



**Year 7**

**Learning Cycle 3**

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

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

	Mon A	Tue A	Wed A	Thu A	Fri A
Core Activity	Reading	Sparx Maths XP	Reading	Sparx Maths XP	Reading
Subject 1	Geography	History	Science	Maths	Spanish
Subject 2	RE	Art	Food	English	Computing
	Mon B	Tue B	Wed B	Thu B	Fri B
Core Activity	Sparx Maths XP	Reading	Sparx Maths XP	Reading	Sparx Maths XP
Subject 1	Geography	Maths	Science	Spanish	English
Subject 2	Music	History	Drama	DT	

# Year 7 Learning Cycle 3 Knowledge Check Timetable

Lesson		17/06	18/06	19/06	20/06	21/06	24/06	25/06	26/06	27/06	28/06
		A					B				
		Mon	Tue	Wed	Thu	Fri	Mon	Tue	Wed	Thu	Fri
1	7X1							Music		DT	RE
	7X2							Computing		Geography	
	7X3									RE	History
	7X4					Food				Art	Music
	7Y1				Computing				Geography	Drama	
	7Y2								Science	Spanish	
	7Y3				Art				Music	Food	
	7Y4				RE				History		
2	7X1						English		History		
	7X2						English		Science		Art
	7X3	DT					English				Food
	7X4						English		Computing		
	7Y1				DT				History		Maths
	7Y2				Art			Music	History	RE	Maths
	7Y3				Drama			RE	Science	Geography	Maths
	7Y4			Music	Drama			Geography	Computing	Art	Maths
3	7X1							Geography	Spanish		Maths
	7X2		RE						History	Music	Maths
	7X3		Music					Art	Geography		Maths
	7X4					RE		DT	Science		Maths
	7Y1		Food		Art			Spanish			
	7Y2				Food			Music			
	7Y3	Computing			DT			History			
	7Y4		DT		Food			Spanish			
4	7X1		Drama	Computing				Food	Science		
	7X2		Food		Food			Art	Spanish		
	7X3		Computing					Spanish	Science		
	7X4			Drama			Geography	Spanish	History		
	7Y1				RE		English	Science			
	7Y2			Computing			English	DT		Geography	
	7Y3						English	Spanish			
	7Y4						English	Science			

# ATTENDANCE FOCUS

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### Attendance Reflection Sheet

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

### To improve my attendance, I commit to the following:

1.

2.

3.

What attendance do you want to end this term with?

What is your end of year attendance target?

What is our minimum expected attendance to be rewarded?

### Possible strategies to REACH MY attendance Goals

- I will make attending school every day a priority.
- I will keep track of my attendance and absences.
- I will set my alarm clock for \_\_\_\_\_ a.m.
- I will attend school everyday unless I am truly sick.
- I will find a relative, friend or neighbour who can take me to school if I miss the bus.

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

# How to Use your Learning Cycle Knowledge Organiser

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




At Poltair we **SORT** it!

## What are the SORT strategies?

Summarise	Organise	Recall	Test
Summarise and condense any class notes, revision guides and revision.	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 <u>e.g.</u> 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>• Cornell Notes</li><li>• Flash cards</li><li>• Mind mapping</li><li>• Revision clocks</li><li>• Dual coding</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: <b>O</b> rganise	Step 2: <b>S</b> ummarise	Step 3: <b>R</b> ecall	Step 4: <b>T</b> est
<p>a. Use the daily planner on page 8 to identify all the times when you will complete your home learning and when you will complete independent revision.</p> <p>b. RAG each of the PLCs so you identify your RED topics – the ones that you are unsure of, or you do not fully understand.</p> <p>c. Write your RED topics into your daily planner for when you will revise that subject</p>	<p>When you revise for a specific topic use your knowledge organiser, revision guide, website <u>etc</u> 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>• Mind maps</li> <li>• Cornell Notes</li> <li>• Revision Clocks</li> </ul> <p>For more details go to the SORT webpage:  <a href="https://www.poltairschool.co.uk/sort">https://www.poltairschool.co.uk/sort</a></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>• Blur 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 <u>test</u> 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 cannot confidently recall the knowledge you will need to repeat step 3.</p>



At Poltair we **SORT** it!

# Home Learning & Revision Planner

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



# Year 7 Learning Cycle 3 Personal Learning Checklists

## English

Key Ideas	S	O	R	T
I understand what an autobiography is and why they are written.				
I can understand significant ideas conveyed by Malala Yousafzai in her writing.				
I can understand important ideas expressed by Benjamin Zephaniah in his writing.				
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 a formal letter to express an opinion.				
I know how to use a range of sentence structures in my letter writing.				

## Mathematics

Key Ideas	SPARX	S	O	R	T
Do I know what parallel and perpendicular lines are?					
Can I calculate angles around a point?	M818				
What are the 4 triangles?					
Can I calculate the angles in a triangle?	M351				
What are quadrilaterals?					
Can I calculate angles in quadrilaterals?	M679				
What are sequences?	M981, M991, U958				
Can I generate a sequence?					
Are these terms in a sequence?					
Can I plot co-ordinates?	M618				
Can I plot a linear graph?	M932				

## Mathematics

Key Ideas	SPARX	S	O	R	T
What is symmetry?	M523				
What are vectors and how to they work?	U903				
What is translation?	M139				
What are the simple linear graphs?	M797				
What is reflection?	M290				
What is rotation?	M910				
What is an enlargement?	M178, U519				
Can I describe an enlargement?					
Can I combine transformations	M881, U766				

# Year 7 Learning Cycle 3 Personal Learning Checklists

## Science – Periodic Table

Key Ideas	S	O	R	T
I understand and can state the difference between an atom, element and compound.				
I can describe the structure of the atom				
I can identify the first 20 elements of the periodic table using the chemical symbol				
I know the names of groups 1, 7 and 0.				
I know that Mendeleev discovered the periodic table and why he left gaps				
I know the difference between a metal and a non-metal and where they can be found in the periodic table				
I know the properties of group 1, 7 and 0 elements				
I can recall the state changes that occur at melting and boiling points				
I can describe the structure, properties and uses of alloys				

## Science - Space

Key Ideas	S	O	R	T
I can name and order all the planets in our solar system				
I can recall the main scientific theory of the big bang which describes a theory of how the universe began				
I understand the life cycle of a star				
I can describe Earth's orbit and rotation				
I can describe the link between the Earth's tilt and the seasons				
I can identify the moon as Earth's natural satellite, recall the phases of the moon and understand how the moon is linked to Earth's tides.				
I can describe the role of the ISS and its importance in exploring our solar system				
I can identify the main events in the history of space travel and understand the importance of each event				
I can evaluate the advantage and disadvantages of living on Mars				

## Art

Key Ideas	S	O	R	T
I understand tone, texture, shape, pattern, scale, line and composition.				
I understand how to use a brainstorm to develop ideas.				
I experimented with a range of materials to create texture and tone.				
I can explain how to develop my ideas.				
I can explain how my ideas are linked to Hundertwasser & Kurt Jackson.				
I can explain what a poster is and how is it used to express an idea.				

# Year 7 Learning Cycle 3 Personal Learning Checklists

## 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 computing terms, Sequence and Selection				
I can create and use variables in scratch				
I can explain the difference between Comparison Operators and Logic Operators				
I can create Scratch code which uses selection.				
I can explain how iteration can be used to improve code.				
I can identify when count control iteration is being used.				

## Design & Technology

Key Ideas	S	O	R	T
I can use ideas from existing designs as inspiration.				
I can select a material with suitable properties to manufacture my mobile phone holder.				
I can select the correct tool when working to manufacture my design.				
I can use tools safely and with precision.				
I can evaluate my product to identify what went well and areas for improvement.				
I can use ideas from existing designs as inspiration.				

## Drama

Key Ideas	S	O	R	T
I can use facial expressions and gestures in my performance appropriate to my character.				
I can project my voice and speak clearly using a vocal skills.				
I can identify physical and vocal skills and consider which would be appropriate for different characters.				
I can recognise the structure of a typical story and can identify the different parts that make it up.				
I can devise a story that uses Freytag's Pyramid.				
I can stay in role throughout a performance.				

# Year 7 Learning Cycle 3 Personal Learning Checklists

## Food Technology

Key Ideas	S	O	R	T
I can explain sources of micronutrients in food				
I can explain the term provenance with examples of food labels to identify provenance				
I understand the importance of energy balance.				
I can explain the difference between macronutrients and micronutrients				
I can explain the four conditions bacteria needs to multiply				
I can explain why food should not be kept in the danger zone				

## Geography - Coasts

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				

## Geography - Weather

Key Ideas	S	O	R	T
Define the terms weather and climate				
Describe the UK weather patterns				
Explain the effects of air masses upon UK weather				
Explain the factors that influence UK weather				
Define microclimate				
Explain each factor that influence microclimates				
Outline the stages involved in a geographical enquiry				
Explain the stages involved in a microclimate enquiry				

# Year 7 Learning Cycle 3 Personal Learning Checklists

## History

Key Ideas	S	O	R	T
I can explain what the Reformation was				
I can state some examples of African people in Tudor England				
I can explain life for African people in Tudor England				
I can explain life for Tudor women				
I can explain why the civil war began				
I can state examples of Cornwall in the Civil War				

## Music

Key Ideas	S	O	R	T
I am able to successfully understand and can play a polyrhythm.				
I can follow a cyclic rhythm and am able to explain what this is.				
I can perform a call and response rhythm.				
I can name a number of West African instruments.				
I understand and can teach others what the three main djembe techniques are.				
I understand about the cultural and historical significant of West African Music.				

## Religious Education

Key Ideas	S	O	R	T
I can outline the key Sikh beliefs about God.				
I can define the 5 Ks and explain their importance				
I can define Nam Simran, Kirat Karna and Vand Chhakna				
I can examine what the main duties of a Sikh are				
I can explain what makes these duties so important.				
I can consider how following Sikh teachings might be challenging for young people.				

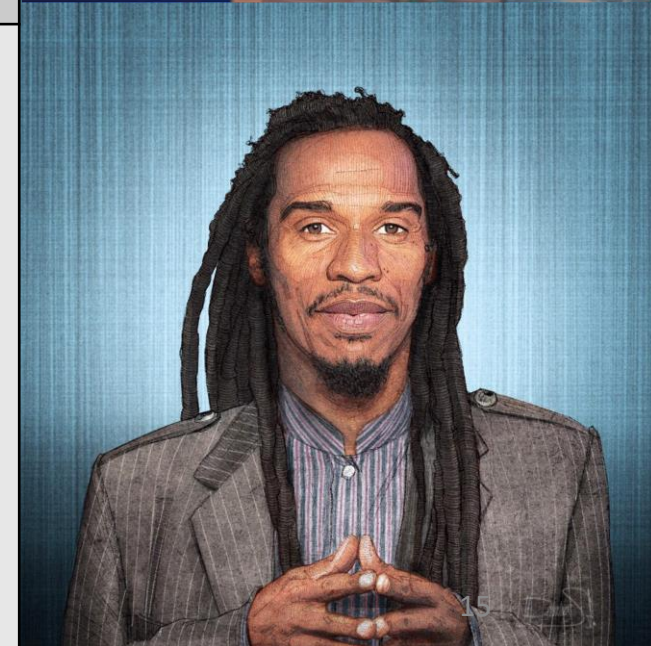
# Year 7 Learning Cycle 3 Personal Learning Checklists

## Spanish

Key Ideas	S	O	R	T
I understand the rules for the present tense				
I can talk about the activities I normally do in my free time				
I can talk about the weather				
I understand the rules for the future tense				
I can talk about what I am going to do at the weekend				
I can recognise verbs in the past tense				
I can talk about what I did recently				
I can order food in a restaurant				
I can give my opinion of different foods				

# Year 7 English Learning Cycle 3 – Autobiography

1. Subject Vocabulary	2. Vocabulary	3. Writers
<b>1a = autobiography (noun)</b> an account of a person's life written by that person.	<b>2a = oppression (noun)</b> a situation in which people are ruled in a cruel way and prevented from having opportunities and freedom	<b>3a = Malala Yousafzai</b> Malala Yousafzai was born in Pakistan, where girls like her were not allowed to go to school. She spoke out about this unfairness. When she was just 15, the Taliban tried to stop her by shooting her in the head. But she survived and kept on speaking up for girls' education.  After the shooting, Yousafzai didn't give up. She traveled around the world, telling everyone that girls deserve the chance to go to school. She even won the Nobel Peace Prize. Now, she runs the Malala Fund, which helps girls get an education.
<b>1b = triple (noun)</b> Use of three words in a short list to emphasise your point and support your argument.	<b>2b = rebellion (noun)</b> action against those in authority, against the rules	
<b>1c = emotive language (noun)</b> Words and phrases that make the reader feel strong emotions e.g. sympathy, anger	<b>2c = founded (verb)</b> to have started something, to have brought something into existence	
<b>1d = protagonist (noun)</b> the main character in a text	<b>2d = chanted (verb)</b> to repeat or sing a phrase or song continuously	
<b>1e = imperative (noun)</b> a command or an order	<b>2e = terrorist (noun)</b> someone who uses – or uses the threat of - violence, serious damage to property or attempts to cause a threat to people's lives, and where they are designed to influence the government, or an international governmental organisation or to intimidate the public, for the purpose of advancing a political, religious, racial or ideological cause.	
<b>1f = repetition (noun)</b> use of a word or phrase more than once to highlight its importance	<b>2f = emerging (verb)</b> coming out of; growing	<b>3b = Benjamin Zephaniah</b> Benjamin Zephaniah is a famous poet and writer from England. He was born on April 15, 1958, in Birmingham. When he was young, he faced discrimination because of his Jamaican heritage. He used his experiences to speak out through his poetry. Zephaniah became known for his powerful words about equality and justice.  Zephaniah has written poems and other texts that have inspired people all over the world. His words encourage others to stand up for what is right and to never give up hope.
<b>1g = contrast (noun)</b> description of two different things that highlights their differences	<b>2g = dignity (noun)</b> the importance and value that a person feels, that makes others respect them or makes them respect themselves	
<b>1h = quotation (noun)</b> words or phrases taken directly from a text to support a critical idea and marked out using quotation marks	<b>2h = ambitions (noun)</b> strong wishes to achieve something	
<b>1i = evidence (noun)</b> Quotations or references to a piece of writing, selected to support a point made when writing analysis.	<b>2i = courage (noun)</b> bravery	
	<b>2j = independent (adjective)</b> not influenced or controlled in any way by other people or things	
	<b>2k = empower (verb)</b> to give someone official authority, freedom or motivation to do something	
	<b>2l = united (adjective)</b> joined together as a group	

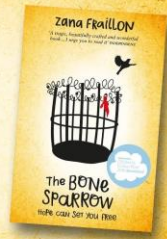




3. Vocabulary	4. Subject Vocabulary	5. Formal Letter Layout
<b>7a = refugee (noun)</b> a person who has been forced to leave their country in order to escape war, persecution or disaster	<b>4a= language (noun)</b> Words or methods (techniques) used by writers to present their meanings or create effects.	<div><div>1.</div><div>2.</div><div>3.</div><div>4.</div><div>5.</div><div>6.</div></div> <div><div>1. Writer's address</div><div>2. Date</div><div>3. Recipient's address</div><div>4. Greeting / salutation</div><div>5. Main body</div><div>6. Sign-off</div></div>
<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		
<b>7l = etched</b> to cut a pattern or picture into a smooth surface, especially on metal or glass		



# Year 7 English Learning Cycle 3 – The Bone Sparrow

1. Plot		 <p>The <b>BONE</b> Sparrow</p> <p>Zana Fraillon</p>
1a = Ch 1 - 10	<ol style="list-style-type: none"> <li>We learn about Subhi's life in a refugee detention centre, with his family Maa and his sister Queeny.</li> <li>Life within the detention centre and the harsh conditions are explained, along with the the superstition of the 'deadly' bone sparrow.</li> <li>Jimmie life is described.</li> <li>We read about Eli the tradesman, who delivers secret packages with Subhi to the centre.</li> <li>Subhi gets caught by Beaver.</li> <li>The reader learns about Jimmie's life without her mother.</li> <li>Subhi, disorientated from his fall, spots Jimmie in the distance.</li> <li>Harvey explains Beaver's circumstances. Eli is transferred to the adult section of the centre even though he is only a child.</li> <li>Jimmie's thinks about Subhi's existence and is eager to go back to the centre.</li> <li>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>Subhi reads the first story of Jimmie's ancestors in her mum' journal.</li> <li>Jimmie reflects on the story and hears her mum's voice.</li> <li>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>Subhi meets with Jimmie and reads the next part of her mum's story.</li> <li>Jimmie reflects on Subhi's life in the Detention Centre and is frustrated to hear how he lives..</li> <li>Queenie and Eli take secret pictures of the camp to send to the papers to inform the public about their horrific conditions.</li> <li>Nasir dies and Subhi continues to tell Jimmie's story.</li> <li>A sickness enters the camp. Subhi continues to read Jimmie's story.</li> <li>Subhi is reflecting and discovering his own identity.</li> <li>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>Jimmie brings Subhi a picnic and asks him to help her read.</li> <li>We learn about Jimmie going back to a home in which she is neglected.</li> <li>Eli and Queeny have an argument. Subhi finds a knife buried in the dirt but leaves it hidden in a different location.</li> <li>Jimmie's dad - to make up for his late working hours - gets her a present which reflects her bone sparrow.</li> <li>Hunger strikes and riots develops more seriously in the camp.</li> <li>Jimmie picks up flu and is weak from her sickness. She is unable to walk to meet Subhi.</li> <li>Subhi reads Jimmie's last part of the story while he waits for her. He is unaware of her illness.</li> <li>Huge change in atmosphere as the Jackets try to control the riots happening in the camp using force and brutality.</li> <li>Subhi escapes the centre to find Jimmie unconscious and rings for an ambulance.</li> <li>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>We learn about Eli's story about his journey as a refugee.</li> <li>Subhi is in shock after witnessing the death of Eli. Harvey is trying to console him through guilt.</li> <li>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>Subhi learns the truth about his Ba.</li> <li>Jimmie returns to good health and Subhi wants to write about Jimmie's story and his experience.</li> <li>We begin to see change and Subhi reads the final story to Jimmie.</li> <li>Subhi talks about new beginnings in his story to Maa and Queeny.</li> </ol>	<b>2. Context</b> <p><b>2a = The Bone Sparrow was based on experiences of refugees in Australian detention centres.</b> 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.</p> <p><b>2b = In writing this book, Zana Fraillon hopes to draw attention to the plight of asylum seekers.</b> She says she was inspired by stories of real-life refugees in Australia and her horror at the way asylum seekers are treated worldwide.</p>

# Year 7 Learning Cycle 3 Mathematics

Key word	Definition
<b>Angle</b>	The amount of turn between two arms at a common point, measured in degrees
<b>Protractor</b>	An instrument used to measure angles
<b>Parallel</b>	Equidistant, the same distance apart, never touching
<b>Perpendicular</b>	At a right angle
<b>Acute</b>	An angle measured at less than 90 degrees
<b>Obtuse</b>	An angle measures between 90 and 180 degrees
<b>Reflex</b>	An angle measured greater than 180 degrees
<b>Right Angle</b>	An angle measured at 90 degrees
<b>Point</b>	A defined position in space
<b>Straight Line</b>	A line with no bends or curves, the shortest distance between two points
<b>Adjacent Angles</b>	An angle immediately next to another angle
<b>Vertically Opposite</b>	A pair of angles directly opposite each other, formed by the intersection of two straight lines
<b>Triangle</b>	A polygon with three angles and three sides
<b>Scalene</b>	A triangle in which all three angles and sides are different lengths
<b>Isosceles</b>	A triangle where two angles and two sides are equal
<b>Equilateral</b>	A triangle where all sides and all angles are equal, all angles are 60 degrees
<b>Right-angled</b>	A triangle that has a right angle
<b>Quadrilateral</b>	A polygon with four angles and four sides
<b>Parallelogram</b>	A quadrilateral that's opposite sides are parallel and equal in length
<b>Rhombus</b>	A quadrilateral that has all equal sides and opposite sides are parallel

Key word	Definition
<b>Kite</b>	A quadrilateral that has two sets of equal adjacent sides
<b>Trapezium</b>	A quadrilateral that has one pair of parallel sides
<b>Regular</b>	Equal
<b>Irregular</b>	Not equal
<b>Sequences</b>	Ordered sets of numbers, shapes or other mathematical objects
<b>Arithmetic</b>	A sequence where the term-to-term rule is added or subtract a common number each time
<b>Geometric</b>	A sequence where the term-to-term rules is multiplied or divide a common number each time
<b>Quadratic</b>	An expression that has a squared variable
<b>Fibonacci</b>	A sequence where the next term is the sum of the two previous terms
<b>Nth Term</b>	A formula to find any term in a sequence of numbers
<b>Coordinates</b>	Ordered pair of numbers, letters or numbers. First term is the horizontal position and the second term is the vertical position
<b>Axis</b>	Real or imaginary reference line
<b>Linear Graph</b>	A straight one-dimensional figure of infinite length produced by an equation
<b>Quadrant</b>	Any quarter of a plane divided by an x or y axis

# Year 7 Learning Cycle 3 Mathematics

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

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

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

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

## Useful features on your calculator:

**FACT:** this 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

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

**o/“** : 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 ay calculations with fractions

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



# Year 7 Learning Cycle 3 Mathematics

# Sparx Maths

Homework will be set on Tuesdays and will be **due on the following Tuesday morning at 7:30am**

You **must** complete 100% of the homework- if you have not got 100% of the questions correct, then you have not done your homework

You will receive a merit for completion of your homework

If you complete one of the extra homeworks- XP Boost or Target, you will receive another merit - they must be 100% complete

Sparx clinics will run Monday, Tuesday, Thursday in Arc 2- a Maths teacher will be on hand to support you, if you are unsure of any of the notes covered

It is your responsibility to seek help BEFORE the deadline, if you get stuck

Your bookwork will be checked in lessons- you must write full workings

You must bring your homework book to the first lesson after Tuesday 7:30am- if you do not have your book, then you have not completed your homework

Homework

Task 1

D40  $12 + 13 = 25$  ✓

E50  $4 \times 3 + 2 \times 5 =$   
 $12 + 10 = 22$  ✓

F60  $\begin{pmatrix} 12 & 18 \\ 2 & 3 \end{pmatrix} \div 6$  ✓

H70  $\frac{1}{14} + \frac{1}{7} = \frac{1}{21}$  ✗

J90  $\frac{1}{8} + \frac{1}{4} = \frac{1}{8} + \frac{2}{8} = \frac{3}{8}$  ✓

A01  $\begin{array}{r} +495 \\ 166 \\ \hline 655 \end{array}$  ✓

B11 Area =  $3 \times 1.4$   
 $\times 1.4$  Area =  $4.2 \text{ cm}^2$  ✓

C21  $\frac{1}{33} + \frac{1}{11} = \frac{1}{33} + \frac{3}{33}$  ✓

Task 2

E41  $P(\text{yellow}) = \frac{3}{6}$  ✗

F51  $P(\text{black}) = \frac{4}{8} = \frac{1}{2}$  ✓

G61 All the marbles are green. The probability of choosing a purple marble is impossible ✓

H71  $P(\text{odd}) = \frac{3}{5}$  ✓

Task 3

J22 Eusebius ✓

K32 Unlikely ✗

L42 B, A, C ✓

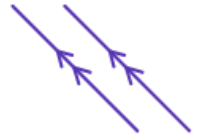
C03 4 more blue balls ✓

D13 4 black, 2 red, 2 blue. The probability of picking

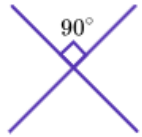


# Year 7 Learning Cycle 3 Mathematics – Lines and Angles

## 1. Parallel and Perpendicular Lines



Parallel Lines



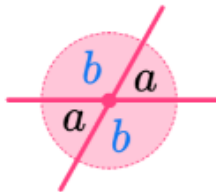
Perpendicular Lines

## 2. Angles around a point, on a line and vertically opposite angles

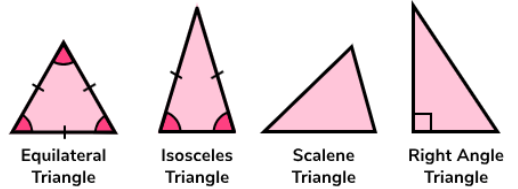
Angles around a point add to  $360^\circ$ . Angles on a straight line add to  $180^\circ$ .



Vertically opposite angles are **equal to each other**.

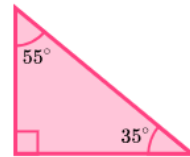


## 3. Types of triangles

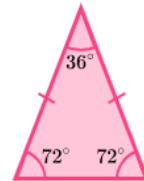


## 4. Sum of angles in a triangle

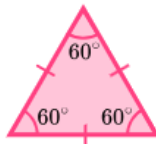
The sum of angles in a triangle is  $180^\circ$ .



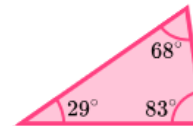
**Right angled triangle**  
One right angle  
 $90 + 55 + 35 = 180^\circ$



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



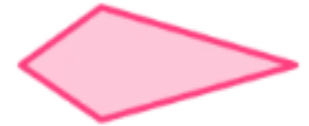
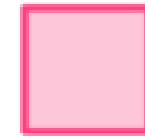
**Equilateral triangle**  
Three equal sides & angles  
 $60 + 60 + 60 = 180^\circ$



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

## 5. Quadrilaterals

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



## 6. Sum of angles in Quadrilaterals

The sum of the interior angles of any quadrilateral is  $360^\circ$

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



This is the same for all types of quadrilaterals.



# Year 7 Learning Cycle 3 Maths – Sequences and Graphs

## 1. Sequence Vocabulary

4, 7, 10, 13, 16, ...

+3 +3 +3 +3 +3

1, 2, 4, 8, 16, ...

×2 ×2 ×2 ×2 ×2

## 2. Generating sequences given the nth term

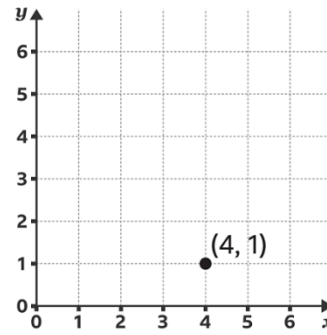
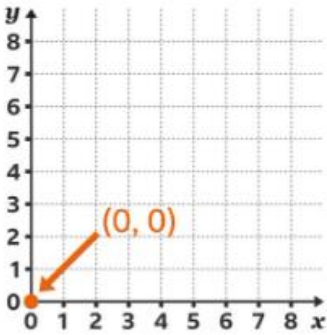
If the *nth* term =  $2n + 1$

n	1	2	3	4
$2n+1$	3	5	7	9

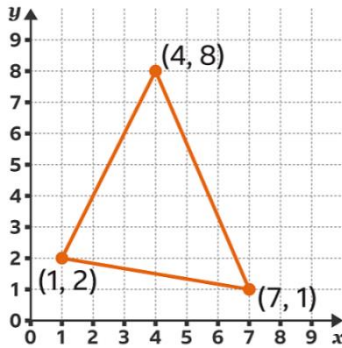
## 3. Finding the nth term

- 1 Find the common difference for the sequence.
- 2 Multiply the values for  $n = 1, 2, 3, \dots$  by the common difference.
- 3 Add or subtract a number to obtain the sequence given in the question.

## 4. Plotting co-ordinates



$(x, y) = (4, 1)$



## 5. Plotting linear graphs

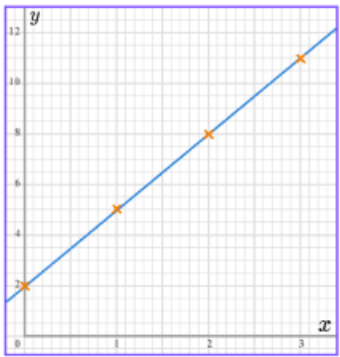
Plotting graphs is when we accurately draw graphs of functions.

To do this we need to find their  $x$ -coordinates and their  $y$ -coordinates.

Example  $y = 3x + 2$

$x$	0	1	2	3
$y = 3x + 2$	2	5	8	11

Substitute each  $x$  value to get the corresponding  $y$  value



## 6. Plotting linear graphs with a calculator

For x press Alpha )

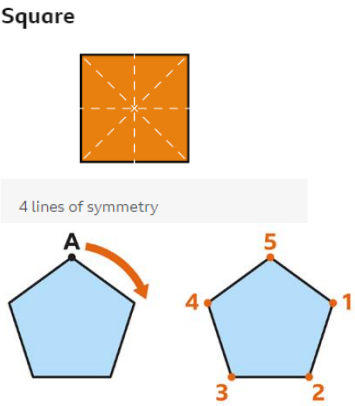
Select menu option 3

Where it says  $f(x)=$  type in  $3x+2$  and press =  
Where it says  $g(x)=$  press =

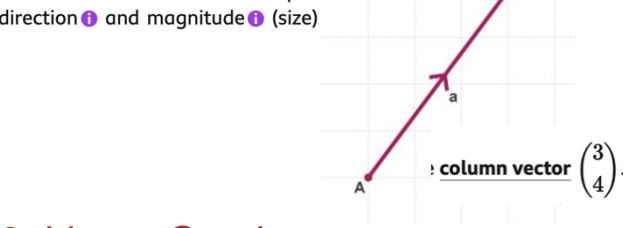
Table Range  
Start: 0 press =  
End: 3 press =  
Step: 1 press =

# Year 7 Learning Cycle 3 Maths – Transformations

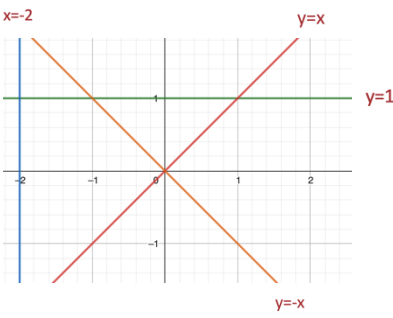
## 1. Symmetry



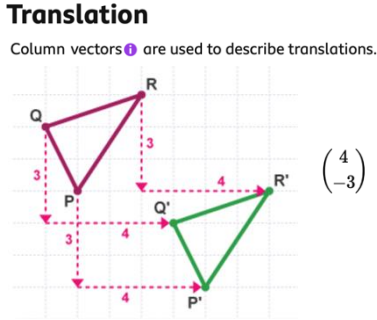
## 2. Vectors



## 3. Linear Graphs

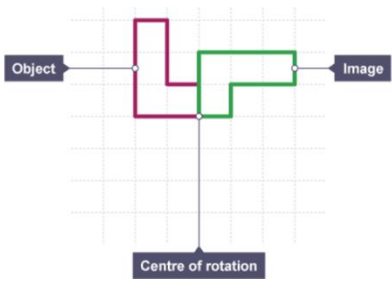


## 4. Transformations



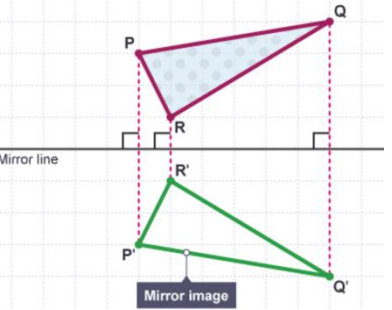
### Rotation

**Rotation** turns a shape around a fixed point called the **centre of rotation**.



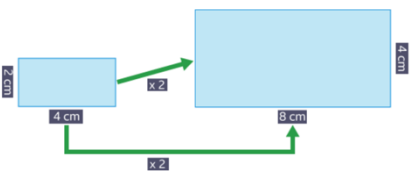
### Reflection

A shape can be **reflected** across a line of reflection to create an image.

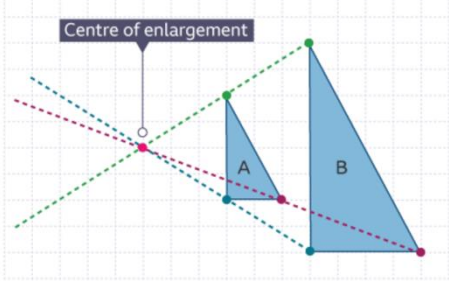


## 5. Enlargements

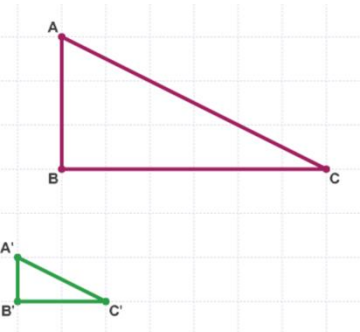
Scale factors and enlargements  
Scale factor of 2



Enlargements through a 'centre of enlargement'



Fractional scale factors  
Scale factors between 0 and 1 – the image is smaller than the original



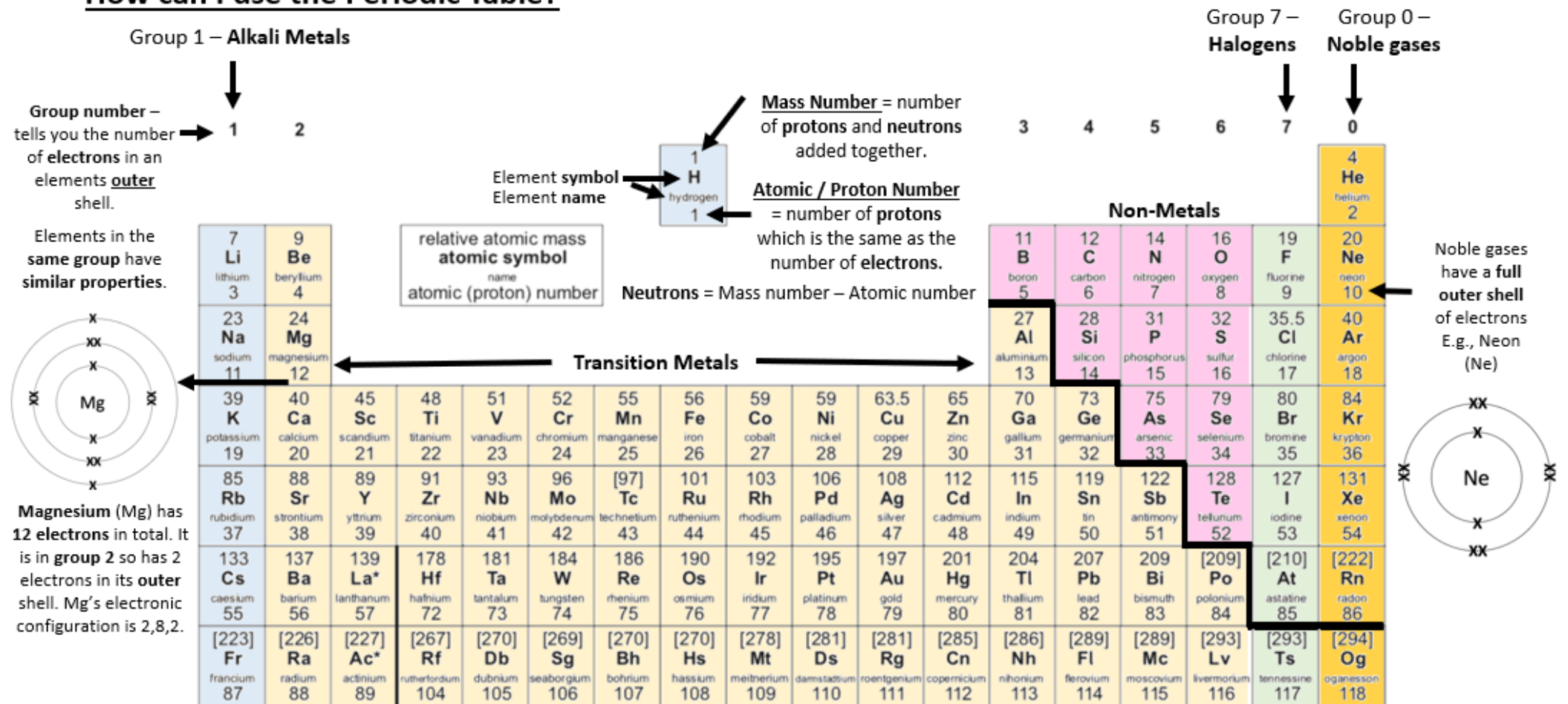
## Year 7 Learning Cycle 3 Science – The Periodic Timetable

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.

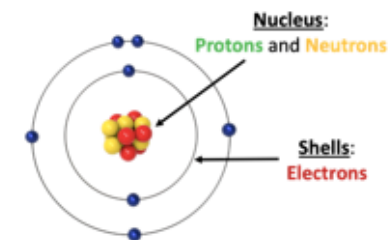


# Year 7 Learning Cycle 3 Science – The Periodic Timetable

## How can I use the Periodic Table?



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



# Year 7 Learning Cycle 3 Science – The Periodic Timetable

## 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.

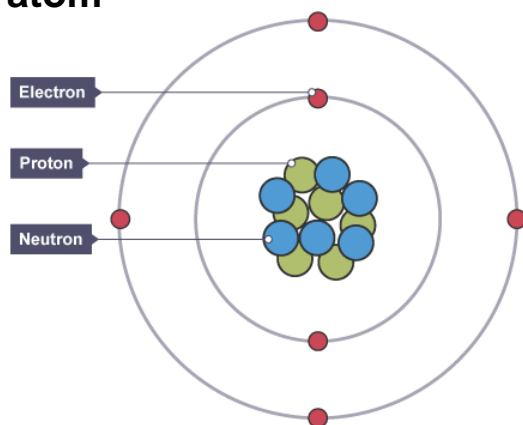
## 2 Structure of the atom

**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-metal:

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 Learning Cycle 3 Science

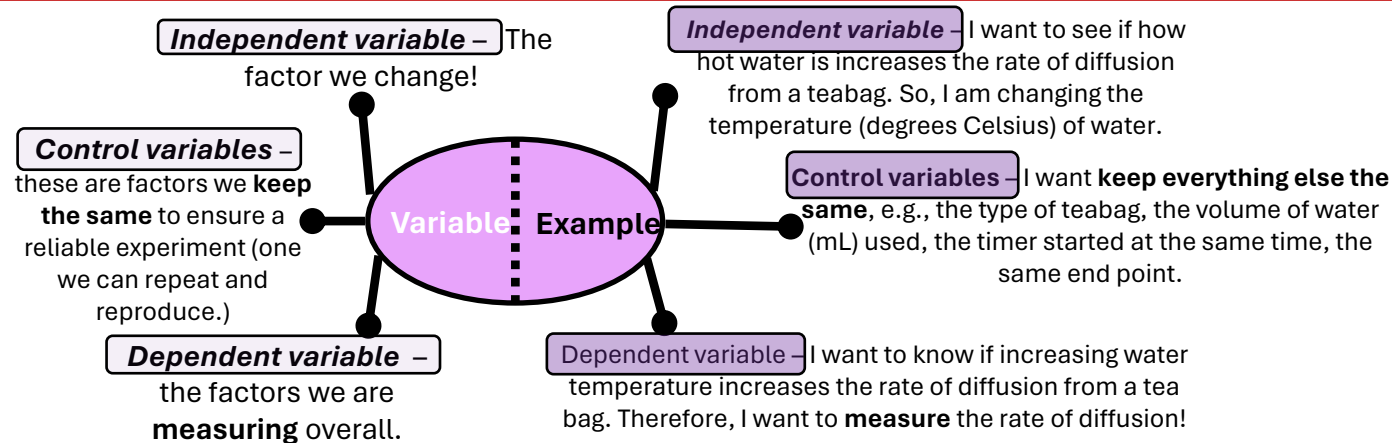
Key words	Definition
Independent variable	The variable you change in an investigation
Dependent variable	The variable you measure in an investigation
Control variable	The variable you keep the same in an investigation
Hypothesis	A prediction of what will happen in an investigation
Reliability	We use 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.

## 1. Designing and performing experiments

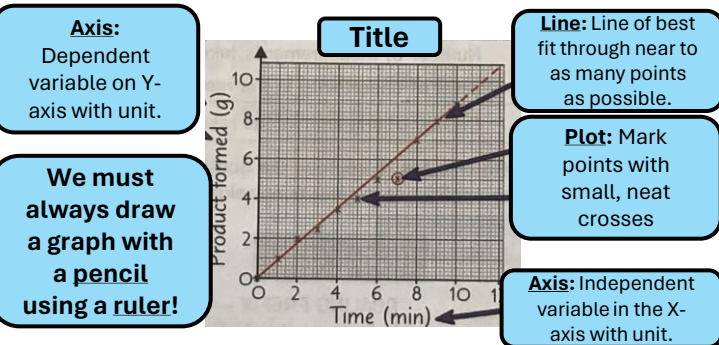
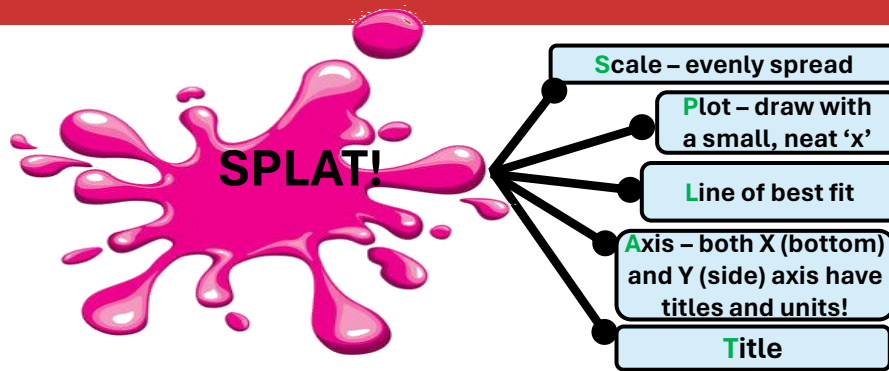
- 1 **Repeatable** – The **same** person gets the **same results** after repeating the experiment using the same method and equipment.
- 2 **Reproducible** – Similar results can be achieved by **someone else** or using a **different method**/piece of equipment.
- 3 **Accurate** – Results are close to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

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

## 2. The Variables



## 3. Presenting Data



### Drawing conclusions from data:

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

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

# Year 7 Learning Cycle 3 Science – 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.



# Year 7 Learning Cycle 3 Science – Space

1

Solar Systems and Planets

My  
Very  
Easy  
Method  
Just  
Speeds  
Up  
Naming.

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

Diagram illustrating the Solar System, showing the Sun, planets (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune), and dwarf planets (Pluto). It also shows the Asteroid Belt and labels for Rocky Planets and Gas Planets.

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.

Diagram illustrating the Big Bang theory, showing the expansion of the universe from a singularity to the formation of the first stars and galaxies.

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

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

Diagram illustrating the life cycle of a star, showing the paths for stars about the same size as the Sun and stars much bigger than the Sun.

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.

Diagram illustrating Earth's rotation and seasons, showing the Earth tilted on its axis and the resulting 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.

Diagram illustrating the phases of the Moon, showing the sequence of phases: New Moon, Waxing Crescent, First Quarter, Waxing Gibbous, Full Moon, Waning Gibbous, Third Quarter, and Waning Crescent.

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

Diagram illustrating day and night, showing the Earth tilted on its axis and the resulting day and night.

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 Learning Cycle 3 Science

## 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

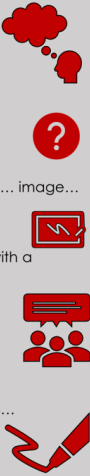
Topic	P16 Space
Qu	Describe how our sun formed. Describe how a massive star will change at the end of the main stable period. Explain why the Sun will not undergo a supernova.
Info	At least one of these questions is likely to come up. The examiner is going to be looking for a clear answer written in 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 <b>red giant</b> and then a <b>white dwarf</b> before becoming a <b>black dwarf</b>.</p>
Practice	1. Learn and practice the model answers above.

# What enrichment opportunities can enhance my understanding of Science?

## Science reading opportunities

**Reciprocal Reading**  
**The Fab 5**

**PREDICT**  
I think... I predict...  
I wonder...  
I imagine... I suppose...  
**QUESTION**  
I wonder... Who? What? Where?  
When? Why? How? What if?  
What does?  
**CLARIFY**  
I'm not sure of this word... section... image...  
diagram... label...  
what does this mean?  
I think I recognise this word...  
does it link to... can I have help with a synonym...  
**TALK THE TEXT**  
Why is this text important?  
How does it link to my learning?  
What key information can I take from the text?  
**SUMMARISE**  
Label the key points / Paragraphs...  
bullet point key ideas...  
highlight key words...  
The most important part is...  
next... also... finally...

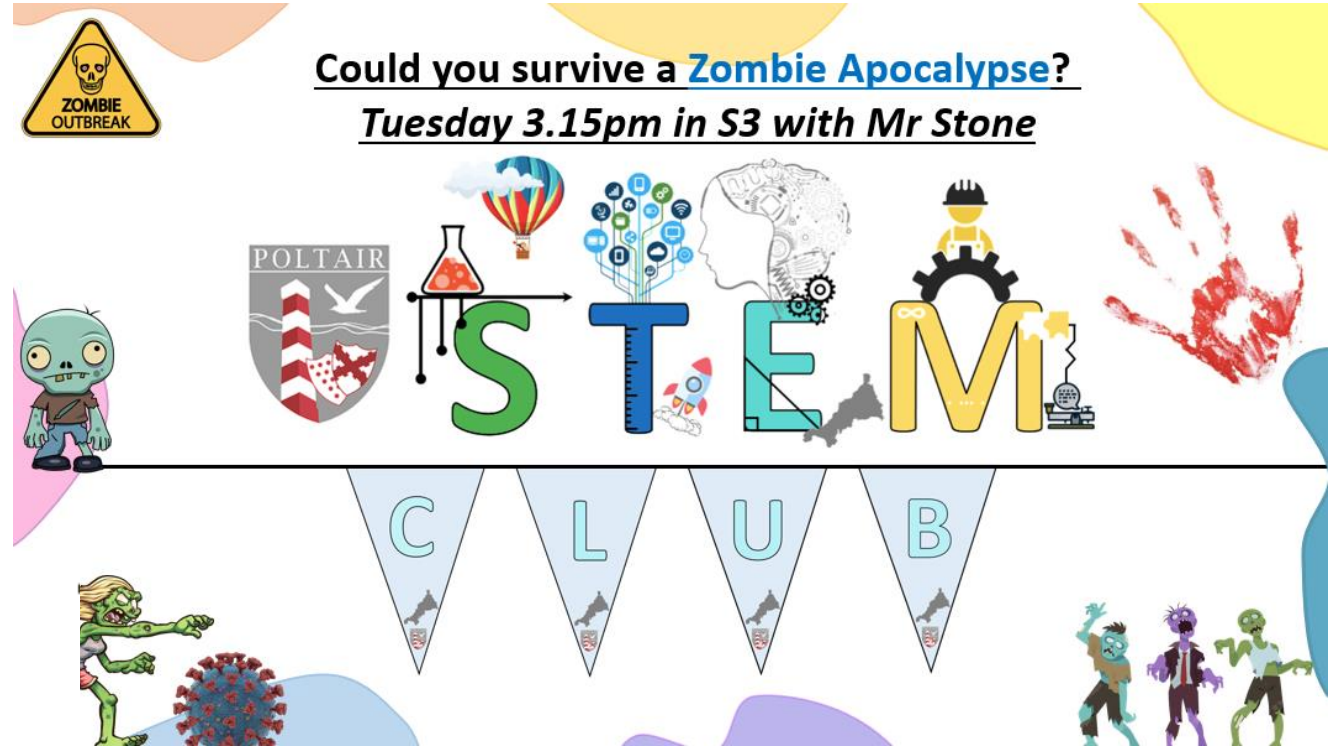


### Science discovery websites:

1. [Spectacular Science \(nationalgeographic.com\)](https://www.nationalgeographic.com) 
2. [KS3 Science - BBC Bitesize](https://www.bbc.com/1/learning-english/primary/ks3-science) 
3. [Science Experiments for Kids - Science Experiments for Kids \(science-sparks.com\)](https://www.science-sparks.com) 
4. [Discover | Natural History Museum \(nhm.ac.uk\)](https://www.nhm.ac.uk) 
5. [Cornwall Wildlife Trust | Cornwall Wildlife Trust](https://www.cornwallwildlifetrust.co.uk) 
6. [Eden at home | Eden Project](https://www.edenproject.co.uk) 
7. [NASA](https://www.nasa.gov) 

## STEM Club (Science, technology, engineering and maths)

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


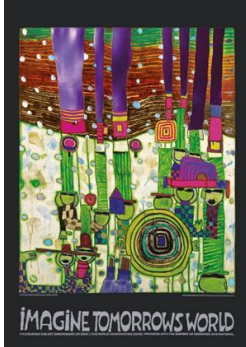





# Year 7 Learning Cycle 3 Art – Environmental Art

1 TIER THREE VOCABULARY	
Composition	How the image is arranged to draw the audience into the image.
Message	The story, meaning or message in the art work.
Environment	The natural world we live in.
Collage	Using coloured paper torn into pieces and stuck down to create colour and tone.
Idea Development	How to draw your ideas to develop through to the final concept.
Texture	Using pattern to create texture in the image.

4 DIFFERENT MATERIALS/MEDIUM
<p>Now is your chance to develop, practice and enhance all the skills and knowledge you have developed in learning cycle 1 &amp; 2. Think about using colour, pattern and tone to create a poster that has a meaning. Use your voice! You can use paint, pencil or felt tip.</p>

2 ENVIRONMENTAL ART
<p>You will be introduced to the work and life of Hundertwasser. He actively campaigned for environmental issues as far back as the 1970's. You will start to learn how art can convey meaning and message.</p> <p>You will use all the skills you have learnt this year combining mark making, tone, texture, pattern, and colour to create a final outcome inspired by a range of artists with an environmental message.</p>
 
 <p>Posters can express ideas to change opinion.</p>

3

ARTISTS THAT USE THEIR ART AS A VOICE

### HUNDERTWASSE

Hundertwasser used colour, pattern and textures in his environmental campaign work.

### Kurt Jackson

Kurt Jackson lives and works in Cornwall and has been creating seascapes and landscapes influenced by the weather, light and environment.

### Sue Lipscombe

Lipscombe works with a large group of artists in the southwest to create large scale sculptures.

6

LINKS & FURTHER READING

### Lesson:

How Does Mark Making Affect Your Paintings  
[is.gd/markmaking](https://is.gd/markmaking)

### Article:

Mark Making: Inspired by the Masters to Find Artistic Voice  
[is.gd/markmakingarticle](https://is.gd/markmakingarticle)

### Revise:

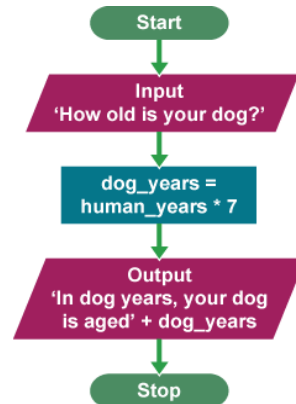
Mindmap Maker  
[is.gd/flashcardsmaker](https://is.gd/flashcardsmaker)



# Year 7 Learning Cycle 3 Computing - Programming

## 1 Creating with Scratch – Sequence and Variables

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.
Scratch	A high-level block-based programming language



A Flow Diagram can be used to describe an algorithm

## 3 Count-controlled iteration

Iteration	Repeating a section of code until a condition has been met.
Count controlled iteration	Repeating a section of code for a specific number of times.

### Why use Iteration?

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



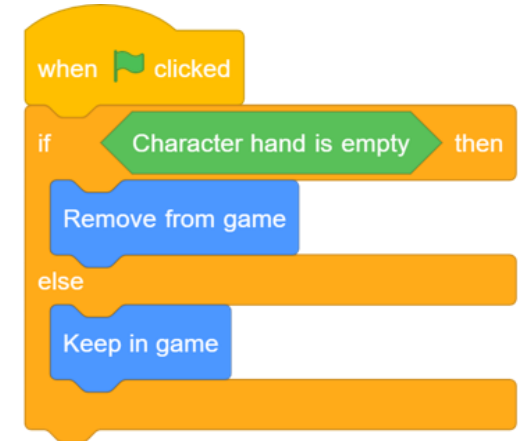
## 2 Selection & Operators

You can **select** what happens to an object, variable or sprite by using selection statements

**If.....then....else**


An **If block** allows us to check a condition and perform an operation if the condition evaluates to 'true'.


When the condition evaluates to 'false' the else operation is run.








Comparison Operators	>,<>=
Logic Operators	AND, OR, NOT
Condition	A statement or sum that is either true or false.
Selection	Running part of the code if a condition has been met (or not met)

# Year 7 Learning Cycle 3 Design Technology

1	TIER THREE VOCABULARY
Hegner Saw	A type of machine saw that can be used to cut curved edges in thin materials.
Aesthetics	What a design or product looks like.
Ergonomics	Designing a product to fit the user and be comfortable to use.
Consumer	The person that uses a product.
Isometric	A 3D representation of a design where horizontal lines are drawn at a 30 degree angle.
2 Point Perspective	Uses two vanishing points to create a 3D drawing of an object.
Thermoplastic	A polymer (plastic) that can be made to change shape when heated. On cooling, it stays this shape.
Vanishing Point	A point on a drawing where parallel lines would meet in the distance.
Quality Control	Checks ensuring that the quality of a product is acceptable at different stages of production.
Etch	Using a laser beam or tool to mark the surface of a material without cutting right through it.
Jig	A device used to hold a piece of material in a certain way. This ensures that the same parts can be made more quickly without
4	USING A HEGNER SAW
 <p>A Hegner Saw is a machine-operated version of a coping saw. It moves the blade up and down very quickly. It works best with wood as acrylic can melt and fuse around the blade. Remember to place your hands either side of your work and away from the path of the blade. Hold your work down to prevent it 'bouncing' but there is no need to push your work onto the blade – Just feed it gently.</p>	

2	ANALYSING EXISTING DESIGNS
 <p>These mobile phone stands have been made using acrylic. The angles have been formed by softening the acrylic using a line bender and then bending the material into shape. Different angles and sizes could be made for different phone types although there is no easy way to charge the phone on the stand.</p>	
 <p>This mobile phone stand has been made by cutting two pieces of plywood using a laser cutter. Most phones will fit on the stand and there is a space for the charging cable to pass through. The two pieces can come apart, so the stand can be disassembled to take up less space during storage and transportation.</p>	
 <p>These phone holders have been made by cutting shaped pieces of the hardwood beech and gluing them together. The same base can be used for each product, but consumers can select which figure they would like to use for their product.</p>	
5	WORKSHOP SAFETY
<ol style="list-style-type: none"> <li>1) Always wear goggles when using machine tools.</li> <li>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.</li> <li>3) Dust from sawing wood using the Hegner saw or fumes from using the Laser Cutter can be harmful. Always ensure that the LEV is running before using the Hegner saw. The Laser Cutter cannot be operated without the fume extraction on, but remember not to open the lid until the fumes have been extracted after the laser finishes cutting your job.</li> </ol>	

3	BENDING ACRYLIC
<p>Acrylic is a thermoplastic. This means that heating it causes it to soften. When it softens, it can be bent/shaped. We can do this in the workshop by using a hot wire/ line bender. The acrylic is placed over the hot wire and allowed to soften. Wearing gloves, it can then be bent to shape and held in place until it cools. Once cool, the acrylic retains this new shape, unless heated again.</p>  	
6	LINKS & FURTHER READING
<p><b>Designing:</b></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/z6jkw6f/revision/1">https://www.bbc.co.uk/bitesize/guides/z6jkw6f/revision/1</a></p> 	
<p><b>How to bend acrylic:</b></p> <p><a href="https://www.youtube.com/watch?v=s1d4xy6uiw&amp;list=PLcvEcRsF_9zIxoGGU59CjuZHciPI9uvGm&amp;index=43">https://www.youtube.com/watch?v=s1d4xy6uiw&amp;list=PLcvEcRsF_9zIxoGGU59CjuZHciPI9uvGm&amp;index=43</a></p> 	
<p><b>Revise:</b></p> <p><i>Mindmap Maker</i>  <a href="https://www.gd/mindmapmaker">is.gd/mindmapmaker</a></p> 	

# Year 7 Learning Cycle 3 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 Levels of tension

Jacques Lecoq developed an approach to acting using seven levels of tension. This encourages the actor to think about the level of tension that they hold in their body on a scale of 1 to 7.

1. Exhausted
2. Laid back
3. Neutral
4. Alert
5. Suspense (is there a bomb in the room?)
6. Passionate (there IS a bomb!)
7. Tragic (the bomb is about to go off!)



Further links: <https://www.youtube.com/watch?v=Ot5CxxLmr-M>

## 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

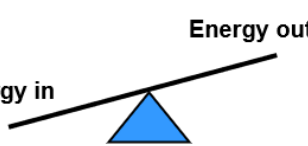
**Character profile-** Create a backstory for your character. A character profile should include information about your characters' life up until now, which will inform the physical and vocal choices that you make.

**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 Learning Cycle 3 Food & Nutrition – Balancing Energy and Nutrients

1	TIER THREE VOCABULARY
Sources	The source of the nutrient, which food it is found in for example meat is a source of protein.
Provenance	The place of origin
Organic	Organic food is the product of a farming system which avoids the use of man-made fertilisers, pesticides; growth regulators and livestock feed additives
Free Range	Livestock (animals) that have had free range in fields for most of their life.
Carbohydrates	Foods such as pasta, potatoes, sugars that give us energy.
Energy Balance	To maintain body weight it is necessary to balance energy intake (from food and drink) with energy expenditure (from activity).
Vegetarian	A person who does not eat meat
Vegan	a person who does not eat or use any animal products, such as meat, fish, eggs, cheese, or leather
Danger Zone	Bacteria multiply between 5-63°C
Cross-contamination	Bacteria transferred from one food to another unintentionally

4	ENERGY BALANCE
<p>To maintain body weight it is necessary to balance energy intake (from food and drink) with energy expenditure (from activity).</p>	 <p>Energy in &gt; Energy out = Weight gain</p>

2	MICRONUTRIENTS
<b>Micronutrients</b> <b>Vitamins</b> There are two groups of vitamins: fat-soluble vitamins, e.g. vitamins A and D. water-soluble vitamins, e.g. B vitamins (thiamin, riboflavin, niacin, folate, vitamin B12) and vitamin C. <b>Minerals</b> Minerals are inorganic substances required by the body in small amounts for a variety of different functions. Examples include: calcium, sodium and iron. Most micronutrients are mostly provided by the diet. An exception is vitamin D which can be synthesised by the action of sunlight on the skin.	

5	Food Poisoning and cross contamination
<b>Food poisoning</b> Food poisoning can be caused by: <ul style="list-style-type: none"> <li>bacteria, e.g. through cross-contamination from pests, unclean hands and dirty equipment, or bacteria already present in the food, such as salmonella;</li> <li>physical contaminants, e.g. hair, plasters, egg shells, packaging;</li> <li>chemicals, e.g. cleaning chemicals.</li> </ul>	
<b>Bacterial growth and multiplication</b> All bacteria, including those that are harmful, have four requirements to survive and grow: <ul style="list-style-type: none"> <li>food;</li> <li>moisture;</li> <li>warmth;</li> <li>Time.</li> </ul>	
	
<b>Symptoms of food poisoning</b> The symptoms of food poisoning include: <ul style="list-style-type: none"> <li>nausea;</li> <li>vomiting;</li> <li>stomach pains;</li> <li>diarrhoea.</li> </ul>	
	

3	PROVENANCE
<b>Food provenance</b> Food provenance is about where food is grown, caught or reared, and how it was produced. Food certification and assurance schemes guarantee defined standards of food safety or animal welfare. There are many in the UK, including:	
	

6	LINKS & FURTHER READING
<b>Video: Cooking chicken</b> <a href="https://www.healthywa.wa.gov.au/Articles/A_E/Chicken">https://www.healthywa.wa.gov.au/Articles/A_E/Chicken</a>	
<b>Article: Provenance</b> <a href="https://ccea.org.uk/downloads/docs/Support/Factfile/2019/Fact%20File%3A%20Food%20Provenance.pdf">https://ccea.org.uk/downloads/docs/Support/Factfile/2019/Fact%20File%3A%20Food%20Provenance.pdf</a>	
<b>Revise:</b> <b>Mindmap Maker</b> <a href="https://is.gd/mindmapmaker">is.gd/mindmapmaker</a>	



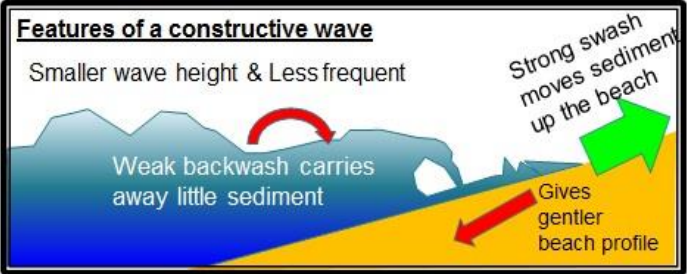
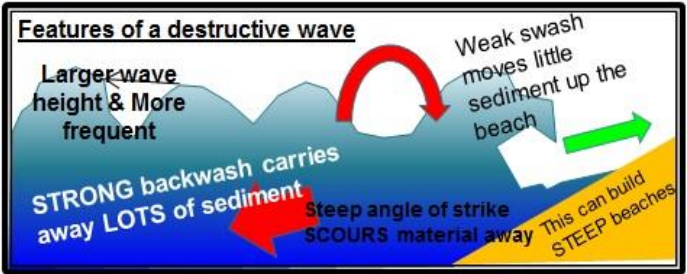
# Year 7 Learning Cycle 3 Geography - Coasts

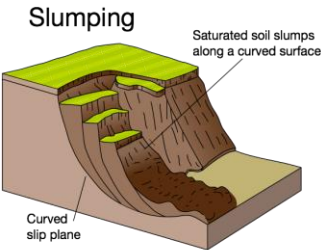
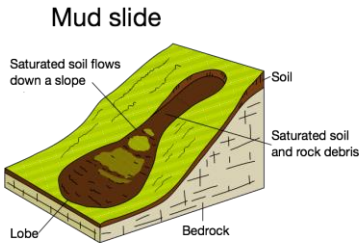
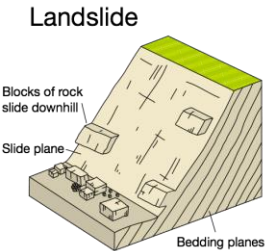
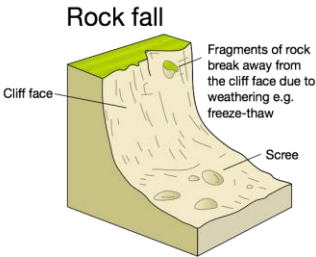
Types of Erosion	
The break down and transport of rocks – smooth, round and sorted.	
Attrition	Rocks that bash together to become smooth/smaller.
Solution	A chemical reaction that dissolves rocks.
Abrasion	Rocks hurled at the base of a cliff to break pieces apart.
Hydraulic Action	Water enters cracks in the cliff, air compresses, causing the crack to expand.

Types of Transportation	
A natural process by which eroded material is carried/transported.	
Solution	Minerals dissolve in water and are carried along.
Suspension	Sediment is carried along in the flow of the water.
Saltation	Pebbles that bounce along the sea/river bed.
Traction	Boulders that roll along a river/sea bed by the force of the flowing water.

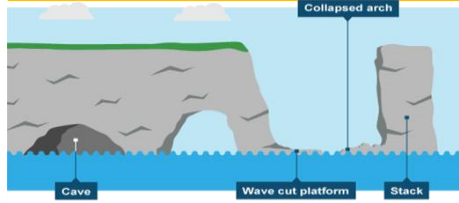
Types of Weathering	
Weathering is the breakdown of rocks where they are.	
Carbonation	Breakdown of rock by changing its chemical composition.
Mechanical	Breakdown of rock without changing its chemical composition.

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	Types of Waves	
	Constructive Waves	Destructive Waves
	<p>This wave has a <b>swash that is stronger</b> than the backwash. This therefore builds up the coast.</p>	<p>This wave has a <b>backwash that is stronger</b> than the swash. This therefore erodes the coast.</p>
<ul style="list-style-type: none"> <li>Fetch how far the wave has travelled</li> <li>Strength of the wind</li> <li>How long the wind has been blowing for.</li> </ul>	<p><b>Features of a constructive wave</b></p> <p>Smaller wave height &amp; Less frequent</p> <p>Strong swash moves sediment up the beach</p> <p>Weak backwash carries away little sediment</p> <p>Gives gentler beach profile</p> 	<p><b>Features of a destructive wave</b></p> <p>Larger wave height &amp; More frequent</p> <p>Weak swash moves little sediment up the beach</p> <p>STRONG backwash carries away LOTS of sediment</p> <p>Steep angle of strike SCOURS material away</p> <p>This can build STEEP beaches</p> 



### 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 leaves a stump.

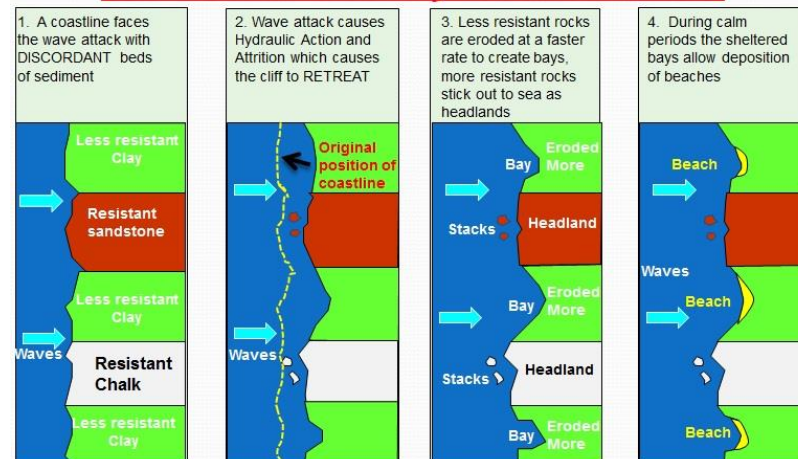
### Formation of Bays and Headlands



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



### The formation of Bays and Headlands



### 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>

#### 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> <p><b>Example: Old Harry Rocks, Dorset</b></p>
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>

# Year 7 Learning Cycle 3 Geography – What impacts the weather and climate in the UK?

1.

## Key words

**Meteorology**- the study of the weather

**Precipitation**- Any form of water that falls to earth ( rain, snow, sleet, hail)

**Microclimate** – the climate of a small area.

**Convictional rainfall**- Rain that is produced when air rises after being warmed by the ground.

**Frontal rainfall**- when air has to rise over cold air in a depression.

**Relief rainfall**- rain caused by air being forced over hills and mountains.

**Anticyclone** – A weather system with high pressure at its center

**Depression** – a weather system with low pressure at its center.

**Weather** is the state of the atmosphere around us. It can change from hour to hour. An example of the weather are rain in the morning and sunshine in the afternoon.

**Climate** is the average weather in a place, over a long period of time. Climate is a measure of the average rainfall and temperature. Examples would be a desert climate, a tropical climate and a temperate climate (such as the UK).

2.

## What is normal weather for the UK?

Four seasons: Summer, Autumn, Winter & Spring. Warm summers and mild winters. Rain occurs all year round. During winter, snow usually falls in Scotland, northern England and upland and mountainous areas.

Predominate wind direction from the South West.

The UK is affected by 4 different air masses

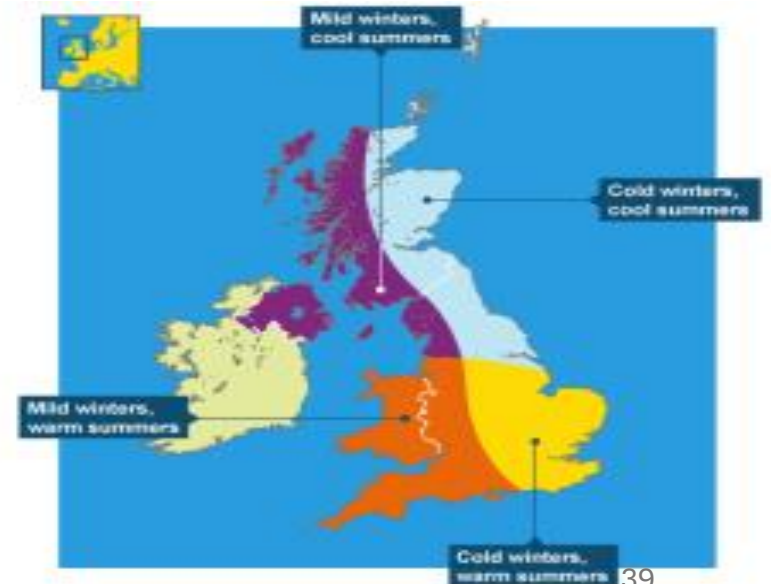
- **Polar** – from the north brings freezing arctic air.
- **Tropical** – from the south brings warm air from places from such as North Africa and the Mediterranean.
- **Maritime** – from the west, brings moisture from the Atlantic bringing lots of rain.
- **Continental** – from the east brings dry from Europe and Asia.

The Jet Stream – A strong wind that can fly across the sky at over 250 miles per hour. If it heads north, it blocks the polar and maritime air masses bringing, warm dry air to the UK. If it heads south, it blocks the tropical and continental bringing wetter, colder air.

3.

## Reasons for temperature differences across Britain.

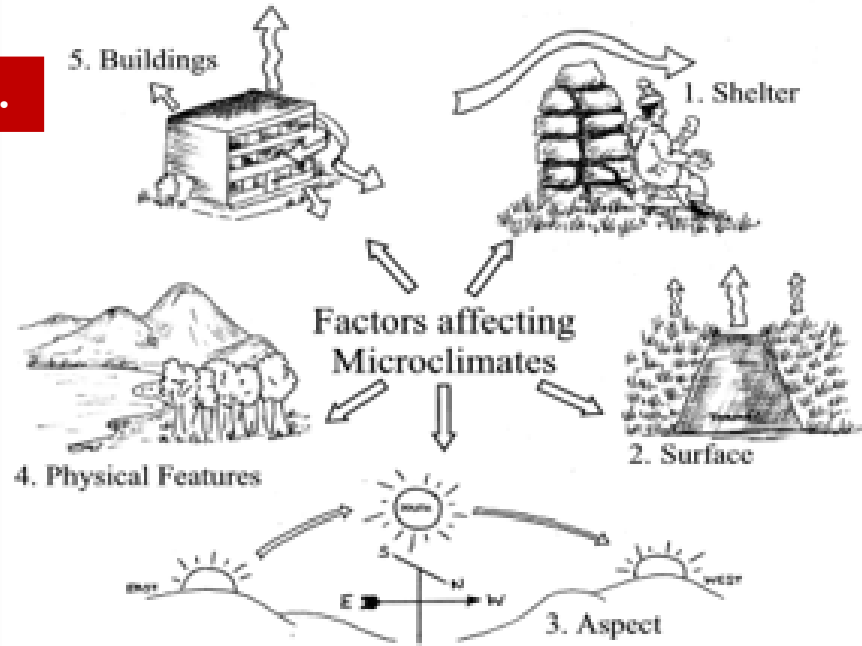
1. Wind direction – This is where the air comes from; a North wind will be colder, a West wind will be wetter.
2. Ocean currents - In winter a warm ocean current coming across the Atlantic from the Caribbean, called the North Atlantic Drift, warms west of the UK.
3. Latitude – The further north or south from the equator, the cooler the temperatures will be because of the decreased intensity of the sun's rays. Therefore the north of the UK is cooler than the south.
4. Altitude – The height above sea level will affect temperatures due to the lower air pressure and fewer air molecules. Temperatures decrease by about 1°C





# Year 7 Learning Cycle 3 Geography – What impacts the weather and climate in the UK?

4.



## Factors affecting Microclimate

### 1. Temperature: temperature affected by:

1. Altitude: Air temperature drops 1°C for 100 m rise in altitude during summer and 130 m in winter
2. Proximity to water: Sea and lakes drops surrounding temperatures
3. Ground Cover: Natural vegetation tends to moderate extreme temperature (Green roof houses)
4. Urban development: it raises air temperature because it blocks winds.

5.



6.

### The six stages of a fieldwork report are:

**1. Introduction** - within this section you are required to **pose questions** about a range of geographical concepts and methods.

**2. Data collection** - describe and justify the way the data was collected. This should be done in lots of detail, so that someone else could repeat the study using the same instructions. Include a map of sites, approximate timings and detailed explanations of how and where to take each measurement. Be clear on what the main methodological approach used was, eg transects. State whether each data collection technique collects or . Justify the sample size and the sampling technique used.

**3. Data presentation** - tables are difficult to interpret and so data must be presented in different ways. Graphs and charts are useful as they help to see patterns within data. Choose which types of [graph or chart](#) to use. Accurate presentation of data helps to form conclusions to the enquiry. Data that is badly presented is very difficult to understand.

**4. Analysis** - process the data and discuss patterns. Are there any clear trends or are there ? Quote figures and places and use geographical terminology.


**5. Conclusion** - this short section should draw together the results to answer the enquiry question.

**6. Evaluation** - this considers the strengths and weaknesses of the data collection, identifies anomalies and the limitations of the conclusions. It will identify possible improvements, extensions or new questions that have arisen. It is acceptable to talk about weaknesses, as long as improvements can be suggested.




# Year 7 Learning Cycle 3 History – Enquiry Question: How equal was Tudor Society?


- Historical Skills we will develop in this enquiry:
- Our understanding of similarity and difference
  - Our understanding of using sources




Bringing the past back to life at Poltair!



## Reading like a historian

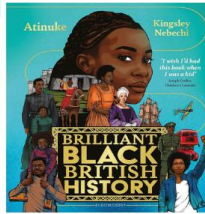




**Black and British:**  
A short, essential history **David Olusoga** (Author)

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!

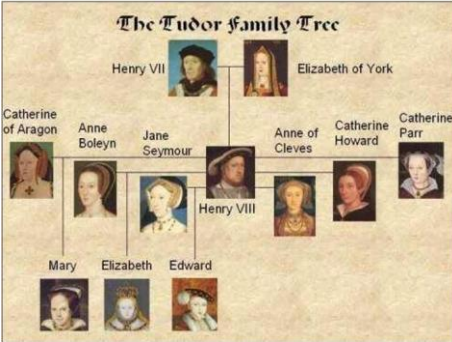


**Brilliant Black British History**  
**Atinuke** (Author), **Kingsley Nebechi** (Illustrator)

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

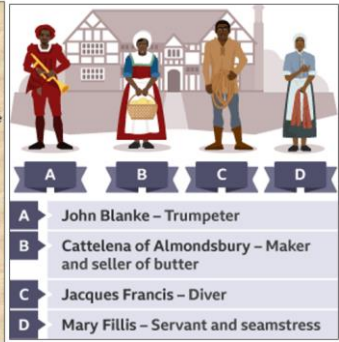
1.Key Terms	Description
Tudor	The last name of the family who held the throne of England from 1485 to 1603
Equality	The state of being equal, especially in status, rights, and opportunities. (fairness/justness)
Society	The sum of people living together in a community
Execution	Carrying out a sentence of death on a person
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,
Reformation	The movement in the 1500s to reform the Catholic church and creating the Protestant church as a result
Patriarchy	Means 'the rule of the father'. A social system where positions of dominance and power are held by men.

2. CORE KNOWLEDGE	
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 Did Tudor women get an education?	Yes, but this wasn't the same as the education as men
8 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
9 Were Tudor women expected to marry?	Yes, but how this happened depended on your status in society. Upper/middle class women usually had marriages arranged by their fathers. Whereas lower class women often had more freedom to choose their husbands
10 Roughly what percentage of Tudor women never married?	30%



The Tudor Family Tree

Henry VII and Elizabeth of York are the parents of Henry VIII. Henry VIII is married to Catherine of Aragon, Anne Boleyn, Jane Seymour, Anne of Cleves, Catherine Howard, and Catherine Parr. Henry VIII has three children: Mary, Elizabeth, and Edward.



A B C D

A John Blanke – Trumpeter  
B Cattelena of Almondsbury – Maker and seller of butter  
C Jacques Francis – Diver  
D Mary Fillis – Servant and seamstress

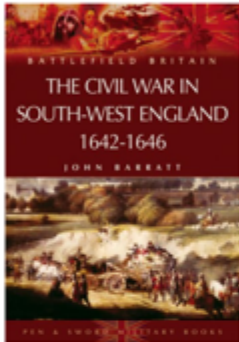
# Year 7 Learning Cycle 3 History – Enquiry Question: Was the world really ‘turned upside down’ by the English Civil War?

## Historical Skills we will develop in this enquiry:

- ✓ Our understanding of significance
- ✓ Our understanding and use of historical interpretations

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

1.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)

## 2. CORE KNOWLEDGE

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 <del>Lostwithiel</del> <b>Marston</b>
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



The world turned upside down.  
1646



Matthew Hopkins,  
The Witchfinder  
General, 1645-47

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London : Printed for John Smith. 1646.

The world turned upside down.  
1646

Matthew Hopkins, Witchfinder General

1 Hemmancar  
2 Brewackett  
3 Pecke in the Crowne  
4 Griezwell Greadgutt

Sacke & Sugar  
Vinegar & Rom

Matthew Hopkins, The Witchfinder General, 1645-47



# Year 7 Learning Cycle 3 Music – Saharan Sounds

1	TIER THREE VOCABULARY
<b>Rhythm</b>	The pattern of sounds and silences that creates a beat in the music.
<b>Pulse</b>	The regular, steady beat that you feel in music.
<b>Polyrhythm</b>	Two or more rhythms played at the same time as each other.
<b>Cyclic Rhythm</b>	A repeating pattern in music.
<b>Call and Response</b>	A musical conversation between two or more people.
<b>Syncopation</b>	Where the emphasis of the beat is on the weaker beat.
<b>Djembe</b>	A West African drum shaped like a goblet made of goat skin that is played with two hands.
<b>Bass</b> (Drumming Technique)	A drum technique that sounds deep and booming where you use your palm to hit the middle of the drum.
<b>Tone</b> (Drumming Technique)	A drum technique that sounds clear and resonant where you use the bottoms of your fingers on the drum.
<b>Slap</b> (Drumming Technique)	A drum technique that sounds sharp and snapping where you hit the drumhead with your fingers.

4	WEST AFRICAN MUSIC
West African Music is deeply rooted in African culture and is performed during importance events like weddings, funerals, and harvest festivals. At the heart of this music is drumming, which tells a story and communicate different meanings. The rhythms are complex and layered, with different beats and patterns that interweave to create a rich and varied sound.	

2	DRUMMING TECHNIQUES
There are three main techniques when playing the djembe: bass, tone and slap. These are shown on the djembe below.	
<p><u>BASS:</u> Use the palm of your hand to hit the centre of the drum</p> <p><u>TONE:</u> Use the backs of your fingers to hit the outside edge of the skin without hitting the edge.</p> <p><u>SLAP:</u> Open your fingers slightly and bounce them off the edge of the edge of the drum.</p>	



5	WEST AFRICAN INSTRUMENTS
There are several different instruments from West Africa and each of them have their own unique sounds and way of playing them. Some are listed below:	
<b>DJEMBE</b>	<b>DUNDUN</b>
<b>TALKING DRUM</b>	<b>BALAFON</b>



3	POLYRHYTHM
Polyrhythm happens where multiple rhythms are played at the same time over one another. This gives the impression that the rhythms are weaving in and out of one another.	
The diagram above shows how the right hand is playing on beats 1, 3 and 5, whereas the left hand is playing on beats 1 and 4. So when played together the combination is called a polyrhythm.	

6	LINKS & FURTHER READING
<p><b>Video:</b> <i>West African Music</i> <a href="https://is.gd/westafricanmusic">is.gd/westafricanmusic</a></p>	
<p><b>Lesson:</b> <i>Polyrhythm: Making Beats</i> <a href="https://is.gd/polyrhythm">is.gd/polyrhythm</a></p>	
<p><b>Revise:</b> <i>Flash Card Maker</i> <a href="https://is.gd/flashcardmaker">is.gd/flashcardmaker</a></p>	

# Year 7 Learning Cycle 3 Religious Education - Sikhism

1. Key Words	Definition
<b>Nam Simran</b>	Remembering God's name
<b>Kirat Karna</b>	Earn an honest living
<b>Waheguru</b>	Wonderful teacher/lord
<b>Guru</b>	Religious teacher- 'gu' means darkness, 'ru' means light
<b>Guru Granth Sahib</b>	Holy book for Sikhs, "eternal Guru" (GGS)
<b>Gurdwara</b>	Sikh place of worship, "Guru's door"
<b>Vand Chhakna</b>	Give in charity to others
<b>Granthi</b>	Person in the gurdwara who is the 'reader' of the Guru Granth Sahib
<b>Sacrifice</b>	Giving something up or something to God
<b>Kurahit</b>	Prohibited, forbidden

## Important Note:

Sikhism is an English term of the name for the Sikh Faith. Many Sikh people prefer the term Sikhi.

## Excellent additional resource

<https://www.bbc.co.uk/bitesize/topics/zbswvk7>



## 2. Sikhism

Guru Nanak, the founder of Sikhism, was born into a country influenced by both Muslim and Hindu religions. After his revelation, he strongly believed that God was one and that there were many ways of approaching God, not just one way. He said, 'God is neither Hindu nor Muslim and the path I follow is God's'. Sikhs believe in the oneness of humanity and do not feel the need to convert to Sikhism- they believe that there are many different paths to God and each can find their own way. All these approached to God are equally valid and deserve respect. Sikhs believe that all creatures are created by God. However, humans are unique among creatures because they can make judgements and distinguish between right and wrong. They are made and loved by God and therefore equal

## 3. The 5 K'S: Five symbols of faith

Kirpan (a small sword): This is a sign that Sikhs are soldiers in the army of God, should fight for justice and protect the weak and vulnerable. The sword must never be used in anger. Kesh (uncut hair): Sikhs believe that their hair is a gift God has given to all humans; it was intended to be worn naturally and not cut. It is covered with a turban (seen as a crown) to keep clean. Kanga (a wooden comb): This is carried to maintain the tidiness of the kesh and to remind Sikhs of the need to keep their body and mind a healthy, organised state. Kara (a steel bracelet): As a circle, the kara symbolises the unbreakable bond with God. It is a reminder that Sikhs should obey God and do God's will. Kachera (cotton underwear): This underwear is comfortable and modest. It is a reminder of the traditional role of Sikhs as soldiers, being prepared to act quickly and with dignity, and the need for self-control and chastity (and also a reminder not to commit adultery)



# Year 7 Learning Cycle 3 Spanish – Mi tiempo libre – My free time

## 1. Free time

### Mis pasatiempos

ir de compras  
ir al cine  
ir a la piscina  
ir al parque  
montar en bicicleta  
montar a caballo  
ver la televisión  
escuchar música  
cantar  
navegar por internet  
jugar en el ordenador  
hacer los deberes  
hacer deporte  
usar mi móvil  
escribir correos  
charlar con los amigos  
tocar la guitarra  
chatear por las redes sociales  
sacar fotos  
bailar  
jugar a los videojuegos  
jugar al baloncesto  
leer libros  
no hacer nada  
salir con amigos  
pasar un rato con mi amigo  
ordenar mi dormitorio  
dormir

### My hobbies

to go shopping  
to go to the cinema  
to go to the pool  
to go to the park  
to ride a bike  
to ride a horse  
to watch tv  
to listen to music  
to sing  
to surf the internet  
to play on the computer  
to do homework  
to do sport  
to use my phone  
to write emails  
to chat with friends  
to play the guitar  
to chat on social media  
to take photos  
to dance  
to play video games  
to play basketball  
to read books  
to do nothing  
to go out with friends  
to hang out with my friend  
to tidy my room  
to sleep

### El clima

hace sol  
hace calor  
hace frío  
hace buen tiempo  
hace mal tiempo  
hace viento  
llueve  
nieva  
graniza  
hay niebla  
hay neblina  
hay tormenta  
está despejado  
clear  
está helado  
está nublado

### ¿Qué haces...?

#### What do you do?

**cuando** hace sol  
**cuando** hace calor  
**cuando** llueve  
**cuando** hace frío  
**si** hay niebla  
**si** hay viento  
**si** nieva

### The weather

it's sunny  
it's hot  
it's cold  
it's good weather  
it's bad weather  
it's windy  
it's raining  
it's snowing  
it's hailing  
it's foggy  
it's misty  
it's stormy  
  
it's freezing  
it's cloudy

## 2. In a restaurant

### En un restaurante

El menú del día  
course meal  
¿En qué puedo servirle?  
Una mesa para cuatro  
Quisiera...  
Voy a tomar...  
Voy a beber ...  
drink...  
Por favor  
Gracias  
la cuenta  
¿Algo más?  
  
Tener hambre  
Tener sed  
¡Qué rico!

### In a restaurant

A set three  
  
How can I help you?  
A table for four  
I would like...  
I'm going to have...  
I'm going to  
  
Please  
Thank you  
the bill  
Anything else?  
  
To be hungry  
To be thirsty  
How tasty

## 3. Further reading and websites

### The present tense:

<https://www.bbc.co.uk/bitesize/topics/zg9mhyc/articles/z63n7nb>

### The Future tense:

<https://www.bbc.co.uk/bitesize/topics/zg9mhyc/articles/zb9bhb>

### The past tense:

<https://www.bbc.co.uk/bitesize/topics/zg9mhyc/articles/zhgfmfr>

### Talking about the food that I like:

<https://www.bbc.co.uk/bitesize/topics/zfgt6v4/articles/zbw4f4j>