements so that the properties fitted other elements in the same group.</p>
Model Answer	<p>Explain why Mendeleev's periodic table was accepted over time.</p> <p>New elements were discovered that fitted into the gaps that Mendeleev had predicted. Also, when the <b>neutron</b> was discovered, this led to an understanding of <b>isotopes</b> which explained why Mendeleev needed to swap the position of some elements.</p>
Practice	1. Learn and practice the model answers above.

## How to approach 6-mark questions in Science - Space

Topic	P16 Space
Qu	Describe how our sun formed. Describe how a massive star will change at the end of the main stable period. Explain why the Sun will not undergo a supernova.
Info	At least one of these questions is likely to come up. The examiner is going to be looking for a clear answer written in a logical sequence.
Top Tip	Be careful that you use key words/phrases accurately (these are in bold in your model answers below).
Model Answer	<p>Describe how our sun formed.</p> <p>Our sun formed from <b>dust and gas</b> which were pulled together by <b>gravity</b>. As more mass was pulled together it got very <b>hot</b>. When it got hot enough <b>hydrogen nuclei fused together</b> releasing energy in the form of heat and light. This energy caused expansion which balanced the gravitational pull</p>
Model Answer	<p>Describe how a massive star will change at the end of the main stable period.</p> <p>The star will turn into a <b>red super giant</b>. This red super giant will then become a <b>supernova</b> before then either forming a <b>dense neutron star</b> or shrinking to form a <b>black hole</b>.</p>
Model Answer	<p>Explain why the Sun will not undergo a supernova.</p> <p>The sun is not a <b>massive star</b>. It is only massive stars that undergo a <b>supernova</b>. Instead the sun will form a red giant and then a white dwarf before becoming a black dwarf.</p>
Practice	1. Learn and practice the model answers above.



# Year 7 Art – Creatures of the Deep

1

## TIER THREE VOCABULARY

Key Term	Definition
<b>Kraken</b>	Greek mythology, Kraken was a sea monster controlled by Poseidon to destroy ships.
<b>Ceramic</b>	Clay is modelled and fired creating ceramic. Modelling material.
<b>Black Out Poetry</b>	Technique where words are blacked out revealing a new word sequence that is then used to inspire an image that is drawn on top.
<b>Design</b>	Using resource materials to develop ideas by selecting and drawing your favourite parts.
<b>Resource Materials</b>	Images selected to inspire your imagination from magazines, newspapers, internet, books and photographs.
<b>Pointillism</b>	A technique and art movement which began in 1886. Seurat and Signac were the pioneers of this style.



2

## WHAT WILL I LEARN?

### What.

We will explore how language can be used to inspire art through artist research, experimentation of materials and analyzing poetry. You will be introduced to the work of Tom Phillips, Stephanie Kilghast and Shayne Greco.

### Why?

To develop our understanding and appreciation of design and 3D ceramic skills.

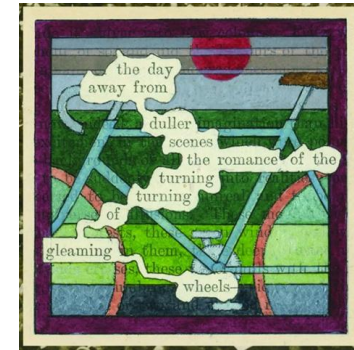
### How?

Researching, selecting, presenting, experimenting and developing a design for our own creature of the deep that you will realize using clay.

3

## ENRICHMENT

1. Visit Barbara Hepworth St Ives.
2. Leach Pottery St Ives, Cornwall.





# Year 7 Computing – Networks and Scratch Programming

Key Words	Definitions
<b>Network</b>	A group of connected computers or devices
<b>Global</b>	Across the whole world
<b>Internet</b>	The internet is a <b>global network</b> of computers. All computer devices (computers, games consoles and smartphones) that are connected to the internet form part of this network.
<b>Websites</b>	Websites consist of webpages which allow you to see information. Websites are accessed using a web browser.
<b>World Wide Web (WWW)</b>	The part of the <b>internet</b> that can be accessed through websites.



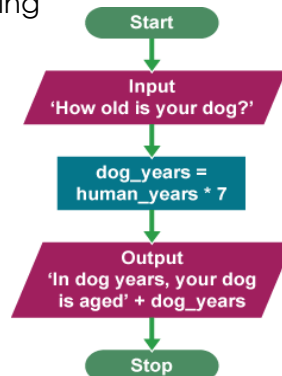
**Scratch:** A high-level block-based programming language

**Selection:** You can **select** what happens to an object, variable or sprite by using selection statements  
**If.....then....else**

Algorithm	Logical instructions for carrying out a task - needed to design computer programs.
Sequence	A set of programming instructions that follow on one from another
Variables	A named part of the algorithm that can be given a value. The value can change. Eg Score

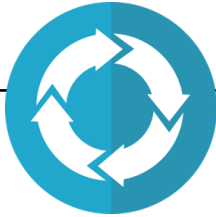
## Flow diagrams

A Flow Diagram is used to describe what an algorithm is doing



## Iteration

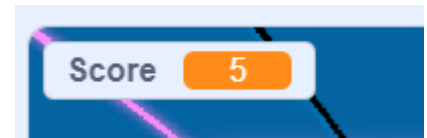
<b>Count</b> controlled iteration	Repeating a section of code for a specific number of times.
<b>Condition</b> controlled iteration	Repeating a section of the code while a condition is met



### Why use Iteration?

It allows algorithms to be simplified by stating that certain steps will repeat. This makes designing algorithms quicker and simpler because they don't need to include lots of unnecessary steps

## Scratch Variables



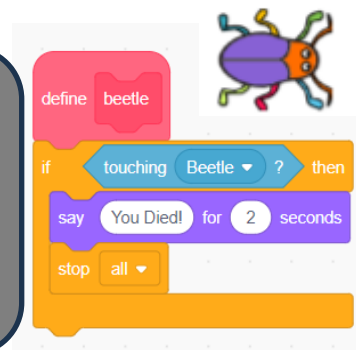
An example of a variable is Score. This changes as a player completes challenges and can make a game more interesting.

## Scratch Game Design

- A good game is not too difficult to play but also not too easy- this is called **Gameplay**
- The **characters** you interact with or take over must appeal to your audience.
- There may be an interesting story line which keeps you coming back for more.
- **Game setting** - The design of the game is also important too and companies employ designers to create the game worlds.

## Scratch My Blocks

Scratch has lots of blocks you can use but you can also create your own code block if you want to simplify your code or reuse code you have written



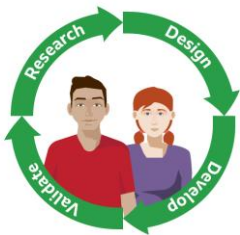


# Year 7 Design & Technology – Material World - Keyring

## 1 TIER THREE VOCABULARY

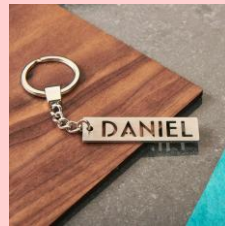
Acrylic	A type of plastic that is available in a variety of different colours
Adhesive	A chemical glue that can be used to bond materials together
Hacksaw	A type of saw with a replaceable blade that can be used to cut metal or acrylic
File	A hand tool used to remove small amounts of metal or plastics to make their surfaces smooth
Hardwood	Wood from trees that lose their leaves in Autumn. They take longer to grow, are not easily sourced and are expensive to buy
Plywood	A board made by gluing lots of layers of thin wood (veneer) together
Line bender	A tool used to heat acrylic so that it softens enough to be bent into a shape
Wet and Dry paper	Waterproof abrasive paper used to sand down surfaces to make them smooth
Pillar drill	A drill that is fixed to the floor and used to make holes in larger pieces of material
Bench drill	A drill that is fixed to the bench and used to make smaller holes in smaller pieces of material

## 4 USER-CENTRED DESIGN



User-centred design bases the design of a product around the needs of the target market rather than the continual development of a design over time. The user is questioned and consulted throughout the development, and evidence is gathered through questionnaires, interviews, testing and observations.

## 2 ANALYSING EXISTING DESIGNS



The fob of this keyring has been made using plywood. Unlike hardwood, plywood is a more sustainable resource. The lettering has been cut using a laser cutter. The font, size and name can easily be changed and customised to make personal keyrings for different users.



The fob of this keyring 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 cloud shape has been cut using a hacksaw and then filed down to make the edges smooth.



The fobs of these keyrings have been made using coloured acrylic. Different coloured layers have been bonded together then cut, filed and polished to make them smooth and shiny. Different combinations of colours, sizes and shapes can be selected and used 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 BONDING ACRYLIC

Pieces of acrylic can be bonded with solvent-based adhesives. The solvent-based glue softens and weakens the surfaces of the two acrylic plastic pieces to form a chemical bond between the two surfaces. Once the two pieces are allowed to cure with the help and pressure of clamps or vices, the pieces will be permanently bonded.



## 6 LINKS & FURTHER READING

### Designing:

<https://www.bbc.co.uk/bitesize/guides/z6jkw6f/revision/1>



### How to finish the surface of acrylic:

<https://www.youtube.com/watch?v=CP5E8P-KSV4>



### Revise:

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





# Year 7 Drama – Silent Movies

## 1 TIER THREE VOCABULARY

<b>Facial Expressions</b>	The different ways our face moves and changes to show our emotions or convey messages without speaking.
<b>Gestures</b>	The movements of our body, such as hand or head movements, that we use to communicate or express something.
<b>Gait</b>	The way a person walks, including their stride and rhythm.
<b>Still Image</b>	A frozen moment captured in a picture or a scene where all the actors are motionless.
<b>Thought Tracking</b>	A technique used in theatre or literature to reveal a character's inner thoughts or feelings by directly stating them.
<b>Short Monologue</b>	A brief speech or performance by a single person that expresses their thoughts, emotions, or ideas.
<b>Mime</b>	The art of performing or storytelling using only body movements and facial expressions, without using words.
<b>Freytag's Pyramid</b>	A storytelling structure consisting of five parts – exposition, rising action, climax, falling action, and resolution – that creates a dramatic arc in a narrative.
<b>Stimulus</b>	Something that triggers or provokes a response or reaction, often used in theatre.
<b>Devise</b>	The process of creating or inventing a piece of theatre.

## 3 SILENT MOVIES HISTORY

The silent movie era spanned approximately three decades, beginning in the 1890s and culminating in the late 1920s.

Actors used exaggerated body language and facial expressions, along with written dialogue on title cards, to tell stories without spoken words. They covered various genres and captivated audiences through visual storytelling. While sound replaced silent movies, they remain a significant part of film history.



## 2 STOCK CHARACTERS

### Comical Cops

These characters were often portrayed as bumbling and clumsy police officers who provided comic relief. They were known for their exaggerated gestures, slapstick humour, and humorous attempts at solving crimes or maintaining order.



### The Heroine

The heroine was typically portrayed as an innocent woman in need of rescue or protection. She often found herself in dangerous situations. The heroine displays qualities of courage, kindness and resilience while facing challenges.



### The Villain

The villain is the main baddie in the story. They are frequently depicted as cunning, ruthless, and morally corrupt. They would oppose the hero and often conspire to harm the heroine or achieve their wicked goals. Villains use dramatic gestures!



### The Hero

The hero was the central character of the story, often portrayed as brave, noble, and morally upright. They would fight against injustice, protect the heroine, and ultimately triumph over the villain. The hero will be strong, courageous and just!



## 5 FREYTAG'S PYRAMID

Freytag's Pyramid was invented by the German novelist and playwright as a way of breaking down a story into five main distinct sections (highlighted in red below). This is an effective way of looking at how so many stories are told to an audience.



## 6 LINKS & FURTHER READING

The Silent Era – Crash Course Film History

<https://www.youtube.com/watch?v=ROOV9tucra0>

Charlie Chaplin in 'The Lion's Cage.'

<https://www.youtube.com/watch?v=79i84xYeiZI>

Charlie Chaplin in 'The Kid'

<https://www.youtube.com/watch?v=qNseEVlaCi4>



# Year 7 Drama - Storytelling

1

## History of Storytelling



- Storytelling has been around as long as the human language. Songs, chants, poetry and myths were all passed down by word of mouth.
- The invention of radio in 1895 dramatically changed how stories were told. Now oral communication wasn't just between individuals; a storyteller could address an entire audience regardless of their physical proximity.
- Fundamentals when telling stories are the use of **pace, pause, comedy** and **drama**.
- The Greeks were master storytellers and introduced the world to the protagonist, antagonist, and chorus. This structure can still be copied and seen in modern theatre.

### Further links:

[https://www.ted.com/talks/ollie\\_oakenshield\\_imagination\\_storytelling\\_and\\_the\\_importance\\_of\\_wonder](https://www.ted.com/talks/ollie_oakenshield_imagination_storytelling_and_the_importance_of_wonder)

2

## Storytelling Techniques

**Still image**- Where the actors freeze onstage in a given moment in order to communicate meaning. It's sometimes called a freeze frame or tableau

**Thought track**- When a character steps out of a scene to address the audience about how they're feeling.

**Narration**- Where one or more performers speak directly to the audience to tell a story, give information or comment on the action of the scene or the motivations of characters.

**Flashback**- Where the chronological sequence of a performance is interrupted to show the audience a scene that unfolded in the past.

**Split stage**- The stage is split into two sections, so two different pieces of action can be seen alongside each other.

3

## Creating Tension

### How can we create tension in performance?

#### Physical Skills

**Eye contact**- Looking directly into someone's eyes. Either another character or the audience.

**Facial expression**- The way the face moves to convey an emotional state

**Stillness**- A moment of pause- absence of speech and movement.

#### Vocal Skills

**Pitch**- How high or low your voice goes.

**Tone**- The emotional sound of your voice,

**Pause and pace**- The speed of your speech, and moments where you pause deliberately between words or sentences.

#### Technical aspects

Lighting effects

Sound effects

4

## Fairy Tales

### What is a Fairy Tale?

A fairy tale is a traditional story that often includes magical elements, imaginary creatures, and a moral lesson. They are passed down through generations and often begin with "Once upon a time..."

### Common Features of Fairy Tales:

- **Good vs Evil** - A clear hero and a villain.
- **Magic** - Spells, talking animals, magical objects or transformations.
- **Moral Lessons** - The story teaches right from wrong (e.g. kindness is rewarded, greed is punished).
- **Happy Endings** - Most fairy tales end well, with good triumphing.
- **Repetition** - Events often happen in threes (e.g. three little pigs, three wishes).
- **Set Phrases** - Like "Once upon a time...", "They lived happily ever after..."

### Fairy Tale Characters (Archetypes):

- **Hero** - The main character who solves the problem (e.g. Cinderella).
- **Villain** - The character who causes trouble (e.g. the Wicked Witch).
- **Helper** - A character or magical being who supports the hero (e.g. Fairy Godmother).
- **Victim** - Someone in danger or needing help.

5

## Character Development

**In order for your character to be believable to an audience, you have to do some work to create and develop your character.**

### Ways to develop a character

**Character profile**- Create a backstory for your character. A character profile should include information about your characters' life up until now, which will inform the physical and vocal choices that you make.

**Hot seating**- Hot-seating involves having a dialogue with a character. The character steps out of the drama for a while, usually sits in an appointed chair (the hot-seat) and is open to questioning by the audience or students. The character must answer in role.





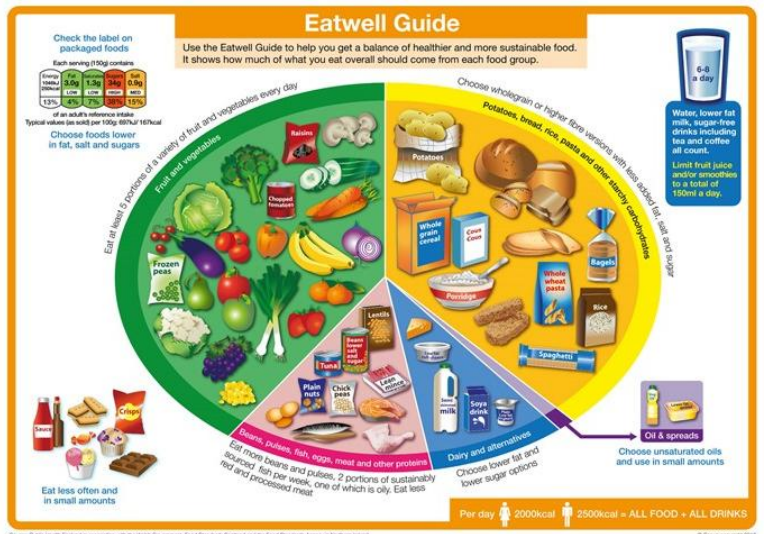
## Year 7 Food & Nutrition

**What is the Eatwell Guide?**  
The Eatwell Guide is a visual tool used in the UK to help people understand how to have a healthy, balanced diet. It shows the proportions of different food groups needed to maintain good health.

---

## Top Nutrition Tips

- Base meals on starchy foods (preferably wholegrain versions).
- Eat at least 5 portions of fruit and vegetables per day.
- Include protein with every meal.
- Choose lower-fat dairy options.
- Unsaturated oils in small amounts.



## The 5 Main Food Groups

Food Group	Key Foods Included	Role in the Body	% of Daily Intake
Fruit and Vegetables	Apples, carrots, spinach, bananas, peas	Provide vitamins, minerals, and fibre	>33%
Starchy Carbohydrates	Bread, rice, pasta, potatoes, oats	Main energy source, provide fibre and nutrients	~33%
Protein	Chicken, beans, lentils, fish, tofu	Growth and repair of cells, muscle maintenance	~12%
Dairy and Alternatives	Milk, cheese, yoghurt, soy milk	Calcium for strong bones and teeth	~8%
Oils and Spreads	Vegetable oil, olive oil, low-fat spreads	Source of essential fatty acids	<5%

## Foods High in Fat, Salt, and Sugar

- Limit foods like chocolate, crisps, sugary drinks, pastries.
- These do not belong in the main 5 food groups.

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- These do not belong in the main 5 food groups.

## Drinks

- Aim for 6–8 glasses of fluid a day.
- Water, lower-fat milk, sugar-free drinks, tea/coffee are better options.

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- Water, lower-fat milk, sugar-free drinks, tea/coffee are better options.






# Year 7 Food & Nutrition – Cooking & Food Safety

This knowledge organiser is your go-to guide for Year 7 cooking and food safety. Learn how to prevent cross-contamination, master bread skills with scones and savoury herb swirls, and explore the farm-to-fork journey. Understand the role of Environmental Health Officers and practice safe techniques while making delicious dishes like chicken goujons. Perfect for building confidence in the kitchen and understanding

## Kitchen Safety – Cross Contamination

- **Definition:** When harmful bacteria spread from one food/surface to another.
- **How it happens:**
  - Raw meat touching cooked food
  - Using the same chopping board for meat and vegetables
  - Dirty hands or utensils
- **Prevention:**
  - Wash hands thoroughly
  - Use separate boards for raw and cooked foods
  - Clean surfaces and equipment after use

## The Dishes you will be making

<b>Chicken Goujons</b>	Chicken breast, breadcrumbs, egg, salt and pepper	Provides protein, carbohydrates and sodium.	
<b>Savoury Herb Swirls</b>	Flour, butter, milk, tomato puree, cheddar cheese.	Provides carbohydrates, fats and protein.	
<b>Scones</b>	Milk, flour and butter with either sugar or cheese.	Good source of carbohydrates for quick release energy.	

## Environmental Health Officer (EHO)

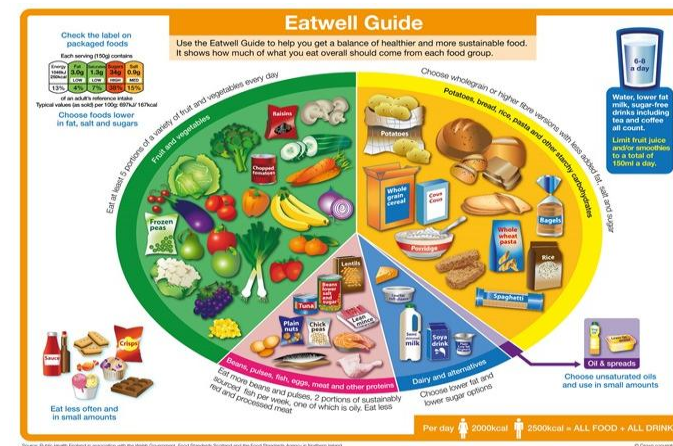
### Role:

Inspect food businesses  
Ensure hygiene and safety laws are followed

### What they check:

Cleanliness  
Food storage  
Temperature control

**Why important?** Prevents food poisoning and protects public health.





# Year 7 Geography

## Types of Erosion

The break down and transport of rocks – smooth, round and sorted.

<b>Attrition</b>	Rocks that bash together to become smooth/smaller.
<b>Solution</b>	A chemical reaction that dissolves rocks.
<b>Abrasion</b>	Rocks hurled at the base of a cliff to break pieces apart.
<b>Hydraulic Action</b>	Water enters cracks in the cliff, air compresses, causing the crack to expand.

## Types of Transportation

A natural process by which eroded material is carried/transported.

<b>Solution</b>	Minerals dissolve in water and are carried along.
<b>Suspension</b>	Sediment is carried along in the flow of the water.
<b>Saltation</b>	Pebbles that bounce along the sea/river bed.
<b>Traction</b>	Boulders that roll along a river/sea bed by the force of the flowing water.

## Types of Weathering

Weathering is the breakdown of rocks where they are.

<b>Carbonation</b>	Breakdown of rock by changing its chemical composition.
<b>Mechanical</b>	Breakdown of rock without changing its chemical composition.

## Mass Movement

A large movement of soil and rock debris that moves down slopes in response to the pull of gravity in a vertical direction.

- 1 Rain saturates the permeable rock above the impermeable rock making it heavy.
- 2 Waves or a river will erode the base of the slope making it unstable.
- 3 Eventually the weight of the permeable rock above the impermeable rock weakens and collapses.
- 4 The debris at the base of the cliff is then removed and transported by waves or river.

## Size of waves

- Fetch how far the wave has travelled
- Strength of the wind.
- How long the wind has been blowing for.

## Types of Waves

### Constructive Waves

This wave has a **swash that is stronger** than the backwash. This therefore builds up the coast.

#### Features of a constructive wave

Smaller wave height & Less frequent

Strong swash moves sediment up the beach

Weak backwash carries away little sediment

Gives gentler beach profile

### Destructive Waves

This wave has a **backwash that is stronger** than the swash. This therefore erodes the coast.

#### Features of a destructive wave

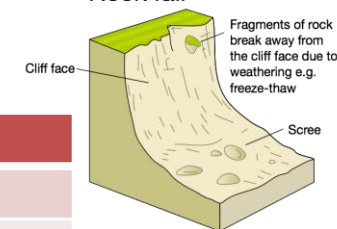
Larger wave height & More frequent

Weak swash moves little sediment up the beach

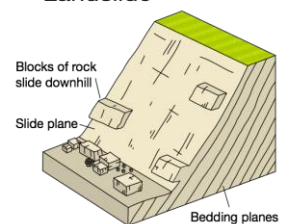
STRONG backwash carries away LOTS of sediment

Steep angle of strike SCOURS material away This can build STEEP beaches

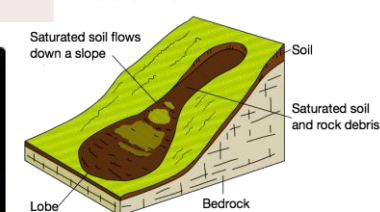
### Rock fall



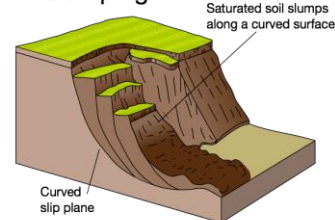
### Landslide



### Mud slide



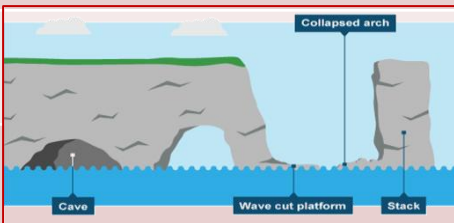
### Slumping





# Year 7 Geography

## Formation of Coastal Stack

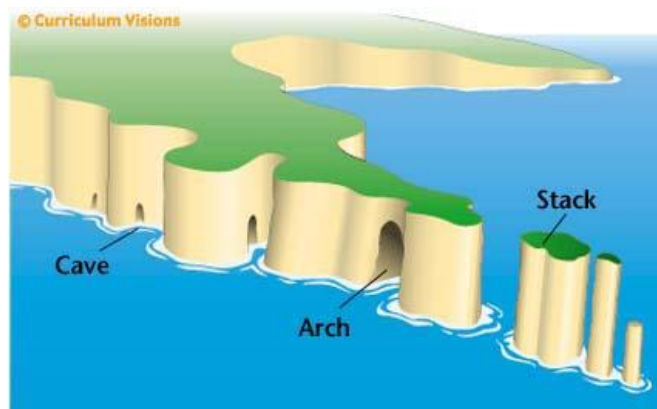


1. Hydraulic action widens cracks in the cliff face over time.
2. Abrasion forms a wave cut notch between HT and LT.
3. Further abrasion widens the wave cut notch to form a cave.
4. Caves from both sides of the headland break through to form an arch.
5. Weather above/erosion below –arch collapses leaving stack.
6. Further weathering and erosion eaves a stump.

## Formation of Bays and Headlands



1. Waves attack the coastline.
2. Softer rock is eroded by the sea quicker forming a bay, calm area cases deposition.
3. More resistant rock is left jutting out into the sea. This is a headland and is now more vulnerable to erosion.



## Coastal Defences

### Hard Engineering Defences

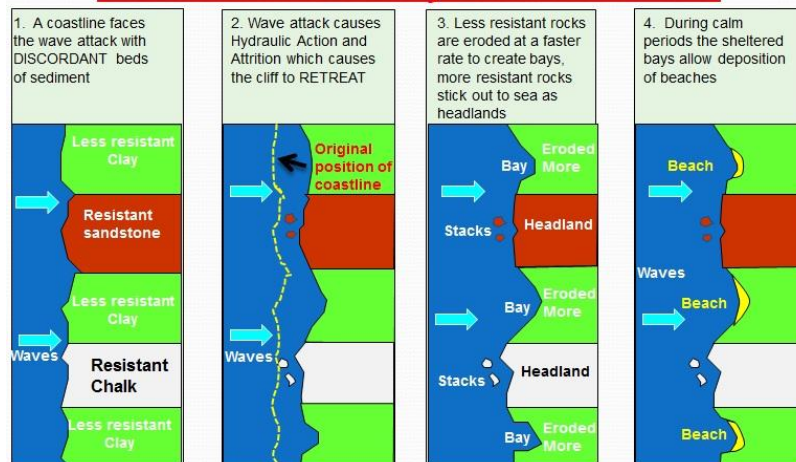
Groynes	Wood barriers prevent longshore drift, so the beach can build up.	<ul style="list-style-type: none"> <li>✓ Beach still accessible.</li> <li>✗ No deposition further down coast = erodes faster.</li> </ul>
Sea Walls	Concrete walls break up the energy of the wave . Has a lip to stop waves going over.	<ul style="list-style-type: none"> <li>✓ Long life span</li> <li>✓ Protects from flooding</li> <li>✗ Curved shape encourages erosion of beach deposits.</li> </ul>
Gabions or Rip Rap	Cages of rocks/boulders absorb the waves energy, protecting the cliff behind.	<ul style="list-style-type: none"> <li>✓ Cheap</li> <li>✓ Local material can be used to look less strange.</li> <li>✗ Will need replacing.</li> </ul>

Example:  
Old Harry  
Rocks,  
Dorset

### Soft Engineering Defences

Beach Nourishment	Beaches built up with sand, so waves have to travel further before eroding cliffs.	<ul style="list-style-type: none"> <li>✓ Cheap</li> <li>✓ Beach for tourists.</li> <li>✗ Storms = need replacing.</li> <li>✗ Offshore dredging damages seabed.</li> </ul>
Managed Retreat	Low value areas of the coast are left to flood & erode.	<ul style="list-style-type: none"> <li>✓ Reduce flood risk</li> <li>✓ Creates wildlife habitats.</li> <li>✗ Compensation for land.</li> </ul>

## The formation of Bays and Headlands



Old Harry Rocks, near Swanage, Dorset are one of the most famous chalk stacks. On the far right is Old Harry, with the smaller remains of Old Harry's Wife, just to the left of it. The stacks will be eroded away eventually but new ones will be formed from the chalk debris by erosion and collapse of cave roofs. The helicopter is a Coastguard Rescue Helicopter. 'Whispering Bells' from Portland (Dorset) 18th Aug 1987. (see Post at Dorset World 2010)



# Year 7 Geography



Common

## export.

means

n. A product shipped from one country for sale in another.

by acronymsandslang.com



Common

## import.

means

1. v. To bring goods from one country into another. 2. n. A product brought into one country from another.

by acronymsandslang.com

Trade- the action of buying and selling goods and services:



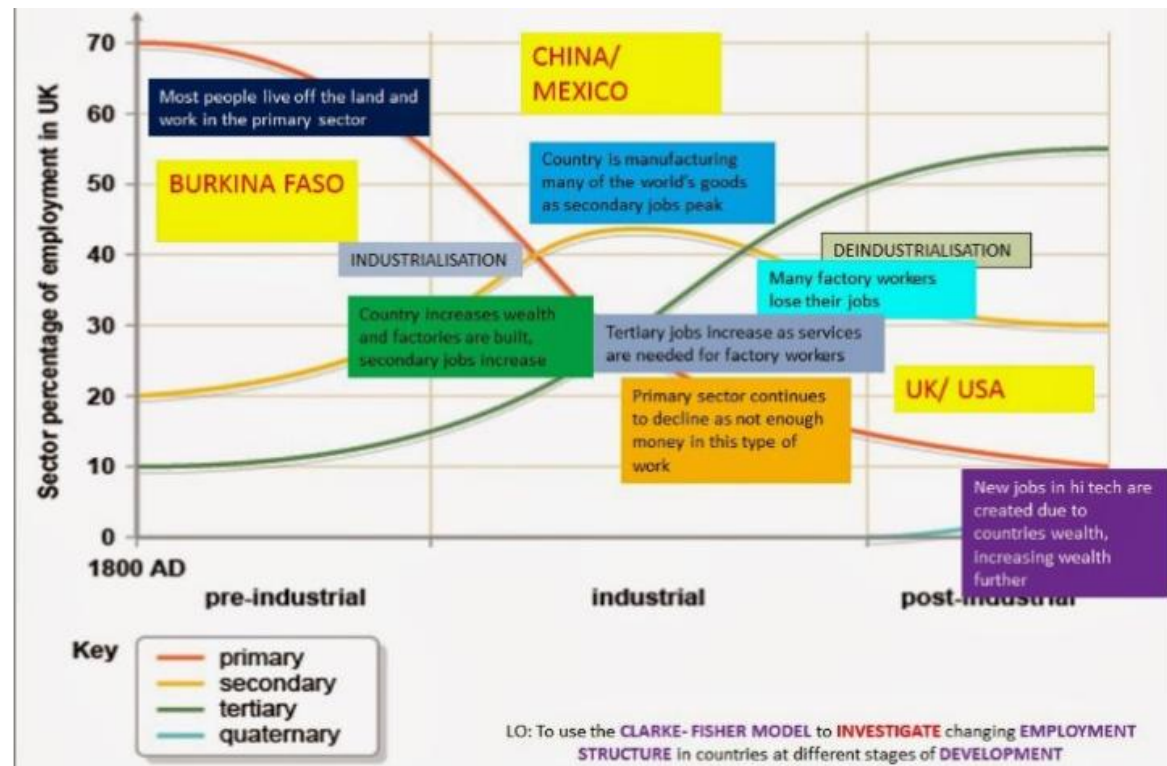
TNC – Trans National Corporation



Globalisation- the increasing connectivity and interdependence of world cultures and economy



## Clark Fisher Model





- TNCs have created jobs and offered education and training to employees
- the additional wealth has led to the **multiplier effect**
- some TNCs have set up schemes to provide new facilities for local communities
- the **infrastructure** of the country has been improved, with new roads and internet cabling
- TNCs pay **tax** to the government, which can be spent on development projects
- some corporation leaders have taken advantage of the relaxed environmental laws in the country by creating lots of pollution
- the conditions for workers in factories can be very harsh
- many TNCs are owned by foreign countries so **economic leakage** occurs, where profit is sent abroad
- the best jobs are often given to foreign workers from the TNC's country of origin

### Formal and informal economies

**Low-income countries** (LICs) have very different economies to **high-income countries** (HICs). In HICs many people have formal jobs in which they have set hours, a monthly wage, healthy working conditions and they pay tax.

Street sellers are part of the informal (or grey) economy

In LICs, some people also have **formal** jobs but large numbers of workers have **informal** jobs. These jobs are often unskilled and labour intensive, require little money to set up, offer no protection to the workers and they pay no tax. Examples include street sellers, minibus drivers, money changers and market traders. These jobs form part of the **informal economy** which is also called the **grey economy**.



# Year 7 Geography

## The location of the Middle East

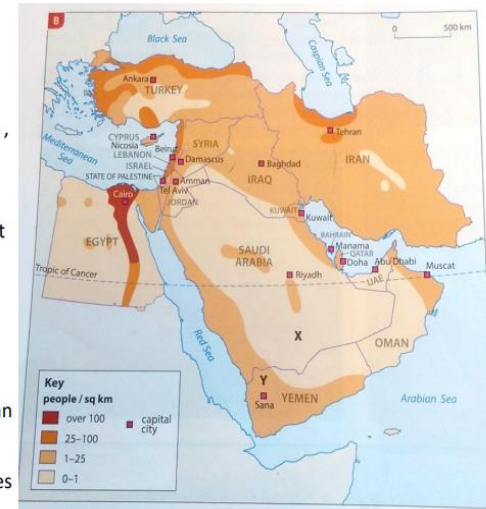


The Middle East is located where the continents of Asia, Africa and Europe meet. It incorporates a wide range of diverse countries, cultures, resources and landscapes.

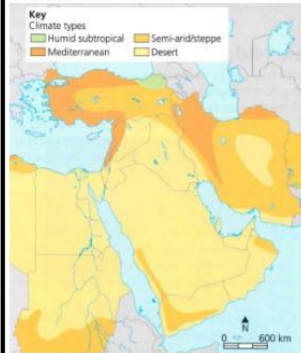


## Human Geography of the Middle East

- Population of approx. 410million
- Uneven population distribution
- Explained by physical geography—deserts are sparsely populated, northern regions and Mediterranean coast more densely populated.
- Majority of Middle East speak Arabic but several countries are not Arabic including Turkey, Iran and Israel.
- Birthplace of 3 main religions Judaism, Christianity and Islam.
- Islam is the most practised religion in the region but varies by country e.g. 70% Israel are Jewish.
- Largest ethnic group are Arabs except in Israel, Turkey and Persian Iran.
- Some ethnic groups eg Kurds have no country but big communities spread over the region.



## Physical Geography of the Middle East



- There are 2 main climate zones. Desert in the south on the Arabian Peninsula and Mediterranean in the North.
- The arid, dry climate creates problems with water scarcity making countries water stressed.
- 2 major plate boundaries have shaped the Middle East.
- The Arabian plate is moving away from the African plate at a constructive plate boundary, creating the Red Sea.

- The Arabian plate is moving north at a rate of 3cm a year, colliding with the Eurasian plate at a destructive boundary. Creating fold mountains in the north of the region.



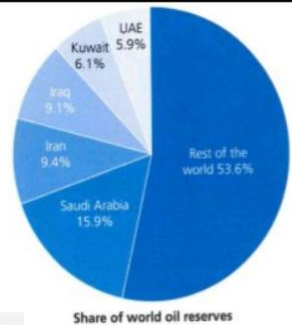
## Natural Resources in the Middle East

Arabian plate holds 48% of the world's oil and 43% of gas reserves. Oil is of major importance to economies in the region with up to 90% of income in some countries, such as Saudi Arabia coming from oil. Other countries rely on Middle Eastern oil— Over 50% of China's crude oil comes from the Middle East. Drawback—countries are reliant on oil and they do not have diverse economies.

### Reason for reserves

The Arabian plate was once under an ocean but 570m years ago it rose up due to tectonic movement.

Years of sedimentation and compression under the ocean created oil and gas reserves





# Year 7 Geography

## Contrasting fortunes—the UAE & Yemen

UAE—7th largest oil & 17th largest gas reserves in the world.

Second largest economy in Middle East—Economy has grown by 231 times since 1971.

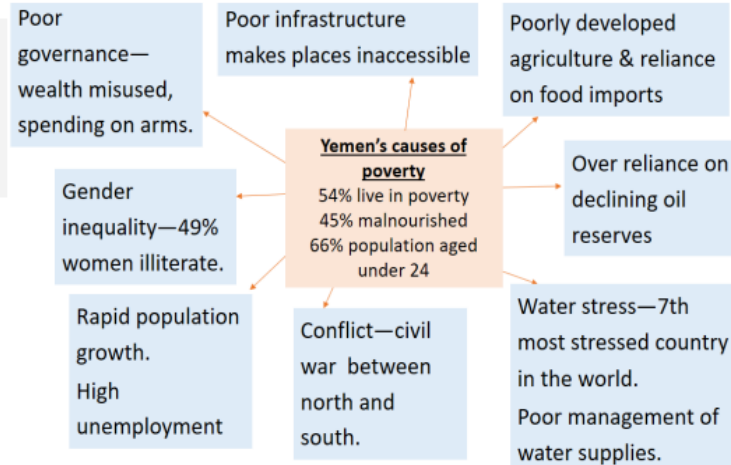
Ranked 30th in world on HDI (higher than Europe)

### Challenges

- Desert environment
- High unemployment
- Over-relying on oil exports
- Unrest, conflict and war between ethnic groups.

### Solutions

- Creating a diverse economy by:
- Developing ports and airports.
  - Encouraging global trade.
  - Tourism
  - Encouraging migration



## Conflict in the Middle East

### REASONS FOR CONFLICT

- Borders – the French and British changed borders, causing unrest for ethnic groups.
- Oil – This encouraged rich countries to interfere with politics causing problems.
- Religion – The main religion divide is between Shia (Iran) and Sunni (Saudi Arabia) Muslims.
- Iraq War – The Iraq War in 2003 saw the government be overthrown, taking Sunni Muslims from power and putting Shia Muslims in power. It exacerbated existing ethnic divisions.
- Arab Spring – in 2011 there were protests in many counties about the government.

### Case Study—The Syrian conflict

- Began in 2011
- Inspired by Arab Spring pro-democracy demonstrations against the government began.
- International involvement from USA, Russia & Saudi Arabia providing military, financial and political support.
- The government's Shia minority (backed by Shia Iran) is fighting Sunni majority (backed Sunni Saudi Arabia)



## KEY VOCABULARY

<b>Arab Spring</b> A series of anti-government protests, uprisings, and armed rebellions that spread across much of the Arab world in the early 2010s.	<b>Region</b> An area that has similar characteristics with within a country or within a part of the world.
<b>Diversification</b> The process of creating a much wider variety of business opportunities or jobs in a region.	<b>Water stressed</b> When the demand for water exceeds the available amount of water.
<b>Forced migration</b> The movement of people away from their homes due to political conflict, natural disaster or environmental hazards.	<b>Distribution</b> The way in which something is shared out among a group or spread over an area.
<b>Desalination</b> A process that can remove the salt from salt water.	<b>Exports</b> A product or service that is sold abroad.
<b>Peninsula</b> A long piece of land that sticks out from a larger area of land into the sea or into a lake	<b>Relief</b> The height and shape of the land.



# Year 7 History – What skills does a good historian need?

## Historical Skills we will develop in Year 7;

- ✓ Our ability to use our knowledge to explain the past
- ✓ Our ability to use sources to explore and explain the past
- ✓ Our ability to use interpretations to explore and explain the past

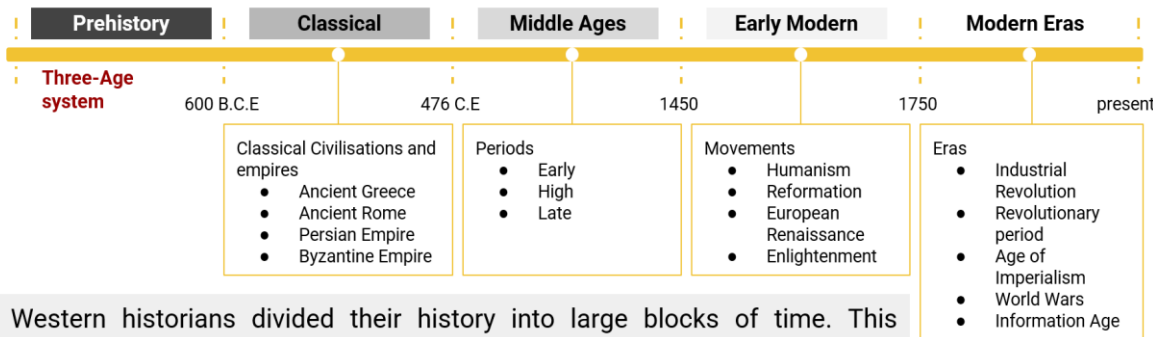
## Chronology

Historians use **chronology** to build up a narrative (story) of the past and see where parts of the narrative fit. For example, the timeline below shows the chronology of the history of humans and different names for time periods along with some key events.

**BCE/BC** - Before Common Era/Before Christ

**CE/AD** - Common Era/Anno Domini (*in the year of our Lord*)

### Major Time Periods in Western History



Western historians divided their history into large blocks of time. This generally accepted division is based on the rise and fall of civilisations, extent of influence (e.g. the Catholic Church during the Middle Ages), cultural, social and intellectual movements and prominent historical events.



Bringing the past back to life at Poltair!

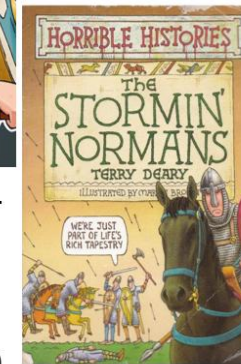
## Reading like a historian



**Horrible Histories-  
Smashing Saxons**  
**Terry Deary**  
**(Author) Martin**  
**Brown (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!



**Horrible Histories-  
The Stormin'  
Normans**  
**Terry Deary**  
**(Author) Martin**  
**Brown (Illustrator)**

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

## Reading

Historians love to read! It is what helps us better understand the world as it was. The more you find out about the time periods you are studying in lessons the easier you will find your lessons and the better a historian you will become. Win, win!

Scan to access History  
information from BBC Bitesize

<https://www.bbc.co.uk/bitesize/subjects/zk26n39>





# Year 7 History– What is the legacy of the Crusades?

## Historical Skills we will develop in this Enquiry;

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

## 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

## What routes did the Crusades take?



## What do some interpretations show about the Crusades?



Crusaders set off for the Levant.  
From 'Le Roman de Godefroi de Bouillon', France, 1337.



The Council of Clermont and the arrival of Pope Urban II

## 1. GLOSSARY CRUSADES

Key Terms	Description
Crusade	In the medieval era, Crusaders believed they were carrying out their God's work by taking part in military campaigns to take control of the Holy Land for Christianity. (A Holy War)
Islam	Religion followed by Muslims.
Christianity	Religion followed by Christians.
Judaism	Religion followed by Jews.
Holy Land	A place of religious significance for followers of religion. Jerusalem is a Holy Land for Christians, Muslims and Jews
Pilgrimage	A religious journey
Pious	Someone who is very religious
Just	Something that is the right or fair thing to do
Chivalry	The spirit of medieval knighthood, qualities expected of a medieval knight
Truce	An agreement to stop fighting for certain period of time. Richard's truce with Saladin was arranged in 1192.
Islamophobia	A fear of the religion of Islam often leading to prejudice/stereotyping



# Year 7 History– What is the legacy of the Crusades?



Bringing the past back to life at Poltair!

## Reading like a historian

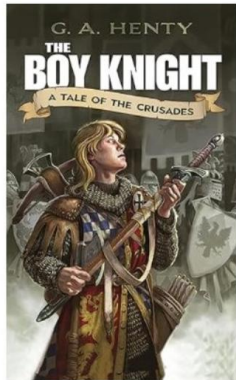


The Crusades  
Explained for Kids:  
The English Reading  
Tree, Keith Goodman  
(Author)



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

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The Boy Knight: A Tale of the Crusades, G. A. Henty (Author)

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

Scan to access a *History Today* article about the history of the crusades

<https://www.historytoday.com/archive/feature/crusades-complete-history>

Who were the leaders of the Third Crusade?



King Richard I



An engraving of Saladin

## 1. CORE KNOWLEDGE CRUSADES

QUESTION	ANSWER
1 Why did people go on crusade?	Many reasons. For example, to stop the expansion of Muslim states. To reclaim the Holy Land for Christianity. To obey the Pope's call for crusade.
2 How many crusades were there?	There were 3 major crusades in this period, however there were still many after these as well. The crusades were over a 200 year period.
3. How did the crusades benefit the church?	Peasants had to give 10% of their earnings to the church (a tithe). The more land the church controlled then the more money it could collect in tithes.
4 How did Europeans believe the crusades would benefit them politically?	European leaders believed success in 'winning back' the Holy Land would secure their power and legacy as a successful leader
5 How were the crusades important economically?	The crusades opened new opportunities for trade. Crusaders brought back spices and textiles. New trade routes were established so more goods could be bought and sold across Europe and with the Middle East
6 Who was Saladin?	Powerful Muslim leader who conquered Jerusalem from the Christians (1187). He showed mercy, allowing them to leave for a ransom rather than just killing them
7 Who was Richard the Lionheart?	King Richard I, who led the Third Crusade (1189). Gets the name Lionheart for his reputation of being a brave fighter
8 Who was Pope Urban II?	Pope who launched the First Crusade in 1095 after giving a powerful speech in which he described Christian pilgrims being mistreated by Turks.
9 What events signalled the end of the crusades?	In 1291 the city of Acre was reclaimed by Muslim forces. Christian forces never again gained control of Jerusalem
10 What has been the lasting impact of the crusades?	Tension remains in the Holy Land, especially between Israel (Jewish) and Palestine (Muslim)



# Year 7 History– How far did the Tudors make England's society 'richer, more diverse and more connected to the wider world'?

## Historical Skills we will develop in this Enquiry;

- ✓ Our understanding of similarity and difference
- ✓ 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.)

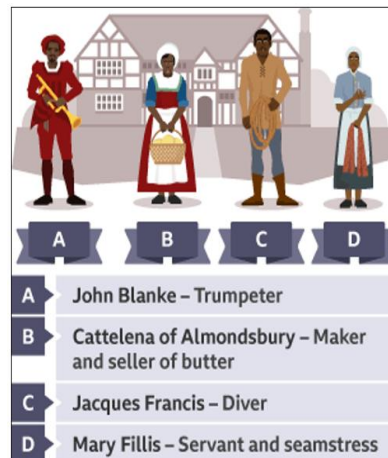
## Scan to find out about Henry VIII and lives of the rich in Tudor England: What Was Life Like? | Episode 11: Meet King Henry VIII:

<https://www.youtube.com/watch?v=X1ZKbFz7558&list=PLx2QMoa1Th9fVTsHjpl31Vxtiv5709Vwc&index=2>

## Scan to find out more about life in Tudor England. What Was Life Like? | Episode 7: Tudors - Meet A Tudor Cook:

<https://www.youtube.com/watch?v=i1cW6sVbUBg&list=PLx2QMoa1Th9fVTsHjpl31Vxtiv5709Vwc&index=6>

## What was life like for black Tudors?



## 2. GLOSSARY TUDOR SOCIETY

Key Terms	Description
<b>Tudor</b>	The last name of the family who held the throne of England from 1485 to 1603
<b>Equality</b>	The state of being equal, especially in status, rights, and opportunities. (fairness/justness)
<b>Society</b>	The sum of people living together in a community
<b>Execution</b>	Carrying out a sentence of death on a person
<b>Catholic</b>	A member of the Roman Catholic Church. Branch of Christianity, following the leadership of the Pope
<b>Protestant</b>	a member or follower of any of the Western Christian churches that are separate from the Roman Catholic Church and follow the principles of the Reformation,
<b>Reformation</b>	The movement in the 1500s to reform the Catholic church and creating the Protestant church as a result
<b>Patriarchy</b>	Means 'the rule of the father'. A social system where positions of dominance and power are held by men.

## Scan to access more information about the lives of black Tudors:

<https://www.bbc.co.uk/bitesize/topics/zwcsp4j/articles/zb84cmn#zrwk96f>



# Year 7 History– How far did the Tudors make England's society 'richer, more diverse and more connected to the wider world'?



Bringing the past back to life at Poltair!

## Reading like a historian

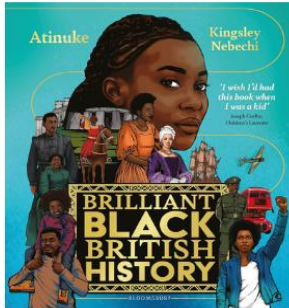


**Black and British:**  
A short, essential  
history David  
Olusoga (Author)

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!



**Brilliant Black British History**  
Atinuke  
(Author),  
Kingsley  
Nebechi  
(Illustrator)

Scan for a video from the  
National Archives: Filling in  
the Blanks: The Life of a Black  
Tudor

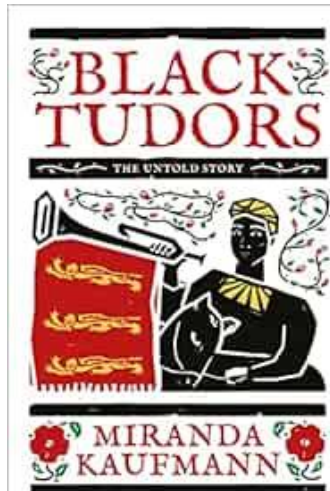
<https://www.youtube.com/watch?v=Oj7X0Hve4DQ>



Who is the historian our enquiry question is based on?



**Historian**  
**Amanda**  
**Kaufmann**



## 2. CORE KNOWLEDGE TUDOR SOCIETY

Question	Answer
1 Who were the Tudor monarchs?	Henry VII, Henry VIII, Edward VI, Mary I, Elizabeth I
2 Why did Henry VIII reform the Church?	To get a divorce from Catherine of Aragon and hopefully have a son. To gain wealth and power from the Catholic church by making himself head of the new Church of England
3 What crime did people face if they were the wrong religion?	The crime of heresy. What version of Christianity was considered heresy changed with the monarch!
4 How do we know about the lives of African people in Tudor England?	Historians such as Imtiaz Habeeb, Onyeka Nubia and Miranda Kaufmann have found evidence to suggest many people of African origin lived in Tudor England
5 How many people of African origin in Tudor England have historians found evidence of?	Over 200
6 How did people of African origin arrive in Tudor England?	Some came directly from the continent of Africa as traders or ambassadors. Many were servants and some were craftsmen
7 What rights did Tudor women have?	Women were legally subject to their husbands and so couldn't own property, enter into agreements, or make their own will without their husband's consent
8 Roughly what percentage of Tudor women never married?	30%
9 What did the Tudors refer to America as?	The 'New World'?
10 Where did Elizabethans attempt to settle in the 'New World'?	Virginia



# Year 7 History– Was the world really 'turned upside down' by the English Civil War?

## Historical Skills we will develop in this Enquiry;

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

## 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

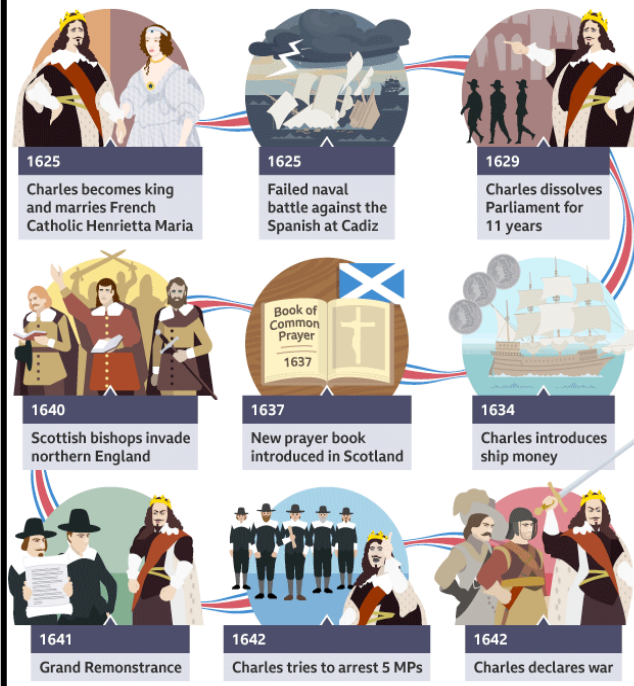
Where does the phrase 'turned upside down' come from in relation to the civil war?



London: Printed for John Smith. 1646

The world turned upside down. 1646

What were the key events leading to the English Civil War?



## 1. GLOSSARY CIVIL WAR

Key Terms	Description
Civil War	A war fought between 2 opposing sides in the same country
Catholic	A member of the Roman Catholic Church. Branch of Christianity, following the leadership of the Pope
Protestant	a member or follower of any of the Western Christian churches that are separate from the Roman Catholic Church and follow the principles of the Reformation,
Puritan	A 'pure' protestant, they believed the Reformation of Henry VIII didn't go far enough
Heresy	Crime against the church (for example being a Catholic when the country was supposed to be protestant
Cavalier	Supporter of the King (Royalist)
Roundhead	Supporter of Parliament (Parliamentarian)

Scan these to access more information about the English Civil War:

<https://www.worldturnedupsideown.co.uk/>

<https://www.bbc.co.uk/bitesize/topics/zk4cwmn>

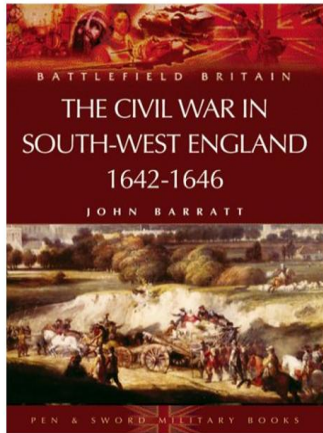


# Year 7 History– Was the world really 'turned upside down' by the English Civil War?



Bringing the past back to life at Poltair!

## Reading like a historian



**The Civil War in South-west England: 1642-1646 John Barratt (Author)**

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

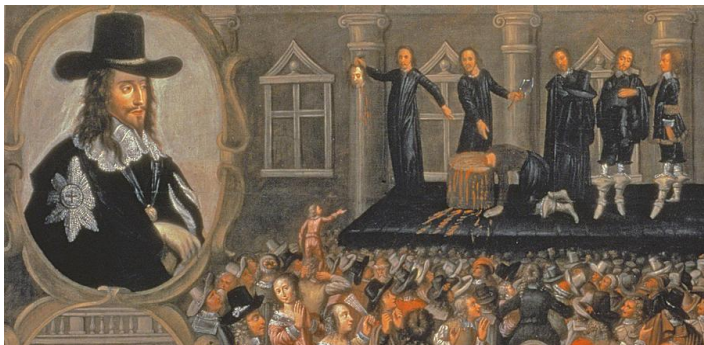
Anything you can read linked to our enquiry questions is amazing and if you tell your teacher what you've been reading and make suggestions to us for books students might like then we will be rewarding you with Merits!

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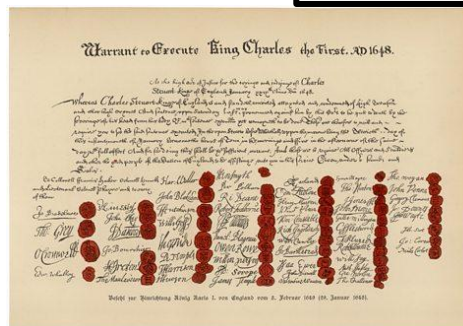
### 3. CORE KNOWLEDGE CIVIL WAR

Question	Answer
1 How did Charles I upset Parliament?	11 Years rule, illegal ship taxes, marriage to a catholic
2 How did Parliament upset the king?	Issuing the 'Grand Remonstrance', a list of problems it had with the king
3 What was the Divine Right of Kings?	The belief that God chose who should be king
4 What was the short-term cause of the civil war?	The kings attempted arrest of the 5 MPs
5 Who was Oliver Cromwell?	Lead the New Model Army for parliament against the king
6 Who was Matthew Hopkins?	He was the Witchfinder General, 1645-47
7 Why was there a witch craze?	The fear and upset of the civil war allowed peoples fears to intensify and Hopkins played on this to accuse many women of witchcraft
8 What was the biggest loss of the parliamentary Army?	The Battle of Lostwithiel
9 What was the outcome of the civil war?	Parliament defeated the Royalist army and King Charles was executed for treason!
10 What happened after the civil war?	Cromwell led the country as Lord Protector, replaced by his son after his death. Eventually Charles II was called back to England

### What do interpretations and sources suggest about King Charles' execution?



**Painting of Charles I's execution, 1649 from eyewitness testimony**



**Charles I's signed death warrant**


**What does the fact there is a statue of Oliver Cromwell outside the Houses of Parliament suggest about his significance?**







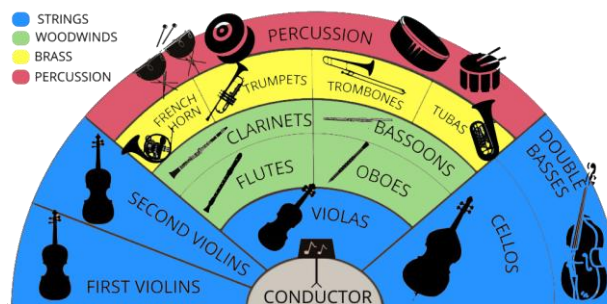


# Year 7 Music – It's Elementary




1	TIER THREE VOCABULARY
String Family	A family of instruments where you strum, pluck or bow the string to make a sound.
Woodwind Family	A family of instruments where you blow into it to make a sound.
Brass Family	A family of instruments where you buzz or vibrate your lips onto it to make a sound.
Percussion Family	A family of instruments where you hit, strike or shake it to make a sound.
Conductor	A person who directs a large group of musicians to keep them in time and tell them when to play.
Orchestra	A large group of musicians that contain strings, woodwind, brass and percussion.
Soundscape	A piece of music that uses a combination of sounds to create an immersive atmosphere.
Acoustic	An acoustic instrument doesn't require electricity to make its sound.
Electric	An electric instrument uses electricity in order to amplify (make louder) its sound.
Digital	A digital instrument cannot make a sound at all unless it uses electricity.
Musical Elements	The musical elements are the building blocks of all music – they describe how music is played.

4	SOUNDSCAPES
<p>A soundscape is where a composer uses sounds and music in order to evoke an image to a person's mind. Often, we associate different instruments and sounds to different environments and locations. For example, the church organ might make us think of a graveyard or something spooky, whereas a ukulele might make us think of a beach!</p> 	

2	INSTRUMENT FAMILIES
<p>Every instrument in the world falls into one of <b>FOUR FAMILIES</b>, and this is based on how each instrument <b>MAKES A SOUND</b>. This is <b>NOT</b> based on what they are made from.</p>	
STRINGS	 You pluck, strum or bow it.
WOODWIND	 You blow into it.
BRASS	 You buzz/vibrate your lips onto it.
PERCUSSION	 You hit, strike or shake it.

3	THE ORCHESTRA
<p>An orchestra is a large group of musicians that all play at the same time. The percussion and the brass instruments are grouped at the back as they can usually play the loudest sounds, whereas the woodwind and the string instruments are at the front as they are typically quieter.</p>	
 <p>Legend:   <span style="color: blue;">●</span> STRINGS   <span style="color: green;">●</span> WOODWINDS   <span style="color: yellow;">●</span> BRASS   <span style="color: red;">●</span> PERCUSSION</p>	

5	THE MUSICAL ELEMENTS		
Timbre	The unique sound an instrument makes.	Rhythm	The different combinations of long and short sounds.
Dynamics	How loud or soft a sound is – also called the volume.	Attack & Decay	How a sound starts and how it stops.
Tempo	How fast or slow a sound is – also called the speed.	Silence	The gaps within music where there is no sound.
Duration	How long or short a sound is – also called the length.	Structure	How the music is built – how does it start, develop, and end.
Texture	How thick or thin a sound is – how many instrument at once.	Melody	The main tune of the music.

6	LINKS & FURTHER READING
<p><b>Lesson:</b>  <i>An Introduction to the Elements of Music</i>  <a href="https://is.gd/musicalelements">is.gd/musicalelements</a></p> 	
<p><b>Article:</b>  <i>BBC Concert Orchestra Wows Young Audience</i>  <a href="https://is.gd/orchestraarticle">is.gd/orchestraarticle</a></p> 	
<p><b>Revise:</b>  <i>Mindmap Maker</i>  <a href="https://is.gd/mindmapmaker">is.gd/mindmapmaker</a></p> 	



# Year 7 Music – Music of the Orient

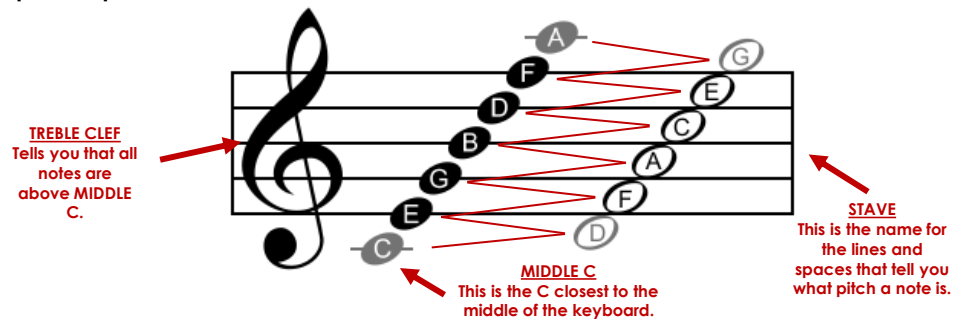
## 1 TIER THREE VOCABULARY

Note	A musical sound.
Notation	The symbols we use in music to record beats/rhythms and tunes/melodies.
Scale	A sequence of notes in a set order.
Pentatonic Scale	A sequence made up of just five notes.
Shakuhachi	A Japanese woodwind instrument that is made from bamboo.
Shamisen	A Japanese string instrument that is played with a large plectrum/pick called a 'bachi'.
Koto	A Japanese instrument that lies down horizontally and is played using finger picks.
Duration	A musical element that describes the length of a note.
Pitch	A musical element that describes how high or low a note is.

## 4 SYMBOLS AND PITCH NOTATION

Although the notes go up in alphabetical order, a nice way to remember the notes for the TREBLE CLEF is to separate the notes on a line and the notes in the spaces.

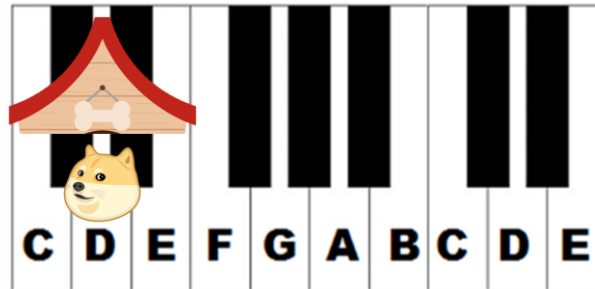
The notes on the lines spell out **EveryGoodBoyDeservesFood**, and the notes in the spaces spell out the word **FACE**.



## 2 FINDING NOTES ON A PIANO/KEYBOARD

There is an easy method that will help you find notes on a piano/keyboard. All **black notes** are grouped in twos and threes. If you find the group of two black notes, The D (dog) sits in between the two black notes (kennel).

### DOG IN THE KENNEL



## 3 DIFFERENT DURATIONS OF NOTES

SYMBOL	NAME	DURATION
	<b>Breve</b> BREEV	hold for 8 beats <small>(this one is rarely used)</small>
	<b>Semibreve</b> SEH-ME-BREEV	hold for 4 beats
	<b>Minim</b> MIH-NIM	hold for 2 beats
	<b>Crotchet</b> CROTCH-IT	hold for 1 beat
	<b>Quaver</b> KWAY-VER	hold for 1/2 a beat

## 6 LINKS & FURTHER READING

**Article:**  
4 Traditional Japanese Instruments  
That Will Make Your Heart Melt  
[is.gd/japaneseinstruments](https://is.gd/japaneseinstruments)



**Lesson:**  
Music Theory - Note Durations  
[is.gd/notedurations](https://is.gd/notedurations)

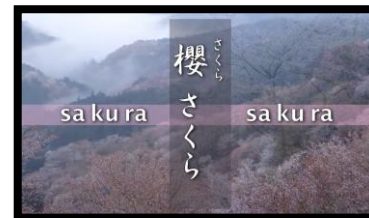


**Revise:**  
Flash Card Maker  
[is.gd/flashcardmaker](https://is.gd/flashcardmaker)



## 5 SAKURA, SAKURA

The piece you are learning is called 'Sakura, Sakura'. It is a traditional Japanese piece of folk music that means 'Cherry Blossoms' and it was written to celebrate the coming of springtime. The song can be heard at the link below on YouTube.



[is.gd/sakuramusic](https://is.gd/sakuramusic)



# Year 7 PSHE – Health and Wellbeing – Time to Teenage – School and PSHE

## Define: **Secondary school**

**Secondary school** is the school you go to after primary school, where you study a wider range of subjects, become more independent, and prepare for exams like GCSEs. It's a time when you grow emotionally, socially, and academically.

## Define: **Expectations**

**School expectations** are the rules and ways of behaving that help everyone feel safe, respected, and ready to learn.

## Define: **PSHE**

**PSHE** stands for **Personal, Social, Health and Economic education**.

It's a subject that helps you learn about yourself, your relationships, staying healthy, keeping safe, and making good choices now and in the future.

## Define: **British Values**

**British Values** are the important ideas that help people in the UK live together in a fair and respectful way. They help everyone feel safe, included, and treated equally.



## British Values

British values are the important ideas that help people in the UK live together in a fair and respectful way. They help everyone feel safe, included, and treated equally.

### The 5 Main British Values Are:



**Democracy** everyone has a say and can vote.



**Rule of Law** laws keep us safe and everyone must follow them.



**Individual Liberty** we all have the freedom to make our own choices



**Mutual Respect** we should treat others kindly, even if they're different from us



**Tolerance** we accept and respect people of different faiths and beliefs

## Key vocabulary

Change

Emotion

Growth

Development

Identity

Confidence

Privacy

Embarrassment

Responsibility

Maturity

Adjustment

Sensitivity

Vulnerability

Self-conscious

Self esteem

## What are our classroom rules about behaviour and expectations in PSHE?

### ☀ PSHE Classroom Rules Around Maturity & Respect

- **Listen without interrupting** - Everyone has the right to speak and be heard without being talked over.
- **Respect each other's opinions** - It's okay to disagree, but we must do so politely and thoughtfully.
- **No judgment or teasing** - We are all different, and no one should feel embarrassed or ashamed for asking questions or sharing.
- **Use respectful language** - Avoid rude, inappropriate, or mocking words — choose your words carefully and kindly.
- **Be brave, but not pressured** - You can choose to share your thoughts, but you should never share anything too personal.
- **Stay open-minded** - Try to understand different points of view and life experiences, even if they're new or unfamiliar to you.
- **Ask questions respectfully** - It's good to be curious, but always ask in a way that shows care and sensitivity.
- **Don't laugh at others' questions or mistakes** - We're all learning — laughing at someone can stop them (and others) from asking again.
- **Take the subject seriously** - Some topics are serious or emotional. Show maturity by focusing and being thoughtful.

### 💛 How Students Should Behave Towards Each Other in PSHE:

- Be kind, calm, and supportive.
- Include others and avoid excluding people from discussions.
- Show empathy — try to understand how others might be feeling.
- Never share someone else's personal story outside the classroom.
- Use body language (nodding, eye contact) to show you're engaged and respectful.



# Year 7 PSHE – Health and Wellbeing – Time to Teenage – Healthy Relationships

## What makes a good friend?

<b>Good friends make you feel good</b>	Good friends say and do things that make you feel good, giving compliments and congratulations and being happy for you.
<b>Good friends listen</b>	A good friend allows you to talk and doesn't interrupt you. They're interested in what you have to say.
<b>Good friends support each other</b>	If you're feeling down, a good friend will support you. If you need help, a good friend will try to help you out.
<b>Good friends are trustworthy</b>	If you tell a good friend something private, they won't share it. You can trust a good friend not to be judgmental.
<b>Good friends handle conflict respectfully and respect boundaries</b>	A good friend will tell you if you've done something to hurt them. If you tell a good friend they've hurt you, they'll be sorry and won't do it again.
<b>Friends not followers</b>	In the digital world you can feel under pressure to have a lot of friends and followers. Remember that you only need a small circle of friends to be happy.

**Good friendships go both ways**

## Signs of a Toxic Friendship

Sometimes people who claim to be your friends can show bullying behaviour. This is sometimes called a 'frenemy' but is a type of toxic relationship. You can spot them by:

- They might say "brutally honest" things to you which are unkind or hurtful
- Put pressure on you to do things you don't want to do
- Be manipulative (e.g. 'If you were my friend you would...')
- Put you down
- Laugh at you, or encourage others to laugh at you
- Talk about you behind your back
- Deliberately exclude you from group chat and activities
- Take the "banter" too far
- Share things about you online
- Make you feel bad about yourself

## What to do if you are in a toxic friendship

- **Remember: the problem isn't you:** Hold on to that thought. Their behaviour might make you feel bad, but they need to change, not you.
- **Talk to them about how their behaviour makes you feel:** Explain calmly and without accusation. Be specific, Tell them what you'd like to happen moving forward. Their response will tell you a lot, sometimes our behaviour hurts others without us realising.
- **If they apologise, give them another chance:** If they mean it, they'll change their behaviour and stop making you feel bad. However, sometimes frenemies might apologise insincerely, and their behaviour afterwards won't change. If they're still making you feel bad despite what you've told them, it's time to move on.
- **Make new friends:** Moving on can be scary, but you deserve people in your life who support you and make you feel good about yourself. See our guide to making new friends for help.
- **Don't retaliate:** It can be tempting to encourage others to exclude your former frenemy, or to put them down behind their back. Don't do this: you're only showing the same behaviour you found difficult in them.

## Key vocabulary when thinking about friendship

**Trust** = Believing that someone will be honest, reliable, and keep your confidence. **Synonyms:** Confidence, faith, reliance

**Loyalty** = Staying supportive and committed to someone, especially during difficult times. **Synonyms:** Faithfulness, dedication, allegiance

**Empathy** = Understanding and sharing someone else's feelings. **Synonyms:** Compassion, understanding, sensitivity

**Respect** = Treating others with care and valuing their thoughts, feelings, and boundaries. **Synonyms:** Regard, consideration, honour

**Honesty** = Telling the truth and being sincere in your words and actions. **Synonyms:** Truthfulness, integrity, openness

**Kindness** = Being caring, friendly, and thoughtful towards others. **Synonyms:** Generosity, compassion, goodwill

**Support** = Offering help or encouragement to someone. **Synonyms:** Assistance, backing, reassurance

**Communication** = Sharing ideas, feelings, and thoughts clearly with others. **Synonyms:** Dialogue, expression, interaction

**Understanding** = Being able to relate to how someone feels or why they act a certain way. **Synonyms:** Insight, awareness, sympathy

**Compromise** = Settling a disagreement by each person giving up something to reach a solution. **Synonyms:** Agreement, give-and-take, middle ground

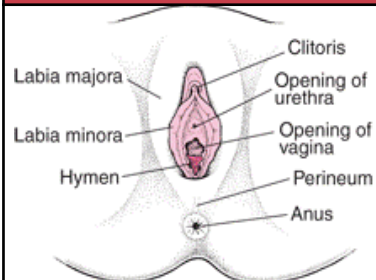


# Year 7 PSHE – Health and Wellbeing – Time to Teenage – Puberty

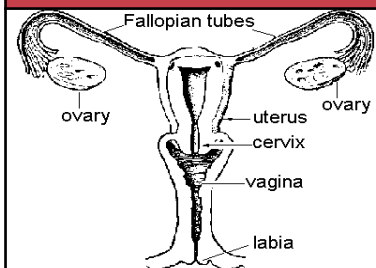
## Define: Puberty

The process of physical maturity in a person that takes place in adolescence

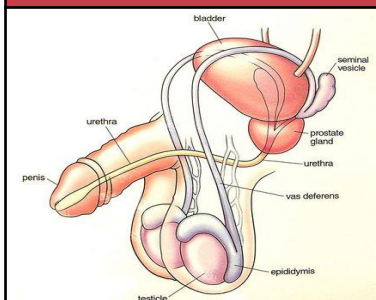
## Female Genitalia – External (Vulva)



## Female Genitalia – Internal



## Male Genitalia



## Physical Changes during Puberty

Boys only	<ul style="list-style-type: none"> <li>Starts between 10 and 12 years of age</li> <li>Facial Hair</li> <li>Voice Breaking</li> <li>Erections</li> <li>Wet Dreams</li> <li>Widening of chest and Shoulders</li> </ul>
Girls Only	<ul style="list-style-type: none"> <li>Starts between 9 and 11 years of age.</li> <li>Menstruation / Periods begin</li> <li>Breast growth</li> <li>Stretch Marks</li> <li>Cellulite</li> <li>Hips widen</li> </ul>
Both	<ul style="list-style-type: none"> <li>Grow taller</li> <li>Sweat more</li> <li>Changes to hair and skin</li> <li>Spots and Pimples</li> </ul>

## Things to Remember

- Puberty begins at different times for different people.
- Changes will happen at different rates and in a different order for different people,
- Everyone goes through puberty, you are not alone.
- Good diet and exercise can help deal with some of the physical changes.
- Puberty is normal despite feeling very abnormal.

## Key vocabulary

Change

Emotion

Growth

Development

Identity

Confidence

Privacy

Embarrassment

Responsibility

Maturity

Adjustment

Sensitivity

Vulnerability

Self-conscious

Self esteem

Anticipation

## Define:

## Menstruation

Also known as a period. The process in a woman of discharging blood and other material from the lining of the uterus at intervals of about one lunar month from puberty until the menopause, except during pregnancy.

## Define:

## Hormones

A chemical substance produced in the body that controls and regulates the activity of certain cells or organs.

## Define:

## Transition

The process or a period of changing from one state or condition to another

## Who Can you turn to for help and Support

Parents or trusted family members	Teachers or school Staff
Your Doctor or Practice Nurse	School Nurse
NSPCC	Helpline: 0808 800 5000 (24 hours, every day) <a href="https://www.nspcc.org.uk">nspcc.org.uk</a>
Childline	Helpline: 0800 1111 (24 hours, every day) <a href="https://www.childline.org.uk">https://www.childline.org.uk</a>
NHS Live Well Website	<a href="https://www.nhs.uk/Livewell">www.NHS.UK/Livewell</a>
Form tutor, HOY, Pastoral manager, teacher, student support – Team Poltair!	



# Year 7 PSHE – Health and Wellbeing – Time to Teenage – Puberty

## Define: **Hygiene**

Conditions or practices conducive to maintaining health and preventing disease, especially through cleanliness.

## Define: **Body Odour**

The unpleasant smell of a person's unwashed body.

## Define: **Halitosis**

Medical term for bad breath

## Define: **Oral Hygiene**

The practice of keeping one's **mouth** clean and free of disease and other problems

## Define: **Puberty**

The process of physical maturity in a person that takes place in adolescence

### **Hair**

Puberty causes the oil glands in the hair to produce more oil which can make hair more oily meaning that it needs to be washed more regularly.

### **Oral Care**

Brushing teeth twice a day, flossing and using a mouth wash can prevent bad breath and dental issues. Regular visits to the dentist are also important

### **Body Odour**

Due to puberty, sweat glands not only become more active than before, they also begin to secrete different chemicals into the sweat that has a stronger smelling odor. Daily bathing and the use of anti-perspirant or deodorant.

Anti perspirant's will reduce the amount of sweat you produce whereas deodorants cover the smell and odour.

### **Genital Hygiene**

Women:

The inside of the vagina rarely needs cleaning with the use of soap. It has a natural balance of substances that can become disturbed by washing causing any bacteria that enter to have the potential of developing into an infection. The labia should only need cleaning once a day using a mild soap and water. The area should also be cleaned following sexual intercourse. Over cleaning of the genital area can be harmful and lead to infections such as thrush

### **Face**

During and after puberty people can be more prone to spots and acne. This can be managed through the use of daily face washes. Exfoliants should be used twice weekly in order to remove dead skin cells.

### **Body Hair**

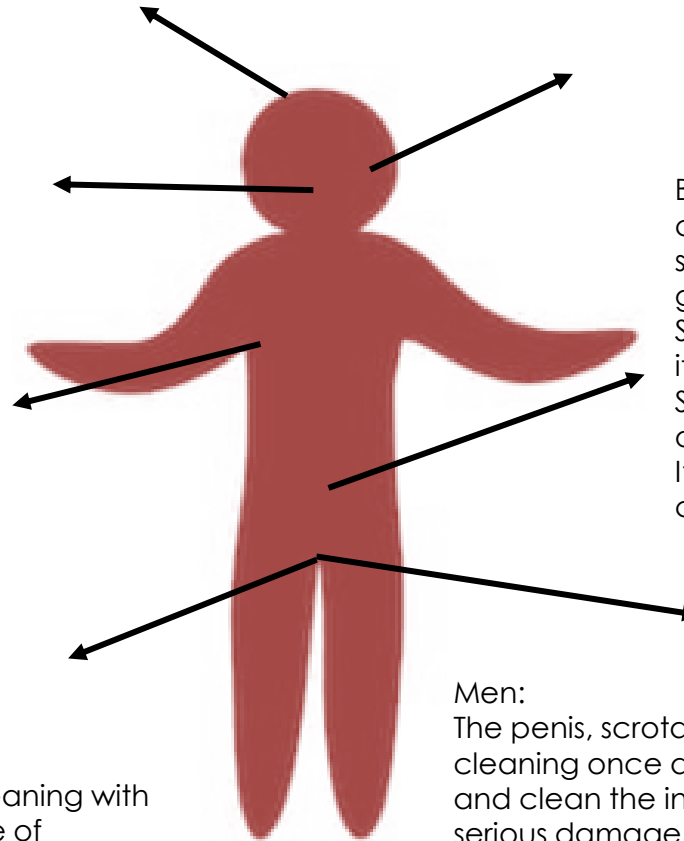
Body hair in new places is something you can count on. You may want to start shaving some places where body hair grows, but whether you do is up to you. Some guys who grow facial hair like to let it develop into a mustache and beard. Some girls may decide to leave the hair on their legs and under their arms as is. It's all up to you and what you feel comfortable with.

### **Genital Hygiene**

Men:

The penis, scrotal area and anus, should only need cleaning once a day. No attempt should be made to try and clean the inside of the urethra; this can cause serious damage. Special care should be taken by uncircumcised men to make sure the head of the penis is cleaned. This can be done by allowing the warm water to act as a lubricant and the foreskin should be gently pulled back. Failure to clean this area properly will result in smegma collection, causing bad odours and an increased risk of infection.

The area should be cleaned after sex, even if wearing a condom, to prevent bacterial build-up and unpleasant smells arising.





# Year 7 Religious Education – What was so radical about Jesus?

1a. Key Terms	Description
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

## 2. Messiah

Jewish tradition promised that God would send a 'Messiah', a chosen one to save them from the persecution that they had faced for centuries.

Christians believe that through his crucifixion, Jesus atones for mankind's sin and therefore saves human beings from the eternal punishment of hell. Therefore, they believe that he is this promised Messiah.

At the Last Supper, the day before his death, Jesus shared bread and wine with his disciples and told them that the wine represented his blood, which was to be shed to form a new covenant with mankind – a new promise that God would grant eternal life to those who followed his teachings.



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

## 3. How did Jesus treat the marginalised?

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').

## 4. 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.



# Year 7 Religious Education – What was so radical about Jesus?

1b. Key Terms	Description
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

## 5. How did Jesus challenge the authorities?

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.

## 6. 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



## 7. 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.



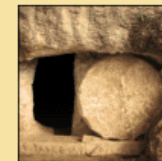
#### Maundy Thursday

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.





# Year 7 Religious Education – What is good and what is challenging about being a Muslim teenager in Britain today?

1. Key Terms	Description
Five Pillars of Islam	The core practices that all Muslims follow
Shahadah	The declaration of faith
Salah	5 daily prayers
Sawm	Fasting during Ramadan
Hajj	Pilgrimage to Makkah
Zakat	Donating money to help the poor
Sunni	The largest denomination of Islam that makes up around 85% of Muslims around the world
Shi'a	The second largest denomination of Islam, making up around 15% of Muslims
Islamophobia	Hatred and discrimination of someone because they are Muslim, or of things that are associated with Islam
Media	Where we get our news and information from (eg newspapers, TV news, magazines etc)
Stereotype	A widely held, but fixed and oversimplified view of a particular type of person or group

**Important note:** Remember when you are making mindmaps/dual coding etc that Muslims consider it very disrespectful to make images of Allah or the prophets.

## 3a. Five Pillars of Islam

The Five Pillars are five important practices that all Muslims include in their lives. Some of these should be carried out on a daily basis, while others are only obliged to be carried out once in a lifetime.



## 2. Why are there different denominations of Islam?

After the death of Prophet Muhammad, there was disagreement amongst Muslims over who should be his successor. Some believed that it should be Abu Bakr, Muhammad's best friend, others believed it should have been Ali, Muhammad's son-in-law. Abu Bakr became the next caliphate, leader of the Muslim Empire, with those who supported him becoming known as Sunni Muslims. Those who supported Ali, became known as Shi'a Muslims. Whilst both groups have very similar beliefs, there are some differences in their core beliefs and practices.

## 3b. Shahadah

This is the declaration that 'There is no God but Allah and Muhammad is his messenger'. Muslims say the shahadah every time they pray. It is also the first thing that should be whispered into a newborn baby's ear and is hoped to be the last thing a Muslim will hear before they die. Saying the shahadah 3 times in front of witnesses is all that is needed to become Muslim.

Reciting the shahadah reminds Muslims of one of the core beliefs of Islam – Tawhid. This is the belief in the oneness of Allah and is fundamental to the Islamic faith.



# Year 7 Religious Education – What is good and what is challenging about being a Muslims teenager in Britain today?

## 3c. Salah

Muslims are obliged to pray 5 times every day.

Prayers take place:

- Before sunrise
- After midday
- Mid afternoon
- After sunset
- Between sunset and midnight

Salah helps Muslims to regularly connect with God and remember their duties as a Muslim

## 3d. Sawm

Ramadan is the Islamic holy month. It is believed to have been during this month that the Qur'an was first revealed to Muhammad.

Muslims fast from sunrise to sunset during Ramadan. This means that they do not eat or drink anything during daylight hours. In addition to this, Muslims will refrain from any activities that are not considered spiritually enhancing and will focus on developing their faith and their relationship with Allah.

Fasting helps Muslims to feel closer to God by focussing on their faith and not on material things like food. It also helps them to understand what it is like for people who do not have access to adequate food and water.

## 3e. Zakat

Muslims are expected to donate to charity as part of the Five Pillars.

It is expected that all Muslims will donate 2.5% of their disposable income (the money they have left after their bills have been paid) to support the poor.

Muslims should ensure that their zakat has been paid before the end of Ramadan.

**Important note:** Remember when you are making mindmaps/dual coding etc that Muslims consider it very disrespectful to make images of Allah or the prophets.

## 3f. Hajj

All Muslims who are physically and financially able to are expected to go on a pilgrimage to visit Makkah in Saudi Arabia at least once in their lifetime. Makkah was the birthplace of Prophet Muhammad and is considered the holiest site in Islam.

Whilst on Hajj, Muslims take part in a number of different rituals that remember the life of Muhammad and of the Prophet Ibrahim including:

- Circling the Ka'aba
- Visiting the Zamzam well, which is believed to have appeared when Hagar and Ishamel were lost in the desert without water
- Visiting Mount Arafat where they pray for forgiveness from Allah
- Throwing stones at pillars which represent the devil

Hajj is an incredibly spiritual experience for Muslims that allows them to reaffirm their faith and to walk in the footsteps of important Muslim figures. It also allows them to feel closer to Allah and to be forgiven for their sins.

## 4. What is Islamophobia?

Some people have blamed all Muslims for recent terrorist attacks carried out by extreme groups who say they follow the religion of Islam. Hating someone or treating them differently because they are a Muslim is called "Islamophobia".

But many people say those terrorist groups have extreme beliefs of hatred and violence that have little to do with what most Muslims believe.

They say it is important not to blame a big group of people for what a small number of individuals have done.

Islamophobia can result in Muslims being targeted, whether in person or online. They can be badly treated, insulted or even physically hurt.

Islamophobia is often made worse by negative representations of Muslims or Islam in the media. If Muslims are only ever shown in a negative way, then this is the impression that people get of Islam, particularly if they don't know any Muslims in real life. Recent positive representations of Islam on television and through sport (people like Mo Salah) have led to an increased acceptance of Islam.



## Y7 Spanish Learning Cycle 2

Numbers

The alphabet

Classroom language

Saying the date

Describing the weather

Getting to know each other

Important verb – *tener*

Things I have

Family members

Physical descriptions

Important verb - *ser*

More descriptions

Regular -ar verbs

Regular er / ir verbs

At what time

My routines

Christmas

My Home

The area where I live

Places in town

"Language is a gift. Learning a new language is becoming a member of the club - the community of speakers of that language."

"One language sets you in a corridor for life. Two languages open every door along the way."

-Frank Smith

### 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**



# Year 7 Spanish – The Twelve Point Check

<b>1. Time frame</b>  <b>often</b> – a menudo <b>sometimes</b> – a veces <b>normally</b> – normalmente <b>at the weekends</b> - los fines de semana <b>on Mondays</b> - los lunes <b>at breaktime</b> - durante el recreo <b>during the holidays</b> - durante las vacaciones <b>when it is raining</b> - cuando llueve <b>in summer</b> - en verano <b>in winter</b> - en invierno	<b>2. 'I' form of a verb</b>  <b>I am</b> – soy <b>I am</b> (+ place / mood) – estoy <b>I have</b> – tengo <b>I go / I am going</b> – voy <b>I study</b> - estudio <b>I speak</b> - hablo <b>I play</b> - juego <b>I do</b> – hago <b>I ride</b> - monto <b>I listen</b> - escucho <b>I watch</b> - veo <b>I can</b> - puedo <b>I want</b> - quiero <b>I need</b> - necesito	<b>3. we/ he/ she verb form</b>  <b>he / she is</b> - es <b>we are</b> – somos  <b>he / she is</b> (+place/mood) - está <b>we are</b> - Estamos  <b>he / she has</b> - tiene <b>we have</b> - tenemos  <b>he / she goes</b> - va <b>we go</b> – vamos  <b>he/ she studies</b> - estudia <b>we study</b> - estudiamos	<b>4. Negation</b>  <b>not / don't</b> – No <b>never</b> – nunca  Examples: I <b>don't</b> do gymnastics – <b>no</b> hago gimnasia  I <b>never</b> eat cheese – <b>nunca</b> como queso	<b>5. Conjunctions</b>  <b>furthermore</b> – además <b>also</b> – también <b>however</b> – no obstante <b>although</b> – aunque <b>above all</b> – sobre todo <b>because of this</b> – por eso <b>therefore</b> – así que <b>because</b> – porque <b>because</b> – ya que	<b>6. Justified opinion</b>  <b>I love</b> – me encanta(n) <b>I really like</b> – me flipa(n) <b>I like</b> - Me gusta(n) <b>I don't like</b> – no me gusta(n) <b>I hate</b> - Odio  <b>because</b> – porque  <b>from my point of view</b> – desde mi punto de vista <b>in my opinion</b> – a mi juicio <b>I would say that</b> – diría que
<b>7. Contrasting opinion</b>  <b>Examples:</b> I <b>like</b> comedies <b>because</b> they are funny <b>but</b> my best friend <b>doesn't like</b> them <b>because</b> <u>she says that</u> they are stupid.  <b>Me gustan</b> las comedias <b>porque</b> son graciosas <b>pero</b> a mi mejor amiga <b>no le gustan ya que</b> <u>dice que</u> son estúpidas.	<b>8. Comparative</b>  <b>more...than</b> – más...que <b>less..than</b> – menos...que <b>better than</b> – mejor que <b>worse than</b> – peor que  Examples: History is <b>better than</b> biology – la historia es <b>mejor que</b> la biología  I am <b>taller than</b> my brother – Soy <b>más alto que</b> mi hermano	<b>9. Superlative phrase</b>  <b>the best thing</b> – lo mejor <b>the worst thing</b> – lo peor  Examples: <b>The best thing</b> about my school is the pool – <b>lo mejor</b> de mi insti es la piscina  <b>The worst thing</b> about my school is the uniform – <b>lo peor</b> de mi insti es el uniforme.	<b>10. Additional tense</b>  <b>yesterday</b> - ayer <b>last Sunday</b> - el domingo pasado <b>I went</b> - fui <b>I saw / watched</b> - vi <b>I listened</b> - escuché  <b>tomorrow</b> – mañana <b>when I am older</b> – cuando sea mayor <b>I am going to + verb</b> - Voy a + infinitive verb <b>I would like to + verb</b> - Me gustaría + infinitive verb	<b>11. WOW-phrase</b>  <b>What a shame</b> – ¡Qué pena! <b>How embarrassing!</b> – ¡Qué vergüenza! <b>How lucky!</b> – ¡Qué suerte!  <b>If I were rich</b> – Si fuera rico/a + conditional (I would) <b>If I had time</b> – si tuviera tiempo + conditional (I would) <b>If I could</b> – si pudiera + conditional (I would)	<b>12. Proofread for ....</b>  <ul style="list-style-type: none"> <li>• repetition</li> <li>• missing accents(<b>sp</b>)</li> <li>• missing words (<b>Λ</b>)</li> <li>• spelling errors (<b>sp</b>)</li> <li>• adjective agreement (<b>A</b>)</li> <li>• syntax errors (<b>wo</b>)</li> <li>• verb agreement (<b>vp</b>)</li> <li>• tense agreement (<b>vt</b>)</li> <li>• tenses match time frame (<b>ww</b>)</li> <li>• vocabulary errors (<b>ww</b>)</li> <li>• Can you add any extra features of the Twelve-Point Check?</li> </ul>



Classroom language	
Español	Inglés
¿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 móvil	a mobile phone
un cuaderno	an exercise book

Describing the weather	
Hoy...	Today ...
hace sol	it's sunny
hace frío	it's cold
hace calor	it's hot
hace viento	it's windy
hace buen tiempo	it's good weather
hace mal tiempo	it's bad weather
llueve	it's raining
nieva	it's snowing
hay nubes	it's cloudy
<b>Saying what the weather is like today:</b> <b>Hoy <u>hace sol</u> y no <u>hace mal tiempo</u> pero <u>hay nubes</u>.</b>	

Days and dates	
Hoy es...	Today is...
lunes	Monday
martes	Tuesday
miércoles	Wednesday
jueves	Thursday
viernes	Friday
sábado	Saturday
domingo	Sunday
enero	January
febrero	February
marzo	March
abril	April
mayo	May
junio	June
julio	July
agosto	August
septiembre	September
octubre	October
noviembre	November
diciembre	December
Saying the date: <b>Hoy es <u>lunes</u>, <u>veintidós</u> de <u>septiembre</u> de dos mil veinticinco.</b>	

Los números
1. uno
2. dos
3. tres
4. cuatro
5. cinco
6. seis
7. siete
8. ocho
9. nueve
10. diez
11. once
12. doce
13. trece
14. catorce
15. quince
16. dieciséis
17. diecisiete
18. dieciocho
19. diecinueve
20. veinte
21. veintiuno
22. veintidós
23. veintitrés
24. veinticuatro
25. veinticinco
26. veintiséis
27. veintisiete
28. veintiocho
29. veintinueve
30. treinta
31. treinta y uno

The alphabet	
letter	Sounds like
a	cat
b	beh
c	theh
d	deh
e	eh like egg
f	effeh
g	heh
h	atcheh
i	ee
j	hota
k	kah
l	eleh
m	emeh
n	eneh
ñ	enyeh
o	lot
p	peh
q	koo
r	erreh
s	esseh
t	teh
u	oo
v	oobeh
w	oobeh dobleh
x	eh kis
y	ee gri egah
z	theta



## Weeks 1 & 2

[illegible]

### Week 3

¿Dónde vives?	Where do you live?
Estoy	I am
Estamos	We are
Vivo	I live
Vivimos	We live
Soy	I am
Es	He / she / it is
Somos	We are
Una casa	A house
Un piso	A flat
En la montaña	In the mountain
En el campo	In the countryside
En la costa	On the coast
una ciudad	a city/town
un pueblo	A town
bonito	pretty
antiguo	Old
cómodo	Comfortable
pequeño	Small
tranquilo	Calm / quiet
histórico	historic
aburrido	Boring
norte	North
sur	South
este	East
oeste	West

## Week 4

¿Qué hay en tu pueblo?	What is there in your town?
Un castillo	A castle
Un (super)mercado	A (super)market
Un estadio	A stadium
Una piscina	A swimming pool
Una Universidad	A university
Una biblioteca	A library
Un colegio	A school
Un cine	A cinema
Un hospital	A hospital
Unos museos	Some museums
Unas plazas	Some town squares
Muchos parques	Lots of towns
Muchos restaurantes	Lots of restaurants
Muchas tiendas	Lots of shops
<b>Prepositions of place</b>	
Sobre	On top of
Debajo de	Under
Delante de	In front of
Detrás de	Behind
en	in
Entre	Between
Al lado de	Next to
Cerca de	near

Prepositions of place
-----------------------

Sobre	On top of
Debajo de	Under
Delante de	In front of
Detrás de	Behind
en	in
Entre	Between
Al lado de	Next to
Cerca de	near



## Week 5

Describe la foto	Describe the photo
hay	there is / are
está / están	he/ she is / they are
dentro / fuera	inside / outside
en la ciudad / el campo	in the town / the country
hace calor / sol	it is hot / sunny
llueve	it is raining
nieva	it is snowing
un hombre	a man
una mujer	a woman
un chico/ una chica	a boy / girl
lleva / llevan	he/ she is / they are wearing
esta(n) sonriendo	they are talking
esta(n) hablando	they are talking
Comparativos	Comparatives
más.(adj)..que	more..(adj)...than
menos..(adj)...que	less..(adj)...than
Mis propios ejemplos	My own examples

## Week 6

Mi insti / mi colegio	My school
se llama	it is called
los profesores	the teachers
los alumnos	the students
voy	I go
empiezan	they start
terminan	they finish
mi colegio tiene	My school has
un patio	a playground
un gimnasio	a gym
una piscina	a pool
la clase	the classroom
una biblioteca	a library
un campo de fútbol	a football field
un campo deportivo	a sports field
una oficina	an office
una sala de ordenadores	IT suite
el edificio	a building
nuevo	new
antiguo	old
moderno	modern
amplio	spacious
pequeño	small
grande	big
cerca de	near to
lejos de	far from
a las ocho	at 8 o'clock
y media	half past
estudiar	I study
aprender	I learn

## Week 7

El transporte	Transport
voy	I go
vamos	We go
en coche	by car
en autobús (escolar)	by (school) bus
en barco	by boat
en tren	by train
en metro	by metro
en bicicleta	by bike
en avión	by plane
a pie	on foot
Las asignaturas	Subjects
la historia	history
la música	music
el baile	dance
el comercio	business
la tecnología	dt
la religion	re
el teatro	drama
el inglés	english
el español	spanish
los idiomas / las lenguas	languages
las ciencias	science
el dibujo / el arte	art
la educación física	pe
las matemáticas	maths



# Year 7 Spanish

## Week 8

Las opiniones	Opinions
me gusta (mucho)	I like (it) (a lot)
me encanta	I love (it)
me da igual	I don't mind (it)
no me gusta (nada)	I don't like (it) (at all)
me gustan (mucho)	I like (them) (a lot)
me encantan	I love (them)
me dan igual	I don't mind (them)
no me gustan	I don't like (them)
odio	I hate
no aguanto	I can't stand
interesante	interesting
aburrido	boring
difícil	difficult
fácil	easy
bueno	good
malo	bad
divertido	fun
útil	useful
inútil	pointless
emocionante	exciting
es	he/she/it is
son	they are

## Week 9

Los profesores	The teachers
le gusta	he/she likes (it)
no le gusta	he / she doesn't like (it)
nos gusta	we like (it)
no nos gusta	we don't like (it)
en mi opinión	in my opinion
pienso que	I think that
creo que	I believe that
amable	nice
simpático	kind
alegre	cheerful
guay	cool
estricto	strict
severo	strict
porque	because
dado que	because
ya que	because
puesto que	because
pero	but
también	also
sin embargo	however
aunque	although
un poco	a bit
muy	very
bastante	quite
tan	so
demasiado	too

## Week 10

Durante el recreo	At breaktime
comer	to eat
beber	to drink
jugar	to play
hablar	to talk / speak
con mis amigos	with my friends
fruta	fruit
agua	water
El día escolar	The school day
a veces	sometimes
generalmente	generally
siempre	always
cada día	each day
normalmente	normally
nunca	never
todos los días	every day
por la mañana	in the morning
por la tarde	in the afternoon
primero	first/firstly
luego	then
después	After(wards)
hago mis deberes	I do my homework
leo	I read
escribo	I write
escucho	I listen



## Year 7 Spanish

## Week 11

El uniforme	The uniform
llevar	to wear
llevo	I wear
llevamos	we wear
una chaqueta	a blazer
una corbata	a tie
una camisa	a shirt
una camiseta	a t-shirt
una falda	a skirt
un sombrero	a hat
un jersey	a jumper
un vestido	a dress
unos pantalones	some trousers
unos zapatos	some shoes
unas medias	some tights
cómodo	comfortable
incómodo	uncomfortable
práctico	practical
caro	expensive
barato	cheap
necesario	necessary
bonito	nice/ pretty
rojo	red

## Week 12

[illegible]

## Week 13

[illegible]



## Year 7 Physical Education - Cricket

### Basic Knowledge and technique practice of key skills

#### 1. Basic Knowledge

##### •Rules of the Game

- Understanding the objective of cricket (runs, wickets).
- Field positions and their roles.
- Scoring system (runs, extras, overs).

#### 2. Batting Skills

- Grip and Stance
- Correct bat grip (top hand and bottom hand). Balanced stance facing the bowler.

#### 3. Bowling Skills

- Basic Bowling Action
- Straight arm delivery.
- Run-up and follow-through.
- Line and Length
- Targeting stumps or good length area.



#### 4. Fielding Skills

##### Catching

High catches (cup hands, watch the ball). Close catching (reaction drills).

##### Ground Fielding

Long barrier technique.

Picking up and throwing accurately.

Throwing Overarm throw for distance.

Underarm flick for short throws.



## Year 7 Physical Education - Rounders

### Introduction to Rounders

#### 1. Knowledge

Basic rules (batting order, scoring, outs).

Equipment: bat, ball, posts.

Safety and fair play.

#### 2. Batting

Correct grip and stance.

Eye on the ball, timing basic hits.

Running to bases safely.

#### 3. Fielding

Catching technique (two hands, watch the ball).

Basic throwing (underarm and overarm).

Positioning at bases.

#### 4. Tactics

Simple batting tactics: hit into space.

Basic fielding awareness: backing up throws.

Communication between players.





## Year 7 Physical Education – Health Related Exercise

### Introduction to Health & Fitness

#### 1. Knowledge

What is health-related exercise?

Components of fitness: cardiovascular endurance, muscular strength, flexibility, body composition.

Basic warm-up and cool-down principles.

Importance of hydration and safety.

#### 2. Practical Skills

Simple aerobic activities (running, skipping).

Basic bodyweight exercises (squats, lunges, press-ups).

Stretching for flexibility

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#### 3. Tactics

How to pace yourself during continuous exercise.

Understanding effort levels (using talk test or simple RPE scale). Working in pairs/groups for motivation.

## Year 7 Physical Education - Athletics

#### 1. Knowledge

Basic rules for track and field events.

Safety in running, jumping, and throwing.

Understanding event categories: sprints, middle-distance, throws, jumps.

#### 2. Running

Sprinting technique: high knees, arm drive.

Starting positions: standing and basic crouch start.

Pacing for middle-distance.

#### 3. Jumping

Basic long jump technique: run-up, take-off, landing.

High jump introduction: scissor technique.

#### 4. Throwing

Basic grip and stance for shot put and javelin.

Safety when throwing.

#### 5. Tactics

Pacing strategies for longer runs

.Efficient transitions in relay (basic baton pass).

Understanding strengths and weaknesses.





# Year 7 Physical Education - Softball

## Introduction to Softball

### 1. Knowledge

Basic rules: innings, outs, scoring.

Equipment: bat, ball, gloves, bases.

Safety and fair play.

### 2. Batting

Correct grip and stance.

Eye on the ball, timing basic hits.

Running bases safely.

### 3. Fielding

Catching technique (two hands, watch the ball).

Basic throwing (underarm and overarm).

Positioning at bases.

### 4. Tactics

Simple batting tactics: hit into space.

Basic fielding awareness: backing up throws.

Communication between players.

















