

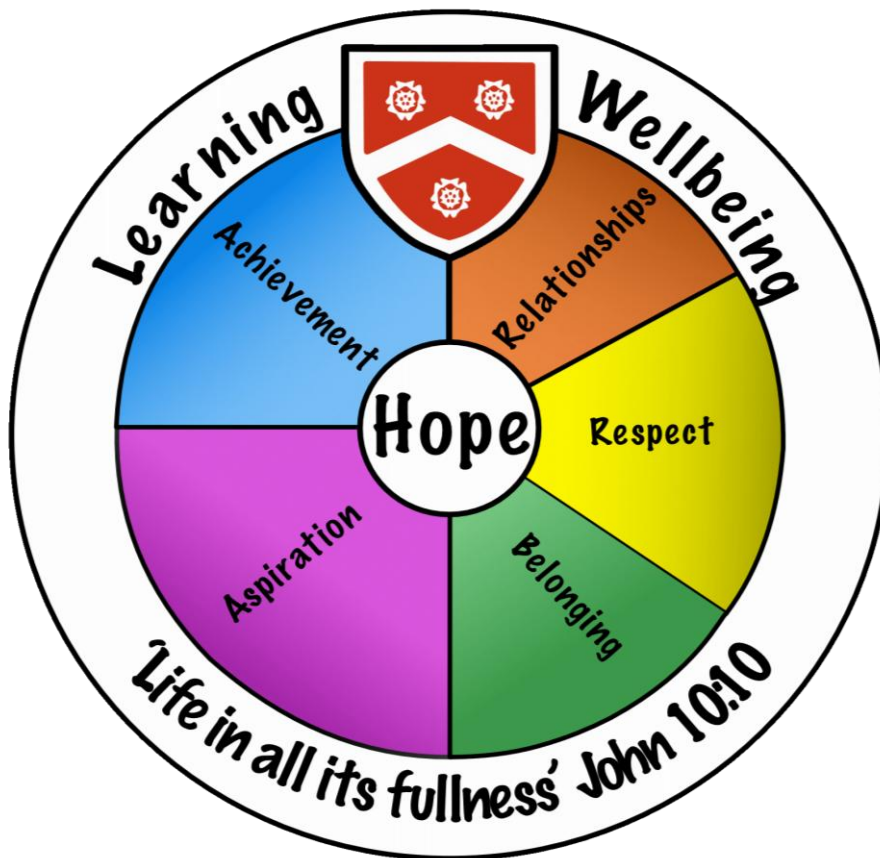


Wadham School

A Church of England Community School



Knowledge Organisers Year 8 Term 5 & 6 2025-2026



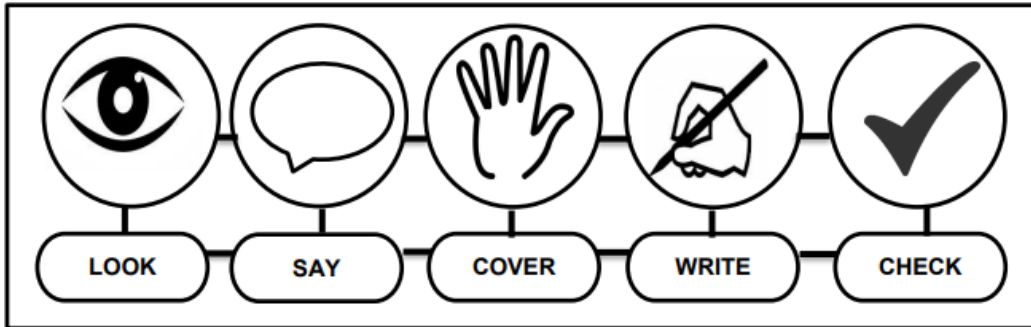
Name.....

Tutor group.....

“Life in all its fullness” John 10:10



Using Your Knowledge Organiser



Look-Say-Cover-Write-Check

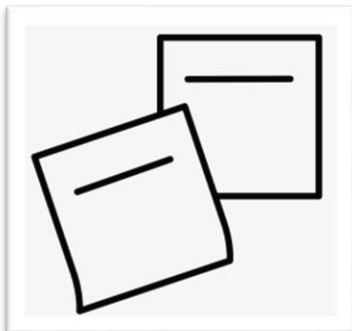
Retrieval practice using the look-say-cover-write-check technique, when done in regular small chunks, is one of the best ways you can learn relevant knowledge over time.

Working in Independent mode:

- Look at the first bullet point or sentence
- Read through it three to five times
- Cover
- Write it out exactly
- Remove and check what you wrote and tick if correct
- Repeat
- When you get it 100% right, move on to the next chunk of information

Flash Cards

Make flash cards with the definition on one side and key word on the other.



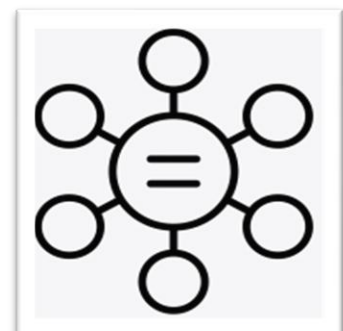
Self Quizzing

Write quizzes with answers to test yourself in the future.



Mind maps

Create mind maps linking key information you need to remember.



LIBRARY INFORMATION

BOOK BINGO

Book set outside the UK	Non-Fiction	Author who shares one of your initials
Book beginning with R	Recommended book	Book with an animal in it
One word title	One of the 50 books to read before you leave Wadham	Blue book cover

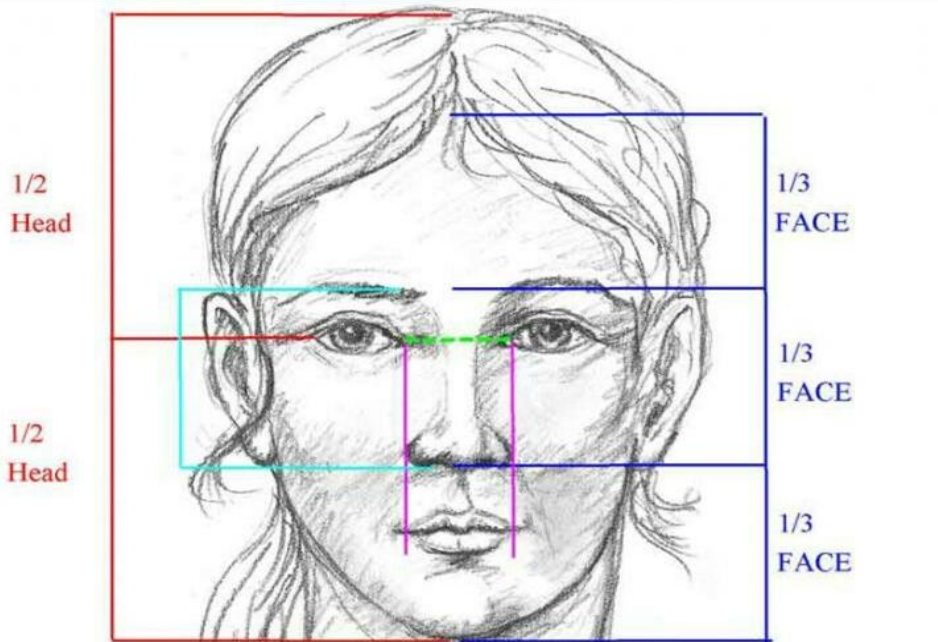
How many different book types can you cross off before the end of the Summer Term?
READ and REVIEW books from the library or on Sparx.
PRIZE for completing a row.
FREE BOOK for a **FULL HOUSE.**

IF YOU LOOSE A BOOK, DON'T PANIC! IT CAN BE REPLACED WITH ANOTHER BOOK OR WITH A SMALL CHARGE



The library is open to all.
it is a safe space where you will always find an adult at break or lunch.
There are tablets in the library that can be used for completion of homework, please ask Mrs George for access.

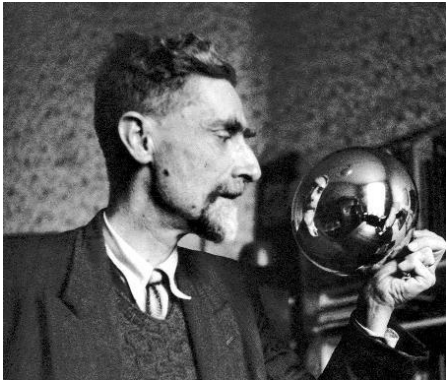
Art



- The eyes are halfway between the top of the head and the bottom of the chin.
- The face is divided into 3 parts: From hairline to eyebrow, eyebrow to bottom of nose and from nose to chin.
- The distance between the eyes is approximately the width of one eye.
- This is the same width as the nose.
- The ear length is from the eyebrow to the bottom of the nose.

Word	Definition
Features	The nose, mouth, ears and eyes.
Proportion	The relationship between height, width and position of these features.
Form	The appearance of 3-dimensional depth.
Tone	Use of light and dark to create the illusion of form.
Profile	The view of the side of the face.
Composition	How the artist chooses to arrange the elements of the image onto the paper.
Realist	Accurately portraying the visual appearance of the person.
Expressionist	Portraying the feeling or personality rather than the appearance of the person, often through use of colour.

Art



M.C Escher
17 June 1898 – 27 March 1972

M. C. Escher, was a Dutch graphic artist born in the Netherlands. He is known for his often mathematically inspired art. These feature impossible constructions, explorations of infinity, architecture and tessellations (means "like tiles").

During his life, Escher made 448 lithographs, woodcuts and wood engravings. He did over 2000 drawings and sketches. He also illustrated books, designed tapestries, postage stamps and murals.

Escher was interested in different ways of making art, he used tile-like repeated patterns in many of his paintings. Early in his career he drew inspirations of nature: he studied art, landscapes and insects.



The pattern with the spherical mirror – a silver sphere – was featured heavily in his later work.

In this print Escher may well have perceived the spherical mirror as a star floating around in the universe.

After the Second World War, Escher became preoccupied with the theme of stars and planets. This is not entirely surprising. Escher had been stargazing with his father since the age of fifteen, using a telescope that had been bought especially for him in Paris.



M.C Escher Crystal Ball



M.C. Escher, The Sphere (Self-portrait), woodcut 1921

Key words

Variety of Tone
Detail
Background
Middle ground
Foreground

Art

Line is the path left by a moving point

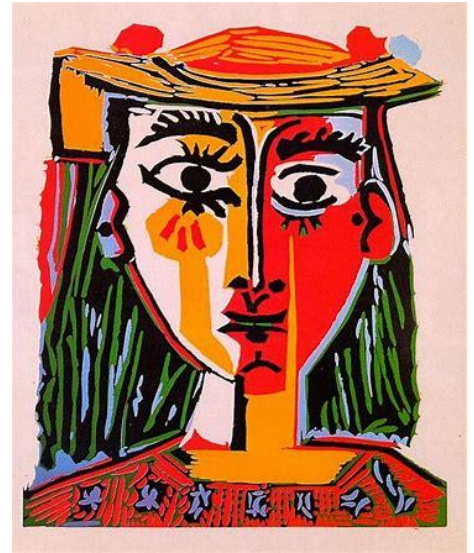


Pablo Picasso was born in Spain in 1881 but lived most of his life in France, he died in 1973.

We can see from these paintings, that lines can express **feelings** and **emotions**.



Weeping Woman 1937 by Picasso



Notice how Picasso has used a range of thick and thin lines to help express emotion.

Look at the way Picasso has used thick, sharp, angular lines to express the grief, frustration and misery in his painting of the 'Weeping Woman'.



The Scream by the Norwegian Artist Edvard Munch is his most famous painting. The swirling, twisting lines he used to disturb and distort the scene and help suggest fear.

Beliefs and World Views

Topic 3: Islam Beliefs and Practices

1	Islam	Arabic Religion – Worlds second largest, around 2 billion followers
2	Muslim	Follower of the Religion of Islam
3	Allah	'God' in Arabic. Often used to refer to Islamic concept of God
4	Tawhid	Belief in One God
5	Shirk	Dividing God into smaller parts

6	Mohammed	Most important prophet in Islam. 'Seal' of the prophets
7	Shahadah	Declaration of Faith – Statement spoken to become a Muslim

8	Zakat	Obligatory giving of 2.5% of wealth to charity
9	Khums	Voluntary giving of an extra 20%

10	Hajj	Pilgrimage to Mecca – At least once in a Muslim's life
11	Mecca	Holy City in Saudi Arabia – Location of the Ka'ba
12	Ka'ba	Building dedicated to Allah by Mohammed
13	Pilgrimage	Sacred journey to a special place of religious interest

14	Sawm	Ritual fasting to prove dedication to God
15	Fast	Not eating food between sunrise and sunset
16	Ramadan	Month of fasting

17	Eid-up-Fitr	Breaking of Fast – Feast and celebration at the end of Ramadan
18	Eid-ul-Adha	Festival of Sacrifice – Remembers Abrahams willingness to sacrifice Isaac

Topic 4: Other Religions and Worldviews

1	Brahman	'God' - Supreme being or universal truth
2	Vishnu	God of Preservation
3	Brahma	God of Creation
4	Shiva	God of Destruction

5	Kirpan	Dagger - Defend those in danger
6	Kara	Bracelet - Symbolise the never-ending god
7	Khanga	Comb - Life should be tidy and organised
8	Kesh	Uncut Hair - Identifies a person as Sikh
9	Kachera	Shorts - Able to move freely in obedience of god

10	Paganism	Non-main religion focused on nature worship
11	Pantheism	God is in everything/God is nature
12	Personal God	God is conscious and acts deliberately
13	Impersonal God	God is not conscious and does not act deliberately.

14	Humanist	Specific group for Atheists
15	Atheists	Believes God does not exist
16	Empiricism	Using evidence to prove beliefs

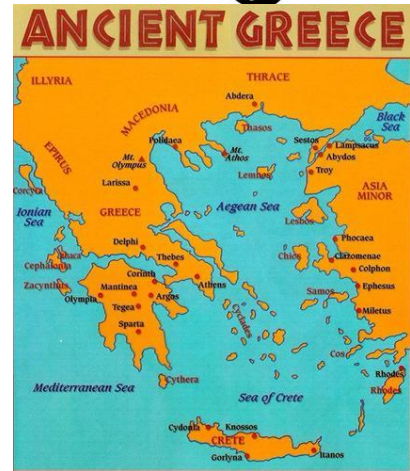


	Keyword	Core Knowledge
1	Fabric	A material made by weaving or knitting threads together, used to make clothes and other textile items.
2	Surface Design	Patterns, colours, or textures added to the surface of fabric to make it more interesting or decorative.
3	Motif	A repeated shape, symbol, or pattern used in a design.
4	Embellishment	Extra decorative details added to something to make it look more interesting or attractive.
5	Embroidery	A way of decorating fabric by stitching patterns or pictures with thread.
6	Art Deco	A bold and stylish design style from the 1920s-30s, known for geometric shapes and rich colours.
7	Memphis	A fun art style from the 1950s-60s that used bright colours and images from everyday life and pop culture.
8	Pop Art	A colourful and playful design style from the 1980s with bold shapes, patterns, and clashing colours.
9	Polymer	A type of plastic made from long chains of molecules, used in materials like acrylic or nylon.
10	Timber	Is wood that has been cut and prepared for use in building, furniture, or other products.
11	Linear Motion	Movement in a straight line, like a train moving along a track.
12	Rotary Motion	Movement in a circle or a spin, like a wheel turning.
13	Oscillating Motion	Movement back and forth in an arc, like a swinging pendulum.
14	Reciprocating Motion	Movement back and forth in a straight line, like a saw blade going in and out.

Drama – Greek Theatre



Performance Techniques	
Choral Speaking	Ensemble speaking by a group often using various voice combinations
Choral Movement	Movement that is performed in unison.
Comedy	A play characterized by its humorous or satirical tone and its depiction of amusing people or incidents
Tragedy	A play dealing with tragic events and having an unhappy ending
Tableau	A frozen image or snapshot of real action.
Canon	Movement that is performed one after another to form a pattern.
Amphitheatre	Large outdoor theatre
Greek Chorus	A group who comment on the action
Narration	Spoken storytelling
Gesture	A meaning that shows movement



Greek Myths & Characters

Myths were used to **teach lessons**

Characters are **types**, not realistic people:

Gods – powerful, confident, slow, controlled

Heroes – brave, strong, determined

Mortals – fearful, weak, emotional

Common themes:

Fate

Punishment

Power

Pride (hubris)

Greek Chorus

A Greek Chorus is a group of performers who comment on the action and provide insight into a play. Typically they are a group of 12 or more who sing, dance, move and speak in unison, sometimes wearing masks to convey different emotions.

Key Knowledge – Greek Theatre

Greek Theatre began in **Ancient Greece over 2,500 years ago**

Performances were part of **religious festivals** honouring the gods

Plays told **Greek myths** about gods, heroes and fate

Theatres were:

Outdoors

Built into hillsides

Held **thousands of people**

Because theatres were large, actors used:

Loud voices

Big gestures

Exaggerated facial expressions

Plays were not realistic – they were **bold, symbolic and dramatic**

What Did Greek Theatre Look Like?

Amphitheatre – a large, open-air theatre

Stage area – where actors performed

Audience sat in curved rows so sound could travel

Actors often played **more than one role**

Masks were used to show character and emotion



PERFORMANCE SKILLS

FACIAL EXPRESSIONS

GESTURES

BODY LANGUAGE

GESTURES

MOVEMENT

MOVEMENT

English

ANALYSIS	
Argument	The writer presents [topic] to...
Neat evidence	The phrase '...' shows...
Additional	Additionally, the phrase '...' adds to...
Language	The imagery suggests...
Your evaluation	A reader may also understand...
Structure and form	Structurally, the... tone emphasises...
Intentions of writer	The writer's intentions may have been to...
Society and context	Contextually, the writer may be reflecting...

POETIC POEMS	Definition
Personification	Giving something human characteristics
Oxymoron	Contradictory phrase
Enjambment	Continuing a line of poetry
Tone	Mood or atmosphere
Imagery	Descriptive language
Contrast	Very different things put together
Perspective	Viewpoint
Onomatopoeia	Words that sound like the thing
Extended	Carrying on
Metaphor	Saying something is something else
Simile	Saying something is like something else

A PERSUADER	Definition
Alliteration	Repeating same sound at starts of words
Points	Clear reasons to add to your argument
Exaggeration	Overstating
Repetition	Saying the same thing over and over
Statistics	Using numbers to represent facts
Unique ideas	Unusual or ways of approaching an issue
Anecdote	A short story used to make a point
Direct address	Talking to the audience
Emotive language	Appealing to people's feelings
Rhetorical questions	Questions not intended to be answered.

Shakespeare

Key words	Definition
Conflict	An argument, disagreement, violence or war.
Symbolism	When something represents something else.
Patriarchy	.A male-dominated society.
Oxymoron	Two opposite words together
Sonnet	A poem of 14 lines with regular structure
Protagonist	Main character
Antagonist	Villain or opposing character
Criticise	To judge something
Soliloquy	A speech delivered just for the audience to hear.
Unrequited love	Loving someone who does not love you back.
Villainy	Actions associated with a bad character.

English

Detective Fiction

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Structure and form	Structurally, the... tone emphasises...
Intentions of writer	The writer's intentions may have been to...
Society and context	Contextually, the writer may be reflecting...

Key words	Definition
Sonnet	A type of love poem with 14 lines.
Stanza	The name for a paragraph in poetry
Simile	A comparison using 'like' or 'as'
Transcendent	Going beyond mortal.
Romanticism	A cultural movement which valued nature.
Personification	Giving something human qualities
Zoomorphism/anthropomorphism	Types of personification – giving humans animal qualities
Divinity	Considering things to do with God or gods
Corruption	The damaging or ruining of something.
Metaphor	Describing something as something else
Supernatural	Things that are beyond normal like magic.
Red herring	A misleading clue

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Food

1	Dietary needs	<p>Nutritional needs vary depending on: life stages - pregnancy, infancy and childhood, adolescence, adulthood, later adulthood; medical conditions - diabetes (type 1 or 2), anaemia, lactose intolerance, coeliac disease; culture - religious beliefs, vegans/vegetarians, lifestyle choices Adolescence - a time of rapid growth and development, the requirements for calcium and phosphorus is fairly high. Boys need more protein and energy than girls for growth. Girls need more iron than boys to replace menstrual losses. Too little iron can lead to iron deficiency anaemia. Girls need more iron than boys to replace menstrual losses - 14.8mg p/day.</p>
	School food plan	<p>Standards for all food served in schools. A wide range of foods across the week must include: plenty of fruit and vegetables plenty of unrefined starchy foods some meat, fish, eggs, beans and other non-dairy sources of protein some milk and dairy foods a small amount of food and drink high in fat, sugar and salt</p>
	SALT/ sodium = MINERAL	<p>To maintain fluid balance Too much salt can cause high blood pressure Some processed foods contain high levels of salt No more than 6g per day</p>
2	Carbo-hydrates	<p>Carbohydrates provides energy for the body. Too much can lead to obesity, FRUIT SUGARS (glucose) (simple carbohydrate) found naturally in the cell walls of fruit or vegetables. FREE SUGARS (added to food) table sugar, jam, confectionary, honey, syrups, unsweetened fruit juice. Too much sugar can lead to tooth decay STARCH (complex carbohydrate) made up of many sugar molecules (potatoes, rice, pasta, bread) DIETARY FIBRE - complex carbohydrate found in the cell walls of plants; Fruits, vegetables, cereals (wholegrains) beans; lentils; nuts, seeds. Keeps the digestive system healthy. Can reduce the chance of getting heart disease and type 2 diabetes. Recommendations - 30g adult per day.</p>
3	Function of bread ingredients:	<p>Dough- mixture of dry ingredients that is mixed, kneaded and baked Flour (Gluten is a protein found in the wheat). Helps create the structure, softness and strength of the dough yeast Yeast is a biological raising agent, a single celled fungus plant the raising agent used in bread, doughnuts and currant buns salt (to add taste and aid proving); prove (leaving dough to rise) water (assists with fermentation - producing Co2 + alcohol and helping dough to rise. fat (sometimes added to make the loaf lighter and airier and extend its shelf life);</p> <p>Fermentation - The yeast uses the flour, sugar and water to and to produce carbon dioxide and alcohol Temperature / moisture - make sure it is a soft dough. Use tepid/warm/boiling heat liquid (37°C). Liquid is usually water but could be milk, water and milk mix, other liquids. Bread dough needs time to rise in first instance, yeast has to have time to grow, double in size. After shaping prove bread (another rising) before it goes into oven, it will almost double again. Warm conditions allow yeast to grow, carbon dioxide produced and bread rises slowly. Baking - in hot oven 220°C, yeast grows rapidly so bread rises rapidly. Yeast is killed by high temperature. Dough sets in the risen state.</p>

Food

4	Local and regional ingredients	<p>All food is grown, reared or caught. Ingredients can be purchased from supermarkets, smaller food shops, butchers, markets. Some people grow or rear food at home or on allotments.</p> <p>Traditional/ regional food: Food is prepared, made and adapted (often using local and seasonal ingredients) to creates dishes unique to a particular region. Traditional British meals have ancient origins, such as roasted and stewed meats and meat pies. However, traditions change with time. British dishes: Toad in the hole (Yorkshire), Cornish pasty (Cornwall).</p>					
5	Food waste	<p>Foods deteriorate when killed or harvested. Preservation techniques extend the shelf life of products: freezing, additives, processed foods (strawberries into jam), dehydration (reduces the water), pasteurisation (killing food spoilage organisms and pathogenic organisms), packaging</p> <p>Common foods wasted: Bread and bread products, fruit and vegetables, starchy foods, meat, chicken, fish, milk,</p> <p>Reasons for food waste: incorrect storage and packaging, buying large quantities, portion size too big; leftovers thrown away, impulse shopping/offers, limited cooking skills</p>					
6	Cultural challenge	<p>Factors that have influenced the UK food culture and what we buy, make and eat: world trade; immigration; foreign travel; developments in technology; changes in family dynamics.</p> <p>Cuisines from around the world are becoming increasingly popular: (Japanese-sushi, Indian - curry, Italian - pasta, Mexican - fajitas)</p> <p>When considering international food culture and tradition, factors that may affect the food eaten around the world include:</p> <p>food availability; cooking equipment, methods and skills; religion; special occasions; beliefs e.g. vegetarianism; culinary practices; traditions; festivals.</p>					
7	Meal planning	<p>Leisure venue - gym, pool, leisure centre, entertainment complex e.g.: bowling venue, cinema, theatre, out-of-town shopping centre.</p> <p>Considerations for preparing and serving a dish in a leisure venue:</p> <p>Cost/ value for money, number of expected visitors, nutrition, food hygiene and safety, appealing to the audience, context, e.g. the dish should be convenient to eat</p> <p>A recipe is made up of 4 parts: title; list and amount of the ingredients needed (in order of use); list of equipment (in order of use); method, i.e. how to make the dish.</p> <p>Include: a picture of the final dish; serving suggestions, e.g. serve with a salad; number of portions; preparation and cooking time; top tips; food skills; nutrition information.</p>					
8	Costing a recipe	<p>Usir</p> <table border="1" data-bbox="439 1524 1293 1653"> <thead> <tr> <th data-bbox="439 1524 611 1653">Ingredient name</th> <th data-bbox="611 1524 782 1653">Quantity purchased</th> <th data-bbox="782 1524 953 1653">Cost of quantity purchased (£)</th> <th data-bbox="953 1524 1125 1653">Quantity needed in recipe</th> <th data-bbox="1125 1524 1293 1653">Cost of ingredient used in recipe (£)</th> </tr> </thead> </table>	Ingredient name	Quantity purchased	Cost of quantity purchased (£)	Quantity needed in recipe	Cost of ingredient used in recipe (£)
Ingredient name	Quantity purchased	Cost of quantity purchased (£)	Quantity needed in recipe	Cost of ingredient used in recipe (£)			
		<p>Cost and availability Budgeting (save money). Ways to spend money wisely on food. Examples can include: eating the seasons; stocking up on food with a long shelf-life; plan meals and write a shopping list; cooking using one pot; making fake-aways rather than buying takeaways; using leftovers; replacing branded items with cheaper items; comparing prices and shop around to find the cheapest items; growing your own food</p>					



Les chansons	Songs
1. J'adore...	<i>I love...</i>
2. J'aime...	<i>I like...</i>
3. Je déteste...	<i>I hate...</i>
4. Je n'aime pas...	<i>I don't like...</i>
5. Le chanteur est...	<i>The male singer is..</i>
6. La chanteuse est...	<i>The female singer is...</i>
7. Le rythme est....	<i>The rhythm is...</i>
8. La mélodie est...	<i>The melody is...</i>
9. La chanson est...	<i>The song is...</i>
10. amusant(e)	<i>fun</i>
11. démodé(e)	<i>old-fashioned</i>
12. intéressant(e)	<i>interesting</i>
13. bon(ne)	<i>good</i>
14. nul(le)	<i>rubbish</i>
15. ennuyeux/ennuyeuse	<i>boring</i>
16. les paroles	<i>the lyrics</i>
17. la musique de (Zaz)	<i>Zaz's music</i>

Les instruments	Instruments
18. Je/il/elle joue...	<i>I play/He or she plays...</i>
19. du piano/du clavier	<i>piano/keyboard</i>
20. du violon	<i>violin</i>
21. de la batterie	<i>drums</i>
22. de la flûte	<i>flute</i>
23. de la guitare	<i>guitar</i>
24. de la trompette	<i>trumpet</i>
25. de la clarinette	<i>Clarinet</i>
26. Je/Il/elle chante.	<i>I sing/He or she sings...</i>

Les genres de musique	Types of music
27. le reggae	<i>reggae</i>
28. le hip-hop	<i>hip hop</i>
29. le jazz	<i>jazz</i>
30. le rock	<i>rock</i>
31. le R'n'B	<i>R'n'B</i>
32. le rap	<i>rap</i>
33. la techno	<i>techno</i>
34. la musique en classique	<i>classical music</i>
35. la musique traditionnelle	<i>traditional music</i>
36. toutes sortes de musique	<i>all sorts of music</i>
37. un peu de tout	<i>a bit of everything</i>
38. J'écoute...	<i>I listen...</i>
39. À mon avis...	<i>In my opinion...</i>
40. C'est...	<i>It's...</i>
41. relaxant	<i>relaxing</i>
42. original	<i>original</i>
43. plus...que	<i>more...than</i>
44. moins...que	<i>less...than</i>
45. meilleur que	<i>better than</i>

Quand?	When?
46. souvent	<i>often</i>
47. rarement	<i>rarely</i>
48. tout le temps	<i>all the time</i>
49. de temps en temps	<i>from time to time</i>
50. parfois	<i>sometimes</i>
51. Je n'écoute jamais...	<i>I never listen to...</i>

Phonics Focus:	
silent final consonant <i>trois</i>	[a] = /a/ <i>avion</i>
[u] = /oo/ <i>salut</i>	[on] [en] [an] = /on/ <i>serpent</i>
[é] [er] [ez] = /ay/ <i>vélo</i>	[in] [un] = /euhn/ <i>numéo un</i>

Vital verb: écouter (to listen to)		
Present:	Perfect (past):	Near future:
<i>J'écoute</i>	<i>J'ai écouté</i>	<i>Je vais écouter</i>
<i>Tu écoutes</i>	<i>Tu as écouté</i>	<i>Tu vas écouter</i>
<i>Il/elle/on écoute</i>	<i>Il/elle/on a écouté</i>	<i>Il/elle/on va écouter</i>
<i>Nous allons</i>	<i>Nous avons écouté</i>	<i>Nous allons écouter</i>
<i>Vous allez</i>	<i>Vous avez écouté</i>	<i>Vous allez écouter</i>
<i>Ils/elles vont</i>	<i>Ils/elles ont écouté</i>	<i>Ils/elles vont écouter</i>

Geography

Y8 Global citizenship big picture

	Key word	Definition
1	Global citizen	A global citizen is someone who understands their place in the world, is aware of global issues, and actively works towards a more just, sustainable, and peaceful planet, often with a focus on human rights and social justice.
2	Climate change	Climate change refers to long-term shifts in temperatures and weather patterns.
3	Rising sea levels	Global sea levels are rising due to human-induced climate change, primarily from melting glaciers and ice sheets, and thermal expansion of seawater as it warms.
4	Crop yield	Crop yield, in agriculture, refers to the amount of a crop harvested per unit area of land, and is a key indicator of agricultural productivity and efficiency.
5	Retreating Glaciers	Once snowfall decreases, or melt increases, the glacier will begin to retreat.
6	Species extinction	Species extinction refers to the permanent disappearance of a species from Earth, meaning no individuals of that species are left alive anywhere.



Musikarten	Types of music
1. R&B-Musik	R&B music
2. Hip-Hop	hip-hop
3. Jazzmusik	jazz music
4. Rockmusik	rock music
5. Rap-Musik	rap music
6. Popmusik	pop music
7. Klassische Musik	classical music

Instrumente	Instruments
25. Ich spiele...	I play...
26. Er/sie spielt...	He/she plays..
27. Geige	violin
28. Schlagzeug	drums
29. Klarinette	clarinet
30. Gitarre	guitar
31. Trompete	trumpet
32. Saxofon	saxophone
33. Keyboard/Klavier	keyboard/piano
34. Ich singe...	I sing...
35. Er/sie singt...	He/she sings...

Lieder	Songs
8. Ich höre gern...	I like listening to...
9. Ich höre nicht gern...	I don't like listening to...
10. Ich höre lieber...	I prefer listening to...
11. Ich höre am liebsten...	I like listening to...most of all.
12. Die Musik ist...	The music is...
13. toll	great
14. lustig	fun
15. originell	original
16. melodisch	tuneful
17. energiegeladen	full of energy
18. dynamisch	dynamic
19. kreativ	creative
20. nervig	annoying
21. modisch	fashionable
22. altmodisch	old-fashioned
23. kitschig	corny
24. monoton	monotonous

Wie oft?	How often?
36. jeden Tag	every day
37. einmal pro Woche	Once a week
38. zweimal pro Woche	twice a week
39. am Wochenende	at the weekend
40. ab und zu	now and then
41. nie	never

Meinungen	Opinions
42. Mein Lieblingssänger ist...	My favourite singer (male) is...
43. Meine Lieblingssängerin ist...	My favourite singer (female) is...
44. Meine Lieblingsband ist...	My favourite band is...
45. Mein Lieblingslied ist..	My favourite song is...
46. Ich habe keine Lieblingsmusik.	I don't have a favourite type of music.

Phonics Focus:	
[j] = /y/ jung	[z] = /ts/ Flugzeug
[i] = /ee/ Musik	[ö] = /err/ hören
[ie] = /ee/ lieber	[w] = /vv/ Windig

Vital verb: écouter (to listen to)		
Present:	Perfect (past):	Near future:
Ich höre	Ich habe...gehört.	Ich werde...hören.
Du hörst	Tu as...gehört.	Du wirst.....hören.
Er/sie hört	Er/sie hat...gehört.	Er/sie wird...hören.
Wir hören	Wir haben...gehört.	Wir werden...hören.
Ihr hört	Ihr habt...gehört.	Ihr werdet...hören.
Es/elles vort	Sie/sie haben...gehört.	Sie/sie werden...hören.

History

The Struggle for Suffrage

Key Words

- 1) **Arson:** The act of deliberately setting fire to property to cause damage.
- 2) **Cat and Mouse Act:** Permitted suffragettes on hunger strike to be released then re-arrested when their health improved.
- 3) **Constitutional:** A peaceful, legal way of campaigning using methods like petitions.
- 4) **Enfranchisement:** To have the vote
- 5) **Hunger strike:** Imprisoned suffragettes refused to eat.
- 6) **Manifesto:** A public declaration giving the aims and methods of a campaign group or political party.
- 7) **Militant:** Aggressive and violent behaviour in pursuit of a political cause.
- 8) **NUWSS:** National Union of Women's Suffrage Societies founded 1897 by Millicent Fawcett. Used constitutional means.
- 10) **Suffrage:** The right to vote in political elections.
- 11) **Suffragette:** A campaigner for women's suffrage who used militant means.
- 12) **Suffragist:** A campaigner for women's suffrage who used constitutional means.
- 13) **WSPU:** Women's Social and Political Union founded 1903 by Emmeline Pankhurst, used militant means.

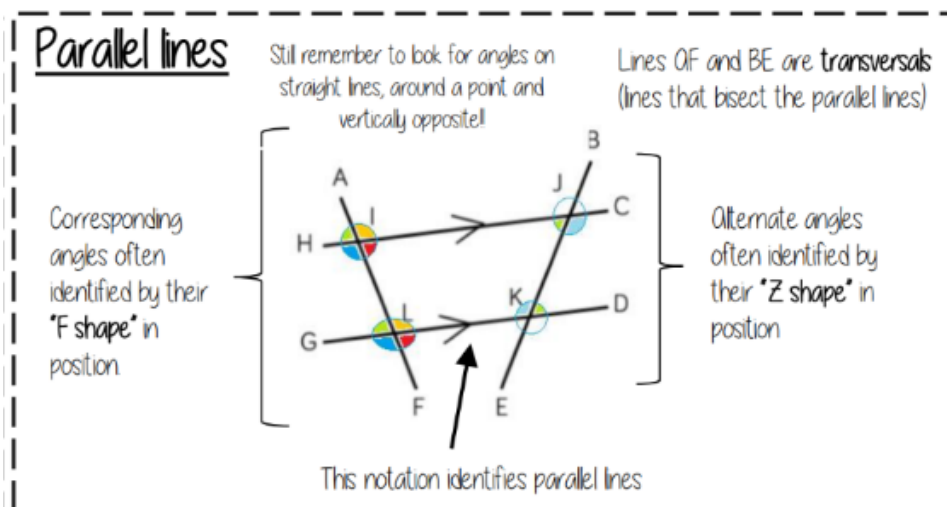
Key Dates

- 1881 Isle of Man becomes first nation to give women the vote
- 1909 Hunger Strikes and Force Feeding of women begin
- 1913 Militant bomb and arson campaign. Cat and Mouse Act passed.
- 1913 Emily Wilding Davison killed at the Derby horse race.
- 1914 WW1 starts, Suffragette and Suffragist leaders urge women to join the war effort.
- 1918 Representation of the People Act is passed, allowing men over 18, and women over 30 the vote. Women (but not all) can vote for the first time.

Maths: 8.13 Angles in parallel lines & polygons.....

Keywords	
Parallel	Straight lines that never meet
Angle	The figure formed by two straight lines meeting (measured in degrees)
Transversal	A line that cuts across two or more other (normally parallel) lines
Isosceles	Two equal size lines and equal size angles (in a triangle or trapezium)
Polygon	A 2D shape made with straight lines
Sum	Addition (total of all the interior angles added together)
Regular polygon	All the sides have equal length, all the interior angles have equal size

Sparx codes for this topic	
M502, M818, M163	Basic angle rules & notation
M606	Parallel lines
M679, M393	Quadrilateral
M653	Exterior & interior angles
M565	Triangle constructions




Maths: 8.14 Area of trapezia & circles.....

Keywords	
Congruent	The same
Area	Space inside a 2D object
Perimeter	Length around the outside of a 2D object
Pi (π)	The ratio of a circle's circumference to its diameter
Perpendicular	At an angle of 90° to a given surface
Formula	A mathematical relationship / rule given in symbols. E.g. $a \times b =$ area of rectangle / square
Infinity (∞)	A number without a given ending (too great to count to the end of the number) - never ends
Sector	A part of the circle enclosed by two radii and an arc

Sparx codes for this topic	
M390, M610, M291	Area of rectangles, triangles & parallelograms
M705	Area of trapezia
M231	Area of circles
M996	Compound shapes

Area of a circle (Non-Calculator)

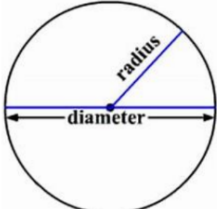
Read the question – leave in terms of π or if $\pi \approx 3$ (provides an estimate for answers)




Diameter = 8cm
 \therefore Radius = 4cm

$\pi \times \text{radius}^2$
 $= \pi \times 4^2$
 $= \pi \times 16$
 $= 16\pi \text{ cm}^2$

Area of a circle
 $\pi \times \text{radius}^2$



Find the area of one quarter of the circle



Radius = 4cm

Circle Area = $16\pi \text{ cm}^2$
Quarter = $4\pi \text{ cm}^2$

Maths: 8.15 Line symmetry & reflection....

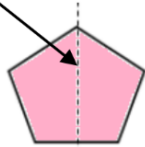
Keywords	
Mirror line	a line that passes through the center of a shape with a mirror image on either side of the line
Line of symmetry	same definition as the mirror line
Reflect	mapping of one object from one position to another of equal distance from a given line
Vertex	a point where two or more line segments meet
Perpendicular	lines that cross at 90°
Horizontal	a straight line from left to right (parallel to the x axis)
Vertical	a straight line from top to bottom (parallel to the y axis)

Sparx codes for this topic


M523	Lines of symmetry
M290	Reflect

Lines of symmetry


Mirror line (line of reflection)



Rhombus
two lines of symmetry




Parallelogram
No lines of symmetry



Shapes can have more than one line of symmetry...
This regular polygon (a regular pentagon has 5 lines of symmetry)

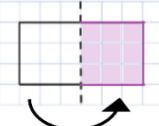
A circle has an infinite amount of lines of symmetry



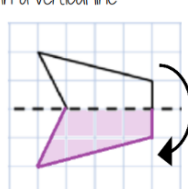
Reflect horizontally/ vertically (1)

Note: a reflection doubles the area of the original shape

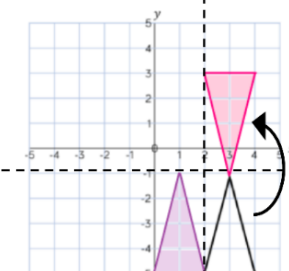
Reflection in a vertical line



Reflection in a horizontal line



Reflection on an axis grid



Reflection in the line $x=2$

Reflection in the line $y=-2$

Maths: 8.16 Measures of location

Keywords	
Spread	the distance / how spread out / variation of data
Average	a measure of central tendency – or the typical value of all the data together
Total	all the data added together
Frequency	the number of times the data values occur
Represent	something that show's the value of another
Outlier	a value that stands apart from the data set
Consistent	a set that is similar and doesn't change very much

Sparx codes for this topic	
M940, M934, M841	Mean, median & mode
M440	Choosing the appropriate average

Mean, Median, Mode

The Mean

A measure of average to find the central tendency... a typical value that represents the data

24, 8, 4, 11, 8

Find the sum of the data (add the values) 55

Divide the overall total by how many pieces of data you have $55 \div 5$

Mean = 11

The Median

The value in the center (in the middle) of the data

24, 8, 4, 11, 8

Put the data in order 4, 8, 8, 11, 24

Find the value in the middle 4, 8, 8, 11, 24

NOTE: If there is no single middle value find the mean of the two numbers left

Median = 8

The Mode (The modal value)

This is the number OR the item that occurs the most (it does not have to be numerical)

24, 8, 4, 11, 8

This can still be easier if it the data is ordered first

4, 8, 8, 11, 24

Mode = 8

Maths: 8.17 The data handling cycle

Keywords	
Hypothesis	an idea or question you want to test
Sampling	the group of things you want to use to check your hypothesis
Primary Data	data you collect yourself
Secondary Data	data you source from elsewhere e.g. the internet/ newspapers/ local statistics
Discrete Data	numerical data that can only take set values
Continuous Data	numerical data that has an infinite number of values (often seen with height, distance, time)
Spread	the distance/ how spread out/ variation of data
Average	a measure of central tendency — or the typical value of all the data together
Proportion	numerical relationship that compares two things

Sparx codes for this topic	
M493	Design & criticise a questionnaire
M644, M460, M738	Pictograms, bar and line charts
M574, M165	Pie charts
M843	Line graphs
M945, M441	Grouped quantitative data

Design and criticise a questionnaire

The Question - be clear with the question - don't be too leading/ judgemental

e.g. How much pocket money do you get a week?

Responses — do you want closed or open responses? — do any options overlap? — Have you an option for all responses?

Zero option → £0 £0.01 - £2 £2.01 - £4 more than £4 ← More option

NOTE: For responses about continuous data include inequalities $< x \leq$

Music

Exploring the Elements of Music MAD T SHIRT

Building Bricks

Exploring the Elements of Music MAD T SHIRT			
<u>Melody - Pitch</u>	<u>Articulation</u>	<u>Dynamics</u>	<u>Texture</u>
<p>The highness or lowness of a sound.</p> <p>Repetition Sequence (a pattern that is repeated at a slightly higher pitch)</p>	<p>How individual notes or sounds are played/techniques.</p> <p>LEGATO – playing notes in a long, smooth way shown by a SLUR.</p> <p>STACCATO – playing notes in a short, detached, spiky way shown by a DOT.</p>	<p>The volume of a sound or piece of music.</p> <p>VERY LOUD: Fortissimo (ff) LOUD: Forte (f) QUITE LOUD: Mezzo Forte (mf) QUITE SOFT: Mezzo Piano (mp) SOFT: Piano (p) VERY SOFT: Pianissimo (pp)</p> <p>GETTING LOUDER: Crescendo (cre) GETTING SOFTER: Diminuendo (dim.)</p>	<p>How much sound we hear.</p> <p>THIN TEXTURE: (sparse/solo) – small amount of instruments or melodies.</p> <p>THICK TEXTURE: (dense/layered) – lots of instruments or melodies.</p>
<u>Structure</u>	<u>Harmony and Tonality</u>	<u>Instruments (Timbre/Sonority)</u>	<u>Rhythm (Duration)</u>
<p>How the music is put together in sections and how often they are repeated</p>	<p>Harmony refers to the sound that is made when more than one pitch is sounded at the same time, often these are chords</p> <p>Tonality is the key or scale used for a piece of music that gives it colour or character usually Major or Minor</p>	<p>Describes the unique sound or tone quality of different instruments voices or sounds.</p> <p><i>Velvety, Sreechy, Throaty, Rattling, Mellow, Chirpy, Brassy, Sharp, Heavy, Buzzying, Crisp, Metallic, Wooden etc.</i></p>	<p>The length of a sound.</p> <p>SHORT → LONG</p> <p>The opposite or absence of sound, no sound. In music these are RESTS.</p>
<u>Tempo (speed)</u>	<u>Families of Instruments</u>		
<p>The speed of a sound or piece of music.</p> <p>FAST: Allegro, Vivace, Presto SLOW: Andante, Adagio, Lento</p> <p>GETTING FASTER – Accelerando (accel.) GETTING SLOWER – Ritardando (rit.) or Rallentando (rall.)</p>	<p>Strings – Violin, Viola, Cello, Double Bass, Guitar, Bass Guitar, Ukulele Woodwind – Flute, Oboe, Clarinet, Bassoon, Recorder, Saxophone Brass – Trumpet, trombone, tuba, french Horn Percussion – Drum Kit, Timpani, Xylophone, Glockenspiel, Djembe, wood block Keyboard – Piano, Organ, Harpsichord</p>		

All About the Bass

A. Bass Clef & Bass Clef Notation

STAFF is the name given to the five lines where musical notes are written.

The position of notes on the staff or staff shows their **PITCH** (how high or low a note is).

The **BASS CLEF** is a symbol used to show low-pitched notes on the staff and is *usually* used for the left

hand on a piano or keyboard to play the **BASS LINE** and also used by low pitched instruments (see B.)

The staff or staff is made up of 5 **LINE**s and 4 **SPACE**s.

Notes on the **LINE**s of the **BASS CLEF**: G, B, D, F, A
Green Buses Drive Fast Always



Notes in the **SPACE**s of the **BASS CLEF**: A, C, E, G

All Cows Eat Grass



Bass Clef STAFF NOTATION:

Exploring Bass Clef Reading and Notation and Bass Line Musical Patterns



B. Musical Instruments that use the Bass Clef



Left Hand of a Piano/
Keyboard



Bassoon



Cello



Double Bass



Trombone



Tuba



Timpani



Bass Guitar



Bass (deepest male singing voice)

C. Bass Line Patterns

BASS RIFFS – Short, repeated, ‘catchy’ and memorable Bass Line Patterns used in Rock, Rap, Hip Hop, R’n’B, and Pop songs often performed on Bass Guitar. Bass Riffs ‘fit’ with the notes in the chord, but also use other ‘**EXTRA**’ notes (**PASSING NOTES**) to make them more memorable.



WALKING BASS – used in Jazz, Blues, Rhythm and Blues, and Rock’n’roll, and featuring a note on every beat. Using the **ROOT**, **THIRD** and **FIFTH** of the chord, and ‘**EXTRA**’ notes (called **PASSING NOTES**) to create a smooth bass line often moving mainly by step (**CONJUNCT**).



ALBERTI BASS – a type of **ACCOMPANIMENT PATTERN** in the **BASS LINE** using the **ROOT**, **THIRD** and **FIFTH** notes of a **CHORD** played in a specific order:

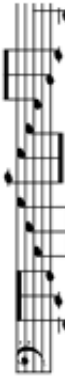
ROOT Lowest	FIFTH Highest	THIRD Middle	FIFTH Highest
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The pattern repeats, but notes change as chord changes and a melody is added ‘on top’ of the Alberti Bass. Used by Classical composers such as Mozart, especially in solo piano music, as well as modern composers.


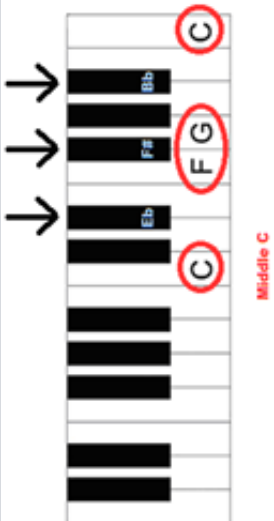




(BASS) PEDAL (POINT/NOTE) – either **SUSTAINED** notes of **LONG DURATION**, or **REPEATED LONG NOTES**, often in **BASS LINE PART**, using the **ROOT** (a **TONIC PEDAL**) or the **FIFTH** (a **DOMINANT PEDAL**). Changing chords, harmonies, and a melody line “fit over the top” of a **PEDAL** note.

BROKEN CHORD – Playing the notes of a chord separately but not necessarily in strict order (e.g., like an *Alberti Bass*), often creating a repeated musical pattern, can be ascending (going up) or descending (going down).



Music

	<p>E.C. minor Blues scale/improvisation</p> 
 <p>E F G A B C D E F G A B C</p>	<p>D. Chords</p>  <p>Play one – Miss one – play one – miss one – play one</p>

Personal Development

Relationships and Sexual Health - KS3

Asexual	A person who does not feel sexual attraction to others or feels it very rarely. They can still have friendships and romantic feelings.
Biphobia	Prejudice, dislike or unfair treatment of people who are bisexual.
Bisexual	A person who is attracted to more than one gender.
Boundaries	Personal limits about what you are comfortable with in your body, feelings and relationships.
Cis gender	A person whose gender identity matches the sex they were assigned at birth.
Condom	Made of very thin latex and used to cover the penis during sexual intercourse. It stops pregnancy by catching the sperm and stopping it from meeting the egg.
Consent	Freely given agreement to something. It must be clear and can be changed or withdrawn at any time.
Contraception	Methods used to help prevent pregnancy.
Contraceptive implant	A small, flexible rod placed under the skin of the arm by a nurse or doctor. It releases hormones to help prevent pregnancy for several years.
Contraceptive pill	A small tablet taken once a day by a female to prevent pregnancy. It works by stopping the body from releasing an egg each month. It can also reduce heavy periods.
Femidom	Made from soft, thin polyurethane. They are worn inside the vagina. A thin, rubbery band at the end is squeezed and inserted into the vagina. It prevents pregnancy by stopping the sperm from entering the uterus.
Gay	A person who is attracted to people of the same gender (often used for boys and men but can describe anyone).
Gender identity	A person's internal sense of their own gender (for example, feeling like a boy, a girl, both, or neither).
Heterosexual	A person who is attracted to people of a different gender to themselves.
Homophobia	Prejudice, dislike or unfair treatment of people who are gay or lesbian.
Lesbian	A girl or woman who is attracted to other girls or women.
Non-binary	A person whose gender identity does not fit only as male or female.
Pregnancy	When a baby develops in the uterus after an egg has been fertilised by sperm.
Pressure	When someone tries to make another person do something they are not comfortable with.
Protected Characteristics	Groups of people protected by law from discrimination, such as sex, race, disability, religion or belief, sexual orientation, and gender reassignment.
Protection	Steps taken to help keep people safe, for example using contraception to reduce the risk of pregnancy and infections.
Respect	Treating others with kindness, fairness and consideration for their feelings and boundaries.
Sexual orientation	Who someone is attracted to emotionally or romantically (for example, heterosexual, gay, bisexual, asexual).
Sexually Transmitted Infection (STI)	An infection that can be passed from one person to another through sexual contact. Some can be treated with medicine.
Transgender	A person whose gender identity is different from the sex they were assigned at birth.
Transphobia	Prejudice, dislike or unfair treatment of transgender people.

Personal Development

Consent

Consent must be FRIES

Freely given

Reversible

Informed

Enthusiastic

Specific

Remember: If it's not a clear 'yes', it's a 'no'.

Sexual Orientation & Gender Identity

Both are Protected Characteristics in the Equality Act 2010 which means it is against the law to discriminate against someone because of their sexual orientation or/and gender identity.

Remember: Everyone has the right to be respected and safe. No one should be bullied for who they are. It's okay to be unsure or figuring things out.

Sharing Nudes (Online Safety)

This means sharing or sending sexual images of yourself or others.

Remember: It is illegal for under 18s to make, send or share sexual images.

Contraception

Methods used to help prevent pregnancy and the transmission of sexually transmitted infections. It is important to get accurate information about contraceptives from trusted adults and/or healthcare professionals.

Support & Help

- School safeguarding team (blue lanyards) or any other adult in school
- NSPCC's [Report Remove tool](#) can help remove nude images and videos that have been posted online. NSPCC phonenumber: 0800 800 5000
- Think u know: www.thinkuknow.co.uk
- Reporting online abuse to CEOP: www.ceop.police.uk
- LGBT+ helpline: 0300 330 0630
- A Better Medway: www.abettermedway.co.uk
- Brook: www.brook.org.uk/help-advice
- Childline: www.childline.org.uk 0800 1111
- Police - 999 in an emergency

Personal Development

Online Financial Harms - KS3

Scam	A trick to steal money or information.
In-app purchase	Buying items inside an app or game.
Algorithm	A system that chooses what you see online.
Privacy setting	Controls that help keep you safe.
Financial harm	Losing money or being pressured to spend.

Phones and Financial Risks

Using phones and apps can sometimes lead to money loss if people are not careful.

Common financial risks:

- In-app purchases and subscriptions
- Scam messages or fake offers
- Clicking unsafe links
- Sharing bank or card details

How to stay safe:

- Ask permission before spending money online
- Never share passwords or card details
- Be careful with links and pop-ups

Gaming

Gaming can be fun and social, but some games include money risks.

Possible risks:

- Pressure to buy upgrades or loot boxes
- Talking to strangers in chats
- Spending more time or money than planned

Staying safe while gaming:

- Set spending and screen-time limits
- Use privacy settings
- Tell an adult if something feels wrong

Social Media

Social media allows people to share content online and communicate.

Possible risks:

- Pressure to spend money through ads or influencers
- Fake competitions or giveaways
- Comparing yourself to others

Healthy habits:

- Think before clicking or buying
- Follow people you trust
- Take breaks from social media

Personal Development

Algorithms

Algorithms are computer programs that decide what content you see online.

Why they matter:

- They show content based on what you like or click
- They can encourage spending or repeat use
- They do not always show what is best or true

Staying in control:

- Be aware content is chosen for you
- Avoid clicking on ads or fake offers
- Change settings where possible

Seeking Help

- Tell a trusted adult straight away if something feels wrong
- Do not communicate with scammers
- Save messages or screenshots
- CEOP - reporting online issues
- NSPCC Report Remove tool
- Childline - 0800 1111

Physical Education

WADHAM KS3 PE KNOWLEDGE ORGANISER: Cricket

Skills and Techniques:

Bowling: The overarm action used to deliver the ball to the batter. Can be varied - spin, seam or swing.

Batting: The action of hitting the ball to score runs and avoid getting out.

Catching: The action of catching a ball that has been hit/thrown.

Long Barrier: This can be used when fielding to stop the ball safely and effectively.

Forward defence – This shot is used to stop the ball from hitting the stumps and getting the batter out.

Straight Drive - This shot is used to hit the ball straight back towards the bowler in an attempt to score runs.

Rules:

- A game consists of two teams. The time of the game is dependent on the number of overs being played (e.g. 20 overs, 50 overs, etc.)
- The game is started with a coin toss to decide who is batting and who is bowling. The winning captain of the coin toss makes the decision.
- Two umpires officiate the game, one at the bowling end and one at square leg.
- Players are not allowed bowl the ball with a bent arm, it must be straight.
- If a player hits the ball over the boundary without bouncing they score 6 runs, if it bounces first they score 4 runs.

Positions:

11 players on a team, made up of:

Batters

Bowlers (spin, seam, swing)

Wicket keepers

All Rounders (can bat and bowl)

Scoring System:

A player can score a run by hitting the ball and completing one length of the wicket.

The ball must completely cross the boundary to score 4 or 6.

The team with the most runs at the end of the game wins.

Tactics:

Bowling or batting first depending on the pitch and or the weather conditions. When to change bowlers and when to change the batting order.

Key Words:

Bowling

Batting

Crease

Wicket

Wicket Keeper

Line & length/pitch

Wide

Key Words:

Stumps

Bails

Long Barrier

Fielder

LBW

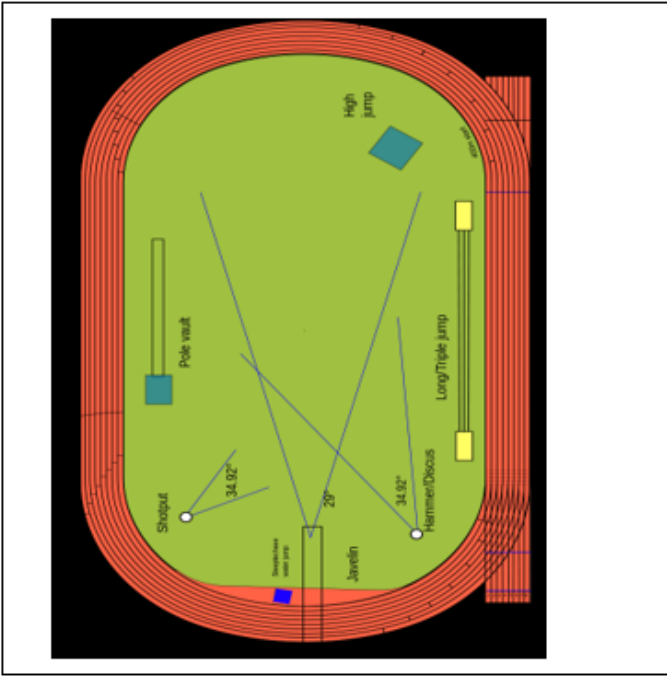
Forward defensive

Cover drive

Physical Education

WADHAM KS3 PE KNOWLEDGE ORGANISER: ATHLETICS

<p>Events:</p> <p>Sprints: 100m, 200m, 300m and 400m. The fastest time over the distance.</p> <p>Middle distance: 800m, 1500m. The fastest time over the distance.</p> <p>Shot putt: The furthest distance a weighted ball can be pushed</p> <p>Javelin: The furthest distance a spear can be thrown</p> <p>Discus: The furthest distance a round weight can be thrown</p> <p>Long jump: The furthest distance an athlete can jump into the sand pitt</p> <p>High Jump: The highest an athlete can jump over a bar</p> <p>Relay: An event where four athletes have to pass the baton as quickly as possible around the 400m track</p>	<p>Technique/tactics:</p> <p>Sprints: Arm drive and knee lift. Accelerate out of the blocks/start.</p> <p>Middle distance: Pace and positioning during the race</p> <p>Shot putt: Chin, Knee, toe, get down low, push up. Clean palm, dirty fingers.</p> <p>Javelin: Warrior pose. Pull at the elbow.</p> <p>Discus: Palm down, release off index fingers, sling action</p> <p>Long jump: Accelerate towards the take-off board, drive hips up, hang in the air</p> <p>High jump: Arc run up, Hips up, arch the back</p> <p>Relay: Fastest runner on 4th leg. Accelerate before receiving the baton. Palm up and open.</p>
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Key Words:
 Distance
 Time
 Speed
 Strength
 Pace/endurance
 Changeover zone
 Baton
 Start Line
 Finish line

Key Words:
 Sprint start
 Run up
 Take off
 Personal best
 Track event
 Field event

Science – 8D

Kingdoms

Organisms are classified into five kingdoms. **Viruses** are not living and so are not in a kingdom.

Cell part	Kingdom				
	prokaryotes (all unicellular)	protocists (mainly unicellular)	fungi (mainly multicellular)	plants (all multicellular)	animals (all multicellular)
cytoplasm	✓	✓	✓	✓	✓
cell membrane	✓	✓	✓	✓	✓
nucleus	✗	✓	✓	✓	✓
mitochondria	✗	✓	✓	✓	✓
cell wall	✓	✗/✓	✓	✓	✗
chloroplasts	✗	✗/✓	✗	✓	✗

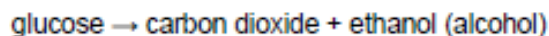
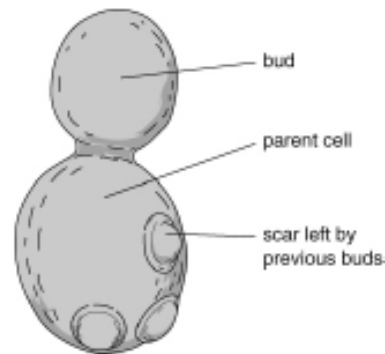
Unicellular organisms can only grow to a certain size. If the organism is too big, it cannot get enough of the substances it needs throughout the cell because diffusion is too slow.

The tissues in multicellular organisms need to have raw materials transported to them because diffusion would be too slow.

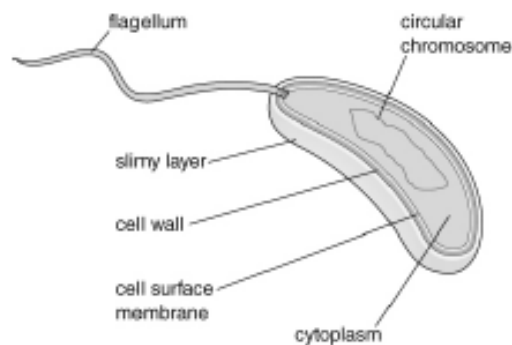
Microscopic fungi

These include, for example, yeast. They:

- reproduce asexually by budding
- can use aerobic respiration, which is important in baking
- can use anaerobic respiration (fermentation), which is important in alcoholic drink manufacture.

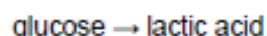


Bacteria



Parts of a bacterium

Some bacteria are important in making yoghurt and cheese. These bacteria use a type of anaerobic respiration to ferment milk:



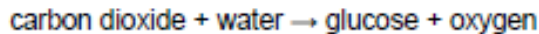
Feeding

Bacteria and fungi feed by releasing **enzymes** into their surroundings to digest large **organic** molecules. The digested molecules are then absorbed.

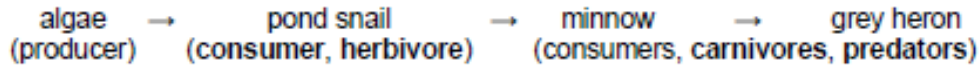
Science – 8D

Protoctists

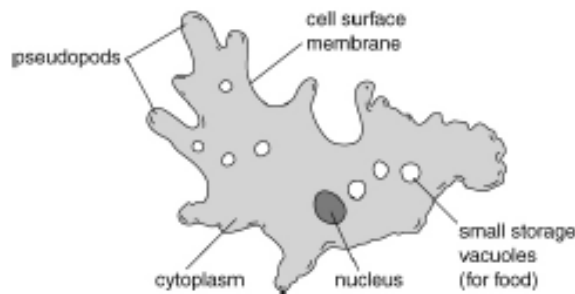
There are many different types of protoctist and some can photosynthesise:



Photosynthesising protoctists are therefore **producers** in a food chain, for example:



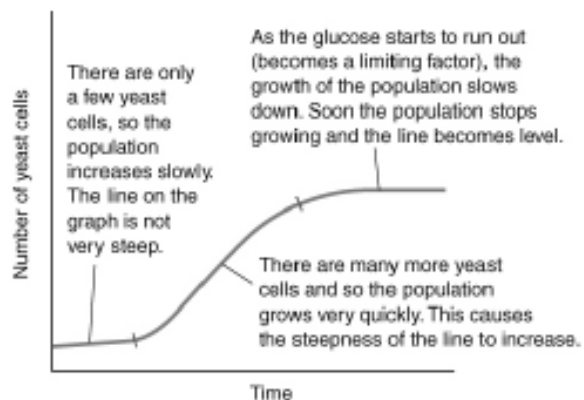
Some protoctists move using **pseudopods**, while others use **cilia** and others use **flagella**.



Parts of an Amoeba

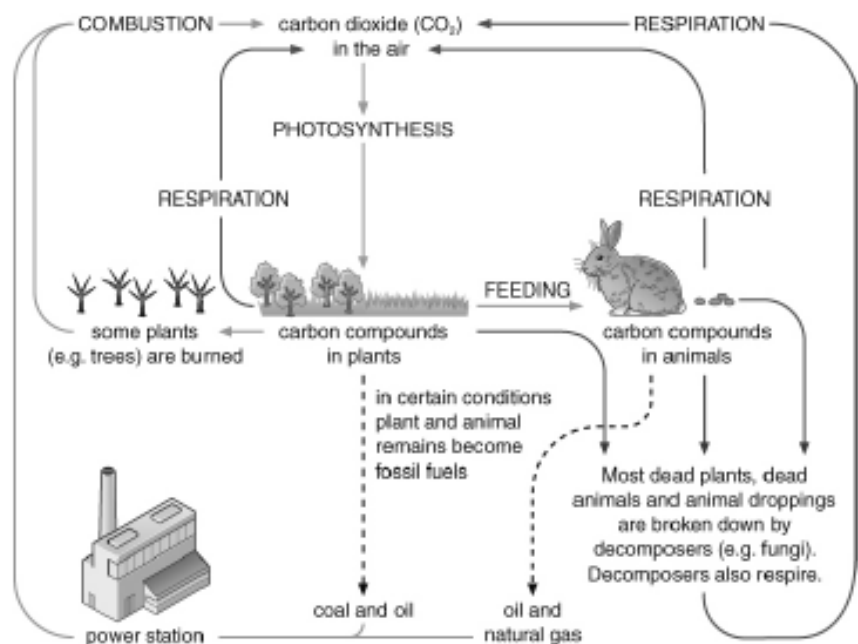
Growth

All microorganisms need warmth, food and moisture to grow well. Some need light for photosynthesis. Some need oxygen for aerobic respiration. The increase in a population can be shown on a growth curve. Something that stops a population from increasing further is called a **limiting factor**.



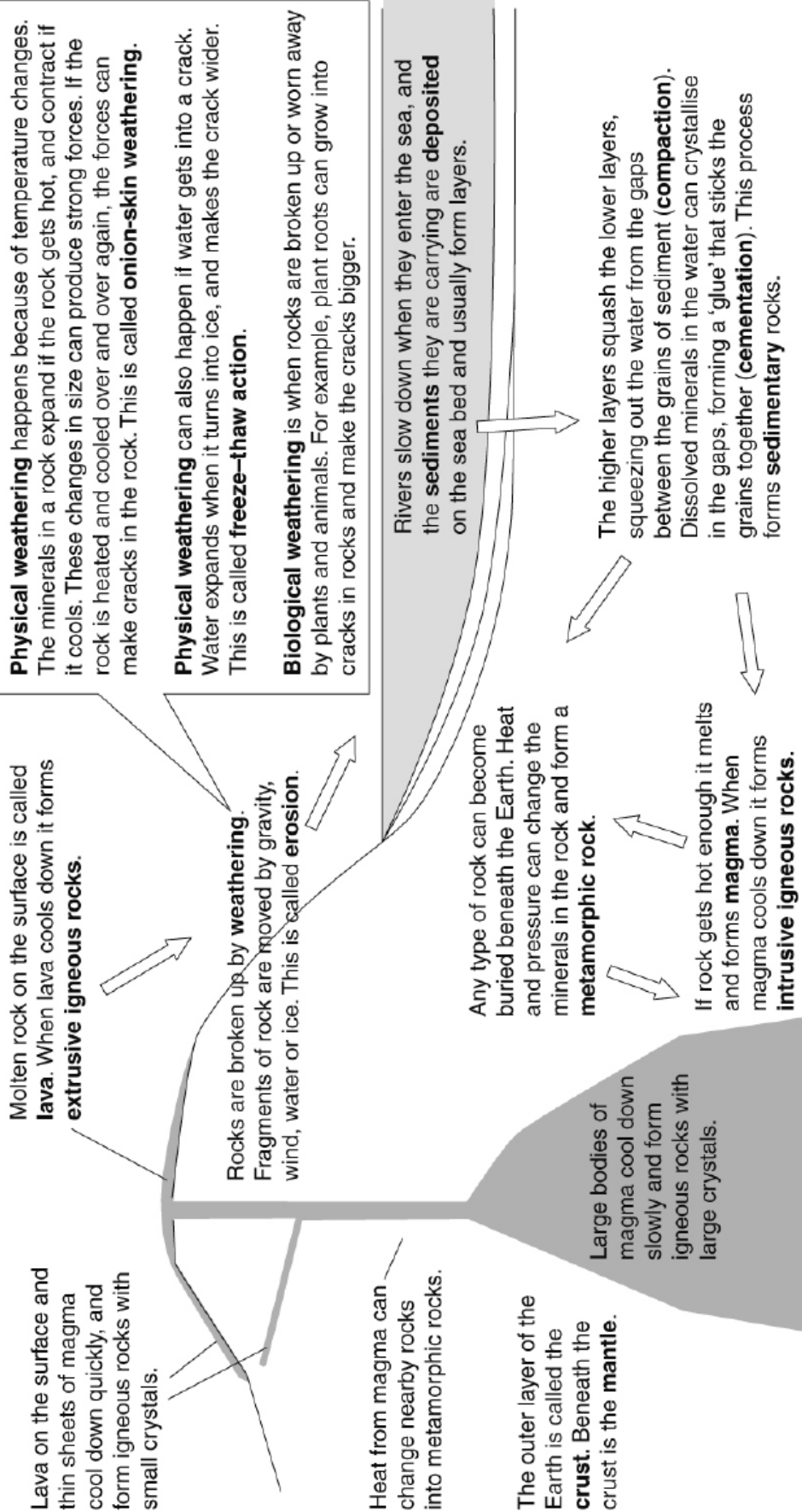
The carbon cycle

Many unicellular microorganisms are **decomposers** and play an important part in the carbon cycle.



Rocks



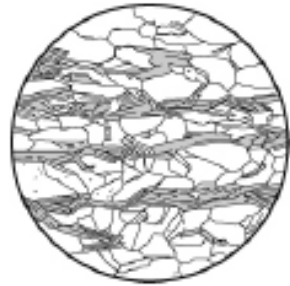
The rock cycle



Science – 8H

Rock textures

Rocks are made of **grains**. Each grain is made of a naturally occurring compound called a **mineral**. The texture of a rock is a description of the size and shape of the grains.

Type of rock	Sedimentary	Igneous	Metamorphic
Examples	limestone, sandstone, mudstone, chalk	basalt, gabbro, granite	marble, quartzite, slate, schist, gneiss
Grains or crystals?	separate grains	interlocking crystals that are not lined up	interlocking crystals, often lined up in bands of different colours
Hard or soft?	often soft or crumbly	hard	hard
Porous?	often	not usually	not usually
Example of texture			

Fossils

Fossils can form when dead plants or animals fall to the bottom of the sea. If their remains get covered by other sediments they do not rot. As the sediments turn into sedimentary rock, the shape of the organism is preserved in the rock. When a dead organism forms a fossil, its form can still be seen because its hard parts have been turned into stone.

Materials from the Earth

Many of the materials we use are obtained from the Earth. We use stone for building. Cement is made from **limestone**, and **concrete** is made by mixing cement, sand and **gravel** with water.

We also obtain metals from the Earth. Unreactive metals like gold and silver are found in their **native states**. Other metals are found as parts of minerals. An **ore** is a rock with enough of a particular mineral in it to make it worth mining. Pure metals are obtained from minerals using chemical reactions.

Mining for metals can destroy habitats and cause pollution.

If we recycle metals we will:

- make supplies of metals last longer
- reduce amounts of mining (and so reduce the pollution and environmental damage this causes)
- reduce pollution caused by putting metals in landfill sites.

Science – 8L

Earth and space

The Solar System

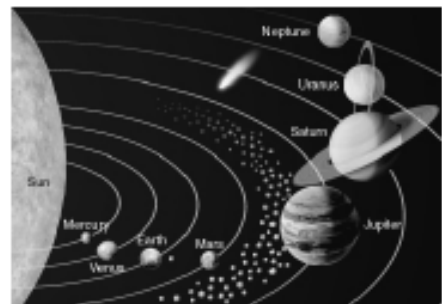
We live on a planet called the Earth. The Earth gets energy from the Sun. The Earth spins on its axis once every 24 hours. The side of the Earth facing the Sun has daylight, and it is night on the side facing away from the Sun.

The Earth orbits around the Sun. It takes one year to go around once.

The Moon is a satellite of the Earth. We can see the Moon because it reflects light from the Sun. The Moon seems to change shape. The different shapes are called phases of the Moon. The phases happen because we cannot always see all of the part that is lit by the Sun.

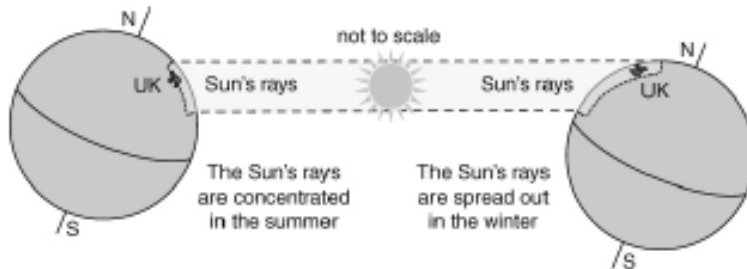
There are eight planets in elliptical (oval-shaped) orbits around the Sun. Most of the planets have moons orbiting around them. The Sun, the planets and their moons make up the Solar System.

The eight planets are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.



Our current model of the Solar System

The Earth's axis is tilted. When the northern hemisphere is tilted towards the Sun it is summer in the UK. Days are longer than nights, and the Sun is higher in the sky. The Sun's rays are more concentrated, so it feels hotter.

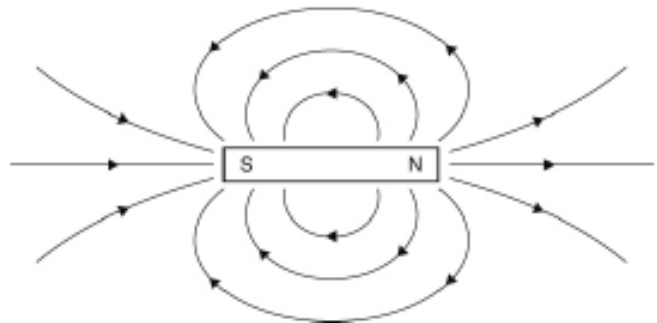


Magnets and magnetic fields

Magnets attract magnetic materials. The two ends of a bar magnet are called the north-seeking pole and the south-seeking pole, or north pole and south pole for short. A north pole and a south pole attract each other. Two north poles or two south poles repel each other.

The space around a magnet where it has an effect is called its magnetic field. You can find the shape of the magnetic field using iron filings or using a plotting compass.

The Earth has a magnetic field. A compass is a small magnet that will point towards the Earth's North Pole. But magnetic materials placed near a compass can change the direction that the compass points towards.



This is the shape of the magnetic field of a bar magnet.

Science – 8L

Gravity and gravitational fields

The **mass** of something is the amount of substance or 'matter' it contains. It is measured in kilograms (kg). **Weight** is the force of gravity pulling on a mass. It is a force, so it is measured in newtons (N).

Gravity is the force of attraction between two masses. The force of gravity is stronger if:

- the objects have large masses
- the objects are close together.

On Earth, gravity pulls on every kilogram of mass with a force of about 10 N.

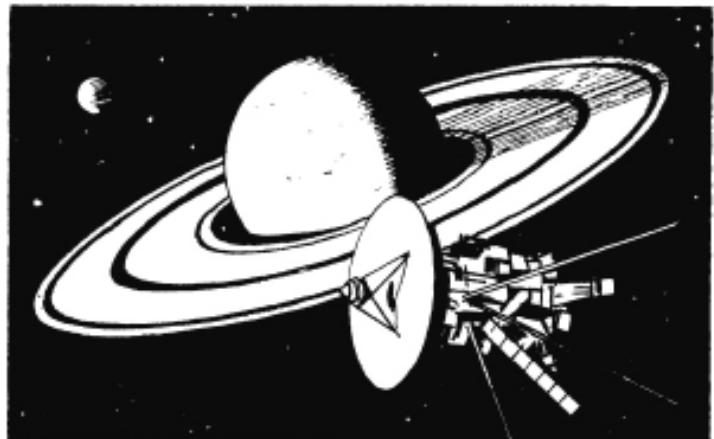
Gravity is not as strong on the Moon because the Moon has a much smaller mass than the Earth. If you went to the Moon your mass would not change, but your weight would be less than on Earth because the Moon's gravity is weaker.

You can calculate the weight of an object using this formula:

$$\text{weight (N)} = \text{mass (kg)} \times \text{gravitational field strength (N/kg)}$$

The Sun's gravity keeps all the planets in our Solar System moving in elliptical orbits around it. If there was no gravity from the Sun, the planets would all fly off into space. The Earth's gravity keeps the Moon in orbit around the Earth.

A satellite is anything that orbits around a planet. The Moon is the only **natural satellite** of the Earth. **Artificial satellites** are put into orbit around the Earth or other planets. They can be used for taking pictures or transmitting TV programmes.



Beyond the Solar System

Planets do not make their own light. We can sometimes see the planets because they reflect light from the Sun.

The Sun is a **star**. It is a ball of gas that gives out large amounts of energy. The Sun is like the stars you can see in the sky at night. The stars do not look very bright because they are a lot further away than the Sun. People often group stars into patterns called **constellations**.

The Sun is one of millions of stars in our **galaxy**, which is called the **Milky Way**. There are millions of galaxies in the **Universe**.

The stars are a very long way from Earth. Scientists measure distances to the stars using **light years**. A light year is the distance that light can travel in one year.



Academic Vocabulary



Sequencing	Comparing
First (ly) Second (ly) Third (ly) Subsequently Finally In conclusion	Similarly Likewise Like In the same way Equally Akin to
Contrasting	Qualifying
Alternatively Conversely On the other hand In contrast Instead Besides	However Although But Except Notwithstanding Nonetheless
Supporting	Emphasising
Moreover Furthermore Also Additionally	Significantly Indeed Notably Significantly
Exemplification	Time
For example Such as Illustrated by For instance	Meanwhile Since Before After

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Projection



Project your voice so all that should hear can hear

Body Language



Use of gesture and position

Good Talk



If you disagree, use respectful language

Listen



Show you are actively listening

Eye Contact



Eye contact shows Belonging

SAYING OR STATING AN IDEA

I think ...
I strongly believe ...
It is my opinion that...

CLARIFYING OR CHECKING

Please could you clarify that?
Please could you explain what you mean?

SEEING THINGS FROM A DIFFERENT PERSPECTIVE OR VIEWPOINT

What if ...
Some people think ...

SUPPORTING OR AGREEING

I agree ...
I agree with Sarah because ...

CHALLENGING OR DISAGREEING

I have a different idea ...
I disagree ...
I would like to challenge something that Samia said ...
I would like to respectfully challenge ...

EXPANDING OR BUILDING ON

Adding to what Zack said ...
Building on what Ella said ...
I have been listening carefully, and I would like to add a new point ...

PARAPHRASING OR REWORDING

I think Mo is saying that ...
In other words, Matt is saying ...

THINKING ALOUD OR SHARING PARTIAL THINKING

Why is it that ...?
I am wondering if ...
I'm not certain but ...
I'm not completely sure but what I'm thinking is ...

JUSTIFYING OR GIVING REASONS

Because ...
If ... then ...
I know ... because ...

ASKING FOR THINKING TIME OR HELP

I'm not sure yet. Please can I have some time to think?
I'm a bit confused about ...
Please can I talk to a partner?
I'm stuck because ...
Please could you speak a bit louder?
Please could you repeat the question?

PASSING ON THE DIALOGUE

Ali, what do you think?
Ben, what do you think about what I said?
Jo, do you agree or disagree?

CONCLUDING OR END WORDS

My final thoughts are ...
There are lots of powerful arguments, but my own opinions is ...
For me, the strongest argument is ...



The Learning Eight



Pen
(Blue or Black)



Ruler



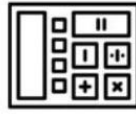
Pencil



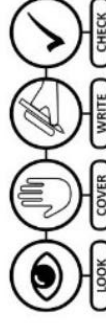
Purple Pen



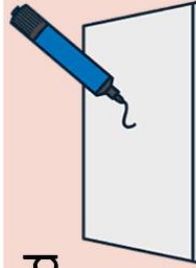
Calculator



Knowledge Organiser



Mini-Whiteboard



Whiteboard Pen

