



Wadham School

A Church of England Community School



Knowledge Organisers Year 7 Term 5 & 6 2025-2026



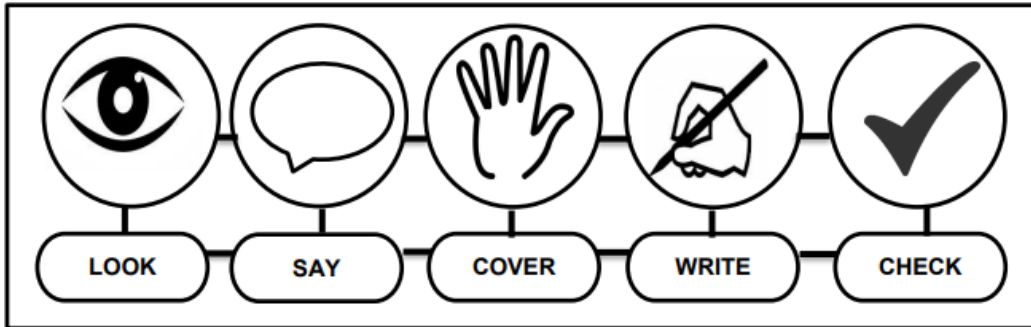
Name.....

Tutor group.....

“Life in all its fullness” John 10:10



Using Your Knowledge Organiser



Look-Say-Cover-Write-Check

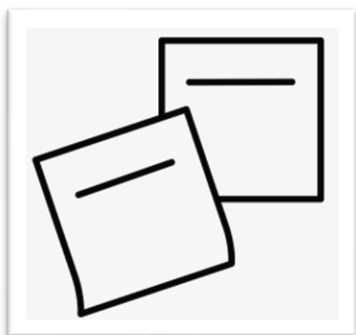
Retrieval practice using the look-say-cover-write-check technique, when done in regular small chunks, is one of the best ways you can learn relevant knowledge over time.

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.



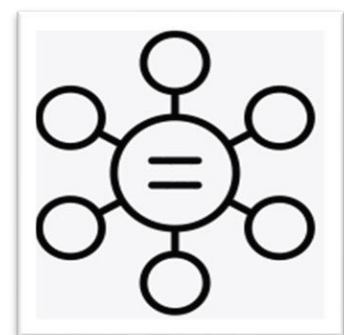
Self Quizzing

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.**

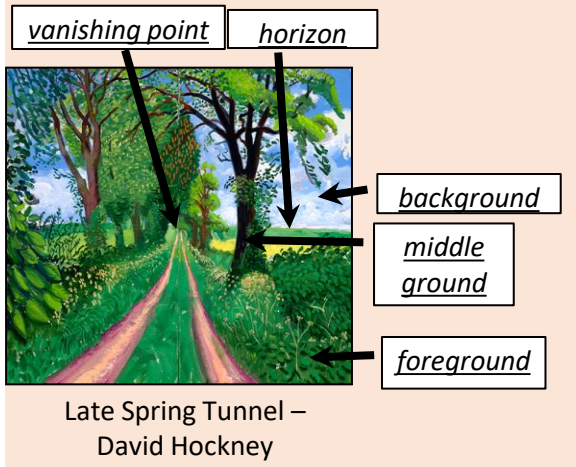
IF YOU LOOSE A BOOK, DON'T PANIC! IT CAN BE REPLACED WITH ANOTHER BOOK OR WITH A SMALL CHARGE



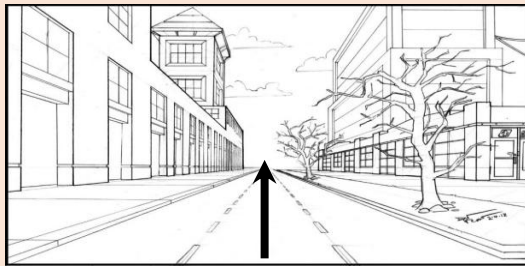
The library is open to all.
it is a safe space where you will always find an adult at break or lunch.
There are tablets in the library that can be used for completion of homework, please ask Mrs George for access.

Art

1. David Hockney's landscape



3. 1 point and 2 point perspective



vanishing point



vanishing point 1

vanishing point 2

2. Who is David Hockney?

Born:	9 th July 1937, England
Inspiration:	Inspired by 2 famous artists Pablo Picasso and Henri Matisse
Materials Hockney uses:	Drawing, paints, photography, digital art
Fun fact:	He is considered one of the most influential British artists of the 20 th century

4. Key terms

<u>foreground</u>	The part of a view that is nearest to the observer, especially in a picture or photograph.
<u>middle ground</u>	The middle distance of a painting or photograph.
<u>background</u>	The part of a picture, scene, or design that forms a setting for the main figures or objects or appears furthest from the viewer.
<u>vanishing point</u>	The point at which receding parallel lines viewed in perspective appear to converge.
<u>horizon</u>	The line at which the earth's surface and the sky appear to meet.



Key words

Vanishing point
Horizon Line
Vibrant colours
Texture
Pattern
Focal point
Background
Middle ground
Foreground

- Hockney, walking June 1986

Art

Henri Rousseau 1844 - 1910



'Surprise' Tiger in a tropical storm 1891

There is a lightening storm in the background. The tiger looks as if he has been caught off guard by it. A sensation of movement and energy is depicted through the contrasting bright colours and thick brushstrokes of the grass and plants. The tiger typically depicted as a powerful and majestic animal is represented to be defenceless and at the mercy of the weather.

Landscape paintings are made up of a Background, Middle ground, Background and a focal point. Depth is shown through scale and colour mixing.



Close up section of the painting 'The Dream'

Rousseau Facts

Rousseau was French from a town called Laval in northern France.

Self taught Post Impressionist artist.

Known as a Naïve Artist

Was inspired by the Fauves.

He never went to a jungle.

Plants painted are out of proportion to the animals, some were even house plants.

Some animals look like they are on top of the plants, but the plants remain upright.

Animals were copied from the Paris zoo and in children's books.

He died a pauper.

Beliefs and World Views

Topic 3: The Story of the Prophets

1	Abraham	Founder of Judaism and the first Prophet – began the covenant
2	Prophet	Messenger of God
3	Covenant	'Promise' between God and Abraham. Abraham would follow God's law and return be blessed with the Promised Land and descendants.
4	Joseph	Sold into slavery by his brothers but became a powerful ruler in Egypt
5	Exile	Living in Captivity in another country. The Jews were in exile in Egypt
6	Dreams	People believed God spoke through dreams, Joseph interpreted them
7	Moses	Leads the Israelites out of Egypt and into the Promised Land
8	Exodus	The Israelites leaving slavery in Egypt after God sends 10 plagues
9	Promised Land	Israel – A land flowing with milk and honey, promised to Abraham
10	Justice	Fair treatment – The plagues were needed as justice for Egypt's sins
11	Law	A set of rules to live morally and please God
12	10 Commandments	Ten very important Rules, written on tablets of stone
13	David	King who led Israel through a time of victory and prosperity
14	Prosperity	Increasing in wealth and power
15	Isaiah	Promises Israel would be restored to Glory & the Promised Land
16	Prophecy	Message given by a prophet, from God, about the future
17	Messiah	Promised ruler who would restore and fix Israel

Topic 4: The Life of Jesus

1	Incarnation	'God became flesh' Jesus is God born as human
2	Virgin Mary	Jesus born unto a virgin, to fulfil messianic prophecy
3	Parable	Story told by Jesus with moral message
4	Agape	Belief that love & compassion are the best course of action
5	Good Samaritan	Parable that teaches compassion for all people
6	Prodigal Son	Parable that teaches us to forgive others
7	Miracle	Supernatural act breaking the rules of nature
8	Feeding of 5000	Jesus multiplies five loaves & two fish to feed 5000
9	Healing of a Blind Man	Jesus restores the sight of a blind man:
10	Walking on Water	Jesus shows his power over nature by walking on water
11	Rebellion	Challenge corrupt authority and leadership
12	Pharisees	Corrupt religious leaders in Jesus' time
13	Sabbath	Day of rest, it was forbidden to work on the sabbath
14	Crucifixion	Execution by being nailed to a cross
15	Atonement	Healing the rift between God and Humans
16	Resurrection	Rising from the dead to new life
17	Salvation	To be saved from the effects of sin and death



Computing

Scratch Programming

Key Terms & Definitions

1	Sequence	One of the three basic programming constructs. Instructions that are carried one after the other in order.
2	Selection	One of the three basic programming constructs. Instructions that can evaluate a Boolean expression and branch off to one or more alternative paths.
3	Iteration	One of the three basic programming constructs. A selection of code that can be repeated either a set number of times (count-controlled) or a variable number of times based on the evaluation of a Boolean expression (condition-controlled).
4	Variable	A value that can change depending on conditions or information passed to the program.
5	Boolean expression	An algebraic expression which has a Boolean value
6	Comparison operator	Used to compare two expressions
7	Computer bug	Code that causes your computer to behave in an unexpected way
8	Resilience	The capacity to recover quickly from difficulties
9	Subroutine	A block of code within a program that is given a unique, identifiable name. Supports code reuse and good programming technique.
10	Decomposition	Breaking down a problem into smaller, more manageable parts in order to make the problem easier to solve
11	List	A data structure that allows multiple pieces of data under a single name
12	Data structure	A way or organising and managing data in a programming language that ideally enables efficient access and modification of the data



<p>1.Standard Components</p>	<p>A standard component is usually an individual part or component, manufactured in thousands or millions, to the same specification (such as size, weight, material etc...).</p>
<p>2.The 6 R's of sustainability</p>	<ul style="list-style-type: none">• Reuse• Reduce• Refuse• Recycle• Reduce• Rethink
<p>3.Tenon saw</p> 	<p>A tenon saw is used to cut straight lines in timber.</p>
<p>4.Coping saw</p> 	<p>A coping saw is used to cut curves in timber.</p>
<p>5.File</p>	<p>A file is used to smooth and shape the surface of a timber.</p>
<p>6.Vice</p>	<p>A vice is used to secure timber as a person is cutting, this mean the timber can be cut without being held.</p>
<p>7.Hardwoods</p>	<p>Hardwoods come from deciduous trees, which have large flat leaves that fall in the autumn.</p>
<p>8.Softwoods</p>	<p>Softwoods come from coniferous trees. These often have pines or needles, and they stay evergreen all year round - they do not lose leaves in the autumn.</p>

Drama

A - Origins of Commedia Dell'Arte

Pronunciation: co-MAY-dee-ah del AR-tay.

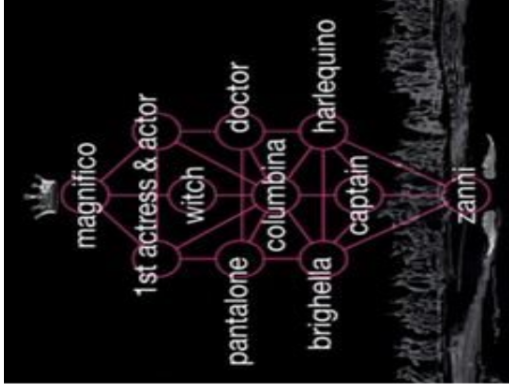
- Formal performances began in Italy in the mid-1500s, soon spreading to France and Spain (where they were very popular) and other parts of Europe.
- Its most popular period was 1550 to 1650.
- Commedia dell'arte is most notable for its mix of masked and unmasked characters, plus the fact that women were acting on the Commedia stage well before they were allowed to act in England.
- The style of Commedia is characterized by its use of masks, improvisation, physical comedy, and recognizable character types.
- Shakespeare got some of his play ideas from Commedia.
- As a child if you were born in an acting family, you were born into whatever role your dad was. So if your dad played the villain you would become the villain.
- These companies would stop in towns and perform to audiences for money, the pieces were adapted to certain audiences.

B- Main features of Commedia dell'Arte:

- Stock characters – the characters were always the same, only the situations changed. Fixed types: the servants, the masters and the lovers.
- Half masks – the masks defined the characters.
- Grammelot - a babel of sounds which, nonetheless, manages to convey the sense of speech.
- Improvisation – actors worked off a scenario and made up their lines. These scenarios mostly revolved around the themes of love, money or food.
- Lazzi – short comedic physical moments were included.
- Lots of humour. Including slapstick moments (slip, trip and collision) and the rule of three.
- Mime, acrobatics and music were featured too.

D- Stock Characters

- Magnifico: Top master. • Leads with his forehead. • Eagle, looks down on everything. • The most powerful character.
- Pantalone: Old mean master. • Leads with his forehead. Hunched over. • Scowl on his face. • Bent knees, chin stuck out and leading the movement. • He has lost his teeth. • Very money orientated, constantly holds onto a bag full of money hanging from his belt.
- Il Dottore / The doctor: A master. • Large character, leads with his stomach. • Light on his feet. • A man of learning. He waffles about what he knows but never really makes a point.
- Zanni: Lowest servant. • Leads with his nose. • Feet come up and arms are involved with this. • Can be compared to a pigeon. • He is a peasant, everything is extraordinary to him, and he is curious and enthusiastic. • He wants to please everyone.
- Columbina: Quick witted servant. • Leads with her hips. • She stands with a hip cocked to the side, hands on hips. • She moves with quick, strong steps. • Vain and spiteful.



C - Hierarchy of Characters

Commedia Dell'Arte – Knowledge Organiser



English

The Tempest

Key Characters



PROSPERO



MIRANDA



ARIEL



KING ALONSO



FERDINAND



GONZALO



SEBASTIAN



ANTONIO



STEPHANO



TRINCULO



CALIBAN

Some Key Techniques

- **acts:** the main sections in a play; Shakespeare's plays tend to have five acts
- **scenes:** parts of the play which stay in the same place at the same time; like chapters in a book
- **character:** the "people" within the play
- **characterisation:** how Shakespeare creates a sense of his characters
- **aside:** when a character briefly says something which the audience hears but other characters do not
- **soliloquy:** a speech delivered by a single character alone on stage; they often give the audience a privileged insight into the character's thoughts and feelings
- **imagery:** language not used literally; eg metaphors, similes, personification, symbols
- **pathos:** feelings of pity and sympathy
- **subplot:** a secondary plot in the play, adding complications and extra obstacles in the way

Some Useful Words & Phrases

- **exploitation:** (noun) using someone—often selfishly—for your own benefits eg Caliban feels exploited by Prospero
- **enslaved:** (adjective/verb) made into a slave; eg did Prospero enslave Caliban or help him?
- **retribution:** (noun) payback for something someone did to you; eg Prospero wants retribution from Alonso
- **usurp:** (verb) to take over someone else's kingdom by force
- **servitude:** (noun) slavery; eg Caliban and Ariel might feel they are in a state of servitude

Some Context

- The play was first performed in 1611. King James I was on the throne, and the play was used as part of the celebrations of his daughter Elizabeth's marriage.
- At the time, Britain was setting up colonies in North America and meeting the original inhabitants. Many of the characters in the play have ideas about how to rule the island.
- The play may look at ideas of "colonisation" - where European countries took over foreign countries and tried to "civilise" the "savages" they found (often actually just exploiting them).
- There had been an essay "Of the Cannibals" by the French writer Montaigne. This looked at the original peoples of South America. "Caliban" may well come from this.

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...







Nature Poetry & Shakespeare

Key words	Definition
Sonnet	A type of love poem with 14 lines.
Transcendent	Going beyond mortal.
Romanticism	A cultural movement which valued nature.
Detachment	Being separated from others.
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.
Soliloquy	A speech in a play delivered only for the audience to hear.
Supernatural	Things that are beyond normal like magic.
Colonialism	The idea of a country taking over another place.
Patriarchy	A male dominated society.

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.

Food

1	Food choice	<p>Planning what to cook: Deciding on what to cook or eat requires making a number of decisions:</p> <ul style="list-style-type: none"> • individual energy and nutrient needs; • diet and health; • religion and culture; • time of day and occasion; • food preferences; • Social factors/ lifestyle (body image/ role models) • Cost of food • food availability • advertising and other point of sale information • environmental considerations; • Food labelling
2	Bread roll	<p>skills linked to making bread - mixing, kneading, shaping, proving, glazing, baking, testing for readiness</p> <p>Types of bread: White bread, whole-wheat bread, Rye bread, Sourdough bread, Multigrain bread, Baguette, Ciabatta</p> <p>Dough- mixture of dry ingredients that is mixed, kneaded and baked</p>
3	Present-ation skills	<p>knife skills:</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Bridge</p>  </div> <div style="text-align: center;"> <p>Claw hold</p>  </div> </div> <p>Vegetable cuts: Carrot cuts. These cuts are often seen in recipes such as stir fry</p> <div style="display: flex; justify-content: space-around; text-align: center;"> <div style="width: 20%;">  <p>batons 5-6.5cm long x 1 cm square</p> </div> <div style="width: 20%;">  <p>dice 1cm square</p> </div> <div style="width: 20%;">  <p>julienne/match 5-6.5cm long x 3 mm square</p> </div> <div style="width: 20%;">  <p>fine julienne 5-6.5cm long x 1.5mm square</p> </div> </div>
4	Flavouring	<p>Senses: Sight, smell, hearing, taste (sweet, salt, sour, bitter, umami) and touch are all used when eating food and drink. A combination of these senses helps to evaluate a food</p> <p>Sensory attributes: Words used to describe the appearance, odour, taste and texture of a food product</p> <p>Sensory evaluation: Analyses and measures human responses to food and drink.</p> <p>Sensory analysis: evaluating consumer products</p> <p>Appetising: looks or smells like it would taste delicious</p> <p>seasoning -- salt, herbs, or spices added to food to enhance the flavour</p> <hr/> <p>Modifying a recipe: ingredients are substituted or altered meaning that the colour, flavour, texture and nutritional value is altered.</p> <ul style="list-style-type: none"> • To meet the needs of different groups of people e.g. vegetarian. • To reduce the cost of a recipe. • To avoid certain foods because of intolerance or allergy. • Reducing the energy content. • Improving the nutritional value/balance (nutritional content or profile) e.g. reducing salt content. • Ingredients are unavailable. • To cater for like and dislikes

Food

5	Nutritional needs of young people	<p>Nutritional needs vary depending on life stages - pregnancy, infancy and childhood, adolescence, adulthood, later adulthood;</p> <p>Eatwell guide: We all need a balanced and varied diet to stay healthy.</p> <p>carbohydrates - energy; protein - growth and repair; Fruit and vegetables - Vitamins and minerals - provide protection from illness and disease; calcium - strong bones and teeth; Fat - energy, warmth, protection.</p> <p>We should follow the 8 tips for healthier eating</p> <p>Adolescence - a time of rapid growth and development</p> <p>Boys need more protein and energy than girls for growth.</p> <p>Girls need more iron than boys to replace menstrual losses</p>
6	Food styling and presentation	<p>Making food taste good and look appetising is an important factor:</p> <p>Visual appearance; Food can be made more appetising by</p> <ol style="list-style-type: none"> 1. The support (what the food will be served on) 2. The focal point 3. Colours 4. Textures 5. Decoration and garnish
7	Healthy eating challenge	<p>You should eat a wide range of foods to make sure you're getting a balanced diet and your body is receiving all the nutrients it needs.</p> <p>8 practical tips cover the basics of healthy eating and can help you make healthier choices.</p> <ol style="list-style-type: none"> 1. Base your meals on higher fibre starchy carbohydrates. ... 2. Eat lots of fruit and veg. ... 3. Eat more fish, including a portion of oily fish 4. Cut down on saturated fat and sugar. ... 5. Eat less salt: no more than 6g a day for adults. ... 6. Get active and be a healthy weight. ... 7. Do not get thirsty. ... 8. Do not skip breakfast <p>The dietary quality in UK adolescents is poor.</p>
8	Meals suitable for teenager	<p>Use the Eatwell guide, ingredients from the Potatoes, bread, rice, pasta and other starchy carbohydrates group. Aim to use wholegrain varieties where possible.</p> <p>A nutritious meal: adding vegetables to a curry (5 A DAY and added fibre)</p> <p>Replace butter with reduced fat spread, skimmed milk, reduced fat cheese</p> <p>Planning: e.g. portion size, allergies, balance/variety, health needs, base meals on starchy foods;</p> <p>Choosing e.g. reading labels, wholegrain versions, choosing leaner cuts of meat, adding beans/pulses;</p> <p>preparing e.g. Removing skin from chicken, use herbs not salt;</p> <p>Cooking: e.g. stir-fry, dry fry, grilling, steaming;</p> <p>Serving, e.g. no butter/glazes.</p>

Food

9

Skills used:

- Judge and manipulate sensory properties: taste, season, add extra flavour, brown/crisp up, garnish, present
- Test for readiness: probe, poke, skewer, bite
- Shaping and finishing a dough: roll out, prove/rest, glaze, shape
- Make a dough: bread, pastry, pasta
- Use of raising agents: whisked egg, self raising flour, baking powder, steam
- Set a mixture removing heat (gelation): chilled starch base for layered desserts, custards, cheesecake
- Set a mixture with heating: cook eggs in a mix that sets
- Make sauces: blended, reduction, emulsion
- Using the oven: bake, roast
- Using the grill: char, grill, roast
- Dry heat and fat based methods (hob): dry fry, stir fry
- Water based method (hob): steam, boil, simmer, poach
- Use of specialist equipment: blender, food processor, microwave
- Preparation of ingredients and equipment: grease/oil, line, flour
- Weigh and measure: liquids and solids
- Select and adjust cooking process: time, turn heat up/down
- Tenderise and marinate: marinade to add flavour and moisture
- Prepare, combine and shape: roll, wrap, skewer, mix, coat, layer, bind
- Prepare fruit and vegetables; grate, crush, peel, segment, de-seed
- Knife skills: Bridge, claw, peel, dice, slice, cut



Les animaux	Pets
1. Tu as un animal?	<i>Do you have a pet?</i>
2. J'ai...	<i>I have...</i>
3. un poisson rouge	<i>a goldfish</i>
4. un hamster	<i>a hamster</i>
5. un chien	<i>a dog</i>
6. un lapin	<i>a rabbit</i>
7. un chat	<i>a cat</i>
8. une souris	<i>a mouse</i>
9. un cochon d'Inde	<i>a guinea pig</i>
10. un cheval	<i>a horse</i>
11. un serpent	<i>a snake</i>
12. un oiseau	<i>a bird</i>
13. Je n'ai pas d'animal.	<i>I don't have a pet.</i>

Ma famille	My famille
25. Il y a...	<i>There is...</i>
26. ma mère	<i>my mum</i>
27. mon père	<i>my dad</i>
28. mon beau-frère	<i>my stepbrother</i>
29. ma soeur	<i>my sister</i>
30. ma demi-soeur	<i>my half-sister</i>
31. mes parents	<i>my parents</i>
32. mes grand-parents	<i>my grandparents</i>
33. Tu as des frères ou des soeurs?	<i>Do you have any siblings?</i>
34. J'ai...	<i>I have...</i>
35. Je n'ai pas de...	<i>I don't have...</i>
36. Je suis fils/fille unique.	<i>I am an only child.</i>

Les couleurs	Colours
14. noir	<i>black</i>
15. blanc	<i>white</i>
16. gris	<i>grey</i>
17. marron	<i>brown</i>
18. rouge	<i>red</i>
19. orange	<i>orange</i>
20. jaune	<i>yellow</i>
21. vert	<i>green</i>
22. bleu	<i>blue</i>
23. violet	<i>purple</i>
24. rose	<i>pink</i>

Les descriptions	Descriptions
37. Il/elle a les cheveux...	<i>He/she has...hair.</i>
38. Il/elle a les yeux...	<i>He/she has...eyes.</i>
39. bruns/noirs/gris/blonds/roux	<i>brown/black/grey/blond/ginger</i>
40. longs/courts	<i>long/short</i>
41. bouclés/raides	<i>curly/straight</i>
42. Il/elle est...	<i>He/she is...</i>
43. grand/petit	<i>tall/small</i>
44. groß/mince	<i>fat/thin</i>
45. musclé/faible	<i>muscly/weak</i>
46. une barbe/une moustache	<i>a beard/moustache</i>
47. des taches de rousseurs/des tatouages	<i>freckles/tattoos</i>
48. Il/elle porte des lunettes.	<i>He/she wears glasses.</i>

Grammar:

Possessive adjectives 'my' and 'your' change according to the number and gender of the noun.
mon (masc) / ma (fem) / mes (pl)

Phonics Focus:	
[oi] = /wah/ <i>trois</i>	[è] = /eh/ <i>sorcière</i>
[eu] = /uh/ <i>cheveux</i>	[i] [y] = /ee/ <i>bise</i>

Vital verb: avoir (to have)	
Le présent	Present tense
<i>J'ai</i>	<i>I have</i>
<i>Tu as</i>	<i>You have</i>
<i>Il/elle/on a</i>	<i>He/she has</i>
<i>Nous avons</i>	<i>We have</i>
<i>Vous avez</i>	<i>You have(formal/plural)</i>
<i>Ils/elles ont</i>	<i>They have</i>

Geography

	Key word	Definition
1	Biome	<p>A biome is a large region with its own distinct climate, plants, and animals.</p> <p>The Earth's major biomes, including tropical rainforests, deserts, savannas, grasslands, temperate forests, and tundra, are distributed across the globe, each with unique climate and vegetation characteristics</p>
2	Ecosystem	An ecosystem is a community of living organisms interacting with their physical environment and their interrelationships within a specific area
3	Food chain	A food chain illustrates the flow of energy and nutrients through an ecosystem, starting with producers (like plants) and moving to consumers (animals), with arrows showing the direction of energy transfer.
4	Food web	A food web is a complex network of interconnected food chains that illustrates the feeding relationships and energy flow within an ecosystem, showing which organisms eat what and how energy transfers between them.
5	Nutrient cycles	Nutrient cycles, describe the movement of essential elements and compounds through Earth's ecosystems, connecting living and non-living components. These cycles involve the continuous transformation and recycling of nutrients, ensuring their availability for plants and other organisms.
6	Climate graph	A climate graph, also known as a climograph, is a graphical representation that displays a location's average monthly temperature and precipitation patterns, typically over a year, using a line graph for temperature and bars for precipitation.
7	Desert	A desert is a landscape where little precipitation occurs and, consequently, living conditions create unique biomes and ecosystems.
8	Grasslands	Grasslands are areas dominated by a nearly continuous cover of grasses, found on every continent except Antarctica, and characterized by diverse plant and animal communities adapted to specific climates and conditions.
9	Choropleth	A choropleth map is a type of thematic map that uses colours or shading to represent statistical data across geographic areas, like countries or states, where darker shades typically indicate higher values.



Hast du ein Haustier?	Do you have a pet?
1. Ich habe...	<i>I have...</i>
2. einen Goldfisch	<i>a goldfish</i>
3. einen Hamster	<i>a hamster</i>
4. einen Hund	<i>a dog</i>
5. ein Kaninchen	<i>a rabbit</i>
6. eine Katze	<i>a cat</i>
7. eine Maus	<i>a mouse</i>
8. ein Meerschweinchen	<i>a guinea pig</i>
9. ein Pferd	<i>a horse</i>
10. eine Schlange	<i>a snake</i>
11. einen Wellensittich	<i>a budgie</i>
12. Kein Haustier	<i>It's false.</i>

Meine Familie	My family
28. Es gibt...	<i>There is...</i>
29. meine Mutter	<i>my mum</i>
30. mein Vater	<i>my dad</i>
31. mein Bruder	<i>my brother</i>
32. mein Stiefbruder	<i>my stepbrother</i>
33. meine Schwester	<i>my sister</i>
34. meine Halbschwester	<i>my halfsister</i>
35. meine Eltern	<i>my parents</i>
36. meine Großeltern	<i>my grandparents</i>
37. Hast du Geschwister?	<i>Do you have any siblings?</i>
38. Ich habe zwei Brüder.	<i>I have 2 brothers.</i>
39. Ich habe drei Schwestern.	<i>I have 3 sisters.</i>
40. Ich bin Einzelkind.	<i>I am an only child.</i>

Eigenschaften	Qualities
13. Er/sie/es ist...	<i>He/she/it is...</i>
14. dick/schlank	<i>fat/thin</i>
15. frech/niedlich	<i>cheeky/cute</i>
16. gemein/süß	<i>mean/sweet</i>
17. groß/klein	<i>big/small</i>
18. kräftig	<i>strong</i>
19. schlau	<i>cunning</i>
20. (super)lustig	<i>(really) funny</i>

Die Farben	Colours
41. schwarz	<i>black</i>
42. weiß	<i>white</i>
43. grau	<i>grey</i>
44. braun	<i>brown</i>
45. rot	<i>red</i>
46. orange	<i>orange</i>
47. gelb	<i>yellow</i>
48. grün	<i>green</i>
49. blau	<i>blue</i>
50. violett	<i>purple</i>
51. rosa	<i>pink</i>
52. Er/sie hat kurze, blonde Haare.	<i>He/she has short, blond hair.</i>
53. Er/sie hat blaue Augen.	<i>He/she has blue eyes.</i>

Talente	Talents
21. Er/sie/es kann...	<i>He/she/it can...</i>
22. Italienisch sprechen.	<i>speak Italian.</i>
23. Flöte/Fußball spielen.	<i>play the flute/football</i>
24. schnell laufen.	<i>run quickly.</i>
25. lesen/tanzen.	<i>read/dance.</i>
26. Rad fahren.	<i>ride a bike.</i>
27. singen/springen/schwimmen.	<i>sing/jump/swim.</i>

Vital verb: haben (to have)	
Präsens	Present tense
<i>Ich habe</i>	<i>I have</i>
<i>Du hast</i>	<i>You have</i>
<i>Er/sie hat</i>	<i>He/she/we has</i>
<i>Wir haben</i>	<i>We have</i>
<i>Sie haben</i>	<i>You have (formal)</i>
<i>Sie haben</i>	<i>They have</i>

Phonics Focus:	
[au] = /ow/ <u>haus</u>	[e] = /uh/ <u>Gitarre</u>
[ß] = /ss/ <u>heiße</u>	[sch] = /sh/ <u>schlange</u>

History - WW2 and the Blitz

Key Word	Definition
The Blitz	A period during WWII when Nazi Germany carried out sustained bombing of Britain from September 1940 to May 1941.
Luftwaffe	The German Air Force responsible for bombing Britain.
RAF (Royal Air Force)	Britain's air force, which defended the country from German attacks.
Blackout	A government order requiring all lights to be covered at night to avoid detection by enemy aircraft.
Anderson Shelters	Corrugated iron shelter that people had in their gardens – big enough for a family of 6.
Firestorm	A massive fire caused by incendiary bombs, spreading rapidly.
Incendiary Bomb	A bomb designed to start fires.
High Explosive Bomb	Bombs designed to destroy buildings and infrastructure.
Home Front	The efforts and experiences of civilians during the war.
ARP Wardens	Officials who enforced blackout rules and helped citizens during air raids.
Propaganda	Information designed to boost morale and support for the war effort.
Morale	The spirit and confidence of the civilian population.

Key Dates

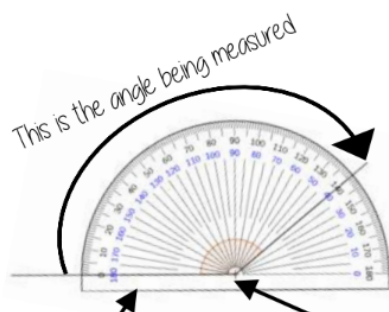
10 July – 31 October 1940	Battle of Britain. The RAF defends Britain from Luftwaffe attacks.
7 September 1940	The Blitz begins with Black Saturday.
September–November 1940	Continuous bombings of London for 57 consecutive nights.
14 November 1940	Coventry Blitz – severe bombing destroys much of the city.
4 May 1942	Bombing of Exeter – over 10,000 bombs destroyed much of the city.
13 – 15 February 1945	Bombing of Dresden, Germany. 800 bombers dropped 2,700 tonnes of explosives.

Maths: 7.11 Constructing, measuring & using geometric notation.....

Keywords	
Polygon	a 2D shape made with straight lines
Scalene triangle	a triangle with all different sides and angles
Isosceles triangle	a triangle with two angles the same size and two sides the same size
Right-angled triangle	a triangle with a right angle
Frequency	the number of times a data value occurs
Sector	part of a circle made by two radii touching the centre
Rotation	turn in a <u>given</u> direction
Protractor	equipment used to measure angles
Compass	equipment used to draw arcs and circles

Sparx codes for this topic	
M502, M780, M331	Classifying, measuring & drawing angles
M814	Parallel & perpendicular lines
M679	Properties of quadrilaterals
M574	Pie Charts
M565	Triangle constructions

Measure angles to 180°



This is the angle being measured

The base line follows the line segment

Make sure the cross is at the point the two lines meet

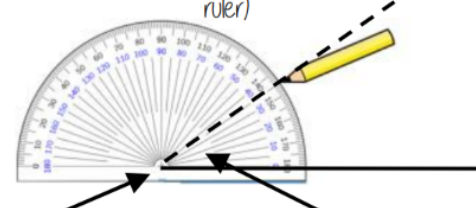
Read from 0° on the base line

Remember to use estimation

This is an obtuse angle so between 90° and 180°

Draw angles up to 180°

Draw a 35° angle



Make a mark at 35° with a pencil
And join to the angle point (use a ruler)

Make sure the cross is at the end of the line (where you want the angle)

The angle

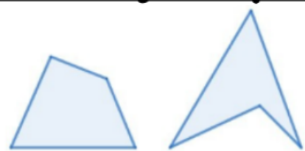
Maths: 7.12 Developing geometric reasoning.....

Keywords	
Vertically Opposite	angles formed when two or more straight lines cross at a point
Interior angles	angles inside the shape
Sum	total, add all the interior angles together
Convex Quadrilateral	a four-sided polygon where every interior angle is less than 180°
Concave Quadrilateral	a four-sided polygon where one interior angle exceeds 180°
Polygon	a 2D shape made with straight lines
Scalene triangle	a triangle with all different sides and angles
Isosceles triangle	a triangle with two angles the same size and two angles the same size
Right-angled triangle	a triangle with a right angle

Sparx codes for this topic

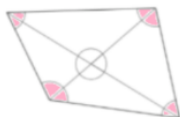
M818	Angles on a point & straight line
M163	Opposite angles
M351	Angles in a triangle
M679	Angles in quadrilaterals
M319	Angle problems

Sum of angles in quadrilaterals



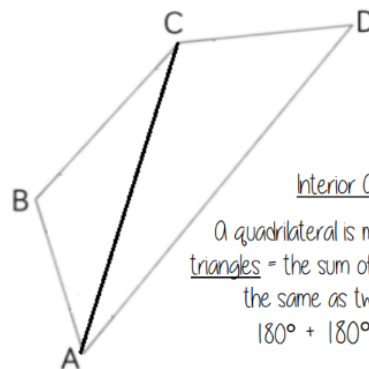
Convex
Quadrilateral

Concave
Quadrilateral



Interior angles are those that make up the perimeter (outline) of the shape

Sum of interior angles in a quadrilateral = 360°



Interior Angles

A quadrilateral is made up of two triangles = the sum of interior angles is the same as two triangles:
 $180^\circ + 180^\circ = 360^\circ$

Maths: 7.13 Developing number sense.....

Keywords	
Commutative	changing the order of the operations does not change the result
Associative	when you add or multiply you can do so regardless of how the numbers are grouped
Dividend	the number being divided
Divisor	the number we divide by
Expression	a maths sentence with a minimum of two numbers and at least one math operation (no equals sign)
Equation	a mathematical statement that two things are equal
Quotient	the result of a division

Sparx codes for this topic

M928, M347, M113, M462	Mental methods for +, -, x, ÷
M429, M152	Mental methods for decimals
M695	Mental methods for fractions
M823	Factors
M878	Estimation

Mental methods for decimals

Multiplying by a decimal < 1 will make the original value smaller e.g $\times 0.1 = \div 10$

Methods for multiplication 12×0.03

$12 \times 3 = 36$ $12 \times 3 = 36$ $12 \times 0.3 = 0.36$ $12 \times 0.03 = 0.036$	$12 \times 3 = 36$ $+10 \downarrow +100 \downarrow +1000 \downarrow$ $12 \times 0.03 = 0.036$
--	---

Methods for addition $23+24$

$2 + 2 = 4$ $0.3 + 0.4 = 0.7$ $4 + 0.7 = 4.7$

Methods for division $15 \div 0.05$

Multiply by powers of 10 until the divisor becomes an integer

$1.5 \div 0.05$ $\times 100 \downarrow \quad \downarrow \times 100$ $150 \div 5 = 30$

Maths: 7.14 Sets & probability

Keywords

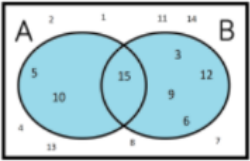
Set	collection of things
Element	each item in a set is called an element
Intersection	the overlapping part of a Venn diagram (AND \cap)
Union	two ellipses that join (OR \cup)
Mutually Exclusive	events that do not occur at the same time
Probability	likelihood of an event happening
Bias	a built-in error that makes all values wrong (unequal) by a certain amount, <i>eg</i> a weighted dice
Fair	there is zero bias, and all outcomes have an equal likelihood
Random	something happens by chance and is unable to be predicted

Sparx codes for this topic

M834	Identify and represent sets
M829, M419	Venn diagrams
M941	Probability of a single event
M655	The probability scale
M755	Sum of probabilities

Union of sets ξ

Elements in the union could be in set A OR set B

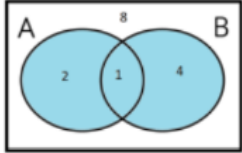


$\xi = \{\text{the numbers between 1 and 15 inclusive}\}$
 $A = \{\text{Multiples of 5}\}$ $B = \{\text{Multiples of 3}\}$

The elements in $A \cup B$ are 5, 10, 15, 3, 9, 6, 12

The notation for this is $A \cup B$

There are 7 elements that are either a multiple of 5 OR a multiple of 3 between 1 and 15



This Venn shows the number of elements in each set

Maths: 7.15 Prime numbers & proof

Keywords	
Multiples	found by multiplying any number by positive integers Factor: integers that multiply together to get another number. Prime: an integer with only 2 factors
Conjecture	a statement that might be true (based on reasoning) but is not proven
Counterexample	a special type of example that disproves a statement
Expression	a maths sentence with a minimum of two numbers and at least one math operation (no equals sign)
HCF	highest common factor (biggest factor two or more numbers share)
LCM	lowest common multiple (the first time the times table of two or more numbers match)

Sparx codes for this topic	
M698	Common factors & HCF
M227	Common multiples & LCM
M322, M108, M365	Products of prime factors

Multiples The "times table" of a given number

All the numbers in this lists below are multiples of 3.

3, 6, 9, 12, 15...

This list continues and doesn't end

3x, 6x, 9x ...

x could take any value and as the variable is a multiple of 3 the answer will also be a multiple of 3

Non example of a multiple

4.5 is not a multiple of 3 because it is 3 x 1.5

Not an integer

Factors

Arrays can help represent factors

5 x 2 or 2 x 5

Factors of 10: 1, 2, 5, 10

10 x 1 or 1 x 10

The number itself is always a factor

Factors and expressions

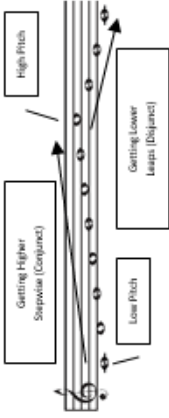




Factors of 6x: 6, x, 1, 6x, 2x, 3, 3x, 2

6x x 1 OR 6 x x

2x x 3

3x x 2

Music

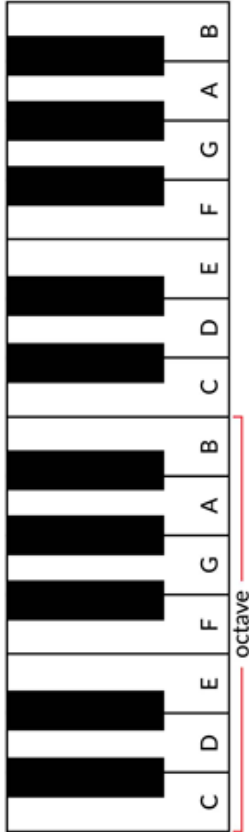
Building Bricks		Exploring the Elements of Music MAD T SHIRT	
<p>Melody - Pitch</p> <p>The highness or lowness of a sound.</p>  <p>Repetition Sequence (a pattern that is repeated at a slightly higher pitch)</p>	<p>Articulation</p> <p>How individual notes or sounds are played/techniques.</p> <p>LEGATO – 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>Dynamics</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) GETTING LOUDER: Crescendo (cres) GETTING SOFTER: Diminuendo (dim.)</p> 	<p>Texture</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>
<p>Structure</p> <p>How the music is put together in sections and how often they are repeated</p>	<p>Harmony and Tonality</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>Instruments (Timbre/Sonority)</p> <p>Describes the unique sound or tone quality of different instruments voices or sounds.</p> <p><i>Velvety, Screechy, Throaty, Rattling, Mellow, Chirpy, Brassy, Sharp, Heavy, Buzzy, Crisp, Metallic, Wooden etc.</i></p>	<p>Rhythm (Duration)</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> 
<p>Tempo (speed)</p> <p>The speed of a sound or piece of music.</p> <p>FAST: Allegro, Vivace, Presto SLOW: Andante, Adagio, Lento GETTING FASTER – Accelerando (accel.) GETTING SLOWER – Ritardando (rit.) or Rallentando (rall.)</p>	<p>Families of Instruments</p> <p>Strings – Violin, Viola, Cello, Double Bass, Guitar, Bass Guitar, Ukulele Woodwind – Flute, Oboe, Clarinet, Bassoon, Recorder, Saxophone Brass – Trumpet, trombone, tuba, French French Horn Percussion – Drum Kit, Timpani, Xylophone, Glockenspiel, Djembe, wood block Keyboard – Piano, Organ, Harpsichord</p>	<p>Programme Music</p> <p>Music can create an atmosphere</p> <p>Music can create an image e.g., in response to art or, a story— this is called PROGRAMME MUSIC.</p>	

Exploring Treble Clef Reading and Notation



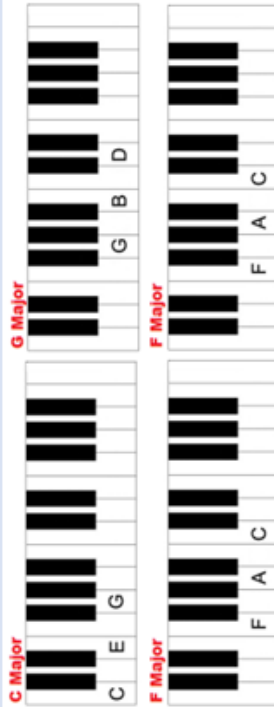
Keyboard Skills

A. Layout of a Keyboard/Piano



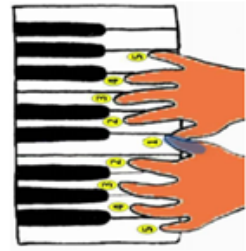
A piano or keyboard is laid out with **WHITE KEYS** and **Black Keys** (see section G). C is to the left of the two Black Keys and the notes continue to G then they go back to A again. Notes with the same letter name/pitch are said to be an **OCTAVE** apart. **MIDDLE C** is normally in the centre of a piano keyboard.

C. Keyboard Chords



Play one - Miss one - play one - miss one - play one

D. Left Hand/Right Hand (1-5)



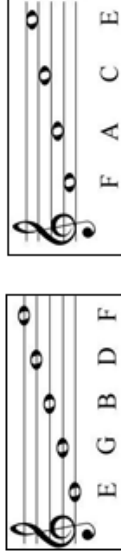
B. Treble Clef & Treble Clef Notation

A **STAVE** or **STAFF** is the name given to the five lines where musical notes are written.

The position of notes on the stave or staff shows their **PITCH** (how high or low a note is). The **TREBLE CLEF** is a symbol used to show high-pitched notes on the stave and is *usually* used for the right hand on a piano or keyboard to play the **MELODY** and also used by high pitched instruments such as the flute and violin. The stave or staff is made up of 5 **LINE**s and 4 **SPACE**s.



Every **Green Bogie** Deserves **Flicking**. Notes in the **SPACE**s spell "**FACE**"

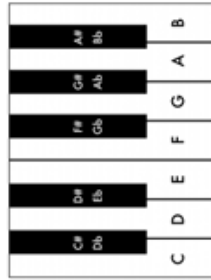


Notes from **MIDDLE C** going up in pitch (all of the white notes) are called a **SCALE**.



E. Black Keys and Sharps and Flats

There are five different black notes or keys on a piano or keyboard. They occur in groups of two and three right up the keyboard in different pitches. Each one can be a **SHARP** or a **FLAT**. The # symbol means a **SHARP** which raises the pitch by a semitone (e.g. C# is higher in pitch (to the right) than C). The b symbol means a **FLAT** which lowers the pitch by a semitone (e.g. Bb is lower in pitch (to the left) than B). Each black key has 2 names - C# is the same as Db - there's just two different ways of looking at it! Remember, black notes or keys that are to the **RIGHT** of a white note are called **SHARPS** and black notes to the **LEFT** of a white note are called **FLATS**.



Personal Development

Online Financial Harms - KS3

Key words

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

Personal Development Knowledge Organiser Changing Relationships - KS3

Key words

Friendship	A relationship based on trust, care and respect.
Boundary	A personal limit that helps to keep you safe.
Respect	Treating others kindly and fairly.
Bullying	Repeated behaviour intended to hurt someone.
Online safety	Steps taken to protect yourself on the internet.

Changing Friendships

Friendships can change as people grow, change interests or meet new people. This is normal and happens to everyone.

Friendships can change because:

- People develop new hobbies or interests
- Changing classes or schools
- Making new friends
- Growing emotionally and socially.

Healthy ways to manage change:

- Accept that change is part of life
- Communicate honestly and kindly
- Stay open to new friendships
- Respect others' choices.

Personal Development

Healthy Online Friendships

Online friendships are relationships formed through games, social media or messaging platforms.

Features of healthy online friendships:

- Mutual respect and kindness
- No pressure to share personal information
- Feeling safe and supported
- Honest communication
- Respecting boundaries. Staying safe online:
- Keep personal information private
- Think before sharing images or messages
- Block and report worrying behaviour
- Talk to a trusted adult if something feels wrong.
-

Hurtful Behaviours

Hurtful behaviours are actions or words that cause emotional or physical harm to others.

Examples of hurtful behaviours:

- Bullying or name calling
- Excluding others on purpose
- Spreading rumours (online or offline)
- Pressuring someone to do something they are uncomfortable with
- Sending unkind messages or images.

What to do if you experience hurtful behaviour:

- Tell a trusted adult
- Save evidence of online messages
- Do not respond to bullying
- Use reporting and blocking tools.

Remember

- Healthy friendships make you feel safe and valued
- Change in friendships is normal
- Hurtful behaviour is never okay
- Help is always available

Support Services

- Childline 0800 1111
- CEOP - report worrying online behaviour
- NSPCC Report Remove tool / NSPCC helpline 0808 800 5000
- YoungMinds
- School safeguarding team - blue lanyards

Physical Education

WADHAM KS3 PE KNOWLEDGE ORGANISER: Mini Tennis

Skills and techniques:

Serve The action used to start the point/game. Must be thrown upwards and contacted above head

Forehand groundstroke The action of returning the ball using a forward sweeping motion with the palm facing forwards

Backhand groundstroke The action of returning the ball using an across the body sweeping motion, with the back of the hand leading the stroke

Volley Returning the ball before it bounces on the court

Singles A match where one player plays one other

Doubles A match where a pair (two) of players play against

Rules:

Each point begins with an overarm serve from the baseline

A player continues to serve for the duration of a game, alternating boxes after each point

The serve must travel upwards before it is hit

The serve must land within the service area.

A second serve is awarded if the first serve misses the service area

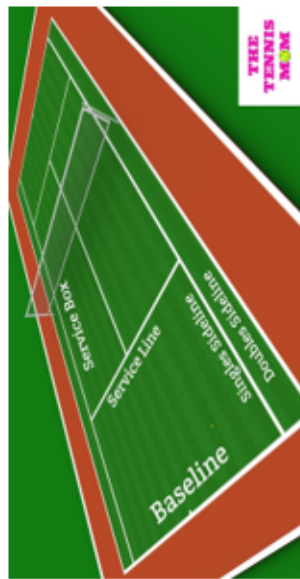
A point is won if the ball is unreturned or lands out

The winning player must win by two clear points

Scoring system

No point = "Love"
First point = "15"
Second Point = "30"
Third Point = "40"
Fourth Point = "Game"

Playing area



Key Words:

Racket
Net
Court
Let
Service box
Baseline
Tramlines
Game, Set, Match

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

Events:

Sprints: 100m, 200m, 300m and 400m. The fastest time over the distance.

Middle distance: 800m, 1500m. The fastest time over the distance.

Shot putt: The furthest distance a weighted ball can be pushed

Javelin: The furthest distance a spear can be thrown

Discus: The furthest distance a round weight can be thrown

Long jump: The furthest distance an athlete can jump into the sand pit

High Jump: The highest an athlete can jump over a bar

Relay: An event where four athletes have to pass the baton as quickly as possible around the 400m track

Technique/tactics:

Sprints: Arm drive and knee lift. Accelerate out of the blocks/start.

Middle distance: Pace and positioning during the race

Shot putt: Chin, Knee, toe, get down low, push up. Clean palm, dirty fingers.

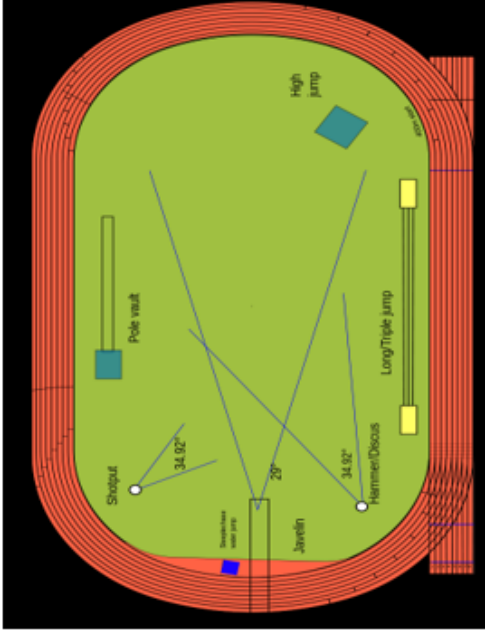
Javelin: Warrior pose. Pull at the elbow.

Discus: Palm down, release off index fingers, sling action

Long jump: Accelerate towards the take-off board, drive hips up, hang in the air

High jump: Arc run up, Hips up, arch the back

Relay: Fastest runner on 4th leg. Accelerate before receiving the baton. Palm up and open.



Key

Words:

Sprint start
Run up
Take off
Personal best
Track event
Field event

Key Words:

Distance
Time
Speed
Strength
Pace/endurance
Changeover zone
Baton
Start Line
Finish line

Physical Education

WADHAM KS3 PE KNOWLEDGE ORGANISER: Rounders

Skills and Techniques:

Bowling:

The underarm action to deliver the ball.

Batting:

The action of hitting the ball.

Fielding:

The stopping and collecting of the ball.

Overarm Throwing

A throwing technique used to throw the ball long distances.

Underarm Throwing

A throwing technique used to throw the ball shorter distances/used for bowling.

Catching

The action of collecting the ball in your hands whilst it's in the air.

Long Barrier

A fielding technique used to stop the ball safely and effectively by getting your body behind the ball.

Rules:

- Ball must be bowled underarm.
- Batter must run around the outside of the bases.
- Fielders must make contact with the post with the ball in their hand in order to stump the base.
- Ball must be bowled between the batters head and knee. It must also be within reach of the batter and not directly at the batters body.
- 2 no balls in a row = ½ rounder
- Batters can be out by being caught, stumped, run in the inside of the post, drop the bat.

Positions:

Fielding team:

- Bowler
- Backstop
- Base fielders
- Deep fielders

Batting team:

- Batter

Scoring System:

The team with the most rounders at the end of the match is the winner.
 ½ rounder is scored by hitting the ball and reaching 2nd base.
 1 rounder is scored by hitting the ball and reaching 4th base.

Tactics:

- Hitting the ball to certain directions in the field.
- Changing the placement of fielders depending on the strengths of the batter.

Key Words:

Post
 Base (1st, 2nd, 3rd, 4th)
 No ball
 Bowler
 Batter
 Backstop
 Obstruction

Key Words:

Backward Hit
 Umpire
 Long barrier
 Catching
 Underarm
 Overarm
 Donkey drop
 Rounder

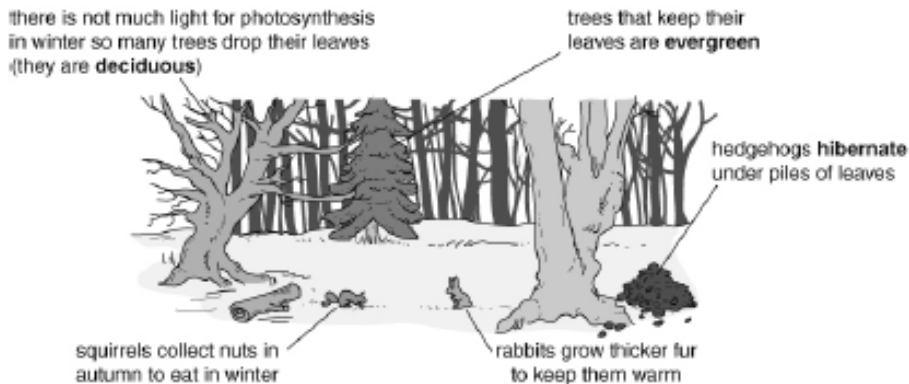
Science – 7D

Habitats and environments

A **habitat** is the area where an organism lives. The conditions in a habitat are called the **environment**. An environment is affected by non-living factors (e.g. light, dampness, temperature), called **physical environmental factors**.

Physical environmental factors change from day to day (**daily changes**). As the conditions change, the organisms respond. For example, **nocturnal** animals are only active at night.

Physical environmental factors change over the year (**seasonal changes**). Organisms respond to these changes. For example, in autumn some birds **migrate** to warmer countries to feed during the winter.



To survive in a habitat, organisms need **resources**. An animal needs space, food, water, shelter and a mate to reproduce. Plants need space, light, water and mineral salts.

All the organisms in a habitat form a **community**. Within a community, the total number of one species is called a **population**.

Adaptations

Organisms have **adaptations** that allow them to survive in a habitat. For example, fish are adapted to living underwater. They have gills to take oxygen out of the water, fins to swim with and streamlined bodies to help them move easily through the water. Organisms that are better adapted to survive in an area will have a better chance of survival.



Jackrabbits are adapted to living in a desert habitat.

Populations

The size of a population is affected by several factors.

- Organisms **compete** with each other for resources. Competition for resources may cause populations of some organisms to decrease.
- Disease can kill organisms.
- Poisons may kill organisms, or kill the organisms that they depend on. Some **pesticides** are **persistent** and can build up in the animals as you go along a food chain, harming the top predators.
- Changes in one population affect other populations. When there are a lot of prey organisms, the number of predators increases because they have plenty of food. This decreases the number of prey, which then leads to a decrease in the number of predators.

Science – 7H

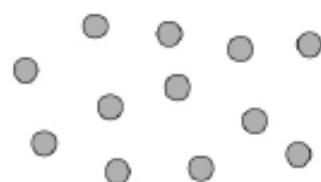
Atoms, molecules, elements and compounds

All substances are made up of tiny particles called **atoms**. Substances can be made of single atoms but they can also be made of atoms bonded together in small groups, called **molecules**. Substances can also be made of many trillions of atoms all bonded together.

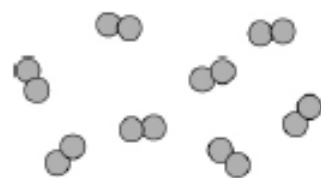
Natural materials can be **pure** (containing one substance) or **mixtures** (containing two or more substances which are not joined together). A **mixture** is formed if elements are mixed without joining.

Elements are simple substances made up of only one kind of atom.

There are about 90 different types of atom found on Earth. Therefore there are about 90 different elements.



atoms of an element

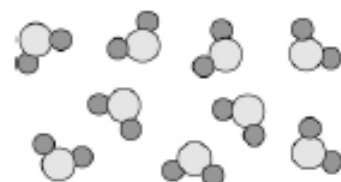


molecules of an element



molecules of a mixture of elements

Most substances are **compounds**, which contain more than one kind of atom (more than one element) bonded (joined) together.



molecules of a compound

The Earth's elements

The **periodic table** lists all 118 known elements.

Element are described by **symbols** of one or two letters.

The first letter is always a capital letter and the second is always lower case.

The same symbols are used in all countries.

Although there are only about 90 natural elements, there are millions of compounds.

We obtain all the elements and compounds we need for living from the Earth's **atmosphere** and **crust**.

Our **resources** are limited and some may run out in the near future. We need to take care of our resources, **recycle** more and make less waste.

e.g. Oxygen = O

Magnesium = Mg

Iron = Fe

Silicon = Si



molecules of a mixture of elements

Science – 7H

Metals and non-metals

Elements can be classified as **metals** or **non-metals**, depending on their properties.

The common properties of **metals** are:

- high melting point solids,
- strong and flexible,
- shiny (when polished),
- good conductors of heat,
- good conductors of electricity.

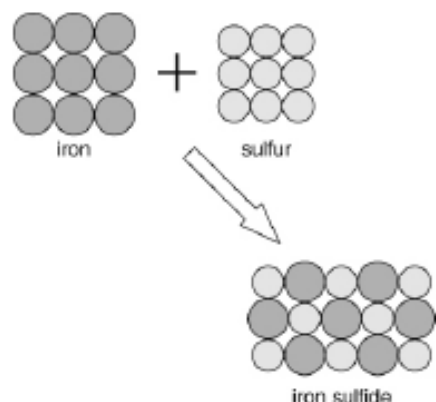
e.g. copper, iron, aluminium, zinc, and tin.

Note: mercury is the only liquid metal.

The **uses** of an element depend on its **properties**. For example, copper and aluminium are used for electrical cables as they are strong, flexible and conduct electricity very well.

Making compounds

Compounds are formed when elements are mixed and react so that the atoms join together.



Naming compounds

If there is a metal in the compound, the name of the metal goes first.

If the compound contains only two elements then one of the element's name has its ending changed to 'ide'.

e.g. zinc + oxygen = zinc oxide

iron + bromine = iron bromide

If a compound contains two elements plus oxygen, then the name ending of one of the elements is changed to 'ate'.

e.g. sodium + carbon + oxygen = sodium carbonate

Chemical reactions

Chemical reactions always form one or more new substances.

Many chemical reactions occur in everyday life, for example, burning, cooking, rusting, digesting food.

Typical signs of chemical reaction include:

- a colour change,
- a gas being given off,
- a solid forming in a liquid,
- an energy change.

How chemical reactions start

Some reactions start just by mixing the right substances together.

e.g. acid and alkalis

Heat is often needed to start a reaction, but once started many reactions give out heat.

e.g. burning natural gas

Others need a continuous supply of energy to keep them going.

e.g. breaking down metal ores

Science – 7H

Modelling chemical reactions using word equations

reactants → products

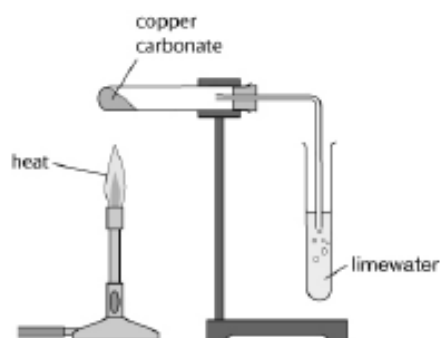
e.g. zinc + chlorine → zinc chloride

tin carbonate → tin oxide + carbon dioxide

Thermal decomposition reactions involve breaking down a single compound using heat.

Heating copper carbonate produces copper oxide and carbon dioxide.

Thermal decomposition reactions are used in industry to extract metals.



Sorting and presenting data

The way data is sorted and presented depends on the type of variable and what you want to show.

Tables – show values and order.

Bar charts – compare differences between qualitative/discrete variables.

Line graphs – shows trends between variables.

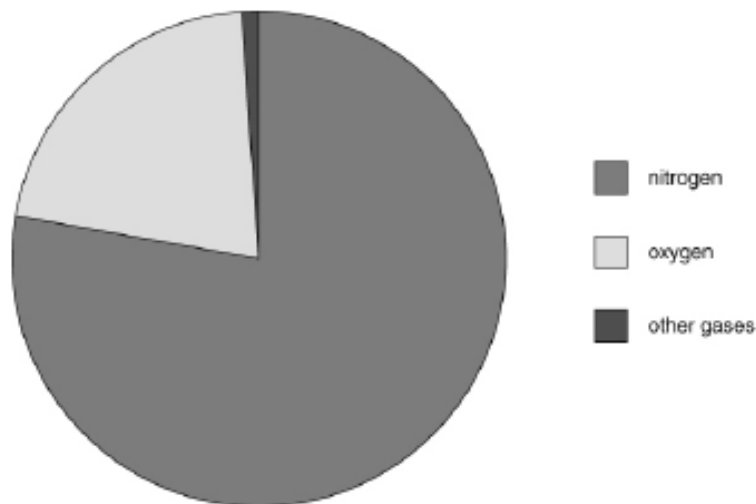
Scatter graphs – look for relationships between quantitative variables.

Pie charts – shows proportions of a total.

Note: Qualitative data = words. Quantitative data = numbers.

Discrete data = only certain number values.

Gases in air	%
nitrogen	78
oxygen	21
other gases	1



Pie chart of gases in air

Science – 7K

Forces

Forces are pushes or pulls. Forces can:

- change the shape or size of an object
- change the speed things are moving (make them move faster or slower)
- change the direction of a moving object.

The unit for measuring force is the **newton (N)**.

Friction is a force caused by two things rubbing together. **Air resistance** and **water resistance** are kinds of friction.

Solid things, like your chair, push up on you when you sit on them. Upwards forces from water or air are called **upthrust**. Things float in water because of upthrust.

Contact forces only act when two objects or materials are touching. Examples of contact forces are:

- friction
- air resistance
- water resistance
- upthrust.

Some forces can have an effect without objects touching. They are called **non-contact forces**. There are three non-contact forces:

- **magnetism**
- **gravity**
- **static electricity.**

Weight and mass

Your **mass** is the amount of substance in your body. Your mass is measured in **kilograms (kg)**. Your **weight** is a force caused by gravity pulling on your body. The newton (N) is the scientific unit used to measure forces, and so it is also used as the unit for weight.

Wherever you take an object, its mass will not change but its weight depends on the force of gravity. An object on the Moon would have a smaller weight than on Earth, because the Moon's gravity is not as strong as Earth's.

Measuring forces

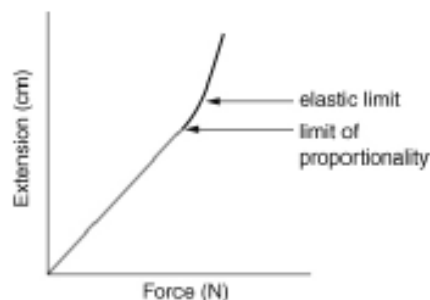
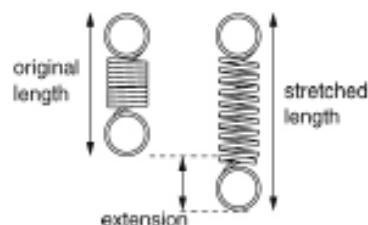
Elastic materials will stretch with a force and then return to their original shape when the force is taken away. Springs are elastic. The **extension** of a spring is the difference between its original length and its stretched length.

The extension of a spring is **proportional** to the force on it. This is called **Hooke's Law**.

If the spring is stretched too far, the extension stops being proportional to the force. If it is stretched even further, it goes beyond its **elastic limit**. The spring will no longer return to its original length when the force is removed.

Force meters have springs inside them.

Materials like Plasticine® will stretch with a force but they will not return to their original shape afterwards. Plasticine® is a **plastic material**.



Science – 7K

Friction

Friction is a contact force. Friction can:

- slow things down
- produce heat
- wear things away
- cause a noise.

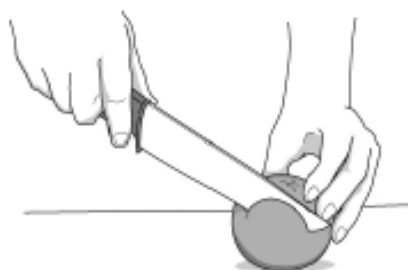
Friction can be increased by using rough surfaces, or by using materials such as rubber that have a lot of friction.

Friction can be reduced by using smooth surfaces, or by lubrication. Oil and grease are examples of lubricants, and help things to move past each other easily.

Pressure

Pressure is the amount of force pushing on a certain area.

For a certain area, the bigger the force, the bigger the pressure. For a certain force, the bigger the area, the smaller the pressure.



Sharp knife – a small area giving a large pressure.

Snow shoes – a large area giving a small pressure.

We can work out the pressure under an object using this formula:

$$\text{pressure} = \text{force} \div \text{area}$$

Balanced and unbalanced forces

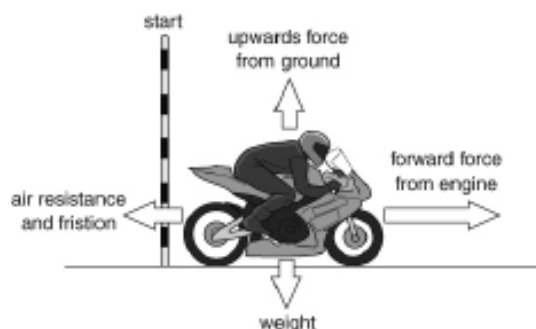
Balanced forces are forces on an object that are the same size but work in opposite directions.

If forces are balanced:

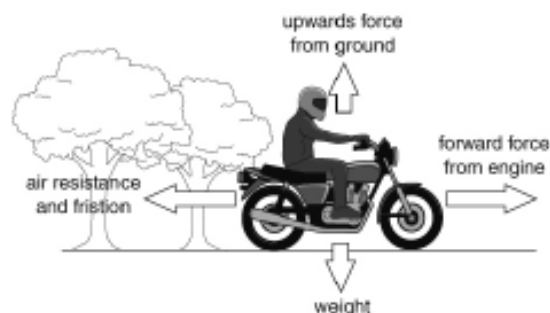
- a stationary object stays stationary
- a moving object continues to move at the same speed and in the same direction.

If there are **unbalanced** forces on an object:

- a stationary object will start to move
- a moving object will change its speed or direction.



Unbalanced forces – the motorbike will speed up.



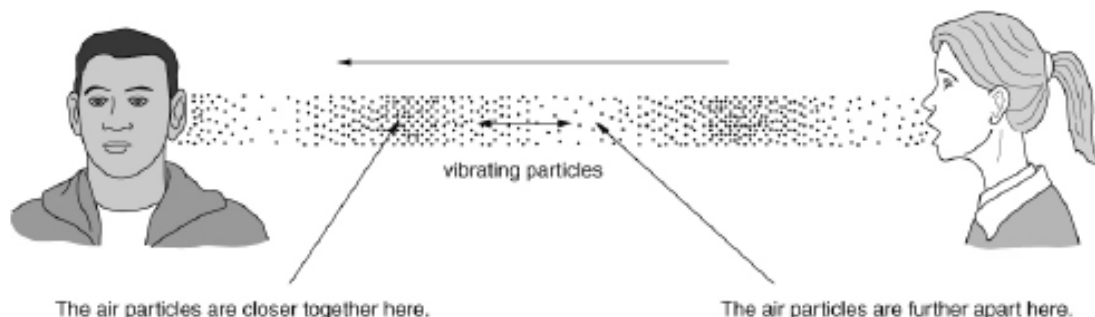
Balanced forces – the motorbike will continue to move at a steady speed.

A car or motorbike uses the energy stored in fuel to move at a steady speed because it needs a force from the engine to balance the forces of air resistance and friction.

Science – 7L

Sound vibrations and waves

Sound is a way of transferring energy. Sounds are made when things **vibrate**. The vibrations are passed on by **particles**. Sound therefore needs a **medium** (substance) to pass on the vibrations, so it can travel through solids, liquids and gases but not through empty space.



The speed of sound is usually faster through materials in which particles are closer together. Closer particles hit each other more easily and so the energy is more likely to be passed from one particle to the next. Sound travels faster in solids than in liquids, and it travels slowest in gases.

Frequency and amplitude

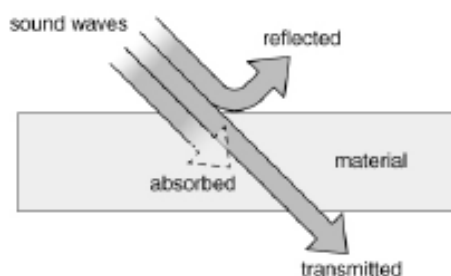
The **frequency** of a sound wave is the number of complete waves passing a point each second. The unit of frequency is the **hertz (Hz)**. **Pitch** is how high or low a sound is. High frequency sounds have a high pitch.

The **amplitude** of a wave is how far the particles move as the vibrations pass. The larger the amplitude, the louder the sound. The loudness of a sound is also described as the **volume** or the **intensity** of the sound.

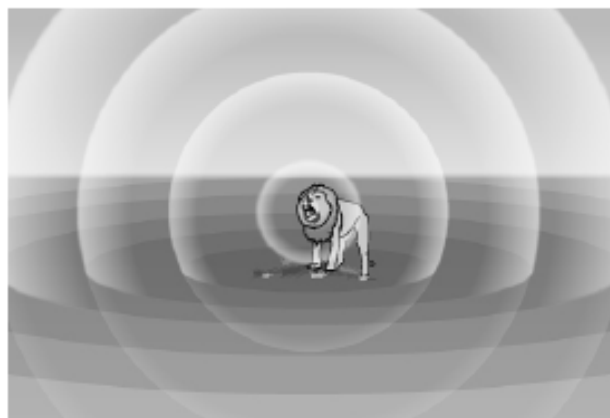
The loudness of a sound is measured using a **sound intensity meter**. The units are **decibels (dB)**.

Absorbing, reflecting and transmitting

Sound waves can be **reflected** by a material. This usually happens if the material is hard. Soft materials **absorb** some of the sound that reaches them, and **transmit** only a little.



When a sound wave moves energy from one place to another, we say that the energy has been **transferred**. The energy spreads out in all directions because the particles move in all directions unless something stops them. This means that the intensity of a sound gets less as you get further from its source.

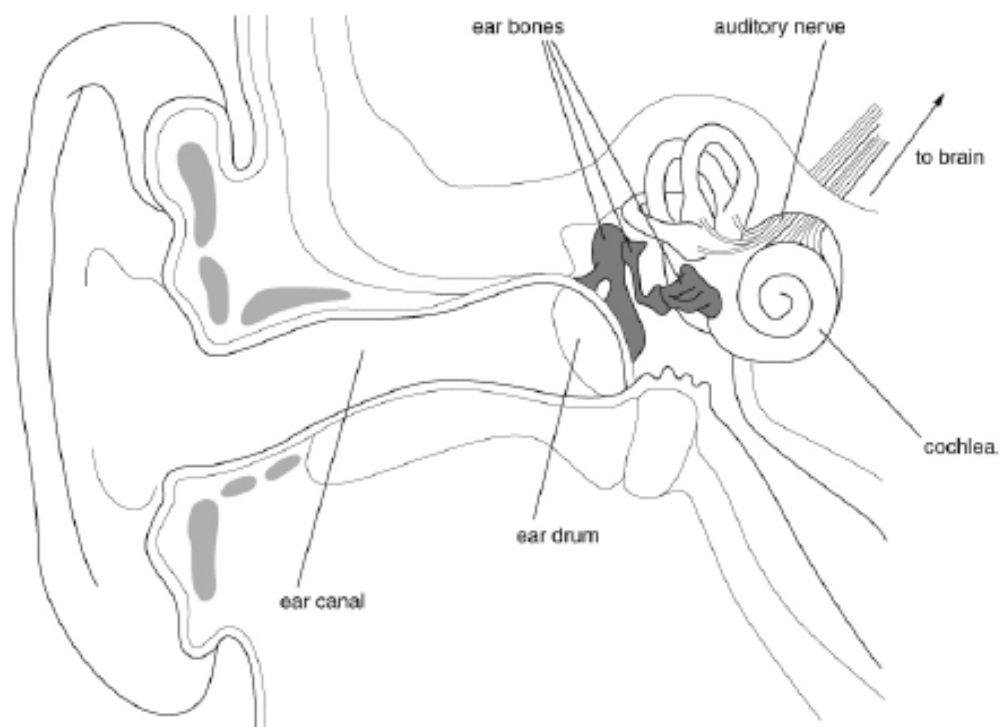


Science – 7L

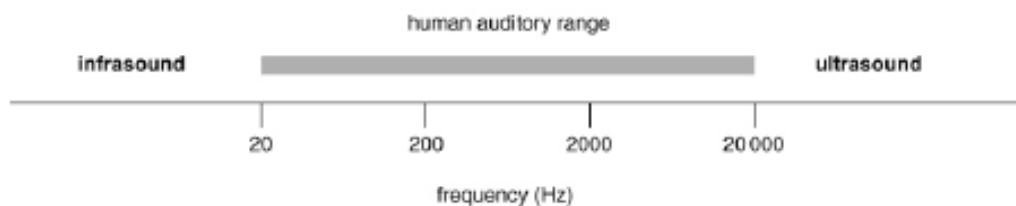
Ears and hearing

Sound is detected by ears and microphones. In a **microphone**, sound waves make a **diaphragm** vibrate, and electronics are used to convert the vibrations into changes in an electrical current.

Ears work in a similar way. Sound waves make the **eardrum** vibrate. The vibrations are passed on by three small **ear bones**, which also **amplify** the vibrations (make them bigger). The vibrations pass on to the liquid inside the **cochlea**, where tiny hairs detect them and send **impulses** along the **auditory nerve** to the brain.



The **auditory range** of an animal is the range of frequencies of sound it can hear. Animals such as bats and dolphins can hear **ultrasounds** (sounds with frequencies greater than 20 000 Hz). Some animals can hear **infrasounds** (frequencies less than 20 Hz).



Uses of sound

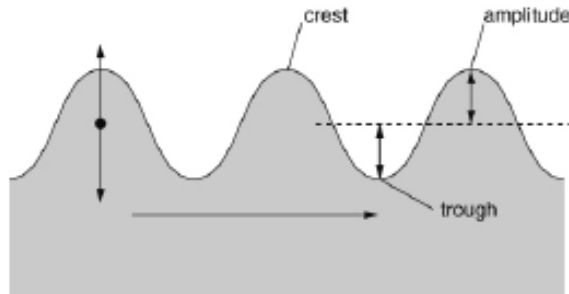
- Humans and other animals use sound for communication.
- Some animals, such as bats and dolphins, use ultrasound to locate prey and avoid obstacles.
- Humans use ultrasound in sonar, to find the depth of the sea or locate fish or submarines.
- Humans use the energy transferred by ultrasound to clean delicate objects (such as jewellery) or in physiotherapy (to relieve pain or aid healing).

Science – 7L

Comparing waves

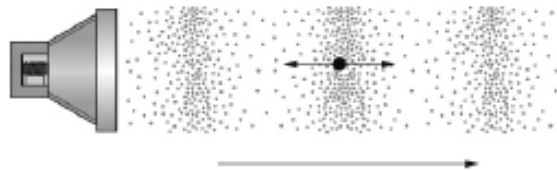
Transverse waves

- waves on the surface of water
- particles vibrate at right angles to direction wave is travelling



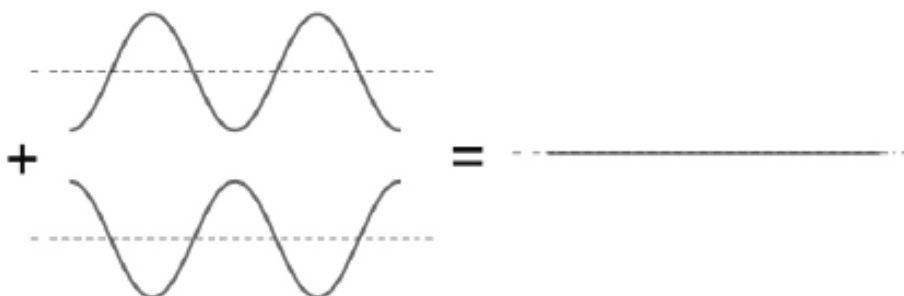
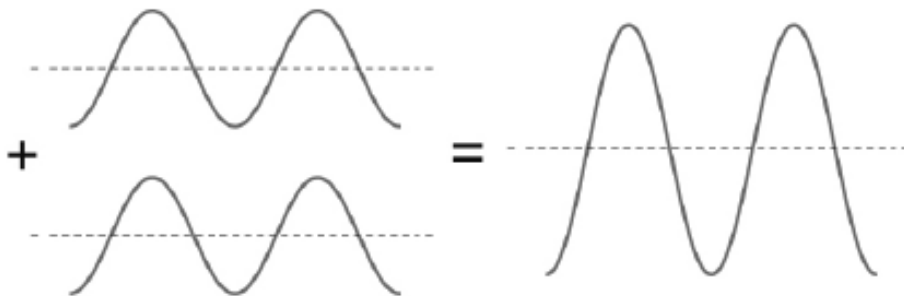
Longitudinal waves

- sound waves
- particles vibrate in same direction as wave travels



All waves

- transfer energy without transferring matter
- can be reflected, transmitted and absorbed
- can affect other waves by **superposition**, when their effects can add up or cancel out.





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

Oracy @ Wadham School

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



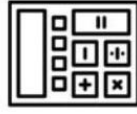
Pencil



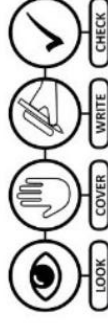
Purple Pen



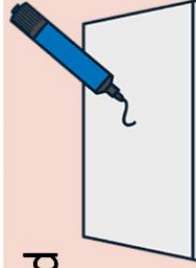
Calculator



Knowledge Organiser



Mini-Whiteboard



Whiteboard Pen

