# KNOWLEDGE ORGANISER



# YEAR 8 CYCLE 1

Name:

Tutor group:





# YOUR KNOWLEDGE ORGANISER

- Knowledge Organisers contain critical knowledge you must know. This will help you recap, revisit and revise what you have learnt in lessons in order to remember this knowledge for the long-term.
- You must have this book for every lesson it is part of your equipment.

# USING THE KNOWLEDGE ORGANISER FOR REVISION

- Students remember 50% more when they test themselves after learning.
- You can use your book to help **memorisation**.
- **Read** a section of your Knowledge Organiser.
- Cover it up.
- Write out what you've remembered.
- **Check** the Knowledge Organiser to see if you're right.
- Repeat this process.
- Do this every day to help commit the information to your long-term memory.

# HOW TO USE THE BOOK FOR SELF-QUIZZING



# **USING YOUR KNOWLEDGE ORGANISER FOR REVISION**

### Research shows that students remember 50% more when they test themselves after learning something.

You can use your 100% book to create <u>flashcards</u>.

These should be:

- double-sided
- a question on one side, the answer on other
- a keyword on one side, a definition or image on the other
- used for self-testing.



<b>Q1</b> What is <u>emulsion</u> ? Oil, water, droplet, shake, immiscible, bond, mixture.	Q2 What is <u>one</u> similarity between an <u>alkene</u> and an <u>unsaturated</u> fat?
Q3 What is the name for the <u>test</u> for <u>unsaturated fat</u> or <u>alkene</u> ? Describe what you would <u>see</u> .	<b>Q4</b> Describe two ways that <u>saturated</u> fat and <u>unsaturated fat</u> (oil) are <u>different</u> .
Q5 What is <u>the</u> <u>advantage</u> of cooking food in <u>oil</u> ? <u>Explain</u> your answer.	<b>Q6</b> <u><b>Describe</b></u> what an <u><b>emulsifier</b></u> molecule does.
<b>Q7</b> Name the <u>two parts</u> of an <u>emulsifier</u> molecule.	Q8 What is the difference between a <u>monounsaturated</u> fat and <u>polyunsaturated</u> fat? <u>Mono</u> = one <u>Poly</u> = many

# FEEDBACK

Your teachers will give you feedback about your learning and progress in many different ways. These will include:

- Verbal feedback about something you are working on in the lesson (practical or written work).
- > Verbal feedback through asking questions.
- ➢ Guided independent self-assessment.
- ➤ Guided peer assessment.
- Instant/quick written comments or identification of SPAG errors on your work as you complete it.
- Written feedback on your work and setting R4 or extension questions for you to complete.
- Knowledge quizzing/short tests that give you a score (i.e. 15/20).
- Longer tests that may also give a score (i.e. in %) as well as feedback about the content you need to re-learn/refresh.

# You will be expected to respond to feedback in the following ways:

- ✓ Correcting all SPAG errors and copying out spellings as directed by your teacher.
- ✓ Answering R4 questions and completing extension questions/tasks in green pen.
- ✓ Giving peer feedback when it is expected by the teacher, using the format provided.
- ✓ Setting yourself targets when required, to ensure that you keep developing your knowledge and skills.
- ✓ Focusing on the areas of knowledge that you need to learn and quizzing yourself on these for homework.
- ✓ Showing that you take pride in your work by presenting it neatly.
- ✓ Always asking for help if you don't understand the work or what to do.

# ENGLISH - GRAMMAR

1. Punctuation Mar	ks		
Full Stop         Used at the end of a sentence	Question Mark Used at the end of an interrogative sentence to form a question.	Exclamation Mark Used at the end of an interrogative sentence to form a question.	Comma Use to separate clauses in a sentence
Speech Mark Used to show when a character speaks.	Colon Used to separate two independent clauses when the second explains or illustrates the first	Semi Colon Used to separate two independent clauses that about the same topic.	Apostrophe Used in 3 ways to show contraction, plural or possession.
Hyphen Can take the place of commas, parentheses, or colons – in each case to slightly different effect.	Slash Used to separate numbers, letters or words.	Ellipsis Use in non-fiction to show omission. In fiction show hesitancy or long pause.	Parenthesis Used to add extra information in a sentence

### **3. Sentence Types**

Simple	Consists for one independent clause. (An independent clause contains a subject and verb and expresses a complete thought. Examples: <ul> <li>I like coffee.</li> <li>Mary likes tea.</li> </ul>	
Compound	<ul> <li>Is two (or more independent clauses joined by a conjunction or semi-colon. Each of these clauses could form a sentence alone.</li> <li>I like coffee and Mary likes tea.</li> <li>Mary went to work but John went to the party.</li> <li>Our car broke down; we came last.</li> </ul>	
Complex	<ul> <li>Consists of an independent clause plus a dependent clause. A dependent clause starts with a subordination conjunction or a relative pronoun and contains a subject and a verb but does not express a complete thought.</li> <li>We missed our plane because we were late.</li> <li>Our dog barks when she hears a noise.</li> </ul>	t t
Minor	<ul> <li>Consists of a fragment, or incomplete clause that still conveys meaning.</li> <li>Hello.</li> <li>The more, the merrier.</li> </ul>	5

#### 2. Apostrophe Rules

To show contraction:

Used to show when letters are omitted from words.

- Do not = don't
- Could not = couldn't
- They are = they're

#### To show possession:

Can be used to show that one thing belongs to or is connected to something.

• The cat's tail was fluffy

Cat is a singular noun so you need to add an apostrophe and 's' to show that the tail belongs to the cat

• Charles's cat was naughty

Charles is a singular noun so, even though it ends in an 's' already, you need to add an apostrophe and another 's' to show that the cat belongs to Charles.

• The brothers' feet was muddy.

Brothers is a plural noun that ends in an 's' so you don't add another 's' after your apostrophe. You just add the apostrophe to show the feet belongs to the brothers.

• The children's toys were broken

Children is a plural noun but it doesn't end with an 's' so you need to add an apostrophe and 's' to show that the toys belong to the children.

4. Word Types		
<b>Noun:</b> A name, place or thing	Verb: A being, doing or having word	Adjective: A word that describes the noun
Abstract Noun: An idea or concept e.g. bravery, courage, love	<b>Modal Verb:</b> A word that shows necessity or possibility	<b>Pronoun:</b> A noun that can be substituted for a name.
<b>Concrete Noun:</b> A noun that can be identified through one of the five senses (taste, touch, sight, hearing, or smell)	<b>Adverb:</b> A word that describes a verb	<b>Preposition:</b> The position or location of a word



# **THE REGIS SCHOOL SPELLING LIST** Year 8 – Autumn Term



### Why is spelling important?

Aside from being given marks for spelling in exams, learning to spell is extremely useful if we want to become confident readers and writers. If you are constantly stopping to think about how words are spelled while you write, it can interrupt the flow of your thoughts, taking you away from what we want you to be thinking about: your choice of words and how you construct those words into sentences that communicate exactly what you want to say.

If you are a confident speller, you are also much more likely to make adventurous vocabulary choices, selecting the exact word to communicate your message, rather than playing it safe and using a word you already know how to spell.

Being a great speller makes you a more effective communicator, allowing you to share your own thoughts and ideas with the world!

### <u>Quizlet</u>

All spellings are available on 'Quizlet'. Follow the link and, if you haven't done so already, create an account using your school email address

Link: https://quizlet.com/join/9Nx5MHGr4

Use the spelling pages to practice your weekly spellings. First, look carefully at the word. Study its shape and the order of the letters. Then, cover the spelling; try to see it in your mind's eye. Attempt to write the spelling out. Check your work-have you missed a letter? Got letters mixed up or jumbled? Try again. Even if you get it right first time, practice makes perfect. Fill in the grid to ensure you are ready for your test in tutor time.

Week 1 – Double Letters	Attempt 1	Attempt 2	Attempt 3
Business			
Pollute			
Scissors			86 
Depressions			
Illegible			
Innocent			
Illiterate			8k
Necessary			
Accommodation			
Irresponsible			
Challenge Words			5k
Hallucination			
Coordination			

Week 2 – 'ea' or 'er'	Attempt 1	Attempt 2	Attempt 3
Knead			
Yearn		93-	2
Heaven			
Persuade			
Perceive			
Coherent		200 	2
Reaction			
Sincerely			
Measuring			
Criterion			
Challenge Words	ĵ.	5a.	50.
Perspective			
Hierarchy			

Week 3 – 'OR'	Attempt 1	Attempt 2	Attempt 3
Original			
Conductor			
Calculator			
Director			
Inspector			
Unfortunately			
Subordinate			
Distributor			
Predecessor			
Denominator			2
Challenge Words			
Defibrillator			
Discriminator			

Week 4 'IE or EI'	Attempt 1	Attempt 2	Attempt 3
Reign		30	
Spied			
Seize			
Weight			
Achieve			-94 
Weird			
Relieved			
Ancient			
Neighbour			
Forfeit			
Challenge Words			
Counterfeit			5) 5)
Conscience			

Week 5 – Vowel Combinations	Attempt 1	Attempt 2	Attempt 3
Poison			
Colour			
Queue			
Approach			
Beautiful			
Column		86 	
Aesthetic			
Conscious			
Persuade			
Loneliest			
Challenge Words			
Coliseum			8 C
Scoundrel			

Week 6 'ex'	Attempt 1	Attempt 2	Attempt 3
Exotic			
Convex			
Index		88. 	2
Examine			
Exhaust			
Experience			
Expand			
Existence			
Textiles		50 50	
Exaggerate	-		
Challenge Words			
Vortexes		89.	
Complexity			

Week 7 'qu'	Attempt 1	Attempt 2	Attempt 3
Quite			
Quiet			
Equals			
Cheque			
Bouquet	22	2	9
Aquatic			
Opaque			
Equipment			
Applique		20	
Banquet			
Challenge Words			
Consequently			
Bequeath		20	

Week 8 - Adjectives	Attempt 1	Attempt 2	Attempt 3
Fickle			
Major			
Humble			
Inferior			
Envious			
Diligent			
Complicated			
Abandoned			
Transparent			
Loathsome			
Challenge Words			
Harmonious			
Mediocre			

Week 9 – Connectives	Attempt 1	Attempt 2	Attempt 3
Also			
Except			
Unless			
Although			
However			
Moreover			
Therefore			
Furthermore	- 22		
Eventually			
Meanwhile			
Challenge Words			
Consequently			
Alternatively			0

Week 10 – Exam Instruction	Attempt 1	Attempt 2	Attempt 3
Define			
Assess			
Contrast			
Relate			
Predict		26	
Justify		X	
Compare			2
Analyse			5
Criticise			
Summarise			
Challenge Words	-		
Demonstrate			
Evaluate			

Week 11 - Recap	Attempt 1	Attempt 2	Attempt 3	
Knead				
Reign				
Scissors				
Inferior				
Aquatic				
Subordinate				
Denominator				
Forfeit				
Loathsome				
Exaggerate				
Challenge Words				
Mediocre				
Consequently				

# MATHS CORE KNOWLEDGE





http://hegartymaths.com

# **Maths Lesson Essentials!**

- Have you written and underlined the date and title?
- Have you written the question and shown your working out?
- Have you shown your units?
- Have you brought your calculator?
- Have you marked your answer in green pen?
- Does your answer make sense?

# **NUMBER & ALGEBRA**

Ascending Descending Denominator Numerator Solve Solution Decimal Percentages Binary Integer

DATA Mean Median Mode Range Scale Proportion Discrete data Continuous data Frequency Cumulative frequency Upper quartile Lower quartile Interquartile range Distribution Correlation Scatter graph

### **SHAPE**

### Names 3D

Sphere Cylinder Tetrahedron Prism Cone Pyramid

SHAPE					
Names 2D					
Quadrilaterals Parallelogram Trapezium Rectangle Rhombus	<u>Triangles</u> Equilateral Right-angle Isosceles Scalene				
Keyw	ords				
Keywords Circle Polygon Interior angles Exterior angles Exterior angle Acute angle Right angle Obtuse angle Obtuse angle Reflex angle Vertically opposite angles Corresponding angles Alternate angles Co-interior angles Pythagoras Trigonometry Parallel					

# MATHS CORE KNOWLEDGE



# SCIENCE CORE KNOWLEDGE

### **1. How Science Works Keywords**

Keyword	Definition
Evidence	A set of data that proves a prediction or hypothesis.
Hazard	Something that could be dangerous.
Risk	Chance of something dangerous happening.
Prediction	Something you think will happen.
Hypothesis	Why you think something will happen.
Variables	Something that changes.
Independent variable	The variable that is changed or controlled in an experiment to test the effects on the dependent variable.
Dependent variable	The variable being tested and measured in an experiment.
Control variable	Something that is constant and unchanged during the experiment.
Repeatability	Closeness of repeats of results to each other.
Reproducibility	Agreement of results from different groups testing the same factor.
Accuracy	Closeness of a measured value to a standard or known value.
Precision	Closeness of two or more measurements to each other.
Reliability	The degree to which the result of a measurement can be depended on to be accurate.

### 2. Key Equipment

<u>Measuring cylinders</u> – 10 ml cylinders will allow measurement to the nearest 0.1 ml. 100 ml cylinders will allow measurement to the nearest 1 ml.



<u>Thermometers</u> – digital thermometers allow measurement to 1 decimal place, whereas alcohol thermometers only allow measurement to the nearest degree.



<u>Quadrats</u> – are used to do sampling and find the amount of a species in a certain area. Quadrats are placed onto the ground.



<u>Metre ruler</u> – used in multiple investigations in the lab. Allows us to measure to the nearest cm.



<u>Measuring tape</u> – used in sampling alongside the quadrat. Placed onto the ground to make a transect line to measure against.

# SCIENCE CORE KNOWLEDGE

3. Graphing, Analysis and Evaluation Keywords							
Keyword	Definition	Example					
Hypothesis	An educated guess based on what you already know.	The rate of photosynthesis will increase as the lamp moves closer to the beaker.					
Independent Variable	The variable that can be changed by the scientist, it is the cause. Found on the <i>x</i> -axis.	Distance from lamp to beaker (cm)					
Dependent Variable	The variable that the scientist observes, it is the effect. Found on the y-axis.	Number of bubbles (per minute)					
Control Variable	The variables that must always be kept the same	Temperature, the size of the pond weed, amount of water					
Line of Best Fit	A line that goes roughly through the middle of all the scatter points on a graph.	The red line on the graph above shows the line of best fit for the data plotted.					
Calculations	Use the correct equation to be used based on the variables of the experiment. Use correct units.	Calculation for mean of number of bubbles per minute: Trial 1 + Trial 2 + Trial 3 ÷ 3 15 + 14 + 15 ÷ 3 = 14.6					
Results Analysis	Identify patterns in data. Describe what the table and graph show.	As the lamp is getting closer to the beaker, more bubbles are produced.					
Conclusion	Answer your original question. State whether or not the hypothesis was supported.	The results prove that the rate of photosynthesis is effected by the distance of the light source. As the lamp was moved closer to the baker, more bubbles were produced.					
Evaluation	Suggest an improvement for the equipment used. Suggest an improvement for the method used.	Use an LED lamp. Measure the volume of oxygen produced.					

Distance from lamp to beaker (cm)	Number minute)	Mean number of bubbles		
	Trial 1	Trial 2	Trial 3	
10	15	14	15	14.6
20	7	7	7	7
30	7	7	6	6.7
40	1	2	1	1.3
50	0	0	0	0

Investigating the Rate of Photosynthesis



### ART

### **PRACTICAL SKILLS VISITED**

#### Skills

#### <u>Colour</u>

- Complementary colours
- Colour and light
- Tertiaries greys/browns
- Perspective through colour

### **Drawing**

- Directional mark making/shading to create form
- Measuring with a pencil, basic foreshortening
- Proportions of the figure
- Line and stylisation
- Drawing with a pen

### **Painting**

- Colour mixing and variety of colours to create light and shade.
- Brushstrokes to create texture, form and movement

### **Printing**

Printing for pattern Batik or repeat block printing **3D** 

Sculpture – small scale

### Photography

Use of photography to record images to work from in a more independent way – e.g. own landscape images.

Editing images to create contrast/interesting colour ways

### Literacy

Ability to compare and contrast two artists' works.

### VOCABULARY

**Complementary colours** – colours that are opposite each other on the colour wheel

**Tertiary colours** – the 'in between' colours e.g. yellow mixed with orange. Purple mixed with red.

**Motif** – a symbol or image used throughout a particular art work or art style, e.g. the whiplash motif in Art Nouveau

Monet – 'The father of Impressionism'

**Impressionism** – An art movement that at the time was considered shocking. From the 19<sup>th</sup> Century, focusing on lose brushstrokes, colour and depicting light.

**Henry Moore** – British sculptor famous for large-scale semi abstract figures and also drawing of the underground during WW2.

**Giacometti** – sculptor known for his textured ghost like sculptures.

**Sculpture/Sculptor** – a 3D art work/an artist who creates sculptures

Maquette – a small try out of a 3D art work

### **STRETCH – FURTHER READING**

#### Drawing

- 1. Complete drawings of figures from real life using line only try to use continuous line
- 2. Draw a sky using colour only without doing outlines first paint if you can
- Draw insects in detail look at botanical drawings of insects to help you.
- 4. Find out about Indian Art and pattern
- 5. Find out about the Impressionists and the Post Impressionists. If possible, visit the National Gallery in London to see some of their work.

Also, the Courtauld Gallery is fabulous for Impressionism.

### ARTISTS

The Impressionists and Post Impressionists:

- Monet
- Henry Moore
- Giacometti

# **COMPUTING - SPREADSHEETS**

	Spreadsheets		Key Points -	- Explain / Define (Bitesize)
Spreadsheets are have our informat calculations, make	used to store information and data. ion in a spreadsheet we can run pove graphs and charts and analyse patt	Columns, rows and cells		
Charts and graphs can often be easie	provide a <b>visual representation</b> of er to understand.	data, which	Data	
Spreadsheets are costs and forecast	used by businesses to keep control of ing sales in the future.	of the	Formulas	
Students use sprea coursework.	adsheets to generate charts and gra	phs for	Merge Cells	
	Accoun	ts (comple	ete in pencil)	
Account	Site		Login	P/W hint
Login	19SurnameInitial			
OneDrive/Email	http://outlook.office365.com/ow a/theregisschool.co.uk	@theregisso	chool.co.uk	
Homework / iDEA	A <u>https://idea.org.uk</u> Internet & Web , What Is The Cloud? Teamwork, Problem Solving , Automation. Any others.		il	
Classcharts - H/W	https://www.classcharts.com			
Keywords	https://quizlet.com/login School Ema TRS CLASS OF 2024		il	

# **COMPUTING - SPREADSHEETS**

E	xcel Keywords		Definition		
asce	ending	Ascending means starting at the Bottom and going up, for example, 0, 1, 2, 3 (smallest to largest) or A			
axis	labels	A label for a gra	aph's horizontal (x) or vertical (Y) axis that explains what the value relates to.		
data	1	Values, typicall	y letters or numbers.		
dial	ogue box	A window that	displays some information or an error message for the user and waits for a response.		
desc	cending	Descending means starting at the Top and going Down, for example, 10, 9, 8 (largest to lowest) or Z - A.			
dou	ble-click	To quickly click a button twice on a mouse or other computer input device.			
dup	licates	To make an exact copy of something.			
forn	nat	The appearance of a document, including the fonts, colours, size and alignment.			
forn	านไล	The use of sym	bols to make a calculation e.g. =Sum(A1*B1) or =Sum(A1:A5)		
function A predefined f =Average(A1:A		A predefined f =Average(A1:A	ormula that performs calculations using specific values in a particular order. E.g. 5) or =VLOOKUP(value, table, col_index, [range_lookup]) or =COUNT(A1:A5)		
			Homework Checklist for first term		
1	Use this to complete the KO		https://www.bbc.com/bitesize/guides/zdydmp3/revision/1		
2	Homework – Idea Badges		Problem SolvingInternet & WebWhat Is The Cloud?Teamwork(look on class charts for others to do)		
3	Keywords from KO		You could also use Quizlet to practice. <u>Https://quizlet.com/join/mJJVnDsjv</u>		
4	4 Extension work		Create your own spreadsheet to balance your budget. $\Sigma$ - Use some more complicated formulas/Functions – look them up -		

# PERFORMANCE STUDIES – DRAMA AND DANCE

DRAMA: Vocabulary		Melodrama + Silent Film			DANCE:
1	Freeze frame: A still frozen/image of actors on	1	Melodrama: A style of theatre from the Victorian era		Physical and Expressive Skills
2	stage. Levels: Positioning the actors at different heights	2	<b>Stock Character:</b> Any fictional character who is instantly recognizable (stereotypical). Melodrama uses the villain, damsel and hero.	1	<b>Alignment</b> : Correct placement of body parts in relation to each other.
3	Body as Prop: Using your body to create an object.	3	<b>Stock Gestures:</b> Well-known gestures that are specific to a stock character and used throughout the performance to help the	2	<b>Isolation</b> : An independent movement of part of the body.
4	<b>Mime:</b> When actor performs without props but suggests that they are there by pretending to interact with them.	4	audience identify them.Non-verbal communication: Refers to all aspect of your physicalitythat you can use to communicate (apart from using your voice).	3	<b>Mobility</b> : The range of movement in a joint; the ability to move fluently from action to
5	<b>Thought track:</b> A way to speak aloud the thoughts or feelings of a character in a freeze- frame.	5	<b>Slapstick Comedy:</b> An over exaggerated style of physical comedy, usually involving a character falling or getting 'hurt' – but never too badly! Exaggerate reactions are very important.	4	action. Extension: Lengthening one or more muscles or limbs.
6	<b>Narration:</b> A <b>narrator</b> is like a storyteller informing the audience about the plot. They can also add a spoken commentary for the audience about the	6	<b>Clocking the audience:</b> When a character acknowledges the audience's presence and uses non-verbal communication such as wink to get their attention / hint at an in-joke / get them onside.	5	<b>Facial expression</b> : Use of the face to show mood, feeling or character.
7	action onstage. Direct Address: When a character delivers their	7	<b>Status</b> : The amount of power / confidence / wealth / popularity a character has.	6	Sensitivity to other dancers: Awareness of and connection to other dancers.
8	<b>Choral movement:</b> When the two or more characters do the same movement at the same		DRAMA: Vocal Skills		<b>Communication of choreographic intent</b> : The aim of the dance; what the choreographer aims to communicate
	time	1	Voice Projection: The volume of your voice.		
9	<b>Choral voice</b> : When the two or more characters say the same line at the same time	2	Tone of Voice: How your voice sounds in terms of emotion.	0	Interrelationship between constituent features of dance works: How costume,
10	Group role: When more than one actor represents	3	Pitch: How high or low your voice is.	8	music, set design and action content relate to
10	one character	4	Pace: The speed in which the character speaks.		each other.
11	<b>Cannon:</b> When a group of people all complete the same action, movement or gesture one after	5	Pause: Gaps within speech to add tension.		DANCE: Mental Skills
	another.		DRAMA: Physical skills		
12	<b>Exaggeration:</b> To make something bigger/larger than it actually is	1	Eacial expressions: Changing your facial features to show your	1	Systematic rehearsal: Repeating something in an arranged or ordered way
13	Repetition: To repeat something more than once	T	character's emotions.		<b>Besponse to feedback</b> : Using neer self and
14	Transitions: Movement that links scenes or images	2	<b>Gestures:</b> Hand actions to emphasise your character's feelings or show what they are doing.	2	teacher feedback to improve your dance performance.
	from one to the other. Soundscape: A group of actors use their voice and	3	<b>Body language:</b> the posture and shape of the actor's body to represent a character and their emotion	3	<b>Capacity to improve</b> : The ability and desire to improve your performance
15	body to create sounds that work together to suggest the mood or location of scene	4	<b>Movement:</b> How your character moves to show their emotions and personality.		18

### **ENGLISH - READING ANALYSIS**

#### **1. WHAT, HOW AND WHY PROMPTS**

#### What is the writer doing?

- The writer is ...
- In the novel ... the writer uses ... to ...
- The writer creates an atmosphere of ... by using ...

In Chapter 5 of Frankenstein the writer creates an atmosphere of jubilation but also of horror. Frankenstein is elated that his monster lives but devastated by the reality.

#### How are they doing this ? How do they use the language/language techniques/structure to do this? How do key words/phrases show this?

- For example (add quotation) the use of ...
- The adjective/alliteration/simile/metaphor ...
- This suggests/implies/demonstrates/presents/ highlights/
- The writer uses ... coupled with ... to highlight ...

For example, 'these luxuriance's only formed a more horrid contrast with his watery eyes' the noun luxuriance's suggest that the monster has lots of positive features, but this contrasts with the adjectives 'horrid' and 'watery'.

#### Why are they doing this? Why did they choose that language? Why might they want us to interpret it in different ways?

- This may suggest ... Alternatively it may suggest ...
- The writer wants to create a feeling of ... Additionally it may suggest ...

The writer wants to create a feeling of joy and achievement for Frankenstein's character however they also want to show his revulsion at the monster he has created. Additionally, it may suggest that the character of Frankenstein did not realise the reality of his experiment and this reality has shocked and disgusted him.

### 3. WRITING ABOUT THE EFFECT

#### **3a. How the reader feels:**

The writer makes the reader feel ...

- Suspicion
- Outrage
- Disgust
- Curious
- Calm
- Joyous
- Anxiety
- Irritation
- Compassion
- Respect
- Horror

# **3b. Vocabulary to write about texts**

The writer ...

- Builds
- Develops
- Contrasts
- Intensifies
- Reinforces
- Highlights
- Begins
- Maintains
- Introduces
- Emphasises
- Organises

### **4. LITERARY TECHNIQUES**

#### 4a. Language Techniques:

**Emotive language**: language used to provoke strong feelings in the reader.

**Rhetorical question**: a question designed not to require an answer. **Imagery**: vivid description of a particular scene.

Adverb: modifies a verb, adjective, adverb or phrase.

**Metaphor**: direct comparison of two things without using 'like' or 'as'. **Plosive consonants**: sound effect created using one or more of the six plosive consonants p, t, k, b, d, g

**Alliteration**: words close to or next to each other that start with the same sound.

Onomatopoeia: Words used to imitate sound.

**Personification**: Non-human things that are given human characteristics.

Simile: A comparison using like or as.

Sibilance: repetition of the 's' sound.

#### 4b. Structural Techniques:

**Contrast**: the deliberate positioning of two or more objects/events/ characters who have distinctly different characteristics.

**Listing**: a number of connected items written one after the other to emphasise a particular quality.

Shifts in focus: the change of focus in or between paragraphs

**Zooming in and zooming out**: the narrowing and the widening of narrative focus.

Narrative voice: 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> person

Chronological structure: arranged in order of time.

Tense: past, present, future

Dialogue: the speech of a character indicted by speech marks.

### ENGLISH – WRITING

La. Literary Terminology						
1 <sup>st</sup> person narrator	Written from the perspective of 'I'.					
omniscient narrator	An all seeing, all wise narrator					
symbolism	The use of symbols to represent ideas or qualities					
motif	Repeated image or idea.					
foreshadowing	A warning or indication of a future event.					
allegory	A story that can be interpreted to reveal a hidden meaning, usually a political or moral one.					
oxymoron	A figure of speech in which apparently contradictory terms appear in conjunction.					
personification	The attribution of a personal nature or human characteristics to something non- human.					
antithesis	Character or ideas that are the complete opposite of each other.					
Extended metaphor	Comparison between two unlike things that continues throughout a series of sentences in a paragraph.					
Pathetic fallacy	When the weather reflects the feelings of the character and/or mood of the piece.					
alliteration	The occurrence of the same letter or sound at the beginning of adjacent or closely connected words.					

1b. Part Stor	v Structure	for Narrative Writing
	y Structure	

FIGTION MOITH

Exposition	Rising Action	Climax	Denouement	Resolution
This is where you outline your setting, introduce your main characters and the time in which your story is set.	The author puts the character into a complicated situation and forces them into an irreversible situation.	The story reaches a crucial moment. The tension builds reaching a peak.	The story explores the consequences of the climax. The tension starts to ease.	The story's central problem is finally resolved leaving the reader with a sense of completion.

#### **1c.** Ideas to structure a piece of Descriptive writing.



Drop: How can we drop the reader into the action

**Shift**: Will we shift in time, mood or place? Decide where you want to take your piece of writing.

Zoom in: What tiny detail shall we zoom in on and write a lot about?Zoom out: Returning to the main scene what shall we focus on?Leave: Write a one-line paragraph that finishes off your piece.

2. NON-FICTION WRITING								
2a. Key Teri	minology							
bias	An inclination or prejudice for or against one person or group.							
humour	The quality of being amusing or comic.							
tone	The choice of writing style the writer employs to convey specific feelings, emotions or attitudes.							
empathy	The ability to understand and share the feelings of another.							
anecdote	A short amusing or interesting story about a real incident or person.							
irony	A state of affairs or an event that seems deliberately contrary to what one expects and is often amusing as a result.							
sarcasm	The use of irony to mock or convey contempt.							
persuasion	To convince someone through rational argument that your opinion is correct.							
imperatives	Phrases used to give orders, commands, warning or instructions							
pathos	A quality that evokes pity or sadness.							
logos	To appeal to logic and reason							
ethos	To appeal to people's sense of right and wrong.							

#### 2b. Forms of Non-Fiction Writing

Article	Letter	Essay	Speech	Leaflet
Clear/apt original title Strapline/ subheading Subheadings Introductory paragraph	Dear Sir/Madam or name Addresses Date Paragraphs Yours sincerely/ faithfully	An effective introduction and conclusion.	Clear address to audience Rhetorical indicators that an audience is being addressed throughout A clear sign off	Clear/apt/original title Organisational devices such as inventive subheadings or boxes Bullet points

Plan 2

#### 2c. Ideas to structure a piece of Non-Fiction writing.

#### <u>Plan 1</u>

Introduction outlining your point of view/argument Point 1 (your 1<sup>st</sup> reason for or against) Point 2 (your 2<sup>nd</sup> reason for or against) Point 3 (your 3<sup>rd</sup> reason for or against) Conclusion – briefly concluding your argument with a strong statement. Introduction outlining your point of view/argument. Point 1 (how the issue affects you locally) Point 2 (how the issue affects the country) Point 3 (how the issue affects the world) Conclusion – briefly concluding your argument with a strong statement.

## **ENGLISH – DYSTOPIAN FICTION**

2 VEV TEDRAINOLOCV

### **1. CONTEXT**

Author: Ray Bradbury (1920-2012)

Nationality: American

Short stories: The Pedestrian, Sound of Thunder

<u>Other notable works:</u> Fahrenheit 451, The Martian Chronicles, Something Wicked This Way Comes.

Genres: Dystopian, Science Fiction, Fantasy

Era: 20<sup>th</sup> Century

#### Author biography

- Born August 22<sup>nd</sup>, 1920 to a Swedish mother and a father with English heritage.
- Inspired in his early years by his aunt who read short stories to him.
- Grew up in Arizona until the age of fourteen when his family moved and settled in L.A.
- Throughout his childhood he was an avid reader and writer. Wrote his first short story during the Great Depression in 1931 at the age of eleven.
- Started to write traditional horror stories at the age of twelve.
- In 1950, published his first major work, The Martian Chronicles.
- In 1953, his best-known novel Fahrenheit 451 was published.
- Published more than 30 books, approximately 600 short stories, and numerous poems, essays, screenplays and plays.
- Defined himself as an American fantasy and horror author. He rejected being labelled as a science fiction author, as his work was based on the fantastical and unreal.
- Won the Pulitzer Prize for Literature in 2004 and received a special citation from the Pulitzer board in 2007.
- Died on June 5th 2012, aged 91, in Los Angeles

#### Social, Historical & Literary context

#### Literary Context: Dystopian Fiction

- The word 'dystopia' is well-known as the opposite, or antonym of 'utopia'.
- 'Utopia' was first coined by Sir Thomas More (1478-1535) in his 1516 work Utopia.
- Utopia comes from the Greek *u-topos* ('no place') and *eu-topos* ('good place').
- Dystopia comes from the Greek dys ('bad') and topia ('bad place')
- If 'utopia' represents an ideal or dream society, 'dystopia' is the word used to refer to an imagined nightmare world which is usually the world of the future.
- The noun 'dystopia' is defined as 'an imaginary place or condition in which everything is as bad as possible'.
- In a dystopian story, society itself is typically the antagonist as society is actively working against the protagonist's aims and desires.
- The worlds depicted are often controlled by a totalitarian or authoritarian government.
- Dystopian fiction often explores issues such as the loss of civil liberties, living under constant surveillance, laws controlling a woman's reproductive freedom, and denial of the right to an education.
- Dystopias are often thought to be 'cautionary tales' but are also used to explore the ideas of what is to be human.

Z. KET IEK	IVIINOLOG I			
Dystopian fiction	Refers to a genre of writing which explores the loss of civil liberties, living under constant surveillance, laws controlling a woman's reproductive freedom, and denial of the right to education.			
literary Conventions	Defining features of particular literary genres, such as novel, short story, ballad, sonnet, and play.			
antagonist	A person who actively opposes or is hostile to someone or something; an adversary.			
setting	The time and place in which the story takes place in a piece of literature. Setting can establish the mood or atmosphere of a scene or story.			
mood	The feelings or atmosphere perceived by a reader in a piece of literature.			
motif	A dominant or recurring idea.			
symbolism	The use of symbols to express ideas or qualities.			
foreshadowing	A literary device in which a writer gives an advance hint of what is to come later in the story.			
characterization	A literary device in which in an author builds up a character in a narrative.			
exposition	Refers to part of the story used to introduce background information about events, settings, characters etc. to the reader.			
rising action	A related series of incidents in a literary plot that build toward the point of greatest excitement/interest.			
climax	The point of highest tension in a narrative.			
falling action	Occurs immediately after the climax, when the main problem of the story has been resolved.			

### **3. KEY VOCABULARY**

J. KET VO	
	Definition
dystopia	An imagined place or state in which everything is unpleasant or bad, typically a totalitarian or environmentally damaged one.
utopia	An imagined place or state of things in which everything is perfect.
totalitarian	A system of government that is centralised and dictatorial and requires its people to obey the government or state without questions.
fatalistic	Relating to or characteristic of the belief that all events are predetermined and therefore inevitable.
nihilistic	Rejecting all religious and moral principles in the belief that life is meaningless.
repressed	Oppressed or restrained.
tyranny	Cruel, unreasonable and oppressive rule or government.
dehumanise	To deprive some one of positive human qualities.
rebellion	The action or process of resisting authority, control, or convention.
paranoia	Unjustified suspicion or mistrust of people.
propaganda	Using biased or misleading information to promote a political cause or point of view.
ebbing	To gradually decrease.
interminably	Endless or continuing too long.
perfunctory	Carrying out an action without real interest, feeling or effort.
paradox	A person or thing that combines contradictory features or qualities.
stagnating	Existing in a unchanging situation
futuristic	Having or involving very modern technology or design
oppressive	Something or someone that limits freedom of thought or action
bureaucratic	Inflexible rules, procedures and regulations
societal norm	The unwritten rules of behavior that are considered acceptable in a group or society
dictatorship	A government or a social situation where one person / system makes all the rules and decisions without allowing input from anyone else.

## FOOD PREPARATION AND NUTRITION

#### **KEYWORDS**

Nutritional Analysis – Annotation of nutrients and their functions.

**Sensory Analysis** – Annotation of how the product looks, tastes, texture and smell.

Gluten – Protein found in wheat.

 $CO_2$  – Gas produced from yeast, used to make bread rise.

**Modification** – Changing the recipe to meet needs of consumer.

**Seasonal foods** – Foods that are only available at certain times of the year.

#### THE EATWELL PLATE



- 1. Base your meals on starchy food
- 2. Eat lots of fruit and vegetables
- 3. Eat more fish
- 4. Cut down on saturated fat and sugar
- 5. Try to eat less salt not more than 6 g a day
- 6. Drink plenty of water
- 7. Don't skip breakfast
- 8. Get active and try to be a healthy weight

### FARM ASSURED

The Union Jack on the Red Tractor logo confirms that your food has been born, grown, prepared and packed in the UK.

The label also confirms that the welfare of the animals have been regulated to make sure they are well cared for.

#### FAIRTRADE

Changes the way trade works through better prices, decent working conditions and a fairer deal for farmers and workers in developing countries.

### SEASONAL FOOD

These foods are only available at certain times in the year. Choosing seasonal food has many advantages:

- More likely to be locally grown
- Food miles will be low
- Support for local farmers
- More nutrients as they are fresher
- Fruit can be used to make chutneys, pickles or jams.





#### **RICE DISHES**

Rice dishes can harbour a bacteria called *Bacillus cereus.* The bacteria can form spores that are not easily destroyed by heat.

If rice is cooled down slowly or kept warm for some time before serving, the spores will germinate and produce bacteria. The bacteria will multiply and will not be destroyed by heating.

It is therefore important to cool rice down quickly by running it under a cold tap and placing it into a fridge straight away, or with stir fries, risottos and so on, cool in a shallow dish then refrigerate. All foods stored in a fridge should ne kept at 0–5 degrees Celsius. It will then be safe to reheat rice.

All reheated food should be served piping hot. The rice you prepare will reheat in the microwave for 3–5 minutes, depending on how powerful your microwave is. If you have any left, it must not be heated up again.

### HEAT TRANSFERENCES

**CONDUCTION** – when heat travels through solid materials such as metal and food. **CONVECTION** – when heat travels through air

**CONVECTION** – when heat travels through air or water.

**RADIATION** – when heat rays directly heat and cook food.



# FOOD PREPARATION AND NUTRITION

#### PIZZA

200 g strong bread flour

- 3 tbsp oil
- 1 sachet of yeast
- 50 g cheese

20 Oml passata or thick tomato pasta sauce

2 of your own chosen toppings



#### FOCACCIA

**MUFFINS** 

2 eggs

**SCONES** 

muffin cases

250 g plain flour

2 tsp baking powder

240 ml semi skimmed milk

100 g caster sugar

125 ml vegetable oil

375 g strong plain flour1 sachet quick acting yeast3 tbsp olive oil



at least 2 additional ingredients as mentioned in class e.g. sundried tomatoes, rosemary, garlic, olives, grated cheese

#### EGG FRIED RICE

2 tbsp vegetable oil4 rashers of smoked bacon

1 onion 2 spring onions 200 g rice 100 g frozen peas 2 eggs 2 tbsp soy sauce



#### **ROCKY ROAD**

250 g digestive biscuits 150 g milk chocolate 150 g dark chocolate 100 g butter 150 g golden syrup 100 g dried apricot, chopped 75 g raisins



#### **BOMBAY POTATOES**

6 medium sized potatoes 3 tbsp vegetable oil 1 medium onion 2 cloves garlic

1 red pepper

 $1 \times 400$  g tin chopped tomatoes

1 tbsp madras curry powder

Fresh coriander and a lemon wedge to garnish

#### **CHICKEN NUGGETS**

100 g flour 1 egg 100 g bread crumbs 1 chicken breast 3 tbsp oil



300 g self-raising flour
1 tsp baking powder
75 g margarine
50 g caster sugar
150 ml milk
25 g of chosen ingredients depending on savoury or sweet



### LEARN SENTENCES

FRAN	IÇA	S
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### **BUILD PARAGRAPHS**

2. Est-ce que ta vie quoti	dienne change pendant	4. FUTURE: Qu'est-ce que tu vas faire la				
les vacances?	0.1	semaine prochaine?				
		Donc, la semaine prochaine	Well, next week,			
D'habitude je me lève tôt pour aller au collège Et chaque soir je joue à des	Usually, I get up very early to go to school. And every evening, I play	Je dois faire un gâteau car c'est l'anniversaire de mon grandpère	I have to make a cake because it's my granddad's birthday			
jeux vidéos	video games	On va faire la fête chez lui	because it will be very			
Après avoir gagné, je fais mes devoirs pendant que	After winning, I do my homework whilst my brother prepares the dinner	car il aura soixante ans! L'après-midi, j'espère qu'il	sunny. In the afternoon, I hope that it will be hot because I would like to meet up with my friends at the beach. I love my granddad but I prefer going out with my friends.			
Mais en vacances, c'est moi qui fait la cuisine et je me	But in the holidays, it's me who cooks and I get up late,	fera chaud car je voudrais retrouver mes amis à la plage.				
Je passe des heures en chattant avec mon amie, qui s'appelle Zoe	I spend hours talking to my friend, who is called Zoe	J'adore mon grandpère mais je préfère sortir avec mes amis				
On sort en ville et on mange We go out to town and we		5. Quelle est ton film	préféré et pourquoi?			
des glaces.	eat ice cream.					
3. PAST: Qu'est ce que tu	u as fait Samedi dernier?	cinéma	cinema			
Alors, samedi dernier j'ai fai beaucoup de choses Le matin, je suis allé à pied chez Jo	Well, last Saturday I did lots of things. In the morning, I went on foot to Jo's house	Je recommanderais vivement les films de Disney à toute personne qui s'intéresse aux dessins animés	I would strongly recommend Disney films to anybody who is interested in cartoons			
Mais il pleuvait des cordes donc sa mère est venue me chercher dans sa voiture	But it was raining cats and dogs so Jo's Mum came to find me in her car	J'aime Netflix cependant, je préfère regarder les films au ciné	I like Netflix however I preder to watch films at the cinema			
On a joué aux cartes et on a lu un BD français qui s'appellait Asterix	We played cards and we read a French comic which was called Asterix.	car la plupart de films sont mieux sur le grand écran	Because most films look better on the big screen			
J'ai voulu faire une soirée pyjama, mais ma mère m'a dit que je dois rentrer pour	I wanted to have a sleepover, but my mum told me that I had to go home to	D'habitude je lis les livres avant les adaptations films	Usually, I read the book before watching film adaptations			
faire mes devoirs. Après avoir fini mes devoirs, j'ai boudé dans le salon en jouant à cache-cache avec	do my homework After having finished my homework, I sulked in the living room while playing	Mais j'ai regardé la saga Harry Potter avant de lire les livres et ils sont mes films préférés!	But I watched the Harry Potter films before reading the books and they are my favourite films!			
mon chien.	hide-and-seek with my dog.		24			

1. Est-ce que ta ville est te	ouristique?
J'habite dans une vieille ville qui est située au bord de la mer.	I live in an old town which is situated near the sea.
Il y a une plage où on peut faire de la planche à voile	There is a beach where you can windsurf.
Ce qui me plaît ici , c'est qu'il y a beaucoup de transports en commun	What I like here is that there is a lot of public transport
On peut se déplacer en train mais c'est un peu cher	You can get about by train, but it's a bit expensive.
Je dirais qu'il y a beaucoup de choses à faire ici	I would say that there is lots to do here.
Par exemple on peut faire du vélo	For example, you can go for a bike ride.
Cependant, mon ami dit que notre ville est sale car il y a trop de circulation et déchets.	However, my friend says that our town is dirty because there is too much traffic and litter.
Si j'étais touriste ici, je serais content du quartier car la côte est vraiment magnifique	If I was a tourist here, I would be happy with the area because the coast is really wonderful.
AIM HIGH	PHRASES
1) Oui s'annelle	Who is called

1) Qui s'appelle	Who is called
2) Il faut que je sois honnête,	I have to be honest,
3) Pour qu'on puisse	So that we can
4) Il serait mieux si j'étais	It would be better if I was
5) Après avoir regardé	After having watched
6) Ce que me plait, c'est	What I like is

### **GEOGRAPHY – Topic 1 - Tectonics**

#### **Background information:**

- The Earth's structure is made up of layers. (A) 1.
- 2. The characteristics of these layers fuels tectonic plate theory and the resulting hazards which occur along plate boundaries. (B)
- 3. There are four different plate boundaries, each with their own characterises and resulting hazards. (C)
- 4. Volcanoes can be found along constructive and destructive boundaries, although the volcanoes found at these boundaries are different. (D)
- 5. Earthquakes take place along all of the boundaries, but are often most significant at conservative boundaries. Earthquakes have key features and are measured using the Richter scale. (E)
- 6. People continue to live in tectonic areas for a number of reasons. (F)
- Some of these reasons relate to how we monitor, 7. protect and plan for such hazards. (G)
- 8. However, the impacts of these hazards can still be significant; although they can vary based upon a countries level of development. (H, F)

Α.	The laye	rs o	f the Earth		
Crus	t	Th	ne thin outer layer of the earth		
Mantle M cr		Mi cru	ddle layer of the earth, between the ust and the core, approx. 2900km thick.		
Outer core lic ni		La liq nic	yer surrounding the inner core. It is a uid layer, also made up of iron and ckel.		
Inner core up		Ho up up	ottest part of the Earth. It is solid, made of iron and nickel with temperatures of o to 5,500°C.		
_					
B. Theory					
Plate boundaries		es	The place where two plates meet.		
Convection			Currents in the Earth's mantle which		

currents

Oceanic crust

Continental crust

rise from the Earth's core and are

strong enough to move tectonic plates. The part of the Earth's crust under the

oceans, usually 6-8km thick. Oceanic crust is denser than continental.

The part of the Earth's crust which

contains land and is 30-50km thick.

Continental crust cannot be destroyed.

С.	Differen	t plate boundaries					Е.	Earthqu	lakes	
Dive	gent	W	Where tectonic plates move apart and new land is created.          —          —          —					tre	The dire ear	e point on the Earth's surface ectly above the focus of an thquake.
$\begin{array}{c} c \\ destructive \end{array}  \text{is subducted, leading to violent volcanic eruptions.} \end{array}  \begin{array}{c} c \\ \hline \end{array}  \begin{array}{c} c \\ \end{array}  \end{array}  \begin{array}{c} c \\ \end{array}  \begin{array}{c} c \\ \end{array}  \end{array}  \begin{array}{c} c \\ \end{array}  \begin{array}{c} c \\ \end{array}  \end{array}  \end{array}  \begin{array}{c} c \\ \end{array}  \end{array}  \end{array}  \begin{array}{c} c \\ \end{array}  \end{array}  \end{array}  \end{array}  \begin{array}{c} c \\ \end{array}  \end{array}  \end{array}  \end{array}  \end{array}  \begin{array}{c} c \\ \end{array}  \end{array}  \end{array}  \end{array}  \end{array}  \end{array}  \end{array}  \end{array}  \end{array}  \end{array}$					Focus	Focus The source of an earthquake		e source of an earthquake		
Conservative Where tectonic plates move alongside, or past each other.				Quinni		Fas	the Earth's surface.			
Conv Collis	ergent sion	W for	here continental plates rming mountains.	move	e towards each other,	<u> </u>	Seismi	c waves	fror A s	m the focus of an earthquake.
D.	Volcar	noes					Richter	scale	stre	ength of an earthquake.
Shiel	d volcano		A gently sloping volca	ano fo	ormed by runny lava, usual	ly at a	F.	Living i	n the	tectonic danger zone
			constructive boundar	y.	, alternating laware of laws	and och			1. Job 2. Ge	os in tourism. othermal energy created.
Com	posite volo	ano	on destructive bound	aries.	alternating layers of lava a	anu asn,	Volcan	oes	3. Asł is goo	n makes the ground fertile, which od for farming.
Pyroclastic flow Torrent of hot ash, rock, gas and s			as and steam from a volcar	no.			I. Diamonds and gold from previous pruptions can be mined.			
Characteristics of valcanoos							1. Frie 2. It h	1. Friends and family live in the area. 2. It has not happened in such a long		
Shield				Composite		Earthquakes time, so people take the 3. Employment in the		so people take the risk. ployment in the area.		
1. Cone shaped/ steep sides				H. Effects of tectonic hazards						
1.Gentle sloping sides2.2.Runny, fast moving lava3.3.Frequent, less explosive eruptions4.Divergent plate boundary4.		2. 3. 4.	Less frequent more explosive eruptions Convergent destructive plate		Primary effects			Direct impacts of an event e.g. people killed, injured, or buildings collapse.		
Hotspot volcano Hotspot volcano Hotspot volcano Hotspot volcano Hotspot volcano Hotspot, magma comes to the surface the rocks with great heat and low pressure. linked to plate margins or may just form on			gma plumes deep in the Ea fface (e.g. Mount Kilauea i es to the surface through c nd low pressure. Hotspots o nay just form on a crustal p	arth that n Hawaii). racks in can be late.	Second	dary effec	ts	The indirect impacts of an event, usually occurring in the weeks, hours, months after the event e.g. the outbreak of disease from contaminated water.		
							I.	Named	l exan	nples
	G. Volcanoes			Earthquakes		<b>Developing</b> 1. 316,0 Haiti 2. 1.5 m		1.3	16,000 dead .5 million homeless.	
1. The shape may change.         2. Increase in gases given off		1. Irregular tremors measured.20102. Radon gas levels increase as7.0 magnit		gnitude	3. C 4. \$	Cholera outbreak killed 8,000. 14bn in damages				
Prote	ect	Lava	diversion channels.		Earthquake proof buildin	gs.	<b>Develo</b> Japan	Developed1. 15,900 dead.Japan2. £230bn in damages		5,900 dead. 230bn in damages
Planning 1. Evacuation. 2. Emergency services trained.		<ol> <li>Earthquake drills.</li> <li>Emergency services o</li> </ol>	2011 3. 332,0 9.0 magnitude ineffectiv		32,000 buildings destroyed lood defences rendered fective due to tsunami wave					

# **GEOGRAPHY – TOPIC 2 - COASTS**

#### **Background:**

- Coastlines are dynamic changing landscapes, 1. which are affected by the action of the waves.
- 2. Waves can have differing features; these features can influence the processes and landforms which may develop along our coastlines. (A)
- Destructive waves can erode the coastline. (B) 3.
- 4. Through erosion a number of distinctive coastal features can form. (D, E, F)
- 5. Further processes act on the coastline, leading to material being transported along the coastline. (C)
- This material will eventually be deposited leading to 6. the formation of landforms such as spits. (G)
- Coastal erosion can impact the landscape and the 7. lives of people living in areas of coastal erosion.
- Different strategies are used to reduce erosion. (H) 8.
- 9. Often these strategies can be controversial. (1)

Α.	Wave features			
Swash		Movement of a wave up the beach. The direction is dependent upon the wind direction (prevailing wind).		
Backwash		Movement of a wave back down the beach, this happens at 90º due to gravity.		
Constructive wave		Have a strong swash and weak backwash; they cause deposition.		
Destructive wave		Have a weak swash and strong back wash; they cause erosion.		
Fetch		The distance a wave has travelled.		

В.	Types of erosion			
Hydraulic action		Waves compress pockets of air in cracks in a cliff, causing the crack to widen, breaking off rock.		
Abrasion		Eroded material is hurled or scrapes against the cliff, breaking off rock.		
Attrition		Eroded material in the sea, hit into each other breaking down into smaller pieces.		
Solution		Cliffs e.g. chalk dissolve in seawater.		

C. Other coastal processes G.		G.	s	pits						River					
Transp	ortation	The m	novement of sedim	nent.		Change	L	eads to mat	erial		_			Salt marshes	
Deposition When waves drop the sediment they are transporting, either due to a loss of energy or change in direction of			ediment they due to a loss of ection of		in coastline	tr di th	transported by longshore drift being deposited into the sea, forming a spit.		hore into pit.	1. Longshore drift			a. Sandspit with		
	Longshore drift		ine.	ment of sediment along the		Hooked	F c	Form on a spit due to a change in the direction		o a on of	wave	Prevailing wind and wave direction		2. Secondary wind and wave direction	
Longsh			coastline in a zig-zag motion, due to			enas	th	the prevailing wind.			H Coastal managemen		agement		
		to the	beach.	ning at an angle			A	An area of salty marshland found behind		hind		H		man-made structures	
Weathe	ering	Break chemi	ing down of rocks ical processes.	by physical and	Salt marsh		a ol	a spit, which has dried out as the sea can no		ed o			tha coa <b>1.5</b>	hat help to deal with coastal erosion, such as: <b>1.Sea walls.</b> which	
D.	Headland	ds and b	ays	Hard rock Soft rock Differential arcsion	Head	land Bay		inger rouein			Hard	d	r e	eflect the waves	
Geology Different rock types e.g. resistant rock such as granite, and less resistant rock such as						9245	engineering		2. s tl e d	2. <b>Groynes</b> , which traps sediments and protects the beach from the effects of longshore drift.					
Clay.       Headland     Resistant rock which is not easily eroded so sticks out to sea.				2. Way			-cut pistform	Soft engineering		Adaptations to work with nature, such as: Managed retreat, allowing the coast to erode and moving people away.					
Bay		eroded :	so retreats to				1	L Case study a			example: Holderness coast Mannleton				
			ay.	1. Crack 2. Cave		Wave-cut platform exposed at low tide			The f	astest er		coastline in	55 C		
E	Wave cu	t platfor	ms					Where?	Yorks	hire.	Jung				
Wave o	cut notch		These form at th This undercuts th unsupported.	e foot of a cliff due he cliff above leav	cliff due to erosion. // e leaving it Reasons to protect Ma		Manag	Management strategies		es	Success				
Wave cut platform       When the unsupported cliff collaps         process repeats and the cliff retre       sloping wave cut platform.		orted cliff collapses, the nd the cliff retreats leaving a platform.			1. Rocks are 1 made of soft rock (boulder clay), eroding at 2m per year.		1. Roci place being longs a wic abso	<ol> <li>Rock groyne put in place to trap sediment being transported by longshore drift, creatin a wider beach to absorb the power of th</li> </ol>		ng he	1. Good – erosion in front of Mappleton has reduced, so the road has been saved.				
F.	Caves stacks and arches					1	2. The B1242		wave	aves. 2. Bad - be		2. Bad - beaches further south have			
Crack	A weak forming	ness in t a cave.	he headland is erc	oded by hydraulic	pre	essure,	ssure, Rand Would be and Would be		2. Rip- place cliffs	Rip-rap has been placed in front of the			been starved of sediment so		
Cave	This is e the hea	eroded fu dland for	urther, until the cav	ve erodes all the v	way	y through		expensi re-route	ve to	wave	energy.			increased e.g. at Great Cowden.	
Arch	rch The roof of the arch has no support, so collapses to form a stack.				]							26			

### HISTORY : The Tudor Religious Rollercoaster

Timeline		Key Peopl	e			
1509	Henry VIII becomes King of England.	Edward \/I	King of England from 1547-1553. He was a devout			
151 <b>7</b>	1517 Martin Luther pins his 95 Point thesis to a church door.		church Protestant.			
1528-33	Henry ends his marriage to Catherine of Aragon for failure to produce a male heir.		Queen of England from 1554—1558. She was raised a Catholic and attempted a counter-reformation by marry a Catholic king and reversing Henry and Edward's chang			
1533	Henry VIII marries Anne Boleyn in secret		Queen of England 1558-1603. She sought a middle way			
1534	The Act of Supremacy is passed.		with her religious settlement which led to discontent t			
1539	Parliament passes the Six Articles which reasserted traditional catholic doctrine.	Elizabeth I	came more intolerant towards Catholic and pursued a Anglican version of Protestantism.			
28 January 1547 – July 1553	Henry VIII dies and his protestant son Edward Vi is crowned King of England. Over his 6 year reign Edward passes a string of reforms making the church more protestant	Phillip II	King of Spain and briefly of England after marrying Marv 1554. He was devoutly Catholic and fought against the spread of Protestantism.			
July 1553– November 1558	July 1553– ovember 1558 Mary I becomes Queen of England. She is Henry VIII first born daughter and she is a Catholic. Catholic and attempted a counter-reformation by marrying a Catholic king and reversing Henry and Edward's changes.		Fled Scotland in 1568 accused of murdering her husbar of She was Henry VIII's granddaughter and had a legitima claim to the throne. Catholics sought to replace Elizabe with her.			
November 1558	Elizabeth is crowned Queen of England.	Diagran	ns			
1559	Elizabeth passes her Religious Settlement Acts of Parliament, the Act of Supremacy and the Act of Uniformity 1559.	<b>A</b>	Catholic			
1571–1586The Ridolfi, Throckmorton and Babington plots all aimed to overthrow Elizabeth and put catholic Mary Queen of Scots on the throne		Edward VI				
1587 Elizabeth signs Mary Queen of Scots execution after her involvement in plots to depose her.						
1588	Phillip II sends the Spanish Armada to depose Elizabeth. Francis Drake and the English Navy defeat it, ending Spanish dominance in Europe.	Protestant The Religious The religious rollercoaster describes the religi				
1603	Elizabeth dies after 44 years as Queen. She didn't have an heir and so the English crown passed to James Stuart.	Konercoaster	when Henry broke from the Catholic Church in what is know as the Reformation. Over the proceeding years, Edward VI a			
Key People			vanced Protestant beliefs until his death. When his half sist Mary L became Queen of England she started upon a series			
Martin Luther	A German monk who helped start the Reformation with his 95 Theses and begin the Protestant faith.		reforms which reversed what Edward had done. Mary I war to make England catholic again and began the counter refor mation. Mary burned 300 protestants at the stake because			
Henry VIII	King from 1509 to 1547 who had six wives and began the English Reformation by breaking with Rome and becoming the head of the church in England.		they would not convert back to Catholicism. Religious pres- sures eased when Elizabeth became Queen in 1558. She wa ed to find a middle ground between the Catholics and the protestants by creating her Religious Settlement.			

	church Protestant.
ary I	Queen of England from 1554—1558. She was raised a Catholic and attempted a counter-reformation by marrying a Catholic king and reversing Henry and Edward's changes.
oeth I	Queen of England 1558-1603. She sought a middle way with her religious settlement which led to discontent from both Puritans and Catholics. After a series of plots she be- came more intolerant towards Catholic and pursued an Anglican version of Protestantism.
llip II	King of Spain and briefly of England after marrying Mary I in 1554. He was devoutly Catholic and fought against the spread of Protestantism.
lueen of ots	Fled Scotland in 1568 accused of murdering her husband. She was Henry VIII's granddaughter and had a legitimate claim to the throne. Catholics sought to replace Elizabeth with her.
grams	
	Catholic
	Mary I



eligious rollercoaster describes the religious upheaval happened within England in the 16th century . It started Henry broke from the Catholic Church in what is known e Reformation. Over the proceeding years, Edward VI aded Protestant beliefs until his death. When his half sister. I, became Queen of England she started upon a series of ms which reversed what Edward had done. Mary I wanted ake England catholic again and began the counter reforon. Mary burned 300 protestants at the stake because would not convert back to Catholicism. Religious preseased when Elizabeth became Queen in 1558. She wantfind a middle ground between the Catholics and the estants by creating her Religious Settlement.

#### **Key Events**

#### Henry VIII Reign-22 April 1509 - 28 January 1547

- Henry was destined to become a priest. However, became King after his older brother, Arthur, died IN 1509.
- Henry married his brothers widow, Catharine of Aragon, and had a daughter with her, Mary I. After 24 year together Henry decided to split from Catharine in favour of his second wife Anne Boleyn.
- The Catholic Church would not grant Henry a divorce and so he broke away from it. He passed the Act of Supremacy (1534) which made him the Head of the Church of England and with it he annulled his first marriage.
- Henry dissolved the catholic monasteries (1536-41) which made him very wealthy. In the later stages of his life he limited any further protestant reforms (Six Articles)

#### VI Reign — July 1553— November 1558

- Edward was the son that Henry was always after. However, his reign only lasted 6 years and he died aged 16.
- In his short reign, Edward passed laws that increased the power of the protestant church.. He allowed priests to marry; church services were held in English and a common prayer book was introduced.

#### Mary | Reign—July 1553– November 1558

- Mary I was the daughter of Henry and Catharine of Aragon, Henry's first wife. She inherited the throne unmarried at the age of 37.
- She was a strict catholic and tried reversing the protestant reforms of her half brother Edward and her father. This was known as the counter reformation.
- Mary got the nickname 'Bloody Mary' due to her harsh punishment of protestants who refused to convert back to Catholicism. In all 300 died by being burn at the stake. Mary changed England's religion back to Catholicism. The Pope was put in charge of religion; churches were decorated; the service was said in Latin.

#### Elizabeth I Reign — November 1558– March 1603

- Elizabeth tried to resolve the religious crisis by finding the middle ground between Catholicism and Protestantism.
- Throughout her reign she was challenged by Catholics and her cousin Mary Queen of Scots.

# HISTORY : THE TUDOR RELIGIOUS ROLLERCOASTER

Key Terms :		Knowledge Outcomes:			
Act of Supremacy	Made Elizabeth supreme governor of the Church of England.	1. Why did people buy indulgences?	To reduce their time in Purgatory	15. Why was Elizabeth concerned about France and Spain's reaction to her religious settlement?	Elizabeth was concerned that these Catholic countries might form an alli- ance against England.
Act of Uniformity	Established the appearance of churches and the form of services held	2. What was the name of the document Martin Luther pinned to a church door in 1517?	The 95 Theses	16. Why did Mary Queen of Scots flee from Scotland?	She was accused of murdering her Protestant husband.
Annulment	To declare that a marriage never actually exist- ed	3. What major historical event was triggered by Luther's actions?	The Reformation	17. Why did many people see Mary	She was Henry VIII's great grand- daughter and had a legitimate claim to the throne she was also Catholic so many Catholics wanted to see her on the throne.
Armada	A Fleet of Spanish warships sent to invade Eng- land in 1588 by Phillip II	4. Which new Christian faith emerged in the 1500s?	Protestantism	Queen of Scots as a serious contend- er to the English throne?	
Corruption	The dishonest behaviour by those in power	5. What did Protestant churches look like?	Plain white walls, no art or stained glass windows, simple wooden altar.	18. Which foreign monarch was involved in the Ridolfi, Throckmorton and Ba-	King Phillip II of Spain
Dissolution of the Monasteries	Henry VIII's actions to strip English monasteries of their wealth and treasures	6. What language was the bible found in Protestant churches?	The local language so that ordinary people could read it	19. What triggered Phillip's desire to in- vade England?	The execution of Mary Queen of Scots.
Counter- Reformation	The Catholic fight back against the spread of Protestantism	7. Who was the original heir to Hen- ry VII's throne?	His oldest son, Arthur	20. Who had the upper hand at the	The English – their smaller ships sailed circles around the larger Span- ish ones. They sunk 5 galleons and destroyed many more.
Heretic	Someone with religious views that disagree	8. Why did Henry want to annul his	She had failed to produce a male heir and could no longer bear children	Battle of Gravelines and why?	
Martur	A person who is killed for their beliefs	marriage to Catherine of Aragon?	and Henry had fallen in love with Anne Boleyn	21. Why did the English send burning ships into the Spanish Armada when they were moored in Calaic2	To cause panic and confusion amongst the Spanish fleet.
	A new form of Christianity emerging in the 16 <sup>th</sup>	9. What did the 1534 Act of Suprem- acy change?	It broke with Rome and made Henry the head of the church in England	aney were mored in calabi	Elizabeth used propaganda to show that the turn of the weather against the Armada was God's will – that he wanted the Protestants to defeat the
Protestant	century in protest against Catholicism	10. What title was given to Henry by the Pope in 1521?	Defender of the Faith	22. How did the Armada strengthen Elizabeth's religious policy?	
Puritans	A group of radical Protestants who wore simple clothing and tried to live without sin	11.What Catholic church service was	The Mass.	23. Who was Elizabeth I favourite	Sir Francis Drake
Recusants	Catholics who were unwilling to attend church services laid down by the religious settlement	12.What language were church services and bibles in during Ed-	English.	24. Why was Elizabeth known as the virgin queen?	She was never married
Transubstantiation	A Catholic belief that the bread and wine taken during Mass actually transform into the physical body and blood of Christ	13.Who was Mary I's husband?	King Phillip II of Spain.	25. When did Elizabeth I die?	1603
Usurper	A person who has taken a position of power ille- gally or by force	14.Why was Elizabeth's religious settlement known as the middle way?	She was attempting to keep everyone in the country happy, including Cath- olics and Puritans.	26. Who was Elizabeth's successor ?	James Stuart

### MATHS

### **1. PRIME NUMBERS**

Prime numbers are only divisible by themselves and 1. They have only 2 different factors. <u>1 is not a prime</u> <u>number because it has only 1 factor</u>. The first 10 prime numbers are: 2, 3, 5,7, 11, 13, 17, 19, 23, 29

#### **3. PRIME FACTOR DECOMPISITION**

Any number can be expressed as a product of its prime factors. To do this, we use a prime factor tree.

Example:

Express 180 as a product of its prime factors

2. INDICES						
Indices (plural of index) are the numbers written above a base number. Bas The index number indica multiplication. For exan	ex number You would pronounce this as "2 to the power of 4" the 2 appears in the					
Square numbers The result of multiplying a number by itself. When you raise a base number to the power of 2 (the index number is 2). We call this squaring a number. Example: $3^2 = 3 \times 3$ = 9 " 3 squared equals 9" $1^2 = 1$ $9^2 = 81$ $2^2 = 4$ $10^2 = 100$ $3^2 = 9$ $11^2 = 121$ $4^2 = 16$ $12^2 = 144$ $5^2 = 25$ $13^2 = 169$ $6^2 = 36$ $14^2 = 196$ $7^2 = 49$ $15^2 = 225$ $8^2 = 64$ $16^2 = 256$	$\frac{\text{Cube numbers}}{\text{When you raise a}}$ $\frac{\text{Cube number s}}{\text{When you raise a}}$ $\frac{\text{base number to}}{\text{the power of 3}}$ $(\text{the index number is 3}).$ $\text{We call this cubing a number.}$ $\frac{\text{Example:}}{3^3 = 3 \times 3 \times 3} = 27$ $^{3} \text{ cubed equals 27''}$ $1^3 = 1$ $2^3 = 8$ $3^3 = 27$ $4^3 = 64$ $5^3 = 125$ $6^3 = 216$ $7^3 = 343$ $8^3 = 512$ $9^3 = 729$ $10^3 = 1000$	<b>Roots</b> <b>Square roots:</b> $\sqrt{1} = 1$ $\sqrt{4} = 2$ $\sqrt{9} = 3$ $\sqrt{16} = 4$ $\sqrt{25} = 5$ $\sqrt{36} = 6$ $\sqrt{49} = 7$ $\sqrt{64} = 8$ $\sqrt{81} = 9$ $\sqrt{100} = 10$ $\sqrt{121} = 11$ $\sqrt{144} = 12$ $\sqrt{169} = 13$ $\sqrt{196} = 14$ $\sqrt{225} = 15$ $\sqrt{256} = 16$	Cube roots: $\sqrt[3]{1} = 1$ $\sqrt[3]{8} = 2$ $\sqrt[3]{27} = 3$ $\sqrt[3]{64} = 4$ $\sqrt[3]{125} = 5$ $\sqrt[3]{216} = 6$ $\sqrt[3]{343} = 7$ $\sqrt[3]{512} = 8$ $\sqrt[3]{729} = 9$ $\sqrt[3]{1000} = 10$			



#### 4. ROUNDING **Rounding Rules:** 1. Identify the digit with the place value you are rounding to. 2. Check the digit in the place value column immediately to the right of this. 3. If it is 5 or more round up. If it is less than 5 round down. Rounding to the nearest 100: The diait is a 2. This Th H T U "rounds down" and so 4 6 2 4 keeps the 6 the same. The answer is 4600 Rounding to the nearest integer: The digit is a 6. This **T U** . $\frac{1}{10} \frac{1}{100}$ "rounds up" and so the 2 3 . 6 7 3 becomes a 4. The answer is 24 Rounding to 1 decimal place: $\mathbf{U} \cdot \frac{1}{10} \frac{1}{100} \frac{1}{1000}$ The digit is a 7. This "rounds up" and so 2.4 7 5 the 4 becomes a 5.

The answer is 2.5

#### **5. FRACTIONS** Simplify Fractions: Example: Divide the numerator and denominator by the same number 18 Your fraction is fully simplified when 24 the Highest Common Factor between vour numerator and denominator is 1 Example: **Multiply Fractions:** 3 4 12 $\overline{9} \times \overline{5}$ Multiply the numerators Multiply the denominators 15 Simplify as much possible Example: **Multiply Mixed Numbers:** Convert to improper fractions Multiply the numerators Multiply the denominators Simplify as much possible Example: **Divide Fractions:** Keep, Change, Flip 2 $\overline{3} \div \overline{7}$ Keep the first fraction the same Change the sign to a multiplication symbol Flip the second fraction Simplify as much as possible $=1\frac{1}{6}$ **Divide Mixed Numbers:** Example: Convert to improper fractions $2\frac{1}{3} \div 1\frac{2}{5}$ = 3 Keep, Change, Flip Keep the first fraction the same Change the sign to a multiplication symbol Flip the second fraction 15 Simplify as much as possible $=3\frac{1}{15}$

# MATHS

6. NEGATIVE NUMBERS							
Multiplying and dividing rules:							
positive x positive = positive positive x negative = negative negative x positive = negative negative x negative = positive	positive ÷ positive = positive positive ÷ negative = negative negative ÷ positive = negative negative ÷ negative = positive						
When multiplying <u>OR</u> dividing, if the signs are <u>different</u> the answer will always be negative. If the signs are the <u>same</u> the answer will always be positive. <u>Examples:</u> $-5 \times 4 = -20$ $24 \div -6 = -4$							
-4 × -8 = 32	-18 ÷ -3 = 6						
Adding and subtracting rules: Refer to a number line. Example: $-2 + 7 \rightarrow -2$ is the starting number. Add 7 onto this. $+7 \rightarrow -10 -5 \rightarrow 0 -5 -10 -2 +7 = 5$							
Example: $-3 - 5$ -3 is the starting number. Subtract 5 from this. -10 + -5 + 0 + 5 = -8							
Example: $13 \rightarrow$ becomes $1 + 3$ . 1 is the starting number. Add 3 $-10 -5 0 \rightarrow 5 10$							
Example: -28 → beconstarting number. Add 8.	1  4  13 = 4 mes -2 + 82 is the $+8  +8  +8  +6  +8  +6  +6  +6$						

7. INVERSE OPERATIONS							
An inverse operation is an operation that <u>reverses</u> the effect of another operation.							
<u>Examples:</u> The inverse of addition is subtraction							
Start with 5 and	add 2: we get	7 Subtract 2 and we					
net back to 5	duu 2. we get	7. Jubliaci 2 ana we					
get buck to J.	5 + 7 = 7	,					
	Inverse 7	-2=5					
The inverse of su	interse. 7	Idition					
	9 - 6 = 3	8					
	Inverse: 3	, +6=9					
The inverse of m	ultiplication is	division.					
	5 × 3 = 1	5					
	Inverse 1	- 5 ÷ 3 = 5					
The inverse of di	vision is multir	plication.					
	30 ÷ 5 = 1	6					
	Inverse:	6 × 5 = 30					
8. Solving Linear Equations							
To solve a linear	equation you	find the value of the					
unknown by isol	ating it on one	e side of the equals sign					
(making it the s	ubject).	• -					
To solve equation	ons you use inv	erse operations.					
Example Solve	<i>x</i> +5 = 18	To solve we need to					
	-5 -5	do the inverse of +5					
	<i>x</i> = 13	which is -5.					
<u>Example</u> Solve	x - 10 = -2 +10 +10	The inverse of $-10$ is $+10$					
	<i>x</i> = 8						
<u>Example</u> Solve	4x = 24	The inverse of					
	÷4 ÷4	multiplying by 4 is					
	<i>x</i> = 0	dividing by 4					
	x.						
<u>Example</u> Solve	$\frac{-}{5} = 4$	The inverse of dividing					
	× 5 × 5	by 5 is multiplying by 5					
	x = 20						

### 9. Solving More Complex Linear Equations

When there is more than <u>one operation</u> then we will need to perform the inverse operations in the correct order – this is the "reverse" order to "undo" the operations.

Example Solve $2x - 7 = 11$ +7 + 7 + 7 = 18 $\div 2 + 7 = 18$ $\div 2 + 7 = 18$ $\div 2 + 7 = 18$ $\div 2 + 7 = 10$	The <i>x</i> is being multiplied by 2 and we then subtract 7. <u>Reverse</u> this and perform the inverse operations
Example         Solve $8f = 2f - 12$ $-2f - 2f$ $-2f - 2f$ $6f = -12$ $\frac{6}{6} + 6$ $f = -2$ $f = -2$	When the unknown is on both sides of the equals sign, resolve this by rearranging.
Example Solve $\frac{3w}{4} = 6$ $\times 4 \times 4$ 3w = 24 $\div 3 = 3$	The w is being multiplied by 3 and then divided by 4. <u>Reverse</u> this and 9 perform the inverse operations
Example Solve 3(2c - 7) = 9     6c - 21 = 9     +21 + 2     6c = 30     +6     c = 30     c = 30	Expand any brackets first 21 D ÷6 5
Example Solve $7x-6=2x+7$ -2x -2x 5x-6=19 +6 5x=25 $\div 5$ x=5	<ul> <li>Rearrange by subtracting 2x. Always chose to resolve unknowns on both sides by 'eliminating' the 'smaller' one</li> </ul>
Example Solve $\frac{2x}{7} - 3 = 1$ $\frac{2x}{7} - 3 = 1$ $\frac{2x}{7} = 4$ x = 14	Only the 2 <i>x</i> is being divided by 7. So we need to reverse the '-3' 7 first, before reversing the division.

### MUSIC



# MUSIC

Word	Meaning
Polyrhythm	A rhythm that makes use of two or more different rhythms simultaneously
Cyclic Pattern	A cyclic pattern is a melodic or rhythmic pattern that is repeated over and over again
Atumpan	The atumpan is the main talking drum of the Akan people
M'bira	The mbira is an African musical instrument consisting of a wooden board with attached staggered metal tines
Kora	The kora is a 21-string lute-bridge-harp used extensively in West Africa
Djembe	A djembe is a rope-tuned skin-covered goblet drum played with bare hands, originally from West Africa
Djundjun	A djundjun is a rope-tuned cylindrical drum with a rawhide skin at both ends, most commonly cow and goat.
Chekere/ Calabash	the calabash is a percussion instrument of the family of idiophones consisting of a dried half of a large calabash, which is struck with the palms, fingers, wrist or objects to produce a variety of percussive sounds
Agogo bells	A single or multiple bell now used throughout the world but with origins in traditional Yoruba music
Mnemonic notation	In general, a mnemonic is a memory aid, such as an abbreviation, rhyme or mental image that helps to remember something

Name of note	Appearance	Rest	Value (Beats)
Semibreve	0	<b>I</b>	4
Dotted Minim	<i>.</i>	* -	3
Minim	0		2
Dotted Crotchet	J.	<b>≵</b> :	1½
Crotchet	J		1
Quaver	5	<u> </u>	1/2
Semiquaver	A	<u> </u>	1 ¼

Keywords						
Dynamics	Symbol	Definition				
Fortissimo	Ŋ	Very Loud				
Forte	ſ	Loud				
Mezzoforte	mf	Moderately Loud				
Mezzopiano	mp	Moderately Quiet				
Piano	Ρ	Quiet				
Pianissimo	PP	Very Quiet				
Crescendo	<	Becoming gradually louder				
Decrescendo	>	Becoming gradually quieter				
Tompo Definition						

Tempo	Definition
Lento	Slowly
Largo	Slow and stately
Adagio	Leisurely
Andante	At a walking pace
Allegro	Fast
Vivace	Lively
Presto	Very Quickly

### **Further Listening**

https://www.bbc.com/bitesize/guides/z2xb gk7/video

https://www.bbc.com/bitesize/guides/z2xb gk7/revision/2

# **PHYSICAL EDUCATION**

### **Components of Fitness**

- 1 <u>Balance</u> the ability to maintain centre of mass over a base of support. There are two types of balance: static balance and dynamic balance.
- 2 <u>Coordination</u> the smooth flow of movement needed to perform a motor task efficiently and accurately.
- 3 **<u>Reaction Time</u>** the time taken for a sports performer to respond to a stimulus.
- 4 <u>Agility</u> the ability of a sports performer to quickly and precisely move or change direction without losing balance or time.
- 5 **Power** the product of strength and speed. Expressed as the work done in a unit of time.
- 6 Muscular Strength the maximum force (in kg or N) that can be generated by a muscle or muscle group.
- 7 <u>Speed</u> distance divided by the time taken. Speed is measured in metres per second (m/s).
- 8 **<u>Flexibility</u>** the ability to move a joint fluidly through its complete range of movement.
- 9 <u>Aerobic Endurance</u> the ability of the cardiorespiratory system to work efficiently, supplying nutrients and oxygen to working muscles during sustained physical activity.
- 10 Muscular Endurance the ability of the muscular system to work efficiently, where a muscle can continue contracting over a period of time against a light to moderate fixed resistance load.

What KPI's will I be assessed in?						
1	Fluency of Skills 6		6	I	Reflection of Personal Goals	
2	Simple	Understanding 7 Personal Fitness Simple/Complex Tactics		Personal Fitness		
3	B Evalu	ate Performance	8		Components of Fitness	
Z	ļ	Leadership	9	Me	ental/Social/Physical Wellbeing	
5	5 Impl	ementing Tactics				
What sports will I be assessed in? Fundamental Skills						
1	Invasion	Football, Hockey, Handball, Basketball, Rugby, Netball		Throwing, Catching, Passing, Dribbling, Tackling, Shooting		
	Net and Wall	Badminton, Tennis, Volleyball		Attacking shots, Defensive shots, Serving		
2	Artistic	Gymnastics and Trampolining			Balance, Travel, Vaulting, Landing, Timing, Rotation, Aesthetics	
3	Striking and FieldingRounders, Stoolball, Softball, Cricket		Striking, Throwing, Catching, Long Barrier, Decision Making			
4	Athletics	Long Jump, High Jump, Shotput, Discus, Javelin, Long Distance, Short Distance, Relay		Running, Jumping, Throwing, Pacing		
5	Swimming Front Crawl, Backstroke, Breast Stroke, Butterfly, Personal Survival		t vival	Streamlining, Breathing, Technique		









# **PRODUCT DESIGN – Materials, Drawing and Evaluation**

Material Knowledge					
Material	Description	Example	Use	Advantages	Disadvantages
Hardwood	Broad leaved trees that drop the leaves in winter. Tend to be harder wearing with no need for treatment if used outside Slow growing so the grain is closer together making it tougher but heavier. Balsa is soft and light though.	Oak, mahogany, balsa, beech	Outside furniture, good quality child's toys. Boats. Balsa – model aircraft	Stronger, hard wearing, can be used outside	Expensive. Take a long time to replace so damaging to habitats. Harder to work with
Softwood	Trees with needles that stay on in winter.	Pine family (like Christmas trees)	Cheap construction, toys, doors	Cheap, easy to work with	Not good outside without protection, mostly weaker
Man made board	Board manufactured for wood for a specific purpose	MDF (medium density fibreboard), plywood	Lots, building, furniture	Any size or function you want. Predictable properties. Can be cheap	Sometime not attractive
Thermoset Plastic	Made from oil that will run out. Plastic that cannot be re-melted due to rigid cross links	Glass reinforced plastic. Epoxy resin	Boats, fishing rods, glue	Resists heat, strong	Brittle and cannot be recycled
Thermoform plastic	Mostly made from oil that will run out. Can be re- melted and recycled into something else	PET – drinks bottles HDPE – milk bottles	Lots!	Easy to mould, lots of different properties	Often cannot be recycled due to being mixed with other plastic or contaminated with labels or food or metal.
Elastomer	Spring like molecule structure allows flexibility	Rubber, elastic	Lots! Rubber bands, clothes, seals	Flexible	Hardens with age

Thermosets



Resist heatRigid Cross links



•Easily moulded into shape •Can be recycled •Can be reheated and remoulded

### Elastomers

Good elasticity

or thermoforming

plastic

Can be thermosetting

### Literacy – Be able to Write an Evaluation

- What skills have you learnt during this project?What skills have you developed (improved)?
- What aspects (parts) of your project do you think have gone well?
- What aspects of your project do you think have gone badly?
- Compare your finished project to your final design drawing, what changed did you make and why?
- If you were given a chance to re do the project, what would you do differently?

#### <u>Pillar drill</u>

We use this for drilling vertical holes in material. Almost always you will clamp your work down first. Wear glasses, use the guard and know how to turn it off in an emergency. Do not use if you are unsure – ask!

#### Batch Production

- To save time, we can do more than one thing at once. In Food Tech, this may be baking a whole load of bread or cakes at the same time. What advantage to you see here?
- When making your lorries we could:
- •use the line bender to bend more than one plastic cab at once
- •get all the cutting tools out and cut as many wood cuts as possible while the tools are out
- •line all the wheels and countersink the holes one after the other
- •drill all the axle holes at the same time.





Isometric drawing: Used for practising drawing in 3D for design ideas. Ask for isometric paper to practise on!



Perspective drawing: Often used architecture. All lines that are not vertical go back to vanishing points.

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### **PRODUCT DESIGN – Tools**

vour work

need a sharp pencil!

Tenon Saw for cutting straight vertical cuts. The depth of the cut is restricted by the brass spine. You must stretch the index finger out when using this saw to steady it and get a more accurate cut. Start cutting on a corner, drawing back several times. Use a bench hook

then tightening up again.

clamp for shorter pieces of wood

Fret Saw for cutting curved lines in thin material with a thin blade. Always keep your fingers clear. Make sure the guard is intact. Cut slowly. Use the clamp to stop wood rattling about. The manual equivalent is a coping saw – you can turn the blade around by unscrewing the handle





Bevel Edge Chisel for removing wood. Always chisel away from yourself. Use only for cutting wood – they must be razor sharp! Bevel edge facing down.

Steel Rule Measuring with accuracy up to 1/2 mm depending on

measurements from above to get an accurate reading. You also

Wood Plane For shaving slithers of wood off your work. The aim is to take a shaving cut that is complete and lasts the whole length of

your work. Always rest it on its side so you don't blunt the blade or

damage my desk. Usually, we use a wood plane along the grain.

your eyes! It starts at zero on the end, unlike a ruler that has

material on the end first. Make sure that you look at the

Vernier Measuring with accuracy. Accurate to 0.01 of a mm. Do not forget to zero it first! You will use this to check the sizes of drills and



### **PRODUCT DESIGN – Maths**

Area: the two-dimensional space taken up by something

Bench Hook and Clamp use the bench hook to help cut wood with

accuracy. Top tip - always cut all the way through your work into

the bench hook to avoid splintering the back of your work. Use a

Squares: 45 degree and 90 degree Take care of these – your work

accuracy depends on them being accurate! You must keep the stock

(wooden bit) tight against your work and your pencil must be sharp!

Measured in: a size appropriate to the problem – either  $cm^2$  or  $m^2$  for larger problems. Area of a rectangle = width × length

width       length       Area of a circle = $\pi r^2$	<ul> <li>Examples - rectangle area.</li> <li>1) If the width of a piece of fabric is 10cm and its length is 15cm, what is its area in cm<sup>2</sup>?</li> <li>2) Width = 12cm, length = 32cmm, what is the area?</li> <li>3) Width = 3m, length = 8m, what is the area in m<sup>2</sup></li> </ul>
radius $\pi = 3.142$ The radius is half the diameter	<ul> <li>Examples - circle area.</li> <li>1) If the radius of a piece of metal is 5 cm, what is its area in cm<sup>2</sup>?</li> <li>2) Radius is 3 cm, what is the area?</li> <li>3) Radius = 9.5 cm, what is the area</li> <li>4) Diameter = 12 cm, what is the radius?</li> </ul>

9.9 (2 212, 2) 1	:9g619vA
1) 72 cm³. 2) 12 312 cm³. 3) 120 m³. 4) 1596 cm³ (1	:emulov biodu)
1) 78.57 cm <sup>2</sup> . 2) 28.2 cm <sup>2</sup> . 3) 283.6 cm <sup>2</sup> . 4) 452.4 cm <sup>2</sup>	Circle area:
1) 150 cm². 2) 384 cm². 3) 24 m²	Rectangle area:
	: <u>sr9wenA</u>

**Volume:** the space taken up by something

Measured in: a size appropriate to the problem – either cm<sup>3</sup> or m<sup>3</sup> for larger problems Volume of a cuboid = depth × length × height

Applications - this could be useful to work out the volume of a material and therefore its cost, or the amount of paint or other liquid used if we use litres or ml instead of cm or metres



Examples - cuboid volume. Work out the volumes below 1) The depth of a piece of wood is 3 cm, its length is 4 cm and the height 6 cm 2) depth = 18 cm, length = 36 cm, height 19 cm3) depth = 3 m, length = 8 m, height = 5 m4) Length 42 cm, depth = 19 cm, height 2 cm

Average or Mean is adding up all the data you have and dividing by the number of sets of data you have.

Example: you want to know the average head size so you can design a hat that would fit an The Average = 420 + 480 + 520 + 360 = 445 average person.

P1 head size 420 mm P3 head size 520 mm P2 head size 480 mm P4 head size 360 mm

For you to do

1). What is the average bottle volume size? 140 ml, 210 ml, 183 ml, 189 ml, 112 ml, 439 ml 2). What is the mean shoe size? 10, 6, 9, 8, 15

# **RELIGIOUS EDUCATION**

Christian Beliefs and Practices			
Keyword	Definition		
Omnipotent	God is all powerful		
Omnipresent	God is everywhere		
Omniscient	God is all knowing		
Eternal	God is beyond time and space and without end		
Omnibenevolent	God is all loving		
Monotheism	Belief in one God		
Forgiveness	Choosing to no longer remember wrong doing against you		
Parable	A story with a meaning or moral		
Sacrifice	To give up something valued for the sake of others		
Salvation	Freedom from sin and its consequences		
Messiah	One who saves, saviour		
Trust	Faith in another person		
Miracles	An act which seems to break the laws of nature		
Incarnation	A person who is God in human form		
Sin	Wrong doing or thinking (disobedience against God		
Trinity	Christian belief that God is three persons in one: God the Father, God the Son, and God the Holy Spirit		
Love	Agape love is a sacrificial love God has for mankind		
Prayer	Communication with God		
Worship	Expressing the value of God for a believer		
Justice	Fairness; bringing about what is right or fair according the law, or making up for what has been done wrong		
Stewardship	The idea that humans have a duty to look after the environment on behalf of God		
Compassion	A feeling of pity that makes one want to help		
Religious organisation	An organisation based on religious principles, usually set up by one particular religion		

Theme	Explanation
Helping the poor and needy	Christians help those in need because all people hold the sanctity of life (all life is God-given and important), everyone is of equal worth, all people should be loved and when making mistakes all people should be forgiven.
CAFOD	Catholic charity who focus on helping the poor and needy. Christians believe that everyone deserves their human rights so many Christians fight for social justice when seeing the unfair treatment of people in society. In over 50 countries, CAFOD partners work alongside people in poor communities. Often this means helping people to learn alternative farming methods or set up new businesses. As a consequence, thousands of people can now feed their families and achieve a decent standard of living.
Mother Teresa	Mother Teresa helped the sick and poor as she became a nurse and started a school in the streets. She showed her Christian faith through action – 'faith without deeds is dead' – as she believed that she needed to be poor and give as much as she could to others.
Martin Luther King	Martin Luther King fought for equality in society through fighting for the human rights of black African Americans. He wrote a speech called 'I have a dream' and worked to have all different races working together in society. He followed the Bible quote 'do unto others, as I do unto you'.



#### **CHALLENGE**

Go to this website for further research on Christianity: http://www.bbc.co.uk/religion/ religions/christianity/ Go to this website, watch the videos and complete the quizzes: https://www.bbc.com/bitesize/ subjects/zh3rkqt

# **RELIGIOUS EDUCATION**

### **Christian Beliefs and Practices**

Belief	Explanation
Trinity	Three persons in one: God the Father, God the Son, God the Holy Spirit. Each person has a different role. God the Father existing first and enabling the creation of the world, God the Son, created second and re-educating society, and God the Holy Spirit created for to those who believed Jesus so they would continue to have a guide to help. Each of these persons reveals a different characteristic of God.
The Golden Rule	Christians believe that they should 'Do to others as you would wish them to do to you' or 'love your neighbour as you love yourself'. Meaning 'treat others the way you wish to be treated' so Christians will show this belief through their practices by helping the needy and supporting the sick and poor.
Jesus	Christians believe that Jesus was fully God and human at the same time. Jesus role of earth was to teach, preach and heal people in society, to prove that he was God and to be the ultimate sacrifice so humans could go to heaven and be with God. His role was to educate humanity and repair the relationship between man and God after the separate due to sin created by Adam and Eve.
Prayer	Jesus spoke about prayer on a number of occasions. Some Christians follow set prayer, such as the Lord's prayer, which Jesus taught his disciples, whereas others make them more personal and create their own prayers.
Parables	A parable is a story used to teach a lesson or a moral. For example: <b>The Good Samaritan:</b> Jesus tells a story of a Samaritan helping a Jew even though at the time they would have been enemies. This teaches Christians today to 'Love your neighbour as you love yourself'. <b>The sheep and the goats:</b> Jesus tells a story about the different types of people in life. Those who help the needy, the sheep, and those who do not, the goats. Jesus said 'Whatever you did for the least of these brothers of mine, you did for me'. This teaches Christians today to give to others as then they will be rewarded with an afterlife. <b>The lost son:</b> Jesus tells of a story where a son leaves his father with his future inheritance. He spends all the money on gambling, alcohol and a partying lifestyle. He ends up working with pigs on a farm. He realised that his own father's servants are being treated better than him and decides to return to his father. His father is so happy that he return as he though the was lost but now he is found. This teaches Christians today that God will always welcome people back to him, even the sinners will have a place in the kingdom of God.
Miracles	A miracle is an extraordinary event that breaks the laws of science and therefore is often seen to be the works of a divine being such as God. Christians believe that Jesus performed miracles that proved he was God and showed that he had been sent to repair the relationship between man and God. Jesus performed different types of miracles, such as calming the storm showing power over nature and the healing a paralysed man.
Salvation and redemption	Christians believe that Jesus was the ultimate sacrifice. Meaning that those who accept believe in Jesus can be saved through his sacrifice and death on the cross. Some Christians believe to be saved from going to hell, believe in Jesus as the son of God is necessary, whereas others believe that good people will be allowed into heaven. Christians believe that Jesus redeemed the situation after Adam and Eve caused original sin to be placed on every human.

# SCIENCE – 8BD Digestion and Nutrition

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1. Diet: Keywords		
Keyword	Definition	Examples
Carbohydrate	Provides energy	bread, pasta, rice
Protein	Growth and repair	meat, eggs, beans
Lipids (Fats)	Stored energy in the body	butter, oil, nuts
Minerals and Vitamins	Needed to maintain health	salt, calcium (milk), vegetables
Dietary Fibre	Ensure movement of food through the gut	vegetables, brain
Water	Needed for hydration of body	water, fruit juice, milk

2. Diet: Balanced and Unbalanced		
Unbalanced Diet	Health Problem	
Too much fat	Heart disease	
Too much sugar	Tooth decay	
Not enough protein	Poor growth	
Not enough carbohydrate	Not much energy	

3. Digestion: Keywords			
Keyword	Definition		
Digestion	When large insoluble food pa		

Digestion	When large insoluble food particles are broken down into small soluble particles
Enzyme	Digests food. Breaks down large molecules into small molecules
Biological Catalyst	Speeds up digestion
Respiration	The chemical reaction that happens in mitochondria to release energy from glucose.

### 4. Digestive System

	A	<b>Mouth</b> : mechanical breakdown/chewing food	G	<b>Appendix</b> : useless organ that harbours bacteria (good and bad)
Н	в	Oesophagus (gullet): pushes chewed food to stomach	H	<b>Salivary Glands</b> : produce saliva with enzymes to breakdown starch
	с	Liver: makes digestive juices	-	<b>Stomach</b> : Partial digestion of food/mechanically churns food with HCI and enzymes
	D	Gall Bladder: makes bile, which breaks down fats (lipids)	J	Large Intestine: re- absorption of water/faeces
K	E	Pancreas: production of digestive enzymes	к	<b>Rectum</b> : muscular section of the large intestines where faeces is produced
	F	Small Intestine: absorption of small soluble particles	L	<b>Anus</b> : where faeces leaves the body

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Nutrient	Enzyme	Product
Carbohydrate (Starch)	Carbohydrase	Sugar
Protein	Protease	Amino acids
Fat	Lipase	Fatty acids and glycerol

### **SCIENCE – 8CP – Periodic Table**

1. Keyword	ds
Atom	The smallest particle of a chemical element that can exist
Element	A substance made from only one type of atom
Compound	A substance made of two or more different types of atom chemically bonded together
Reactants	The chemicals that react with each other at the start of a chemical reaction
Products	The chemicals that are formed in a chemical reaction
Conservation of mass	The mass of the reactants equals the mass of the products
Word equation	An equation in which only the names of the reactants and products are used to model a reaction
Symbol equation	Gives more information about a chemical reaction because it includes the symbols and formulae of the substances involved
Period	Elements in the same row going across the Periodic Table
Group	Elements in the same column going down the Periodic Table

How to use chemical symbols and equations



BIG number apply to everything *after* them Small numbers apply only to the symbol before them

The small numbers go at

Numbers in formulae

- the bottom. For example:
- CO<sub>2</sub> is correct;
  CO<sup>2</sup> and CO2 are wrong.



### 2. Periodic Table

Invented by	Dmitri <b>Mendeleev</b> , a Russian scientist.
How did he arrange the elements?	In order of atomic mass, and by their chemical properties
What was special about his periodic table?	<b>Predicted</b> the existence of <b>other elements</b> not discovered, and <b>left gaps</b> for them in his table.
Why did scientists use Mendeleev's Periodic Table?	New elements were discovered that matched these gaps.

#### 3. Properties – Metals and Non-Metals Non-Metals Property Metals High (they feel heavy Low (they feel light for their size) Density for their size) Strong Strength Weak Malleable (they bend Malleable or Brittle (they break or shatter without breaking) brittle when hammered) Conduction of Poor (they are insulators) Good heat

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### 4. Properties – Groups 1 and 7

		-					
Group 1 (I)	Melting point	Density	Reactivity	Group 7 (VII)	Melting point	Density	Reactivity
Lithium (Li)				Fluorine (F)			
Sodium (Na)	Decreases down	Increases down	Increases down	Chlorine (Cl)	Increases down	Increases down	Decreases down
Potassium (K)	the group	the group	the group	Bromine (Br)	the group	the group	the group
Rubidium (Rb)				lodine (I)			



# **SCIENCE – 8CP – Periodic Table**

5. Atomic Structure		6. Propertie	s of Sub-atom	7. Electron Arrangement Rules			
The centre of an atom.		Particle	Relative mass	Relative charge	Location	1.	Always fill from the inside to the
TNUCLEUS	neutrons	Proton	1	+1	Nucleus		
2 Dreter	A positively charged particle		1	0	Nucleus	2.	electrons
2 Proton	found in the nucleus	Electron	0	-1	Shells	3.	The second and third can hold 8
3 Neutron	A neutral particle found in the nucleus. Has no charge			/			Third shell Can hold up to 8 electrons
4 Electron	A negatively charged particle found in energy levels (shells) around the nucleus				nucleus		Second shell Can hold up to 8 electrons First shell

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8. Properties – Metals and Non-Metals									
Property	Metals	Non-Metals							
Density	High (they feel heavy for their size)	Low (they feel light for their size)							
Strength	Strong	Weak							
Malleable or brittle	Malleable (they bend without breaking)	Brittle (they break or shatter when hammered)							
Conduction of heat	Good	Poor (they are insulators)							
Conduction of electricity	Good	Poor (they are insulators) apart from graphite							

# SCIENCE – 8PE – Electricity and Magnetism

1_0_0_	-0-0-	(2	$\rightarrow$	1	Open switch	7	Resistor	4	Keywords           Poles         The ends of the magnets (South/North)
	<b>B</b>   <b>B</b> -		<i>v</i> )-	2	Closed switch	8	Fuse		Charge Positive or negative (+ / -)
4.	5.	6.		3	Bulb	9	Ammeter		Magnetic field lines:
		(A	-(v	4	Cell	10	Variable Resistor		Lines with arrows that move from North to South.
<i>.</i>	8.	9.	$\sim$	5	Battery	11	Thermistor		
			チ 2.	6	Voltmeter	12	Light Dependent Resistor		Electromagnet: A magnetic field caused by current flowing through a conductor
2	Series	Pa	aralle	el			$\sim$		
Components	connected o loop	on one col sej	onnecteo parate l	d by oop	s				the following:
Current	same everyv on circuit	where sha be	ared ev etween l	enly loop	s				<ol> <li>Increase the turns of the coil</li> <li>Increase the current</li> <li>Use a soft iron core</li> </ol>
Voltage	shared betw components	veen sar S	ime evei	rywł	nere	-			
Prope	erty		Unit		Un	it S	ymbol		
Voltage or I Difference (	Potential V or p.d)	\	Volts				V		Similarities between magnets and charges:
Curren	nt (I)	Amps	(Ampe	ere	s)		А		Poles/Charges Like/same repel each other
Resistan	ce (R)	C	Ohms				Ω		Opposites attract each other



**Conductor**: allows charge to flow through it. Does not hold charge, e.g. ALL metals and graphite.

**Insulato**r: does not allow current to flow. Holds charge, e.g. Wood, plastic, glass, rubber.

# SCIENCE – 8PL – Light and Space

1.	Light Keyw	vords
1	Reflection	Light bounces off surface
2	Refraction	Light is bends as it enters and leaves
3	Primary colours	Red/Blue/Green makes all colours
4	Eyes	Senses the light we see
5	Filters	Absorbs light of the same colour
6	Transmitted/ Emitted	Light that is given out
7	Absorbed	Light that is taken
8	Scattered	Light that is spread when it reflects
9	Boundary	A place where lights bounces off or bends
10	Secondary light	When primary light mixes

### 4. Types of Reflection

1. Specular reflection is what you see in a mirror – the image is not distorted

2. Diffuse reflection is what happens from most materials – the light is reflected but the image is not preserved



2. L	aw of Refl	lection
1	Incident ray	A beam of light that comes from the light source.
2	Incidence angle	The angle made between the incident ray to the normal line
3	Normal line	This line is 90 degrees to the mirror
4.	Reflected angle	The angle made between the reflected ray to the normal line
5	Reflected ray	A beam of light that leaves the mirror
6	Mirror	Light reflective surface
7	Law of reflection	Angle of incident = angle of reflection



6. Law of Refraction				
	1	Refracted ray	A beam of light that leaves the glass block	
	2	Incident ray	A beam of light that comes from the light source.	
	3	Normal line	This line is 90 degrees to the surface	
	4	Medium 1	Air	
	5	Medium 2	Glass block	
	6	Incidence angle	The angle made between the incident ray to the normal line	
	7	Refraction angle	The angle made between the refracted ray to the normal line	
	8	Law of refraction	The beam will bend towards the normal line as it goes from a less dense medium to a more dense medium	



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# SCIENCE – 8PL – Light and Space

5. The Eye					
1	Muscle	Controls shape of the lens. Relaxes makes the lens fat.			
2	Pupil	Hole that light in like a camera aperture			
3	Cornea	Transparent front of the eye			
4	Iris	Coloured muscle that controls the amount of light entering the eye			
5	Jelly lens	Can change shape to focus light onto the retina			
6	Retina	Layer of light sensitives on the back of the eye			
7	Optic nerve	Carries the electrical signals to the brain			



6. Colours				
Primary colours	Secondary Colours			
Red	Magenta			
Green	Cyan			
Blue	Yellow			



7. Space				
Gravity	Non-contact force of attraction between masses. The larger the mass, the larger the pull of gravity			
Light	Travels in straight lines			
Light	Travels very fast – 300,000,000 m/s			
Galaxies	Contain many solar systems			

8. Solar System			
1	Mercury	Му	
2	Venus	Very	
3	Earth	Easy	
4	Mars	Method	
5	Jupiter	Just	
6	Saturn	Speeds	
7	Uranus	Up	
8	Neptune	Naming	



### LEARN SENTENCES

**BUILD PARAGRAPHS** 

1. ¿Qué tipo de destin	no turístico es tu pueblo?	2. ¿Qué haces en las vacaciones y en la vida cotidiana?		4. FUTURE: ¿Qué vas a hacer el fin de semana que viene?	
Vivo en un pueblo histórico que está situado al lado del mar.	I live in an historic town which is situated near the sea.	Normalmente, me despierto muy temprano	Normally, I get up very early and go to school.	Pues, el próximo fin de semana,	Well, next weekend,
Hay una playa donde se puede surfear.	There is a beach where you can surf.	y voy al insti. Cada día, juego al fútbol con mis amigos.	Each day, I play football with my friends.	voy a ir a la playa con mis padres	I'm going to go to the beach with my parents
Lo mejor de mi pueblo es que el transporte público	The best thing about my town is that the public transport is	Después, hago mis deberes en casa mientras	After, I do my homework at home whilst my brother	porque hará mucho sol.	because it will be very sunny.
es muy bueno.	very good.	mi hermano cocina.	cooks.	Vamos a ir de paseo v	We are going to go for a
Se puede llegar en tren, aunque es un poco caro.	You can arrive there by train, although it's a bit expensive.	Pero en las vacaciones, me gusta levantarme más	But in the holidays, I like to wake up later.	también montar en bici.	walk and also a bike ride.
Diría que hay mucho que hacer allí.	I would say that there is lots to do there.	tarde. Suelo ir al parque con mi	I usually go to the park	¡Qué guay! Me encanta la naturaleza.	How cool! I love nature.
Por ejemplo, se puede montar en bici.	For example, you can go for a bike ride.	amiga, que se llama Zoé.	called Zoe.	Sin embargo, a mi padre no le gusta nada.	However, my dad really doesn't like it.
Sin embargo, a mi amigo	However, my friend doesn't like spending time outside.	descansamos, jQué guay! rest. How cool!		5. ¿Qué tipo de películas/series de tele recomendarías y por qué?	
no le gusta pasar tiempo al aire libre.		3. PAST: ¿Qué hiciste el fin de semana pasado?			
Así que suele ir a la sala de iuegos, iQué aburrido!	So he usually goes to the arcade. How boring!	Bueno, el fin de semana pasado, hice muchas	Well, last week I did lots of things.	A mí me encantan las películas.	Me, I love films.
Como turista, prefería	As a tourist, I would prefer to	El sábado por la mañana,	On Saturday morning,	Recomendaría las pelís de aventura	l would recommend adventure films
sol.	visit a castle if it is sunny.	salí con un amigo en bici y	I went out with a friend	porque son fáciles de ver.	because they are easy to watch.
AIM HIGH PHRASES		fue estupendo.	amazing.	Sin embargo, prefiero ir	However, I prefer to go
1) Que se llama	Who is called			al cine	to the cinema
2) Hay que ser honesto/a,	I have to be honest,	Por la tarde, hice los deberes. ¡Qué rollo!	In the afternoon, I did my homework. What a drag!	porque la imagen es mejor en la gran	because the picture is
3) Para que pueda	So that I can be			pantalla.	better on the big screen.
4) Sería mejor si fuera	It would be better if I was	El domingo, despues de hablar con mi abuela,	On Sunday, after talking to my Grandma,	Mi película favorita es Avengers: Endgame– jes	My favourite film is Avengers: Endgame - it's
5) Después de jugar,	After having played,	vi una peli con mi	I watched a film with my	increíble!	incredible!
6) Lo mejor/peor es The best/worst thing is		hermana.	sister.	Pero mi amigo odia las	But my friend hates
7) íQué guay!	How cool!	Desafortunadamente, no me gustó.	Unfortunately, I didn't	aventuras. Dice que son previsibles.	adventure films. He says they are predictable. 44
8) íFue estupendo!	It was amazing!		ince it.		

# **TEXTILES**

KeywordsInterpretInspirationAppliqueEmbroiderQuiltingAnnotateLabelDesign	Reverse applique y Stencilling Layering & fraying Target Market	<ul> <li>Health and safety rules:</li> <li>Long hair must be tied</li> <li>NO food or drink in the</li> <li>One person using a mage</li> </ul>	back. e workshop. achine.	Tie Dye	Reverse applique
Technical textiles are ma for their technical and per than their aesthetic (app They have a function or p go	aterials and products made formance properties rather bearance) characteristics. urpose rather than looking od.	Smart materials are Their properties can be of stimuli, such as electric an moisture and temper environmenta	e reactive materials. changed by exposure to ad magnetic fields, stress, rature. They react to al conditions.	Applique Stencilling	Quilting Layering &
A <b>conductive textile</b> is a fabric that can conduct electricity with metal strands woven into it.	A <b>fire resistant</b> <b>material</b> is one that is designed to resist burning and withstand heat.	<b>Hydrochromic</b> inks change colour according to the amount of water they detect.	Thermochromic colour change is effected by heat. The different colours can determine the temperatures much		<b>Indying</b>
bes cotor nicrofiers	BULLET / STAB PROOF VESTS UVING GLOVES WALKING BOOTS WALKING BOOTS	Solar Solar Solar Solar Solar Solar Solar	in the same way as a thermometer.	Fabric Product	tion Methods
<b>Wicrofibres</b> are 60 to 100 times finer than a human hair. They are used for clothing	Kevlar <sup>™</sup> is extremely strong, lightweight, corrosion and heat resistant. It is often used	Photochromic inks Special pigments change colour when exposed to	Phosphorescent pigments absorb light energy so that it can be	Non-Wo	oven

released once it is dark.

as a glowing light effect.

The energy is released

solar light and reverse

back to clear when the

light source is removed.

a numan nair. They are used for clothing for outdoor and active sportswear.

other materials, forming

in combination with

composites.

Knitted

### **TEXTILES**

### WRITING ABOUT YOUR DESIGN IDEAS

#### Being able to write about your own ideas and sources

Example: "I am really pleased with the storage unit that I have designed. I like it because it reflects the art deco era as shown in my research. Whilst I think that the 1st idea also portrays the art deco era I feel that the size of the product might be too big".

I think that	reflects	another idea
reminds me of	I likebecause	makes me fe
portrays	signifies	gives the im
suggests that	reinforces	it could be t

- vould be to
- what I like about this idea is of all the ideas that I have drawn









Felt







