

### Year 7 Learning Cycle 2

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

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### 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	

### Expected time home learning will take:

Activity	Time
Reading	30 mins each session
Sparx Maths	1 hour a week
All other activities	15 mins each
Sparx XP	30 mins each session

### My Computer passwords:

Platform	Username	Password
School System		
Sparx Maths		
Educake		
Memrise		

### Year 7 Learning Cycle 2 Summative Assessment Timetable

		26/02	27/02	28/02	29/02	01/03	04/03	05/03	06/03	07/03	08/03
_esso	on			В					А		
		Mon	Tue	Wed	Thu	Fri	Mon	Tue	Wed	Thu	Fri
7	7X1		Music		DT			Maths			
7	7X2							Maths			
	7X3							Maths			
1 7	7X4				Art	Music		Maths			Food
_	7Y1				Drama				Maths	Computing	English
	7Y2					Drama			Maths		English
7	7Y3			Music	Food				Maths	Art	English
7	7Y4								Maths	RE	English
_	7X1					Art				English	
_	7X2						Drama			English	
_	7X3					Food	DT			English	
	7X4									English	
7	7Y1		Music							DT	
	7Y2									Art	
	7Y3									Drama	
7	7Y4				Art					Drama	
	7X1										
7	7X2				Music			RE			
	7X3		Art					Music			RE
	7X4		DT								
7	7Y1							Food		Art	
7	7Y2		Music							Food	
	7Y3						Computing			DT	
7	7Y4							DT	Music	Food	
7	7X1		Food					Drama	Computing		
7	7X2		Art					DT		Food	
7	7X3							Computing		Drama	
7	7X4								Drama		
7	7Y1									RE	
7	7Y2		DT						Computing		
7	7Y3										
7	7Y4										

### Year 7 Learning Cycle 2 Summative Assessment Timetable

		11/03	12/03	13/03	14/03	15/03	18/03	19/03	20/03	21/03	22/03
Lesso	n			В					А		
		Mon	Tues	Wed	Thu	Fri	Mon	Tue	Wed	Thu	Fri
7.	X1		Music		DT	RE					
7	X2		Computing		Geography	MFL					
7.	X3				RE						
7	X4				Art	Music					Food
	Y1			Geography	Drama						
7	Y2			Science	MFL	Drama					
7	Y3			Music	Food	MFL				Art	
7	Y4			History		Geography					
	X1			History		Art					
	X2			Science			Drama				
	X3			MFL		Food	DT				
	X4			Computing		MFL					
7	Y1		Music	History						DT	
	Y2			History	RE					Art	
	Y3		RE	Science	Geog					Drama	
7	Y4			Computing	Art					Drama	
	X1		Geography	MFL							
7.	X2				Music						
	X3		Art	Geography				Music			
_	X4		DT	Science							
7	Y1							Food		Art	
_	Y2		Music							Food	
	Y3		History							DT	
	Υ4		MFL					DT	Music	Food	
7.	X1		Food	Science				Drama			
7.	X2	History	Art					DT		Food	
	X3			Science		History				Drama	
4 =		Geog		History					Drama		
7	Y1		Science		MFL						
	Y2		DT		Geography						
	Y3										
7	Υ4		Science								

### How to Use your Learning Cycle Knowledge Organiser

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

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



### 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 e.g Look, cover, write or self-testing	Use low stakes online tests/quizzes and answer high stakes past paper/sample questions to check and apply knowledge and understanding
Strategies			
<ul> <li>Cornell Notes</li> <li>Flash cards</li> <li>Mind mapping</li> <li>Revision clocks</li> <li>Dual coding</li> </ul>	How to use your PLC How to schedule your home learning and stick to it!	<ul> <li>Look cover &amp; test</li> <li>Leitner system</li> <li>Blurt it</li> <li>Transform it</li> </ul>	<ul> <li>Low stakes</li> <li>Self-quizzing</li> <li>Quiz each other</li> <li>Online quizzes</li> <li>High stakes</li> <li>Exam style questions</li> </ul>

### How to use SORT

Step 1: Organise	Step 2: Summarise	Step 3: Recall	Step 4: Test
<ul> <li>a. Use the daily planner on page 10 to identify all the times when you will complete your home learning and when you will complete independent revision</li> <li>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</li> </ul>	sure of or you do not fully  use your knowledge organiser, revision guide, website etc to summarise the key knowledge you need to learn.  Use any summarizing strategy, such as:  Flashcards  Mindmaps		The last step in revision is to be confident that you can recall and retrieve the knowledge. To do this you need to test yourself. Quick and simple ways are to ask someone else to quiz you on the knowledge or to complete an online quiz. You can also answer past exam questions.  If you can not confidently recall the
c. Write your RED topics into your daily planner for when you will revise that subject	• Revision Clocks  For more details go to the SORT webpage:  https://www.poltairschool.co.uk/sort	Look, say, cover, write, test	knowledge you will need to repeat step 3.



# ATTENDANCE FOCUS







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

To improve my attendance, I commit to the following:						
1.						
2.						
3.						
What attendance do you want to end this term with?						
What is your end of year attendance target?						
What is our minimum expected attendance to be rewarded?						

### Possible strategies to REACH MY attendance Goals

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

### Home Learning & Revision Planner

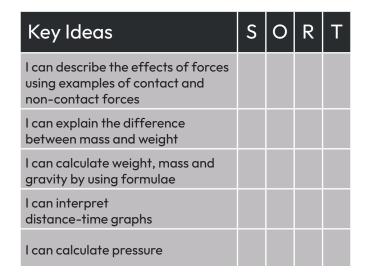
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Time	Saturday	Sunday
8.30am - 4pm						8.30am - 4pm		
4pm - 5pm						4pm - 5pm		
5pm - 6pm						5pm - 6pm		
6pm - 7pm						6pm - 7pm		
7pm - 8pm						7pm - 8pm		
8pm - 9pm						8pm - 9pm		

### English Maths

Key Ideas	S	0	R	Т
What features of poems can I analyse?				
Can I identify methods that writers use to present their ideas?				
How can I compare writer's ideas and methods?				
Can I use figurative language methods in my writing?				
Am I able to recall the key characters and plot of The Tempest?				
What is context?				
Can I explain the context of The Tempest?				
Can I identify the features of a play?				
What is a monologue?				
Can I remember and apply a range of structure terms?				
Can I recall the plot and characters of 'To build a Fire?'				

Key Ideas	Sparx Code	S	О	R	Т
I can simplify and compare fractions	M671				
I can convert between mixed numbers and improper fractions	M601				
I can multiply with fractions and find fractions of quantities	M157				
I understand what a percentage is and how they link to decimals	M695, M684				
I can convert between fractions, decimals and percentages with or without a calculator	M264				
I can find percentages of amounts	M437, M905				
I understand the language of probability	M655				
I can find the probability of a single event	M941				
I can use a sample space diagram	M718				
I can find the probability of something not happening	M755				
I can calculate probabilities from experiments	M332				
I can write ratios in the form 1:n	M543				
I can share a quantity in a ratio given the total or part of the amount	M525				
I can use a multiplier to scale any two quantities					
I can solve direct proportion problems	M478				
I can calculate with speed, distance and time	U151				

### Science



#### Science

Key Ideas	S	0	R	Т
I can describe the process of photosynthesis				
I can test a leaf for starch				
I can explain the structure and function of a leaf				
I can describe the process of aerobic respiration				
I can understand how toxins accumulate in the food chain				

### Art

Key Ideas	S	0	R	Т
I understand tone, texture, shape, pattern, scale, line and composition.				
I understand how to mix and blend secondary colours.				
I experimented with a range of materials to create primary and secondary colours.				
I can explain how to develop my ideas.				
I can explain how my ideas are linked to Derain, Thomas and Seurat.				
I can explain how to create a Pointillism technique.				
I understand how Seurat used colour and pointillism to create colour and tone.				

### Computing

Key Ideas	S	0	R	Т
I know how to select different applications for different purposes				
I know that Excel is used for analysing data and creating charts				
I know the differences between a Pie Chart and a Bar Chart				
I understand that computers have input, output and storage				
I can name computer input and output devices				
I can define what a network is.				
I can explain the difference between the internet and World Wide Web				

### Design Technology

Key Ideas	S	0	R	Т
I can recall and define the tier three vocabulary in this Unit				
I can select material combinations that are aesthetically pleasing				
I can use hand tools safely				
I can use hand tools with precision				
I can join materials using an appropriate method				
I can evaluate the finish of my work and link this to how precisely I have used tools				

### Drama

Key Ideas	S	0	R	Т
I can use accurate facial expressions and gestures in my performance				
I can project my voice and speak clearly				
I can identify physical and vocal skills and consider which would be appropriate for different characters				
I can stay in role throughout a performance				

### Food

Key Ideas	S	0	R	Т
I can explain why chefs should plan a recipe to prevent enzymatic browning				
I can explain the rubbing-in method				
I can explain the term sensory analysis and ranking when making a food product				
I understand there are a range of factors that influence food choice				
I can explain how skills are transferred to create a different food product				
I can explain how to adapt a pizza recipe				

### Geography

Key Ideas	S	0	R	Т
Name and locate the world's major biomes				
Describe the location of the world's major biomes				
Explain the physical characteristics of the world's major biomes				
Interpret climate graphs				
Describe the Mediterranean climate using a climate graph				
Explain the 3 types of coral reef				
Name the layers of the rainforest				
Name animal species living at each of the rainforest layers				
Explain how plants adapt to tropical rainforests				

### Geography

Key Ideas	S	0	R	Т
Define key terms and give examples of case studies				
Explain the importance of the world's oceans				
Explain how warm and cold ocean currents distribute heat around the world				
Name all the world's oceans				
Explain the causes and effects of ocean plastic				
Explain how ocean gyres transport ocean plastic around the world				
Explain the impacts of ocean plastic pollution upon Henderson Island				
Explain the solutions to ocean plastic pollution				
Explain the impacts of marine pollution upon Kenya's coastline				

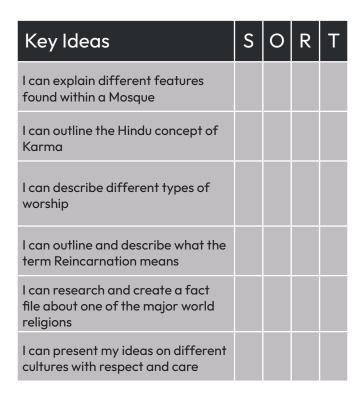
### History

Key Ideas	S	0	R	Т
I can explain what a Crusade is				
I can state some of the reasons for the Crusades				
I can state an impact of the Crusades even today				
I can name key figures in the Crusades				
I can state what caused the Black Death				
I can explain the symptoms of the Black Death				
I can explain some of the consequences of the Black Death for Britain				

### Music

Key Ideas	S	0	R	Т
I can find a note on a piano/ keyboard without help				
I understand what a pentatonic scale is and can play one				
I can describe some traditional Japanese instruments and how they make a sound				
I know different note durations and can both identify and play them				
I can use the acronym: 'Every Good Boy Deserves Food' and 'FACE' to help me understand how to read music on a stave				
I can compare the two musical elements, 'duration' and 'pitch' and explain what they are				
I can play my part of 'Sakura' on the keyboard accurately and with good timing				
I can find a note on a piano/ keyboard without help				

### **Religious Education**

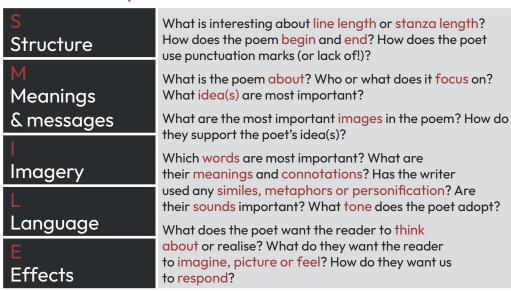


### Spanish

Key Ideas	S	0	R	Т
I understand the rules for adjective agreement and world order				
I can describe my school in Spanish				
I can give an opinion and a reason in Spanish				
I can talk / write about how I travel to school				
I can talk about my uniform				
I can form regular 'er', 'ir' and 'ar' verbs in the present tense				
I can form the conditional tense of regular verbs				

### Year 7 Learning Cycle 2 English - Nature Poetry

### 1. How to Analyse a Poem



### 2. What, How, Why Paragraphs

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

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

WHY have they chosen to do this? Purpose?

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

#### 3. Key Poems

#### 3a = The Rime of the ancient Mariner by

Samuel Taylor Coleridge (Extract) A poem in which mariners get stranded out at sea and are seemingly saved by an Albatross, which the mariner then kills. The much longer original poem contains the famous line 'Water, water everywhere, but not a drop to drink' which refers to the fact that they are stranded at sea and cannot drink the sea water.

#### 3b = The Sea by James Reeves

The sea is explored through the extended metaphor of comparing it to a dog.

#### 3c = Spellbound by Emily Bronte

The speaker is outside looking at nature and feels so captivated by it that she cannot move.

### 3d = The Eagle by Alfred Lord Tennyson

A very short rhyming poem that explores a moment of an Eagle, perched up high on a mountain, then flying down to catch its prey.

#### 3e = Hurricane Hits England by Grace Nichols

Nichols explores the effect that a hurricane has on place and the individual.

#### 3f = Below The Green Corrie by Norman MacCaig

A poem in which the mountain is personified as a robber or pirate. However, the speaker feels he took more from the experience of being on the mountain than the mountain got from him.

### 4. Subject Vocabulary

#### 4a = poem (noun)

a piece of writing in which the words are arranged in separate lines and are chosen for their beauty and sound.

#### 4b = stanza (noun)

A group of lines in a poem; a verse.

#### 4c = language (noun)

Words or methods (techniques) used by writers to present their meanings or create effects.

#### 4d = structure (noun)

The way the poet has organised the poem on the page, including stanza length, line length, title and ending.

#### 4e = connotations (noun)

A feeling or idea that is suggested by a particular word.

#### 4f = imagery (noun)

The use of language to create vivid pictures in the readers' minds.

#### 4g= simile (noun)

Comparing one thing to another to highlight their similarities.

#### 4h = symbol (noun)

A character, idea, image or setting that represents a bigger idea

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

### Year 7 Learning Cycle 2 English - The Tempest

### 1. Shakespeare's Life and Times

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

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

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

Id = Beliefs and Superstitions Folklore are the traditions, beliefs and stories passed down by a community. In Shakespeare's time, folklore was an important part of life. For example, some people believed that fairies and goblins came out at night to play tricks. People in the 1500s and 1600s believed in the supernatural. The audience would have believed in witchcraft and magic.

#### 2. Genres

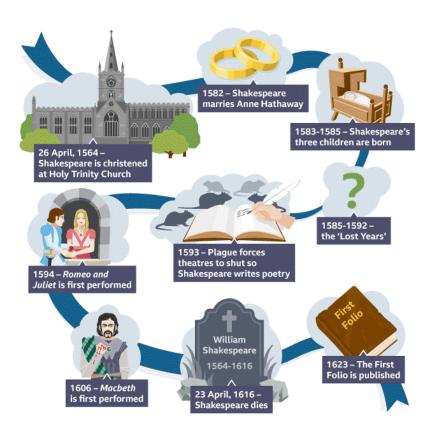
Shakespeare's plays can be categorised using three genres:

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

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

2c = Histories The ten plays that cover English history from the twelfth to the sixteenth centuries. Each historical play is named after, and focuses on, the reigning monarch of the period and include 'Richard III' and 'Henry V'.

#### 3. Timeline



### Year 7 Learning Cycle 2 English - The Tempest

### 4. Early Modern English Words

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

hast (verb) have

hence (verb) away from here!

hie (verb) hurry

oft (adverb) often

thou, thee (pronoun) you

thy (pronoun) your

thine (pronoun) yours

wherefore (adverb) why

wit (noun) intelligence, wisdom, good sense

#### 5. Characters

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

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

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

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

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

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

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

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

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

5j = Gonzalo Alonso's counsellor and trusted advisor.

#### 6. Plot

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

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

6c = Act 3 Ferdinand carrys logs and says he is happy to do the tasks Prospero tells him to because of his love for Miranda. Prospero is actually watching as Miranda and Ferdinand express their love for each other.

Stephano - still drunk and enjoying the status Caliban is giving him - Caliban and Trinculo enter. Caliban persuades Stephano to kill Prospero and rule the island himself. They are interrupted by Ariel's magical music.

Alonso, Sebastian, Antonio, Gonzalo search for Ferdinand. Music plays and strange creatures lay out a banquet. Ariel appears as a harpy and says that the consequence of betraying Prospero was the storm and loss of Ferdinand.

### Year 7 Learning Cycle 2 English - The Tempest

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

**6e** = Act 5 Prospero announces that his plans are coming together and he says he will forgive the nobles if they are sorry for what they have done. He plans to give up his magic. Ariel leads in the nobles and Prospero forgives them. Prospero reveals Miranda and Ferdinand playing chess together in his cell, much to Alonso's delight. Ariel leads in the Master and Boatswain who explain that strangely the ship fixed. Prospero sends Ariel to set Caliban and his companions free.

Caliban regrets taking Stephano for a god. Prospero promises to tell the noblemen the story of his life since being sent away from Milan, before they all return to Naples. Prospero tells Ariel to ensure they get safely back to Naples and then sets him free. Prospero then speaks to the audience directly, asking for their applause to set him free.



### 7. Vocabulary

7a = tempest (noun) a violent windy storm

7b = conflict (noun) a serious disagreement or struggle between two people groups or forces

7c = usurp (verb) take a position of power illegally or by force

7d = exile (verb) to send someone away from their own country or city

**7e = solemn (adjective)** having or showing serious purpose and determination; very serious or formal in manner or behaviour

7f = mankind (noun) all human beings

7g = mercy (noun) compassion or forgiveness shown towards someone who you could punish or harm

7h = plummet (verb) fall or drop straight down at high speed

7i = confined (verb) kept someone or something within limits; restricted

7j = enchant (verb) fill someone with great delight; charm

7k = plague (noun) a contagious bacterial disease including fever and delirium

7I = abhorred (adjective) Intensely and deeply hated.

7m = colonialism (noun) A country taking control of another country or land (usually one less powerful).

### 8. Subject Vocabulary

8a= play (noun) A dramatic piece of literature intended to be acted out on the stage.

8b = act (noun) A way of dividing a play. Each act is a group of scenes.

8c= scene (noun) A dramatic part of the story of a play, at a particular time and place and a way of dividing **acts** into smaller parts.

8d= stage direction (noun) An instruction in a play that tells actors how to move or speak, or gives information about the setting, sound effects or lighting.

**8e= language (noun)** Where or when the play takes place, usually introduced at the exposition (beginning) of a story.

### 8f= characterisation (noun)

The creation or construction of a fictional character.

8g = sonnet (noun) A love poem of 14 lines (3 quatrains of 4 lines and one couplet of two lines).

### 8h= pathetic fallacy (noun)

Giving human feelings and emotions to something not human, particularly the weather or environment, to enhance the mood of the writing.

#### 8i = imperative verbs (noun)

Verbs that express a command or an instruction e.g. 'Sit down' and 'Carry

those logs.'

### Year 7 Learning Cycle 2 English - To Build a Fire by Jack London

#### 1. Plot

This story is about a man who tries to survive in the harsh Yukon wilderness, (In Alaska, Canada) but makes a fatal mistake.

He is walking in the ice and snow towards a campground (Henderson's creek) with his dog. He accidently falls into a stream and then builds a fire to dry off. The fire is put out by snow falling from a tree. He attempts to build another fire, but his hands are frozen. He considers killing his dog to keep him warm, but decides to run instead. Eventually he succumbs to the cold and dies. The Dog continues on to the camp.

#### 2. Authorial Intent

Jack London was an American Novelist, journalist and activist. He supported animal rights, workers rights and socialism.

- Jack London wrote "To Build a Fire" to illustrate the naturalistic theme of man versus nature, and to show how human arrogance and ignorance can lead to fatal consequences.
- 2. He was inspired by his own experiences in the Yukon Territory, where he participated in the Klondike Gold Rush and faced many hardships and dangers.
- 3. He wanted to challenge the romanticized view of the Wilderness and present a more realistic and harsh portrayal of it.

### 3. Vocabulary

3a. creek (noun) a place where a small amount of water flows

3b = exposure (noun) the state of having no protection from something harmful

3c = withdraw (verb) to take something back, away or out

3d = tremendous (adjective) very large or great

3e = blazing (adjective) very hot, fast, or powerful

3f = aware (adjective) feeling, experiencing, or noticing something

3g = perspective (noun) a particular attitude towards or way of regarding something; a point of view:

3h = ignorance (noun) Lack of knowledge or information

3i = romanticise (Verb) deal with or describe in an idealized or unrealistic fashion; make (something) seem better or more appealing than it really is

### 4. Subject Vocabulary

4a = naturalism (noun) a style and theory of representation based on the accurate depiction of detail

4b = realism (noun) the quality or fact of representing a person or thing in a way that is accurate and true to life

4c = theme (noun) an idea that recurs in or is apparent throughout a work of art or literature

4d = exposition (noun) Background information at the start of a plot to introduce setting, time, characters' backstories, prior events

4e = structure (noun) The way a play, novel or poem is constructed and linked together.

4f = climax (noun) The point of the most tension or drama in a narrative

4g = resolution (noun) The ending and conclusion of a story's plot

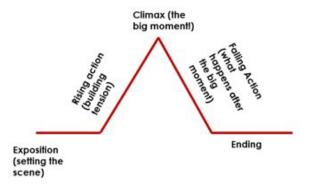
4h = opening (noun) the way the extract begins

4i = narrative shift (verb) a shift or change of focus

4j = foreshadowing (verb) hints at what's to come

4k = internal thoughts (noun) description of what a character is thinking or feeling



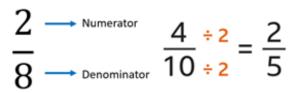


### Year 7 Learning Cycle 2 Maths

Key Words	Definitions
Numerator	The number on the top of a fraction
Denominator	The number on the bottom of a fraction
Vinculum	The line in a fraction
Improper fraction	A fraction where the numerator is bigger than the denominator
Mixed number	A number made up of a whole Integer and a fractional part.
Multiplier	The value which you can multiply a quantity by to get another.
Mutually exclusive events	Events which cannot happen at the same time.
Sample space diagram	A diagram which shows all of the possible outcomes when combining two things.
Likely	This means there is a good chance that an event will happen.
Unlikely	There is not a good chance that an event will happen.
Certain	You can be absolutely sure that an event will happen.
Even chance	An event may or may not happen- each outcome is equally likely.
Impossible	There is no way that an event can happen.
Proportion	A part, share or number considered in comparative relation to a whole.
Ratio	Ratios describe the relationship between two quantities
Speed	A rate of movement. How far an object travels in a given timeslot.

### Year 7 Learning Cycle 2 Maths - Fractions, decimals and percentages

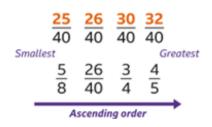
### 1. Simplifying fractions



To simplify a fraction, find the HCF of the numerator and denominator, and divide both numbers by this number

### 2. Comparing fractions

· Convert the fractions to have the same denominator



· Compare the numerators

### Converting between mixed and improper fractions

To find the numerator:

Multiply the whole number by the denominator

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

Then add the numerator
 The denominator stays the same

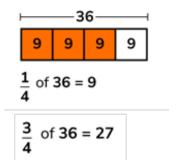
### 4. Multiplying fractions

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

$$\frac{3}{4} \times \frac{2}{5} = \frac{3 \times 2}{4 \times 5} = \frac{6}{20}$$
 Simplify

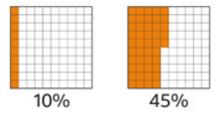
### 5. Fractions of amounts

- Divide by the denominator
- Multiply by the numerator



### 6. What is a percentage

Percentages are a way of expressing a number as a fraction of 100.



### 7. Converting between percentages and decimals

Divide by 100

Convert 60% to a decimal

$$60\% = 60 \div 100 = 0.6$$

So 
$$60\% = 0.6$$

### 8. Converting between percentages and fractions

- Write as a fraction with denominator 100
- Simplify

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

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

### 9. Finding percentages of amounts

Without a calculator- find simple percentages and build up

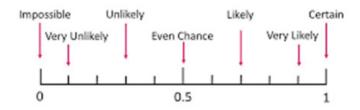
With a calculator:

- · Type the percentage>
- Use the percentage button (shift>ANS)
- "x"
- Quantity

### Year 7 Learning Cycle 2 Maths - Probability

### 1. The probability scale

The Probability Scale



### 2. Probability of a single event

$$P(A) = \frac{\text{Number of favorable outcomes to A}}{\text{Total number of possible outcomes}}$$

### Twirling a spinner



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

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

### 3. Sample space diagrams

Show the probability of events involving two things.

	1	2	3	4	5	6
Н	1H	2H	3H	4H	5H	6Н
Т	ΊΤ	2T	3T	4T	5T	6T

### 4. The probability of something not happening Probabilities add up to 1.

$$P(A') = 1 - P(A)$$

### 5. Finding probability from an experiment

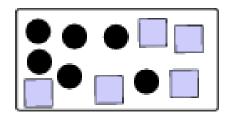
$$Relative \ frequency = \frac{frequency \ of \ the \ event \ occurring}{total \ number \ of \ trials \ of \ the \ experiment}$$

### 6. Expected outcomes

Multiply the probability by the number of trial.

### Year 7 Learning Cycle 2 Maths - Ratio and proportion

### 1. Forming ratio

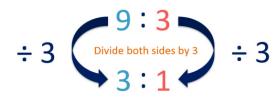


Circles : squares 6:5

Ratios describe relationships between two quantities.

Give the values in the order that the items were mentioned i.e. circles first.

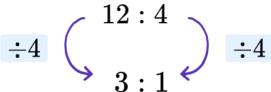
### 2. Simplifying ratio



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

Divide by the common factor

### 3 Writing in the form n:1



Simplify the ratio as before, but instead of choosing the common factor, divide to get a 1 where the question asks for a 1.

### 4. Sharing a ratio

- · Count the total number of parts
- · Find the value of one part by division
- · Multiply to find the value of each group

Nikki: Gemma



9 Boxes in total

Value of each box = £36  $\div$  9 = £4 per box

Nikki: Gemma

£16 £20

### 5. Writing ratio as Fraction

b:r

3:2



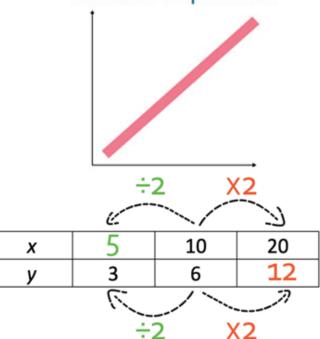
The fraction for blue is 3/(2+3)=3/5

The fraction for red is 2/(2+3)=2/5

### 6. Direct proportion

As one quantity increases, so does the other

### **Direct Proportion**



### 7. Speed

Speed= distance:time

20km/h means

Distance: time

20km: 1 hour

40km: 2hours

60km: 3hours

10km: 1/2hour

### Year 7 Learning Cycle 2 Maths

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

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

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

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

### Useful features on your calculator:

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

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

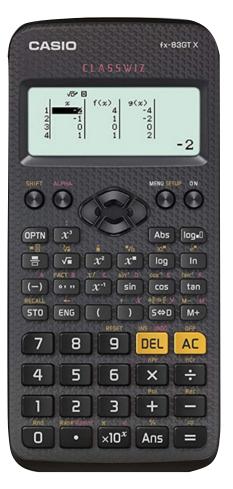
Table (menu 3): This is where you can generate values within a table- useful for plotting graphs and generating terms of a sequence

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

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

Fraction button: can be used for any calculations with fractions

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



### Year 7 Learning Cycle 2 Maths - Sparx Maths

## **Sparx Maths**

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

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

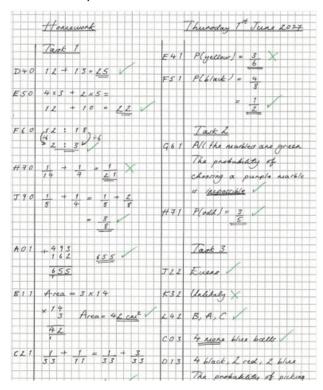
If you complete one of the extra homeworks- XP Boost or Target, you will receive another merit - they must be 100% complete

Sparx clinics will run Monday, Tuesday, Thursday in W4 - a Maths teacher will be on hand to support you, if you are unsure of any of the notes covered

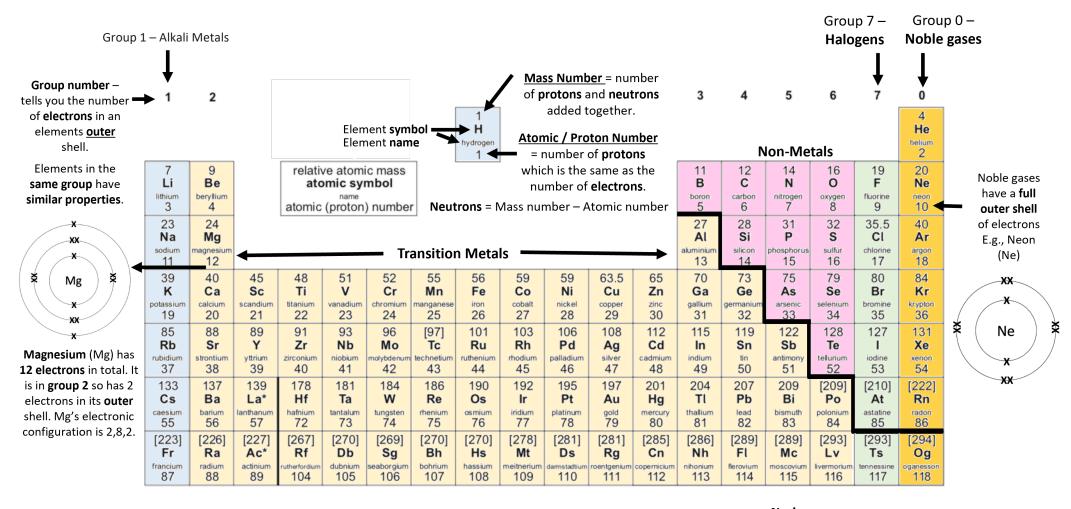
It is your responsibility to seek help BEFORE the deadline, if you get stuck

Your bookwork will be checked in lessons- you must write full workings for every question.

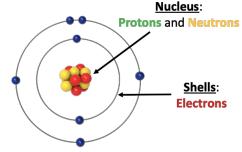
You must bring your homework book to the first lesson after Tuesday 7:30am- if you do not have your book, then you have not completed your homework



### Year 7 Learning Cycle 2 Science - How can I use the Periodic Table?



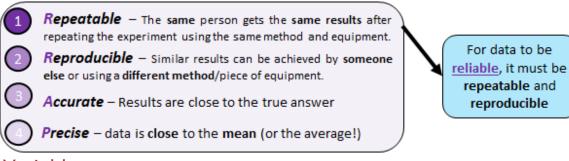
Subatomic Particle	Mass	Charge
Proton	1	+1
Neutron	1	0
Electron	Negligible	-1



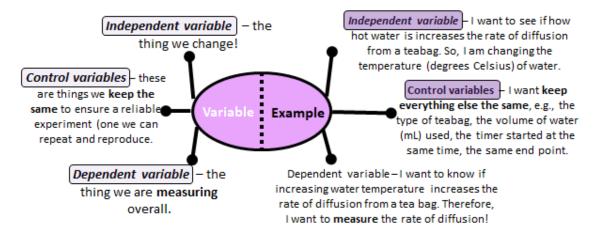
### Year 7 Learning Cycle 2 Science - Experiments

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

### 1. Designing and performing experiments



#### 2. The Variables



#### 3. Presenting Data



#### Drawing conclusions from data:

- State the relationship between the independent and dependent variable, e.g., 'as the time increases the product formed increases.'
- 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 2 Science - Forces, motion and pressure

1. Key Words	Definitions
Contact forces	A force that acts between two objects that are physically touching
Non-contact forces	A force that acts between two objects that are not physically touching
Speed	A measure of how fast an object is moving
Distance	Numerical description of how far apart two things are. Measured in metres
Weight	A force that acts on mass, pulling it down, due to gravity. It is a force and forces are measured in newtons (N)
Mass	A measure of the amount of matter an object is made out of. Measured in kilograms
Pressure	A measure of how much force is acting on an area
Distance-time graph	A graph with distance travelled plotted on the vertical axis against time taken on the horizontal axis
Constant speed	When the speed of an object remains the same – it does not increase or decrease
Accelerating	The rate of change of speed. This is calculated when the speed of an object changes

#### 2. Forces revision



https://www.bbc.co.uk/bitesize/topics/z4brd2p/articles/zs3896f#z7tbvwx3

### 3. Weight and mass revision



https://www.bbc.co.uk/bitesize/topics/z4brd2p/articles/z6xjdp3

### 4. Speed revision



https://www.bbc.co.uk/bitesize/topics/z4brd2p/articles/zw9qwnb

#### 5. Pressure revision



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

### Year 7 Learning Cycle 2 Science - Forces, motion and pressure

#### 1. Non Contact Forces



Magnetic force is experienced by a magnet or a magnetic material, e.g. iron, when placed in a magnetic field.



Electrostatic force is experienced by a charged particle in an electric field.

This force can be either attractive or repulsive.

Gravitational force is experienced by a mass when it is sufficiently close to another mass.



Gravity always pulls two objects towards each other. It never pushes apart.

In the diagram, Earth pulls the satellite and the satellite pulls the Earth. The forces are equal in size and opposite in direction.

### 2. Speed

In science, speed is typically measured in metres per second, m/s. This is the simplest unit of speed.

Distance is measured in metres.

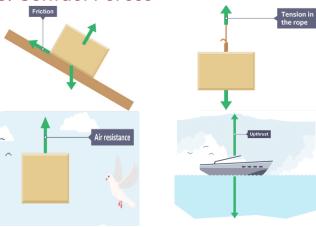
Sometimes a question will give distance measured in kilometres. You can convert kilometres into metres by multiplying it by 1000.

For example  $10km - 10 \times 1000 = 10,000m$ .

Time is measured in seconds

speed = distance/time

### 3. Contact Forces



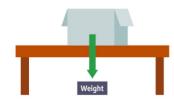
### 4. Weight and Mass

The terms weight and mass are often used incorrectly. Phrases like 'a bag of sugar weighs 1kg' are not scientifically correct.

Mass is a measure of the amount of matter an object is made out of. Mass is measured in kilograms (kg). Very small masses are sometimes measured in grams(g). There are 1000g in 1kg.

Weight is the force that acts on mass due to gravity and is therefore measured in newtons (N).

The following equation can be used to calculate the weight of an object



Weight (N) = mass (kg) x gravitational field strength (N/kg)

The gravitational field strength on Earth is 10N/kg.

This means that 1kg mass would be attracted by a force of 10N.

#### 5. Pressure

Pressure can be thought of as the concentration of a force on an area and can be calculated using the equation:

#### Pressure = force ÷ area

Force is measured in Newtons (N). Area can be cm<sup>2</sup> or m<sup>2</sup> and so pressure is measured in N/cm<sup>2</sup> or N/m<sup>2</sup>.

For example a person might weigh 400N and stand on one foot which has an area of  $80 \text{cm}^2$  so the pressure this person puts on the ground is  $400 \div 80 = 5 \text{N/cm}^2$ .

You can see the effects of this equation in action if you press a drawing pin into a cork board. The pin point end pierces the cork board and stays in place, you couldn't do that with the flat end.

This is because the same force is concentrated onto a smaller area at the pin end which creates enough pressure for the pin point to pierce the cork board.

### Year 7 Learning Cycle 2 Science - Wildlife Science

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

### 2. Photosynthesis revision



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

### 3. Factors affecting photosynthesis revision



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

### 4. Respiration revision



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

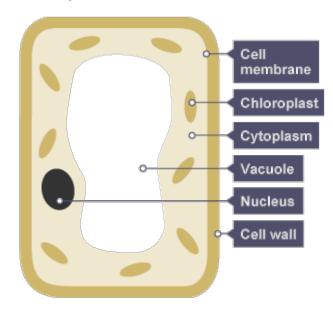
### 5. Ecosystems, food chains and bioaccumulation revision



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

### Year 7 Learning Cycle 2 Science - Wildlife Science

### 1. Photosynthesis



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

Plants get carbon dioxide from the air through their leaves, water from the ground, and light from the sun!. This produces glucose (food for the plant) and oxygen.

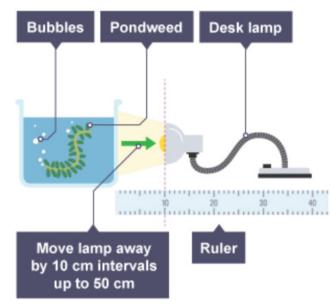


If a plant's leaves cannot undergo photosynthesis, it will die.

Carbon dioxide + water → Glucose + Oxygen

### 2. Photosynthesis Investigation

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



Independent variable: The light intensity (how close the light is)

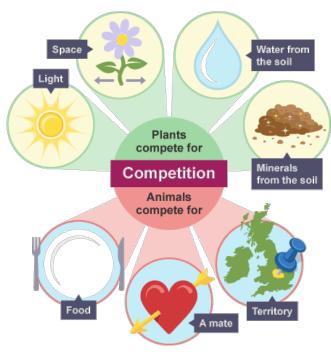
Dependent Variable: the number of oxygen particles produced (representing the rate of photosynthesis)

Control variables: The mass of the pondweed, the volume of water used, the temperature.

### 3. Ecosystems: Competition and Habitats

An **ecosystem** is the living (biotic) organisms in a particular area together with the non-living (abiotic) components of the environment, such as soil, air and water.

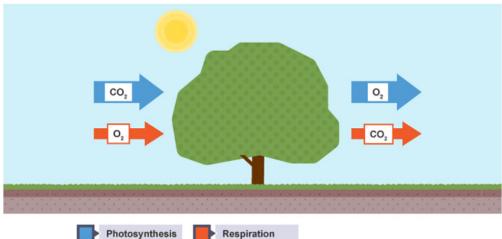
A **habitat** is a place where organisms live in an ecosystem. A **community** is the **populations** of organisms that live in an ecosystem.



### Year 7 Learning Cycle 2 Science - Wildlife Science

### 4. Respiration

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



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

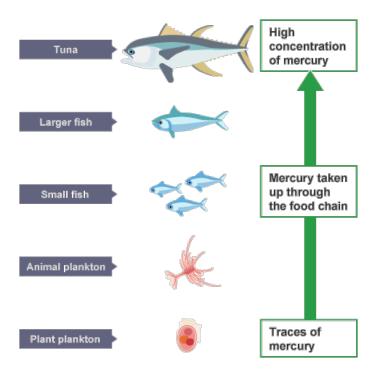
**Aerobic Respiration:** 

Oxygen + Glucose -> Water + Carbon Dioxide

#### 5. Bioaccumulation

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

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



### Year 7 Learning Cycle 2 Science - How to Approach 6 Mark Questions

### 1. How to approach 6 mark questions in Science - Forces, motion and pressure

Question	An organiser of a bungee jumping competition changes the length of the bungee rope so different people can use the rope safely. Use your idea of forces to describe how the size of a person affects the rope when they jump.
Top tip	You need to know that a heavier adult will exert more force on the rope.  For safety, the extension of the rope must be smaller than the distance
	to the ground. Heavier jumpers will therefore need a shorter rope
Model answer	When a person bungee jumps, the force of their weight pulls them down to the Earth. The greater the mass of the person jumping, the more force they will exert on the bungee rope. The greater the force on the bungee rope, the further it will stretch. Therefore, a heavier adult who is bungee jumping will cause the bungee rope to have greater extension. To prevent them hitting the ground, heavier adults will need a shorter bungee rope.
Practice	Learn and practice the model answer above.

### 2. How to approach 6 mark questions in Science - Wildlife Science

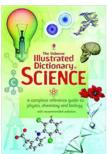
Question	Describe the structure and function of a leaf (6 marks).
Top tip	To describe means you have to give the details. You do not need to explain why.
	The function of the leaf is to carry out photosynthesis. The top layer of the leaf is the upper epidermis. This is a transparent layer that allows sunlight through so photosynthesis can occur in the cells below.
Model answer	Next, the leaf has a layer of mesophyll palisade cells, they are close towards the upper surface of the leaf; they are packed with chloroplasts and are arranged closely together. This means that there is increased absorption of light for photosynthesis.
	The leaf also has a spongy mesophyll layer with gaps between the cells, this allows diffusion of gases.
	Finally, the stomata at the bottom of the leaf are tiny holes that allow carbon dioxide to diffuse into the leaf for photosynthesis.
Practice	Learn and practice the model answer above.

### Year 7 Learning Cycle 2 Science - Clubs and Reading

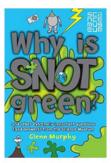
### 1. Science reading opportunities



2. Young scientists club





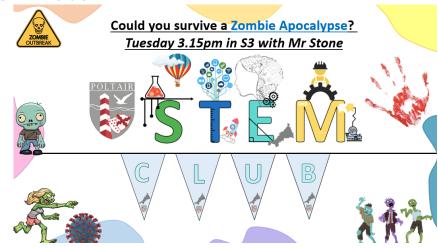








#### 3. STEM club



### 4. Science discovery Websites

Spectacular Science National Geographic

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

KS3 Science Bitesize

https://www.bbc.co.uk/

bitesize/subjects/znq4d2p



Discover Natural History Museum

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



#### Cornwall Wildlife Trust

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



#### Eden at home

https://www.edenproject.



com/learn/eden-at-home



### NASA

https://www.nasa.gov/



#### Science Experiments for Kids

sparks.com/



### https://www.science-



Science or magic?



# Year 7 Learning Cycle 2 Art - Making Marks

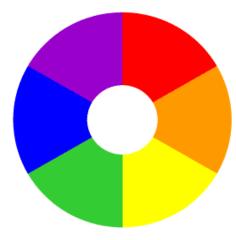
### 1. Tier Three Vocabulary

Key Words	Definitions
Primary	The first set of colours. Red, Yellow and Blue. They cannot be made
Secondary	The second set of colours. Made by mixing two primary colours together
Complementary	Colour that is opposite on the colour wheel. Colours complement each other. Mixing together produces the Tertiary colours
Tertiary	The third set of colours. Three shades of brown. Made by mixing the complementary colours
Fauves	The wild beasts, An art movement from 1905–1910. Using colour to express detail, light and tone
Pointillism	A technique and art movement which began in 1886. Seurat and Signac were the pioneers of this style
Blending	Wash one colour into another

### 3. Colour Wheel Knowledge

You will learn about the colour wheel. How to mix, blend and paint. You will learn about complementary colours and how colours can express emotion and meaning.

#### COOL COLORS WARM COLORS



You will be introduced to a range of artists that have explored how to use colour in a landscape. We will look at Andre Derain, Fauves, Alma Thomas, Seurat and Signac. We will learn about Pointillism which is a painting technique using dots and dashes.

#### 4. Artists that make marks



Andre Derain

Derain used colour

wheel theory to

create landscapes

of London.





Alma Thomas
Alma Thomas

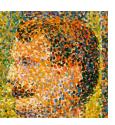






George Seurat

Seurat developed the techniques Pointillism where the eye mixes the colour.



### 2. Materials





### 5. Links and Further Reading

https://www.tate.org.uk/art/artists/andre-derain-998



https://nmwa.org/art/artists/alma-woodsey-thomas/

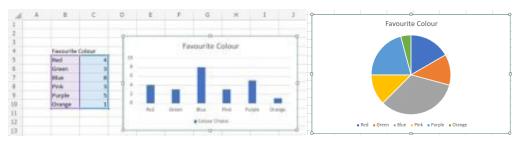
https://www.nationalgallery.org.uk/artists/georges-seurat



# Year 7 Learning Cycle 2 Computing - The Internet, the World Wide Web and Computer Hardware

## 1. Working with data (Excel Spreadsheets)

Spreadsheets are useful because you can model data using Graphs and Charts very easily. It is good for seeing trends and relationships.



#### Key Words:

Bar Chart: Data is displayed in columns or rows

Pie Chart: Data is displayed as proportions of a circle

### 2. Computer Hardware

Keyword	Definition	Example
Input Device	Allows you to add data to the computer	Keyboard, mouse, touchscreen, microphone
Output Device	Allows the computer to communicate with you	Monitor, speaker, headphones, printer
Storage	Allows you to save data	Hard disk, USB, DVD

### 3. The Internet and World Wide Web

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

# Year 7 Learning Cycle 2 Design Technology - Material World - Keyring

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

### 4. User-centred Design



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

### 2. Analysing Existing Design



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



The fob of this keyring has been made using coloured acrylic. Unlike wood, acrylic is NOT a sustainable resource as it is usually made from crude oil that is finite. The cloud shape has been cut using a hacksaw and then filed down to make the edges smooth.



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

### 5. Workshop Safety

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

### 3. Bonding Acrylic

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



### 6. Links and Further Reading

Designing:

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





How to finish the surface of acrylic:

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





# Year 7 Learning Cycle 2 Drama - Matilda

1. Key Words	Definitions
Still Image	Where the actors freeze onstage in a given moment in order to communicate meaning or mark a moment
Thought Track	When a character steps out of a scene to address the audience about how they're feeling
Hot Seating	A character is questioned by the audience or students. The actor must answer in role
Tone	The emotional sound of your voice
Pitch	How high or low your voice goes in speech
Facial Expression	How you show emotion on your face
Body Language	How you communicate feeling through the actions of your body
Gait	How your character walks
Gesture	A movement that communicates something

### 2. Plot

Matilda is a little girl with big curiosity, a sharp mind and a vivid imagination - and the worst parents in the world. While her parents content themselves with trashy TV and dodgy money-making schemes, she loves to lose herself in the pages of her beloved books. Where they are loud, selfish and unkind she is a quiet observer, thinking up small and cheeky acts of rebellion and revenge. On meeting her inspirational teacher, Miss Honey, Matilda is encouraged and begins conjuring her own fantastical tales. Excited to attend Crunchem Hall, Matilda is surprised to find the school is an ominous and oppressive place led by the huge and villainous Miss Trunchbull. As well as kind Miss Honey, the bright lights among the meanness are storyloving librarian, Mrs. Phelps and Matilda's newfound school friends. Filled with an overwhelming sense of justice, Matilda dares to take a stand for what is right and teach Trunchbull a lesson she won't forget.

#### 3. Context

Roald Dahl's Matilda The Musical, with a book by Dennis Kelly and music and lyrics by Tim Minchin, is based on the Roald Dahl book, Matilda. A children's novel that was published in 1988, it became notable in years thereafter for a film adaptation in 1996 that starred Danny DeVito and Rhea Perlman. The Royal Shakespeare Company had a desire to bring

Dahl's work to the stage in 2009, so they reached out to Kelly, a writer for film and television, and Minchin, a comedian and musician, to work on the show, before beginning to assemble the creative team.



#### 4. Characters

Matilda	An imaginative girl who is clever and wise far beyond her years. She has a thirst for learning that cannot be quenched. Likable and charismatic, honest and unassuming, but with a prankster streak and a strong sense of justice
Miss Trunchbull	Headmistress of Crunchem Hall, the tyrannical headmistress at Matilda's school who despises children. Sly, conniving and cunning
Miss Honey	Matilda's kind-hearted teacher. She is tired of living in fear under Miss Trunchbull. Sweet, honest, caring, and intelligent
Mr Wormwood	Wormwood is Matilda's uncaring father. A slimy, greedy used-car salesman, unintentionally hilarious
Mrs Wormwood	Mrs. Wormwood is Matilda's self-absorbed, negligent mother who is obsessed with amateur ballroom dancing.
Bruce	Bruce is a genuine, kind boy with a fondness for sweets; his spirit is broken by the Trunchbull but he bounces back stronger than ever
Lavender	Matilda's classmate and friend. Loud and wacky - likes to have fun
Amanda	Very sweet girl who is quite shy. Scared of Ms. Trunchbull, but feels safe with Miss Honey

### 5. Links and Further Reading

RSC Matilda The Musical Production Website

is.gd/matildaproduction



Official West End TrailerRSC Roald Dahl's Matilda the Musical

is.gd/westendtrailer



#### Filmed Production

Full length musical production performed by the Palatka High School Musical Theatre Department.



is.gd/filmedproduction

# Year 7 Learning Cycle 2 Food - Hygiene, Safety & Balanced Diet

1. Key Terms	Description
Enzymatic Browning	The reaction that occurs when fruit is exposed to oxygen, causing the fruit to go brown
Reaction	A process in which one or more substances, also called reactants, are converted to one or more
Rubbing-in Method	Butter or margarine rubbed into flour to resemble breadcrumbs
Sensory Analysis	Evaluates the entire sensory experience of edible products – appearance, aroma, taste, and texture
Aroma	Smell for example burnt, sweet
Appearance	Sight, presentation for example bright, colourful, dull
Texture	Feeling of the food when eaten, for example crunchy, soft
Taste	Flavours of the food spicy, sweet, bland
Economic Attitudes	The attitude a person has regarding costs of food such as ingredients or a dish on a menu
Adaptation	The change of an ingredient or recipe

### 2. Enzymatic Brownina

Enzymatic browning is an oxidation reaction that takes place in some foods, mostly fruit and vegetables, causing the food to turn brown. Enzymatic browning is a reaction which requires the action of enzymes and oxidation to occur.

### 4. Sensory Analysis

Food is analysed and evaluated by taste, texture, aroma and appearance. A sensory analysis enables a dish to be compared to others and evaluated. One method of completing this is the ranking test, where a selection of the same foods are tasted and ranked.



### 3. Rubbing in Method

The rubbing in method is the skill of rubbing the flour grains to coat the fat, until the mixture resembles breadcrumbs.



#### 5. Food Choice

People's food choice is influenced by a number of different factors, biological, social, economic and physical. Biological factors such as allergies, intolerances or medical conditions. Economic factors derive from the economy including available disposable income to spend on food as well as costs of dishes on a menu. People choose food depending on social attitudes such as vegetarian, vegan and religious beliefs. Food availability impacts the physical attitudes towards food.



### Revise: Mindmap Maker is.gd/mindmapmaker



### 6. Links and Further Reading

Video: Apple Crumble

https://www.bbcgoodfood.com/ recipes/best-apple-crumble



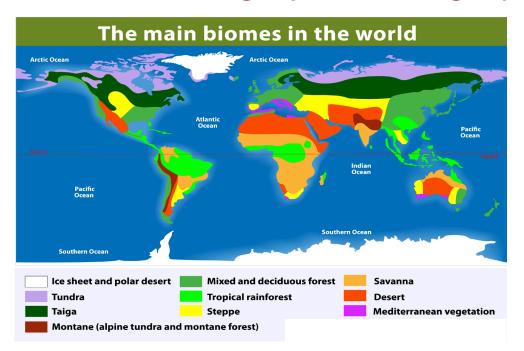
Article: Food Choice: The Challenge of Choosing Foods

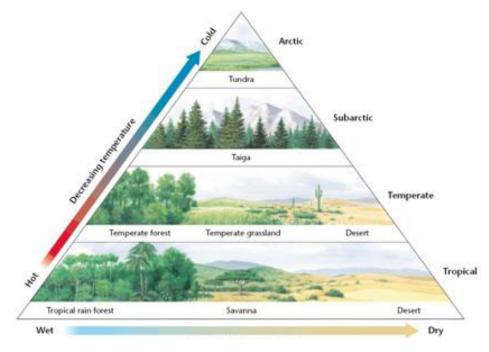
https://pressbooks.bccampus.ca/nutr1100/ chapter/lifestyles-and-nutrition/

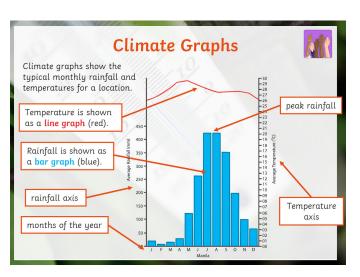


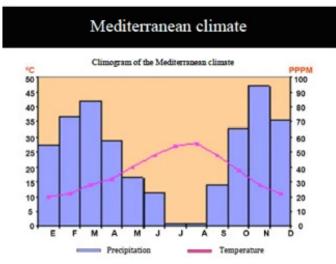


# Year 7 Learning Cycle 2 Geography - World Biomes



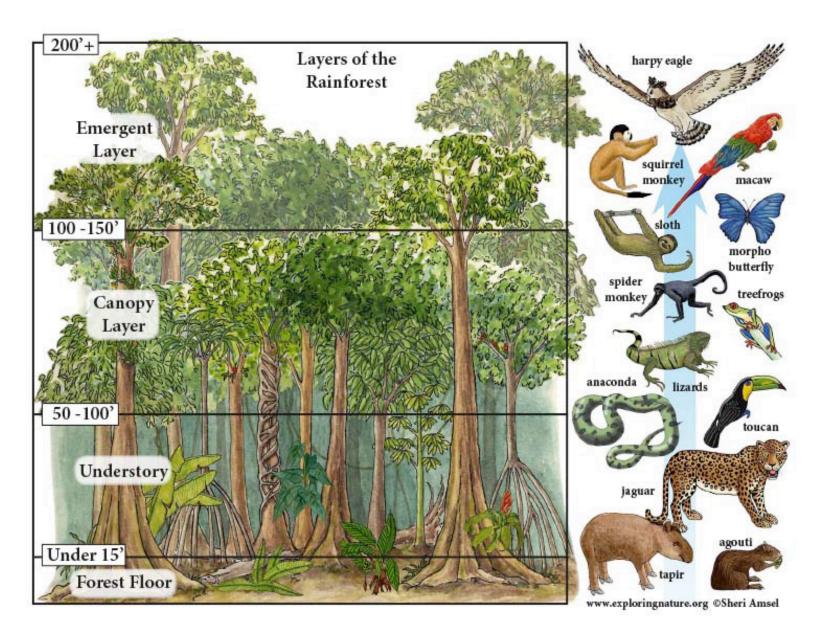








# Year 7 Learning Cycle 2 Geography - World Biomes



### Tropical Rainforest Plant Adaptations

- Drip tips and waxy layer allow water to run off leaves
- Buttress and prop roots hold up plants in shallow soil
- Plants climb or live on others to reach sunlight
- Epiphytes, or "air" plants, have aerial roots that cling to a host plant
- Flowers lure animal pollinators due to lack of wind pollination on forest floor

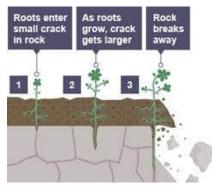
# Year 7 Learning Cycle 2 Geography - How is the Planet Shaped by Process?

### 1. Weathering

There are three types of weathering.

#### Biological weathering

This describes rocks being broken up by the roots of plants, or animals burrowing into them.

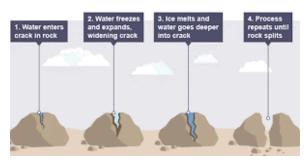


#### Chemical weathering

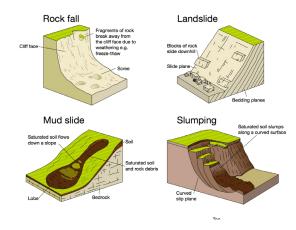
This describes rocks being broken up because substances in rainwater, rivers and seawater or the air, react with the in the rocks.

#### Physical weathering

This describes rocks being broken up by changes in temperature, freezing and thawing of trapped water or the action of waves and rivers.

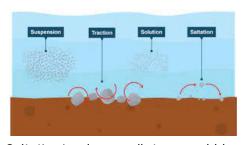


### 2. Erosion



### 3. Traction

Traction involves large pebbles and boulders being rolled along the sea bed.



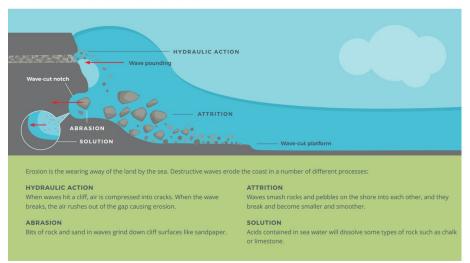
Saltation involves small stones, pebbles and silt being bounced along the sea bed.

Transportation by suspension is when fine particles of clay and sediment are suspended in the sea and transported by waves.

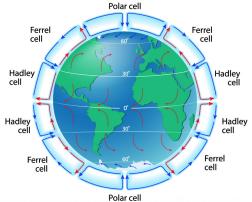
When material is dissolved and carried by the sea it is transported in solution.

### 4. Coastal Erosion

#### **COASTAL EROSION**



# 5.Global Atmospheric Circulation



### 6. The Water Cycle

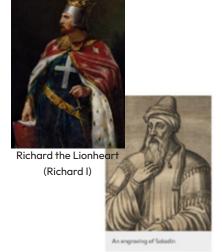


# Year 7 Learning Cycle 2 History - Enquiry Question: What is the legacy of the crusades?

Key Terms	Description
Crusade	In the medieval era, Crusaders believed they were carrying out their God's work by taking part in military campaigns to take control of the Holy Land for Christianity. (A Holy War)
Islam	Religion followed by Muslims. Monotheistic (one God, Allah). Prophet Mohammad (pbuh.)
Christianity	Religion followed by Christians. Monotheistic (one God). Prophet Jesus, son of God who died for sins
Judaism	Religion followed by Jews. Monotheistic (one God)
Holy Land	A place of religious significance for followers of religion. Jerusalem is a Holy Land for Christians, Muslims and Jews
Pilgrimage	A religious journey
Chivalry	The spirit of medieval knighthood, qualities expected of a medieval knight
Truce	An agreement to stop fighting for certain period of time. Richard's truce with Saladin was arranged in 1192

### The Routes of the Crusades



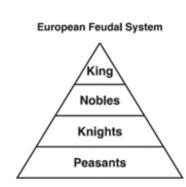


### 2. Basic knowledge

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

# Year 7 Learning Cycle 2 History - Enquiry Question: Did the Black Death end the Dark Ages?

1. Key Terms	Description
Black Death	The outbreak in the 1340s of the Bubonic Plague. It caused swellings and blackening of the skin
Buboes	Swellings roughly the size of an egg in the groin and underarms (key symptom of the Black Death)
Flagellants	Movement that developed as result of the Black Death. They would 'punish' themselves for sins by whipping as a way of preventing God punishing them by giving them the Black Death.
Miasma	Belief that 'bad air' caused disease and illness
Feudalism	System of society where there were clear positions for groups (King at the top: church: knights: peasants)
Dark Ages	The idea that the early Middle Ages was a dark time in terms of knowledge and literature
Revolt	Attempt to achieve major and sudden change in political power and political organisation
Monarchy	A government with a royal family (King or Queen)
Tax	Money you have to pay from your income to the government
Poll tax	Tax that is the same amount of money for all (doesn't matter how much you earn/have you pay the same cost in a Poll Tax)





### 2. Basic knowledge

Question	Answer
1. What do we know caused the Black Death?	The bacteria Yersinia pestis, which was spread via the fleas carried on rats
2. What did people in the Middle Ages think caused the Black Death?	God, miasma (bad air)
3. What were the symptoms of the Black Death?	Headache, fever, swellings (buboes) in the groin and armpits, bleeding under the skin (black patches), painful muscle spasms death!
4. How long did it take the population of England to recover to normal levels after the Black Death?	250 years
5. What % did wages increase by because there were so few workers?	400%
6. What were many churches forced to do?	Close, either whole villages died, or the religious leaders did
7. How were poor people's diets affected by the Black Death?	Improved; there was more food/crops available
8. How did landowners take advantage of the high death rates?	Extended the amount of land they controlled
9. What was the Peasants' Revolt, 1381?	Peasants were unhappy with a Poll Tax the king told them to pay and with the reduction in their wages, so they started to attack tax collectors and mobilise to get the king to deal with their issues
10. What were the long-term consequences of the Peasants' Revolt?	It didn't achieve what the peasants were looking for but did at least prove the threat they could be if they were upset by the government. A Poll Tax wasn't introduced by any government again until 1990!

# Year 7 Learning Cycle 2 Music - Music of the Orient

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

### 2. Finding Notes on a Piano/Keyboard 3. Different Durations of Notes

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

#### The dog in the kennel



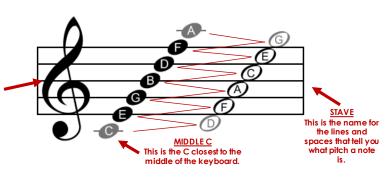
Symbol	Name	Duration
O	Breve	Hold for 8 beats
	Breev	(This one is rarely used)
0	Semibreve Seh-me-breev	Hold for 4 beats
	Minim Mih-nim	Hold for 2 beats
	Crotchet Crotch-it	Hold for 1 beat
or 21ogether	Quaver Kway-ver]	Hold for 1/2 a beat

### 4. Symbols and Pitch Notation

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

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





Lesson: Music Theory - Note Durations is.gd/notedurations

## 6. Links and Further Reading

Article: 4 Traditional Japanese Instruments That Will Make Your Heart Melt

is.gd/japaneseinstruments



Revise: Flash Card Maker is.gd/flashcardmaker





5. Sakura Sakura

is.gd/sakuramusic

The piece you are learning is called 'Sakura, Sakura'. It

is a traditional Japanese piece of folk music that means

'Cherry Blossoms' and it was written to celebrate the coming of springtime. The song can be heard at the link



# Year 7 Learning Cycle 2 Religious Education

1. Key Words	Definitions
Dharma	Means religious duty, but also refers to the Hindu code of conduct and way of life
Reincarnation	Most Hindus believe in reincarnation – the idea that after death, the souls is reborn into a new life
Karma	The belief that actions in this life will have a consequence for a person's rebirth
Brahman	Many people misunderstand Hindu beliefs about God. Hindus believe in one God who can be seen in many forms. The different forms of God are referred to as the deities. Brahman is often represented through the Aum symbol
Atman	Hindus believe that all living things have a soul (an atman). It is the soul that is reborn after death
Good and evil	According to Hindu scriptures there is a constant struggle between good and evil, order and chaos, light and darkness. The deities (gods) are believed to uphold order whilst demons are said to be trying to disrupt it

BBC Teach - Inside a Mosque





Key Stage Three Bitesize Religious Studies





One God in many forms

Sanatana

Dharma

Sanatana Dharma is the more accurate name for the religion and way of life that is popularly called Hinduism. It is a belief system that begin around 5000 years ago in India. The Hindu Dharma has evolved over time and there is a great deal of diversity within the religion. It is the third largest religion, with around 750 million followers

Hinduism teaches that there is one God (Brahman) with many forms.

Brahman is an energy that fills the universe and is far too complex for the human brain to understand

The Trimurti The 3 main aspects of Brahman are known as the Trimurti (tri = 3, murti = an image of God). These are:

Brahma

Shiva

Vishnu

Vishnu and avatars

Vishnu is believed to have visited earth in living forms (AVATARS) to destroy evil. Some avatars were in animal form, others were human. Rama and Krishna are the most well known and popular incarnations of Vishnu

Hindu worship Hindu worship is often referred to as PUJA. It can be performed at home or in the temple (the Mandir). Most Hindu families have a home shrine because worship is seen as part of daily life. Shrines and temples contain MURTI – statues or images of the deities. However, Hindus do not worship statues – they ring a bell before worshipping to symbolise calling on God's presence. Hindu worship often involves making offerings such as food or flowers

Diwali

Diwali is known as the festival of lights because houses, shops and public places are decorated with small earthenware lamps called divas. The word Diwali comes from the Sanskrit word 'deepawali' which means a row of lamps. Diva lamps are lit to celebrate the story of Rama and Sita and symbolise good overcoming evil just as light overcomes darkness.. They are also important because they help light the way for the goddess Lakshmi find her way into people's homes. The hope is that she will bless them with wealth and luck for the year ahead





# Year 7 Learning Cycle 2 Spanish - Mi vida escolar - My school life

### 1. Topic vocabulary

Las asignaturas	School subjects
mi asignatura preferida	My favourite subject
Mi profe de inglés es	My English teacher is
severo, estricto	Strict
trabajador(a)	hardworking
paciente	Patient
amable	Kind
nos ayuda	He/she helps us
nos hace réir	He/she makes us laugh

En mi insti hay	In my school there is
En mi insti ideal habría	In my ideal school there would be
No hay	There isn't
un campo de deportes	A sports field
un pasillo	A corridor
un polideportivo	A sports hall
un vestuario	A changing room
un aula	A classroom

un aula	A classroom
el transporte	
er ir arisporte	Transport
voy al insti	I go to school
viajo	I travel
en autocar	By coach
A pie	On foot
suelo ir	I usually go
mi padre me conduce	My father drives me
El uniforme	Uniform
llevo	I wear
llevaría	I would wear
una chaqueta	Ajacket
es	It is

### 2. Key Questions

¿Cómo es tu insti?

¿Cómo vas al instituto?

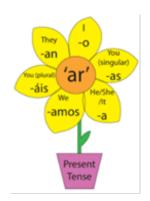
¿Cuál es tu asignatura preferida?

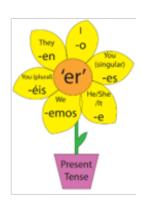
¿Cómo son los profesores?

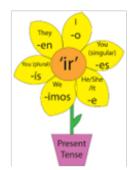
Describe tu colegio ideal

¿Llevas uniforme?

#### 3. Present tense







### 4. Opinions and WOW phrases

Creo que	I believe that
Pienso que	I think that
Supongo que	I suppose that
Me gusta (mucho)	I (really) like
Me encanta	llove
Mi pasión es	My passion is
No me gusta nada	I don't like at all
Me da igual	I don't mind
porque	Because

### 5. Further reading and websites

The present tense:

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





The conditional tense:

https://www.bbc.co.uk/bitesize/guides/znx8nrd/revision/1

Adjectives and how to use them: https://www.bbc.co.uk/bitesize/ topics/zg9mhyc/articles/zjdrvk7





Festilingo - General Spanish practice:

https://www.bbc.co.uk/bitesize/topics/zkkb382/articles/zk48qnb









