



PUDSEY
GRAMMAR SCHOOL
EST.1905

KNOWLEDGE ORGANISER

YEAR 7

Student Name:

Year and Form:



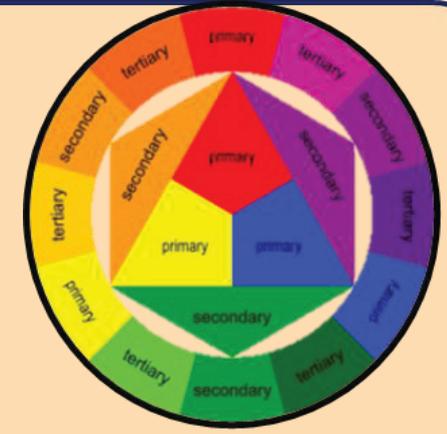
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Colour Theory & Formal Elements

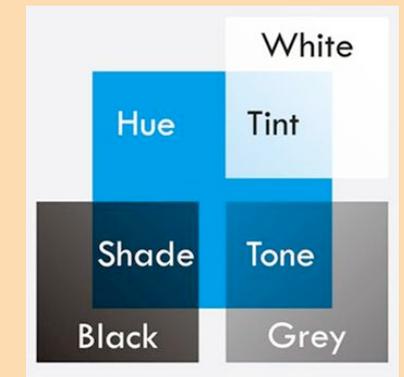
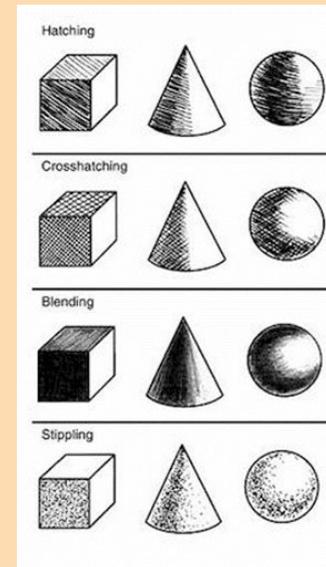
Formal Elements	The parts used to make a piece of artwork.
Line	Line is the path left by a moving point. For example, a pencil or a brush dipped in paint. A line can be horizontal, diagonal or curved and can also change length.
Shape	A shape is an area enclosed by a line. It could be just an outline or it could be shaded in. Shapes can be geometric or irregular .
Form	Form is a three dimensional shape , such as a cube, sphere or cone. Sculpture and 3D design are about creating forms.
Tone	This refers to the lightness or darkness of something. This could be a shade or how dark or light a colour appears. Tones are created by the way light falls on a 3D object. The parts of the object on which the light is strongest are called highlights and the darker areas are called shadows .
Texture	This is to do with the surface quality of something, the way something feels or looks like it feels. There are two types of texture: Actual texture really exists, so you can feel it or touch it; Visual texture is created using marks to represent actual texture.
Pattern	A design that is created by repeating lines, shapes, tones or colour's. The design used to create a pattern is often referred to as a motif . Motifs can be simple shapes or complex arrangements.
Colour	Red, yellow and blue are primary colour's , which means they can't be mixed using any other colour's. In theory, all other colour's can be mixed from these three colour's.

- **Tertiary colours** are created by mixing a primary colour and the secondary colour next to it on the colour wheel.
- Colours that are next to each other on the colour wheel are called **harmonious**.
- **Complementary** colours are colours that are **opposite** each other on the colour wheel. When complementary colours are used together they create **contrast**. Adding a colour's complimentary colour will usually make a darker shade. This is often preferable to adding black.
- **Warm colours** are colours on the red side of the wheel. These are red and include orange, yellow and browns.
- **Cool colours** are colours on the blue side of the wheel. These are blue and include green, purple and most greys



Primary	Secondary
red + yellow	=orange
red + blue	=purple
blue + yellow	=green

Tint = Colour + White
 Tone = Colour + Grey
 Shade = Colour + Black





Van Gogh

Van Gogh Key facts

Vincent Van Gogh produced more than 1,000 of these works (in addition to his 870 paintings, 150 water colour's and 133 letter sketches) throughout the course of his ten year career as an artist.

The Starry Night is one of the most recognized paintings in the history of Western culture

Van Gogh translated his view of the world in his drawings.

He tries to sincerely express his compassion for their way of life.

He focuses on fringes of society (homeless/poverty)

People who have to work hard for their living, in humble workshops and on farmlands in all weathers.

Painted the same view 21 times at different times of the day and different weather conditions to create the painting The Starry Night

23 December 1888 Van Gogh had a breakdown that resulted in the self-mutilation of his left ear. May 1889 Van Gogh voluntarily admitted himself into the asylum which only looked after wealthy people. It was half-full allowing him to occupy not only a second-story bedroom but also a ground-floor room for use as a painting studio.



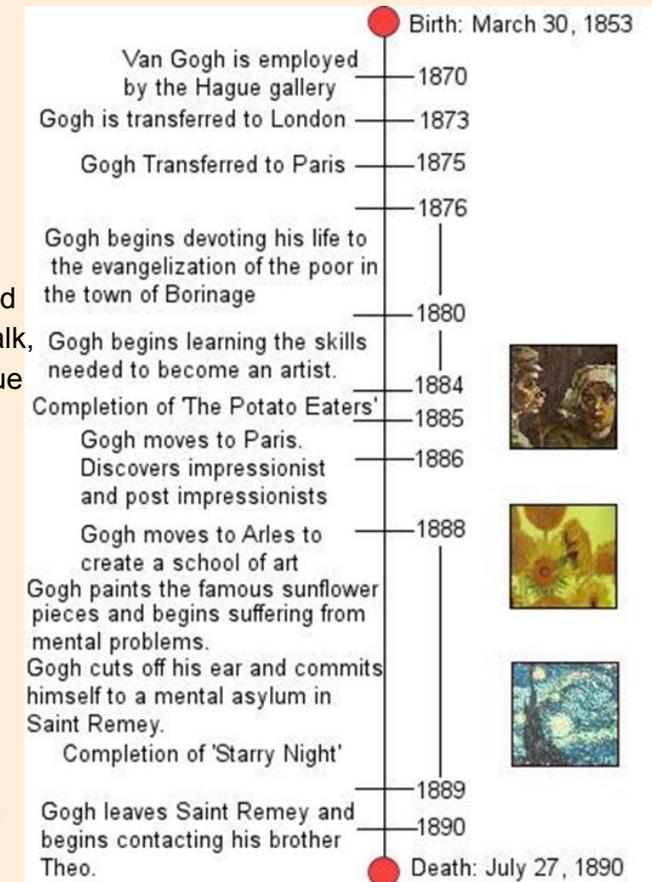
Carpenter's yard and laundry. drawing on laid paper in late May 1882, using pencil, black chalk, pen and brush in black ink, brown wash, opaque watercolour and scratching.



The Starry Night. Oil-on-canvas. Painted in June 1889, just before sunrise, with the addition of an imaginary village. Located in Saint-Rémy-de-Provence, Belonging to the Post-Impressionist movement

The Starry Night is on display in New York at the museum of modern art since 1941.

The planet Venus was visible from his bedroom. The brightest star in the painting is Venus.



Van Gogh Vocabulary

Exaggerated-enlarged or altered beyond normal proportions.

Luminous-giving off light; bright or shining.

Emotive- arousing or able to arouse intense feeling.

Emotion- Feeling

Vibrant- (of colour) bright and striking.

Gestural- expression of mark making.

Gesture- express (something) with a gesture or gestures.



Key Vocabulary	Definition
Silkscreen printing	the process of pressing ink through a stencilled mesh screen to create a <i>printed</i> design
Lithography	the process of printing from a smooth surface, for example a metal plate
Commercial art	art used in advertising and selling
Composition	The layout, the arrangement of elements or objects within a work of art.



Andy Warhol

Andy Warhol was born on the 6th August 1928 in Pittsburgh, Pennsylvania, United States

In 1961 Warhol came up with the concept of using mass-produced commercial goods in his art. He called it Pop Art. His soup cans are famous examples of this type of art.

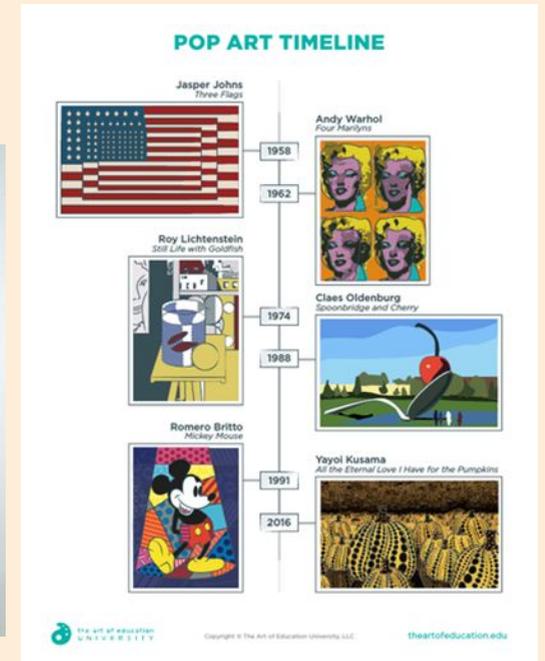
Pop Art is an art movement that emerged in the 1950s and flourished in the 1960s in America and Britain, inspired by popular and commercial culture. That's why it is called Pop Art!

What you are likely to see in Pop Art;

- Bright colours
- Onomatopoeia (Pow! Bang! Wow!...)
- Ben Day Dots
- Recognisable imagery such as celebrities or brands
- Innovative techniques e.g printing or mixed media collage

Roy Lichtenstein

1923 – 1997 was an American pop artist. During the 1960s, along with Andy Warhol. He was Inspired by the comic strip, His work was influenced by popular advertising and the comic book style.





Introduction to Computer Basics & E Safety

eSafety	Keyboard Shortcuts		Username and Email Address																								
<p>What is cyberbullying? Cyberbullying is when a person or people use mobile phones, social networks, emails, gaming or any digital technology to threaten, tease or humiliate someone else.</p> <p>Online Grooming is when an adult builds a relationship with a child through social networks or online gaming. They can pretend to be a child at first to gain their trust before they get the child to send them inappropriate images or even try to physically meet them.</p> <p>What is fake news? Fake news is news or stories on the internet that are not true. There are two kinds of fake news:</p> <p>False stories that are deliberately published or sent around, in order to make people believe something untrue or to get lots of people to visit a website. These are deliberate lies that are put online.</p> <p>Stories that may have some truth to them, but they're not completely accurate. This is because the people writing them - for example, journalists or bloggers – don't check all of the facts before publishing the story, or they might exaggerate some of it.</p> <p>Don't feed the trolls Internet Trolls join discussions to irritate other people, for what they see as fun.</p> <ul style="list-style-type: none"> • Don't engage in conversation with them, just ignore them! • Don't make your private data public • Don't make information about you public. • Thieves can target you or your home easily. • Don't get involved in hurtful comments <p>Many people post comments intended to upset others, think before you post/re-post comments targeting someone else, think how you would feel if it was about you!</p>	<p>Control Key (Ctrl)</p> <p>Hold this key down while pressing another key to perform a shortcut command.</p> <p>Ctrl + C Copy Ctrl + V Paste Ctrl + X Cut Ctrl + Z Undo</p> <p>Screenshot Windows PC Chromebook</p> <p>↑+ +S  Ctrl + ↑+  (Copy to Clipboard)</p>	<p>Username Your username will be the first 6 letters of your last name, plus your first initial and then 01. e.g. Simon Thompson will be: thomps01</p> <p>Email Your email address will be your username from above and then @pudseygrammar.co.uk e.g. thomps01@pudseygrammar.co.uk</p>																									
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Key vocabulary		Magnetic Storage
CPU	The central processing unit is computer hardware. It executes programs and manages all other hardware in the computer system.	<p>Up to 4Tb in capacity (4 million thick books)</p> <p>Spindle rotates the magnetic disks</p> <p>Main spindle</p> <p>Head 0</p> <p>Side 0</p> <p>Platter 1 (has sides 0-1)</p> <p>Arm for head 1</p> <p>Arms move read/write Heads over the platters</p> <p>Data stored on magnetic disks (platters)</p> <p>Read/Write heads access and add data to the platters</p> <p>Head 2</p>
Clock Speed	The number of instructions a processor can carry out each second.	
Cores	A processing unit found inside the CPU. Multiple programs can work in parallel to each other.	
Cache	Quick access memory inside the CPU. Generally comes in small quantities, as it is expensive to produce. Comes in levels, as the level becomes higher, access speed slows down.	
RAM	Random Access Memory is volatile memory used to store data and instructions which are needed by the CPU. Also referred to as main memory.	Solid State Storage
ROM	Read only memory. Used to store the boot sequence as this should never be changed. This memory is non- volatile.	<p>Microchip containing the transistors which 'symbolise' 1's and 0's (Computer data)</p> <p>Up to 1TB in capacity (1 million thick books)</p> <p>Much smaller in size compared to hard disk drives, magnetic tape and CD's/DVD's.</p> <p>No moving parts meaning less energy needed and more robust.</p>
Volatile	Storage which needs to have power to store data. If power is lost, data is lost.	
Non-Volatile	Storage which does not lose its contents when the power is lost.	
Secondary Storage	A non-volatile storage medium which stores files and programs. Examples include the hard drive (HDD) and solid state drives (SSD).	
Magnetic Devices	Magnetic disks are read and written to with a moving head inside the disk drive. They often contain moving parts and are susceptible to damage. Magnetic devices can be either internal or portable.	
Solid State Devices	SSD has no moving parts. It retains an electronic charge using logic gates. Examples include SD cards and USB memory sticks. Also referred to as flash storage.	



Alan Turing and Enigma Machine

Born: 23 June 1912, Maida Vale, London

Died: 7 June 1954, Wilmslow (Age 41)

Education

School: Sherborne School

University:

University of Cambridge (BA, MA)

Princeton University (PhD)

Specialist Fields

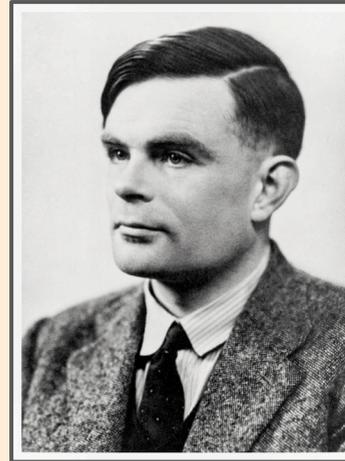
Logic

Mathematics

Cryptanalysis

Computer science

Voted the **Greatest Briton of the 20th Century**
Known as the **Father of Computing**



Bombe Code Breaking Machine



Service During WW2

Code Breaker at Bletchley Park

Designed and built the Bombe code breaking machine to help break the German Enigma code machine. Alan Turing's work, along with the other codebreakers at Bletchley Park, was predicted to have shortened WW2 by up to 2 years, saving countless lives.

Research after WW2

After WW2 ended Alan Turing began working on the design of the ACE (Automatic Computing Engine) at the **National Physical Laboratory (NPL)** in London. This was one of the very first stored-program computers. He then moved to the **University of Manchester** where he worked on software for one of the earliest stored-program computers, the Manchester Mark 1.

Turing developed a test which tested a machine's ability to exhibit intelligent behaviour equivalent to, or indistinguishable from, that of a human. This was known as the **Turing Test**. Alan developed the idea for the **Universal Turing Machine**, the basis for the first computer. And he developed a test for artificial intelligence in 1950, which is still used today

Death

Alan Turing was homosexual, in a time when this was illegal, he was convicted of having a homosexual relationship with another man in 1952. His security clearance was revoked which, prevented him from working on top secret projects. Alan Turing committed suicide on 7th June 1954. Only in 2009 did the government apologize for his treatment.

"We're sorry — you deserved so much better," said Gordon Brown, then the prime minister. Only in 2013 did Queen Elizabeth II grant Turing a royal pardon, 59 years after a housekeeper found his body at his home at Wilmslow, near Manchester, in northwest England.

The Enigma Machine

Manchester Mark 1 Computer





Design and Technology

Key Equipment



Coping Saw – Used for cutting curves and hard to reach places in wood and acrylic



Drill Bit – Used for drilling holes in wood, acrylic and soft metal



Hand File – Used for smoothing rough edges improving accuracy and creating a quality finish on wood, metal and acrylic



Tenon Saw – Used for cutting straight lines in wood



Belt Sander – Used for producing a quality finish and shaping wood and acrylic



MDF - medium density fibreboard

Moisture resistant fibreboard made from wood particles bonded with plastic resin. Paraffin wax is added to provide protection against water and damp.

Annotating Design Work

All design work should be fully annotated. Annotations should include:

- Measurements
- Target audience
- Cost
- Materials
- Equipment and tools
- Manufacturing techniques

Health and Safety

Safety Goggles – worn when using machinery to protect your eyes.

Apron – Worn to protect clothing

Yellow Line – Always stand behind the yellow line when somebody is else is using the equipment

Always tie long hair back to prevent it becoming tangled in pieces of equipment

Never use tools or equipment without permission

Bags in pigeon holes, **stools** stacked neatly when doing practical work so they are not a tripping hazard

Pine Wood (a soft wood) has been used for centuries for house building, furniture and much more. Different Pine species have different colours and properties, they grow faster than hardwood trees, making pine wood less expensive than hardwood.



THERMOPLASTICS	THERMOSETS
(Can be melted repeatedly)	(Once shaped, cannot be melted)

Sustainability	We must act responsibly about the products we consume in order to be able to support the billions of people on this planet forever.
Climate Change	The long-term alteration of temperature and normal weather patterns in a part of the world.
Renewable	Any natural resource (as wood or solar energy) that can be replenished naturally with the passage of time.
Durability	Something continuing to be used without getting damaged.

Plywood is many thin sheets of wood glued together. When layers are put together, at right angles, it produces a sturdy, lightweight product which can be curved.



2D Design – Is a computer package that allows you to produce designs that can then be sent to the laser cutter.

Laser Cutting is a non-contact process which utilizes a **laser** to cut materials, resulting in high quality, dimensionally accurate cuts. The process works by directing the **laser** beam through a nozzle to the work piece. A combination of heat and pressure creates the **cutting** action.



Textiles

Fibres - A fine hair like structure.



Properties and Characteristics:

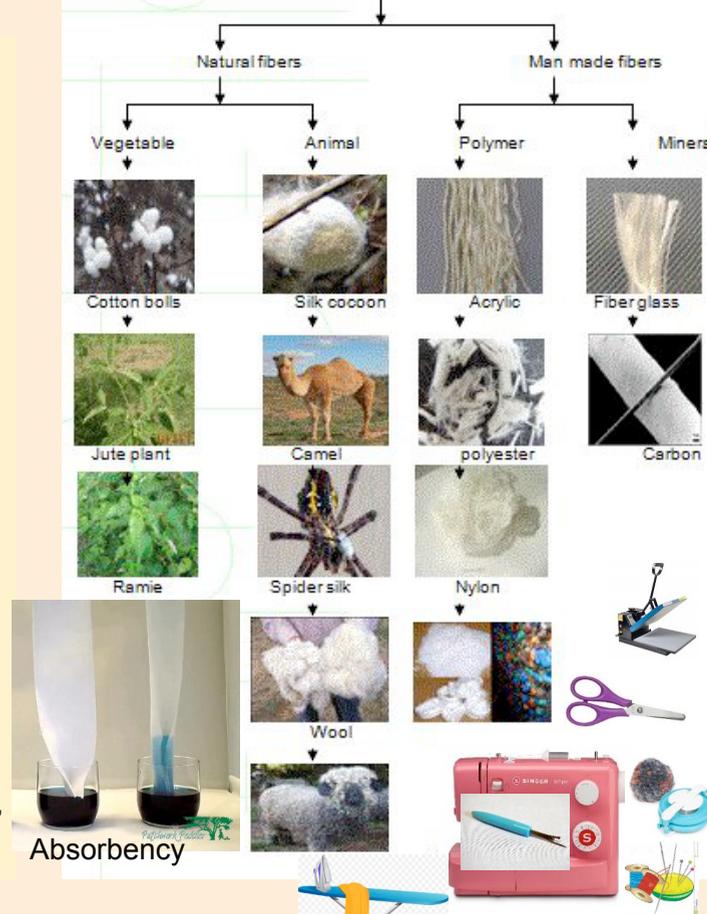
Cotton - is the seed of a plant. It is cellulose, it is absorbent so soaks up the tie dye, iron with a hot iron as it creases easily, soft to touch

Polyester - used for Transfer Printing as the Polyester is easy to print on with heat. It is easy to iron and does not crease easily, it is not absorbent and is ideal for sport shirts as it does not absorb the sweat.

Equipment: Needle, pin, un picker, scissors, sewing machine, heat press, iron and ironing board, scissors,

Technical terms:

Pinning	Pins hold fabric in place. This is called pinning.
Tack & Tacking	Using a needle and thread to hand stitch/tack fabric in place. It is a temporary stitch, it is removed after using the sewing machine.
Machine & Machining	Using a sewing machine to permanently sew a product together. This is called machining.
Resist method & Tie dye	Tie bands or thread around cotton fabric, this stops the dye(resisting it) from getting to the fibre. This creates the pattern, this is called tie dye.
Printing	Printing is when a design is created and transferred onto a fabric.



Environmental	We must act responsibly about the products we consume in order to be able to support the billions of people on this planet forever
Recycling	The process of taking materials ready to be thrown away and converting (changing) them into reusable materials
Biodegradable	Breaks down or decays naturally without any special treatment

Health, Safety and Hygiene

1. Individual and group,
2. Safe use of equipment,
3. Safe manipulation of materials,
4. Product is safe for the user.

10 Amazing facts and uses of Bamboo

1. **Tree or Grass?**
Bamboo is not a plant or tree, it is a grass. It grows in most places in the world.
2. **Food**
Pandas eat bamboo shoots
3. **Mythology**
Some cultures believe humans were born from bamboo stems
4. **Human food**
Bamboo shoots are used in human foods and are used a lot in Chinese stir fry
5. **Paper**
It is one of the strongest papers and very eco friendly. It is easy to make
6. **Constructions & Flooring**
Houses can be built using bamboo, bamboo flooring is better than wooden flooring
7. **War Equipment**
Bamboo was made into equipment such as bows, cannons and swords
8. **Bamboo Clothes**
Clothes can be made out of bamboo, it is said to have antibacterial properties
9. **Health**
Medicines made from bamboo can be used to treat Diabetes, Cancer, Skin diseases etc.
10. **Products**
Any kind of product can be made using bamboo, from tea cups to tables, to musical instruments etc.

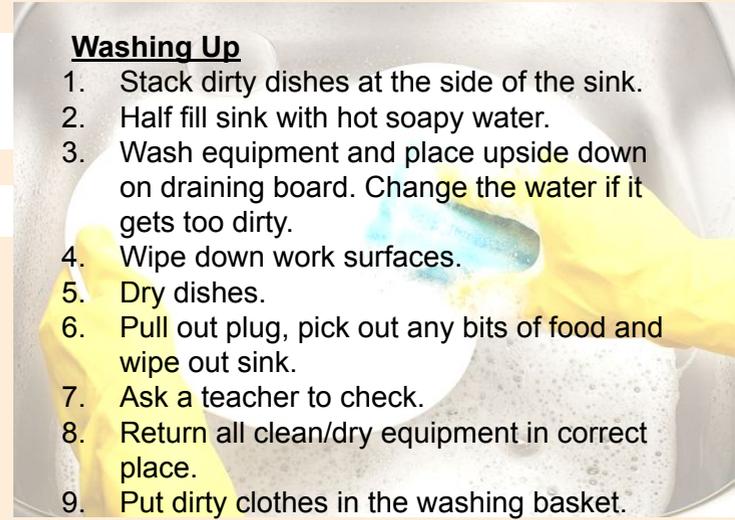
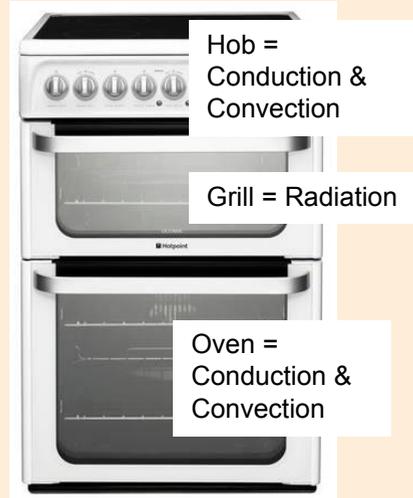




Food Preparation and Nutrition

	Grater To grate cheese or vegetables.		Measuring Jug To measure a liquid.
	Cooling Rack To place hot baked goods on, to cool them down.		Chopping Board To chop food ON, protects the surface.
	Rolling Pin Used to roll out a dough.		Wooden Spoon Used to mix / stir foods.
	Muffin Tray Used to bake cupcakes / muffins in.		Peeler To peel the skin off vegetables or fruits.
	Saucepan Used for boiling water, making soups / sauces.		Colander To drain water from pasta or vegetables or to wash fruit.
	Tin Opener To open a tin which doesn't have a ring pull.		Weighing Scales Used to weigh food ingredients.

Fair Trade	Producers receive a fair price for the goods that they produce.
Food Miles	The distance between the place where food is grown or made and the place where it is eaten.
Carbon Footprint	The amount of carbon dioxide released into the air because of your own energy needs.
Seasonality	The times of year when a given type food/fibre is at its peak, either in terms of harvest or its flavour.



Washing Up

1. Stack dirty dishes at the side of the sink.
2. Half fill sink with hot soapy water.
3. Wash equipment and place upside down on draining board. Change the water if it gets too dirty.
4. Wipe down work surfaces.
5. Dry dishes.
6. Pull out plug, pick out any bits of food and wipe out sink.
7. Ask a teacher to check.
8. Return all clean/dry equipment in correct place.
9. Put dirty clothes in the washing basket.

Heat Transfer Methods

There are **three methods** of heat transfer we use when using the oven.

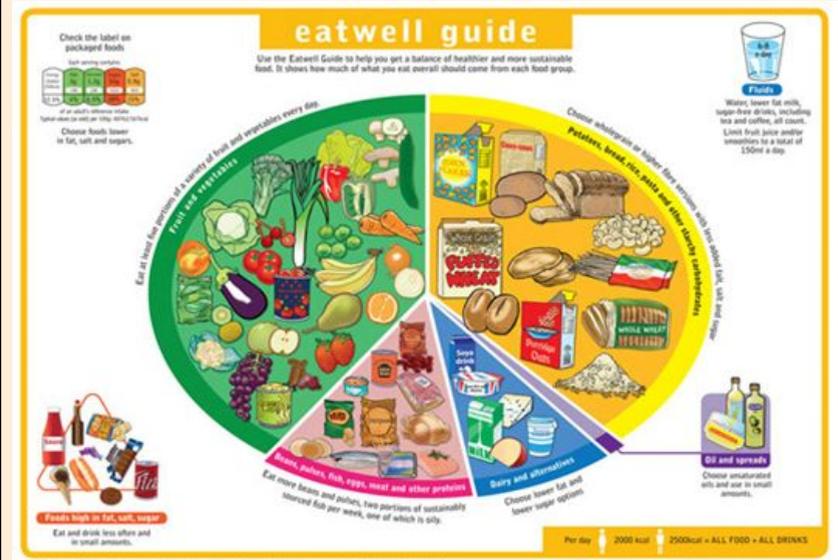
Conduction: transferring heat through a solid object into food.

Convection: transferring heat through liquid or air into food.

Radiation: when heat rays directly warm and cook food. Heat travels from one place to another.

Personal Hygiene

- Hair is tied up or in a hair net
- No jewellery
- Cover all wounds with a blue plaster
- Wear a clean apron
- Nails should be short and clean
- Remove blazer and jumper





Key knowledge

Key Word	Definition
Accepting	Accepting the situation and characters in the story
Actor	The person playing a role
Audience	The people watching the drama
Blocking	Saying "No" to ideas and stopping the drama moving forward.
Context	The situation or circumstances in which a piece of drama is set or devised, including historical, cultural or social influences. In simple terms: Who? What? Why? Where? & When?
Devise	To create performance from a stimulus
Entrances and Exits	The way an actor enters the stage and leaves the stage during a performance. This must be done in character.
Evaluation	To reflect on the performance, commenting on the strengths and areas for improvement
Improvisation	Making up the drama as you go along!

Key knowledge

Key Word	Definition
Levels	To show the status of the character through actors being at different heights
Linear Structure	When a story has a beginning, middle and end in chronological order.
Line learning	The process of memorising and remembering what your character says in a scene or play
Non-verbal Communication	How we can communicate with other actors or the audience without speaking
Persuasive Language	Language used to convince someone to do or think something you want them to
Performance Intention	What impact you want the overall performance to have on the audience

Key knowledge

Key Word	Definition
Prop	An item or object used by an actor on stage
Rehearsal:	To practise your performance until it is a polished performance
Scene intention	What you want the audience to learn/know/feel during this scene
Stage Directions	An instruction in the text of a play indicating the movement, position, or tone of an actor, or the sound effects and lighting
Status	The assumed importance of a character based on their wealth, power and importance
Spontaneous Improvisation	Having no planning time before beginning to improvise and perform
Stereotype	A generalised belief about a particular category of people
Stimulus	A starting point for devising Drama



KEY DRAMA VOCABULARY



Characterisation Skills

Key Word	Definition
Character	The role the actor plays
Body Language	How you communicate your character's emotions through the use of your body
Character Intention	What you want the audience to think or feel about your character
Facial Expressions	How you communicate your character's emotion using your face
Gestures	Movements of a particular body part, often the hand, to display meaning
Physicality	How actors use their facial expressions, body language, walk and stance to show emotion, characteristics and age of their character
Red cross	An actor facing forward so the audience can see their facial expression and body language
Proxemics	The distance between the actor & actor, actor & audience or actor and object and what that communicates
Staying in role	Staying in role for the whole performance
Corpsing	Laughing, talking or breaking role when performing

Characterisation Skills

Key Word	Definition
Vocal skills	The way you use your voice to communicate your character's emotions.
Accent	The way you speak based on where you're from e.g. Scouse accent from Liverpool
Articulation	Clear and precise speech ensuring letters are clear
Projection	To speak loudly and clearly without shouting
Pace	The speed at which you talk e.g rushing and speaking quickly if you character is excited or scared
Volume	How loudly or quietly you speak

Drama Conventions

Key Word	Definition
Cliffhanger	Is an unexpected ending that leaves the audience wanting to know more
Ensemble	A group of actors/people performing together
Hot seating	Actors are asked questions while in character to develop a deeper understanding of their characters personality and thoughts
Slow-motion	A choreographed moment where the actors make it look like time is moving slowly. It is a great way of highlighting important or dramatic moments
Spoken thought	The character tells the audience their thoughts at that moment
Still image	Creating a picture to represent a frozen moment or sum up what's happening in the drama



Rhetorical language is how we **form our arguments, shape our views and put across our ideas in a convincing way.**

The Aristotelian Triad

Form

Purpose

Aristotle outlined that an effective **persuasive argument** must contain these **three elements to be successful:**

Speech

Speaking formally to an audience. A speech will open using a powerful image, anecdote or pose a question to the audience.

Action

The purpose of a piece of writing could be to demand that action be taken to change or stop something happening.



Poem

Poems are a form of literature that can be used to share ideas or opinions about society. Polemic poetry is used to create a debate or highlight a problem.

Motivation

Motivating people is to make them feel enthusiastic or driven to believe an idea, or to take action. It may be that the speaker or writer is trying to give people hope or an optimistic outlook.

Key Vocabulary

Key rhetorical devices

Alliteration	Repeating the same sound at the start of consecutive words
Anecdote	A short amusing or interesting story about a real incident or person.
Anaphora	Starting each sentence with the same words
Direct Address	Use of a proper noun (you) to address the audience.
Dialysis	Presenting an alternative argument

Ethos	Convincing an audience of the reliable character or credibility of the speaker/writer, or the credibility of the argument. (e.g. Buy my old car because I am Jeremy Clarkson')
Pathos	A way of convincing an audience of an argument by creating an emotional response (e.g. Buy my old car as I'm selling it to pay for vets' bills of this cute little kitten')
Logos	An appeal to logic, and is a way of persuading an audience by reason. (e.g. Buy my old car because yours is broken)
Invention	The content of your speech and drawing together of evidence
Arrangement	The order of your speech



Animal Farm

<p>Karl Marx</p> <p>Marx was a German philosopher who came up with the theory which underpins communism.</p>	<p>Russian Revolution</p> <p>Russian Revolution in 1917: Tsar Nicolas was killed, and the country stopped being a monarchy. The country eventually became the world's first Communist state.</p>	<p>Trotsky</p> <p>Trotsky: a leader in Russia's October Revolution in 1917. He was a communist.</p>	<p>Joseph Stalin</p> <p>The dictator of the USSR from 1929 to 1953. Under Stalin, the Soviet Union was transformed from a peasant society into an industrial and military superpower. However, he ruled by terror, and millions of his own citizens died during his brutal reign.</p>	<p>George Orwell</p> <p>Orwell was an English writer and a committed socialist. He wrote the novel 'Animal Farm' as a political fable based on the Russian Revolution.</p>
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	Skill	Definition	Example
Word Level	Noun	Common to refer to an everyday thing or proper which refers to a specific thing	'pig', 'dog', 'Napoleon', 'Orwell'.
Word Level	Verb	A word describing an action or state	'plotted', 'thought', 'ran'.
Word Level	Adjective	A descriptive word used to modify a noun	'The greedy pig'
Word Level	Adverb	Gives additional information about a verb	'She walked slowly .'
Word Level	Personal pronoun	Replaces people, places or things in a sentence	'He', 'she', 'they', 'them'
Word Level	Conjunction	Used to link clauses	'and', 'but', 'so', 'despite', 'because'
Word Level	Root word	A word that has no other elements affixed to it and from which other words can grow	'act' could become 'active' or 'inactive'.
Sentence Level	Declarative	A sentence that is a statement	'Boxer was tired.'
Sentence Level	Imperative	A sentence that is a command	'Bring me the food.'
Sentence Level	Interrogative	A sentence that is a question	'Could you bring that over here?'
Sentence Level	Exclamatory	A sentence that is an exclamation	'Boxer was exhausted!'



Animal Farm

Vocabulary	Definition	Utopia	An imagined place where everything is perfect
Communism	A way of organising society where all property and resources are owned by the community	Allegory	A story, poem, or picture that can be interpreted to reveal a hidden meaning, typically a moral or political one
Dictatorship	A place ruled by a dictator - a person who has total power and rules by force	Cyclical	Something occurring in cycles

	Skill	Definition	Example
Sentence Level	Simple sentence	A sentence made up of one main clause	'Boxer worked hard.'
Sentence Level	Compound sentence	A sentence made up of two main clauses	'Boxer worked hard and he was tired.'
Punctuation	Commas	Used to separate words, phrases and clauses in a sentence or used to separate items in a list	'Unhappy with Napoleon, Snowball took charge.' 'The pigs took the apples, grain and beer.'
Whole Text Level	Structure of a speech	Greeting to audience, introduction, main topic paragraphs, conclusion and sign off	'Good afternoon ladies and gentlemen.' 'Thank you for listening'.
Literary Device	Satire	The use of humour, irony or exaggeration, to expose and criticize people's stupidity	'All animals are equal, but some animals are more equal than others'.
Literary Device	Allegory	A story, poem, or picture that can be interpreted to reveal a hidden meaning, typically a moral or political one	'Animal Farm' is an allegory for communist Russia.
Literary Device	Motif	A repeated image or idea in a text	Repetition of the 'Beasts of England' song
Literary Device	Symbolism	Something representing something else	Each animal represents a figure from Russian history e.g. Napoleon as Stalin.
Literary Device	Propaganda	Information, often misleading, used promote a political cause or point of view	The sheep repeat 'four legs good, two legs bad'.



Vocabulary	Definition
Subvert	To undermine something or do it differently
Metaphor	Something that represents something else
Propaganda	Information, often misleading, used promote a political cause or point of view
Figurative	Language that is not literal

Sonnet

A poem that is usually 14 lines. Shakespeare's sonnets usually contain three quatrains (four line sections) and a rhyming couplet.

Conscientious Objector

Someone who refuses to fight in a war because of moral or religious beliefs. These men were given white feathers in WW1 to symbolise cowardice.

Pal's Battalions

Units in the army made up of young men from the same town or area.

	Skill	Definition	Example
Sentence Level	Simple sentence	A sentence made up of one main clause	'Shakespeare wrote many famous sonnets.'
Sentence Level	Compound sentence	A sentence made up of two main clauses	'Shakespeare wrote many sonnets and published many plays.'
Sentence Level	Complex sentence	A sentence made up of at least one main clause and one subordinate clause	'Shakespeare's work is still influential despite the fact that it was written almost 500 years ago.'
Whole Text Level	Temporal connectives	Words or phrases used to tell a reader when something is happening	'Earlier', 'Later', 'Afterwards', 'Meanwhile'
Punctuation	Apostrophes	To show possession or contraction	'The soldier's gun,' 'It's cold.'
Literary Device	Repetition	Repetition of a word or phrase for effect	'I wanna be yours, I wanna be yours.'
Literary Device	Metaphor and extended metaphor	Something that represents something else, and can sometimes continue over several lines or stanzas	'I give you an onion.' 'It is a moon wrapped in brown paper'.
Literary Device	Simile	Comparing one thing with another thing of a different kind	'Love is like a summer's day.'
Literary Device	Rhyme	Words that sound the same	'may' and 'day'.
Literary Device	Rhyming couplet	Two lines that occur one after the other and that end with a rhyme	'my love as rare [...] with false compare'



The Gothic and The Ghostly

Vocabulary	Definition	Gothic setting Key features include dark, isolated settings such as castles; extreme landscapes and weather; magic and the supernatural; death, decay and madness; a hero, villain and heroine or femme fatal; horrifying events and evil deeds.	Victorian Ghostly fiction Ghostly stories were popular in the Victorian Era and drew on features of the gothic genre.	Prometheus A character from Greek Mythology who went against the gods and gave fire to humans. As a result, he was tied to a rock and his liver was eaten by an eagle every day. Mary Shelley named her novel 'Frankenstein' or 'The modern Prometheus'.
Gothic	Literary style that uses settings to suggest horror and mystery			
Uncanny	A strange, mysterious or unsettling feeling			
Hysteria	Uncontrollable emotion or excitement			
Supernatural	Something that cannot be explained rationally			

	Skill	Definition	Example
Word Level	Adjective	A descriptive word used to modify a noun	'The mysterious castle'
Word Level	Verb	A word describing an action or state	'run', 'hide', 'explore'
Word Level	Adverb	A word used to add description to a verb	'She walked nervously '
Sentence Level	Repetition	Repetition of a word or phrase within a sentence for a particular effect	'Fog covered the fields. Fog covered the streets.'
Whole Text Level	Narrative structure	Exposition, rising action, climax, falling action, resolution	'The Red Room' climax is the night the narrator spends in the room; resolution is the ending.
Punctuation	Semi-colon	Used to link two main clauses	'The day was hot; the boy was tired.'
Punctuation	Dashes	Used to add extra linked information and as a way of showing parentheses (a word or phrase used to show explanation or an afterthought)	'After hours of deliberation, the child came to a decision – hide the key.'
Punctuation	Speech	Words spoken sit inside speech marks, along with punctuation.	"What time is it?" the girl asked.'
Literary Device	Narrative perspective	The point of view of a character in a text	I crept cautiously towards the gate.
Literary Device	Semantic field	A set of words or ideas linked by meaning	Semantic field of fear - 'nervous', 'shiver', 'crept'
Literary Device	Tense change	A deliberate change in tense part way through a narrative	'I ran forward [...] I'm on my feet again'.



A Midsummer Night's Dream

William Shakespeare

- Shakespeare was born 26 April 1564, Stratford.
- Shakespeare had three children with his wife, Anne Hathaway.
- Shakespeare wrote 38 plays and 154 sonnets, including 'Romeo and Juliet', 'Macbeth' and 'Hamlet'.
- Shakespeare was part of a theatre company called Lord Chamberlain's Men.
- Shakespeare died on 23 April 1616, aged 52.

Key Characters

Hermia - Egeus's daughter who is in love with Lysander

Lysander - In love with Hermia. Runs off into the forest with her

Helena - Hermia's friend who is in love with Demetrius

Demetrius - Wants to marry Hermia and is disgusted with Helena's love for him

Egeus - Hermia's stubborn father who wants her to marry Demetrius or be put to death

	Skill	Definition	Example
Word Level	Preposition	A word giving information about time, manner or place	'After', 'Next', 'Later', 'In', 'Over', 'By'
Word Level	Mental verb	A verb related to a thought or feeling.	'think', 'feel', 'care'.
Word Level	Direct address	Directly addressing a reader by using the second person pronoun 'you'	'You can see many impressive buildings.'
Sentence Level	Expanded noun phrase	A noun phrase with pre-modifying adjectives	'The huge theatre'
Sentence Level	Active voice	The subject of the sentence performs the action on the object	'She chased them.'
Sentence Level	Passive voice	The subject undergoes the action of the verb.	'They were chased by her.'
Sentence Level	Rhetorical question	A question asked in order to create a dramatic effect or to make a point.	'How can this still be happening?'
Whole Text Level	Structure of a leaflet	Main title, subheaded sections, topic sentences	Title - 'Shakespeare's Globe' Subheading - 'The Stage'
Whole Text Level	Topic sentence	A sentence at the start of a paragraph that introduces the main topic of the paragraph	'The Globe Theatre was built in 1598.'

A Midsummer Night's Dream



Vocabulary	Definition
Monarchy	A form of government with a monarch (King or Queen) at the head
Connotation	An idea or feeling evoked by a word

Patriarchy	A system of society or government in which men hold the power and women are largely excluded from it
Unrequited	Not returned - often used to describe love

	Skill	Definition	Example
Punctuation	Exclamation mark	Used to convey excitement, anger or surprise	'She took it from me!'
Punctuation	Commas to separate dates	Use a comma before a date	'July, 1542'
Punctuation	Brackets	Used to convey additional information	'Puck (the naughty fairy) made a mistake.'
Literary Device	Imagery	Figurative language used to represent something in a play, story or poem	Lysander says, 'Who will not change a raven for a dove?'
Literary Device	Iambic pentameter	A line of verse with five metrical feet, each consisting of one short (or unstressed) syllable followed by one long (or stressed) syllable	'Two households, both alike in dignity.'
Literary Device	Trochaic tetrameter	A line of verse with four trochees (a stressed syllable followed by an unstressed syllable)	'Double double toil and trouble/ fire burn and cauldron bubble'.
Literary Device	Soliloquy	Speaking one's thoughts aloud when by oneself or regardless of any hearers, especially by a character in a play	'Full of vexation come I, with complaint against my child'



What is a Geographer?

The continents	
North America	<p>Location: North America is located in the northern hemisphere and is north of South America.</p> <p>The Alaskan Pipeline: The 1002 lands has high amounts of oil underground. It is also part of the Arctic National Wildlife Refuge and is an area of wilderness.</p>
South America	<p>Location: South America is located on and south of the equator. Other than Antarctica, no other continent stretches so far south.</p> <p>Tourism: The Galapagos Islands have more than 275,000 visitors per year, mainly to see the unique landscapes and species.</p>
Europe	<p>Location: Europe is located directly north of Africa and is west of Asia.</p> <p>Svalbard: Svalbard is a group of islands belonging to Norway. They are internationally important as they hold the world's largest seed vault which can be used in times of crisis.</p>
Africa	<p>Location: Africa is located on the equator and stretches further north than the Tropic of Cancer and further south than the Tropic of Capricorn. It is south of Europe.</p> <p>Gorillas in the DRC: Gorillas are at risk of extinction in the Democratic Republic of Congo as their habitat is being destroyed. The forests are being cut down so a mineral called Coltan, found in mobile phones, can be mined.</p>
Asia	<p>Location: Asia is mostly located in the northern hemisphere and is found to the east of Europe.</p> <p>Population: Much of Asia is currently experiencing rural to urban migration - the movement of people from the countryside to cities in search of a better way of life.</p>
Oceania	<p>Location: Oceania is located in the southern hemisphere and is south east of Asia.</p> <p>The Great Barrier Reef: The Great Barrier Reef is under threat from coral bleaching - a process where the coral dies and leaves the skeleton behind. This is happening due to increasing sea temperatures.</p>
Antarctica	<p>Location: Antarctica is the southernmost continent in the world and is home to the South Pole.</p> <p>Threats: Antarctica is currently under threat due to climate change, tourism and resource extraction.</p>



Globalisation & Rivers

Globalisation - key terms

Manufacturing: Making things from raw materials (part of the secondary sector).
Tourism: People travelling to countries or places outside of their usual environment for pleasure.
Globalisation: The interaction of people, goods, ideas, and money worldwide.

Sectors of the economy

Primary Sector
 Extracting natural resources from the land and sea. The jobs in this sector involve farmers, miners, fishing and lumberjacks.

Secondary Sector
 Making things (manufacturing) from the raw materials. Jobs include factory workers, builders of houses and infrastructure.

Quaternary Sector
 Involves research and development. It involves high level skills and expertise to develop medicines and new technology.

Tertiary Sector
 Providing a service to another person. Examples of this are shop assistants, teachers and delivery drivers. It is the most common sector of the economy.

Rivers - key terms

Erosion: The wearing away of rocks, sediment and soil by other materials and water.
Transportation: Material being moved from one location to another either by bouncing/rolling along the river bed or being suspended in the water.
Deposition: The process where a river drops its load due to a lack of energy
Drainage basin: An area of land drained by a river and its tributaries.
Sustainability: Meeting the needs of today without compromising the needs of future generations.

Features of a river

Upper course	Middle course	Lower course
<ul style="list-style-type: none"> • The steepest and shallowest part of a river • Large, jagged boulders • Waterfalls are found here 	<ul style="list-style-type: none"> • The river is gradually getting deeper and wider in this section • Meanders and floodplains are found here • Smaller pebbles 	<ul style="list-style-type: none"> • The widest part of a river • Fine sediment and material • The deepest part of a river • The mouth is found here



Weather and Climate & Plastics in our Ocean

Weather & climate - key terms	
Weather: The state of the air and atmosphere at a particular time and place.	
Depressions: A depression is an area of low pressure which moves from west to east in the northern hemisphere.	
Distribution: The way in which something is spread out over an area.	
Climate zone: Areas with distinct climates, usually separated from others by latitude.	

Extreme weather case studies	
<p>Storm Dennis</p> <p>Impacts:</p> <ul style="list-style-type: none"> • In total, four people died • Damage to homes and businesses cost between £175 and £225 million • Landslides occurred in Wales <p>Responses:</p> <ul style="list-style-type: none"> • The army were deployed to help areas affected by flooding • A record number of flood warnings were issued on the Sunday. By midday, the total was 594! 	<p>Beast from the East</p> <p>Impacts:</p> <ul style="list-style-type: none"> • 10 deaths were linked to the cold and snow • Thousands of schools were closed for more than one day • Supermarkets across the UK ran out of food <p>Responses:</p> <ul style="list-style-type: none"> • The Met office issued red weather warnings to prevent unnecessary travel • Red cross issued blankets to people stranded at Glasgow airport

Where are the Oceans?



Plastics in the ocean

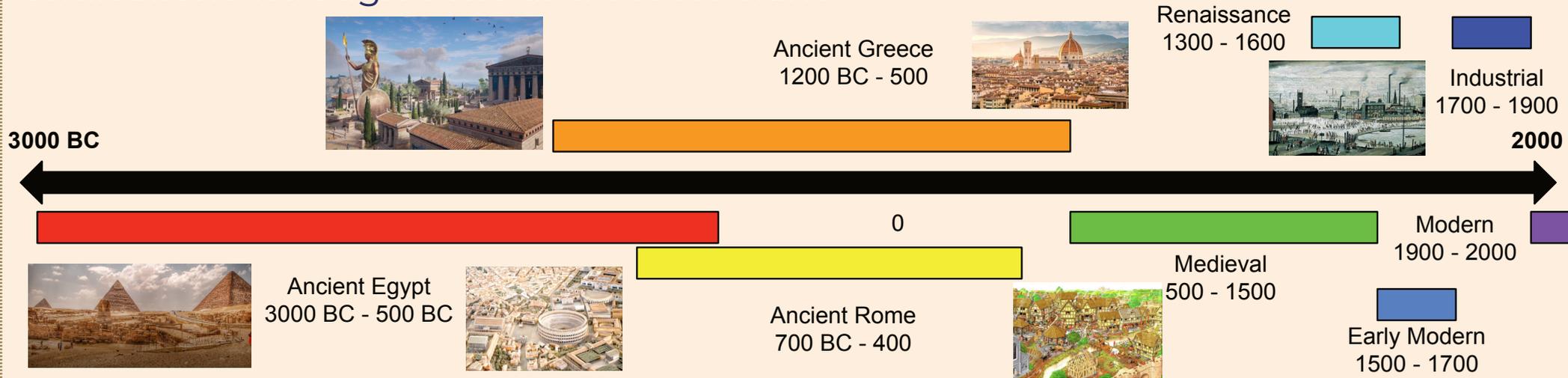
At least 14 million tons of plastic end up in the ocean every year, and plastic makes up 80% of all marine debris found from surface waters to deep-sea sediments. Marine species ingest or are entangled by plastic debris, which causes severe injuries and death.

Impacts of plastic pollution

In the ocean, **plastic debris injures and kills fish, seabirds and marine mammals**. Marine plastic pollution has impacted at least 267 species worldwide, including 86% of all sea turtle species, 44% of all seabird species and 43% of all marine mammal species.



Civilisations Through Time and the Romans



The Romans

Key Concepts

- i. **Republic** - Before rule by an Emperor, Rome was ruled by Consuls & Senators. These individuals were elected by the people and handled issues such as warfare, the economy and public health.
- ii. **Dictatorship** – Emperors like Julius Caesar governed Rome from a position of individual power. All power was held by one person, however they did have advisors and counselors to support them.
- iii. **Democracy** – Democracy is a system which allows power and some forms of equality to be obtained by the people. In a democracy the people are given the power to vote for who represents them within the government.

Water Technology - Aqueducts and public baths improved management of water



Empire - The Roman empire stretched from Africa to Europe



Knowledge - Public libraries helped with the spread of knowledge

Legacy of the Romans



Public Health - Sewers and better sanitation made Britain a cleaner safer place



Growth of Parliament and the Industrial Revolution



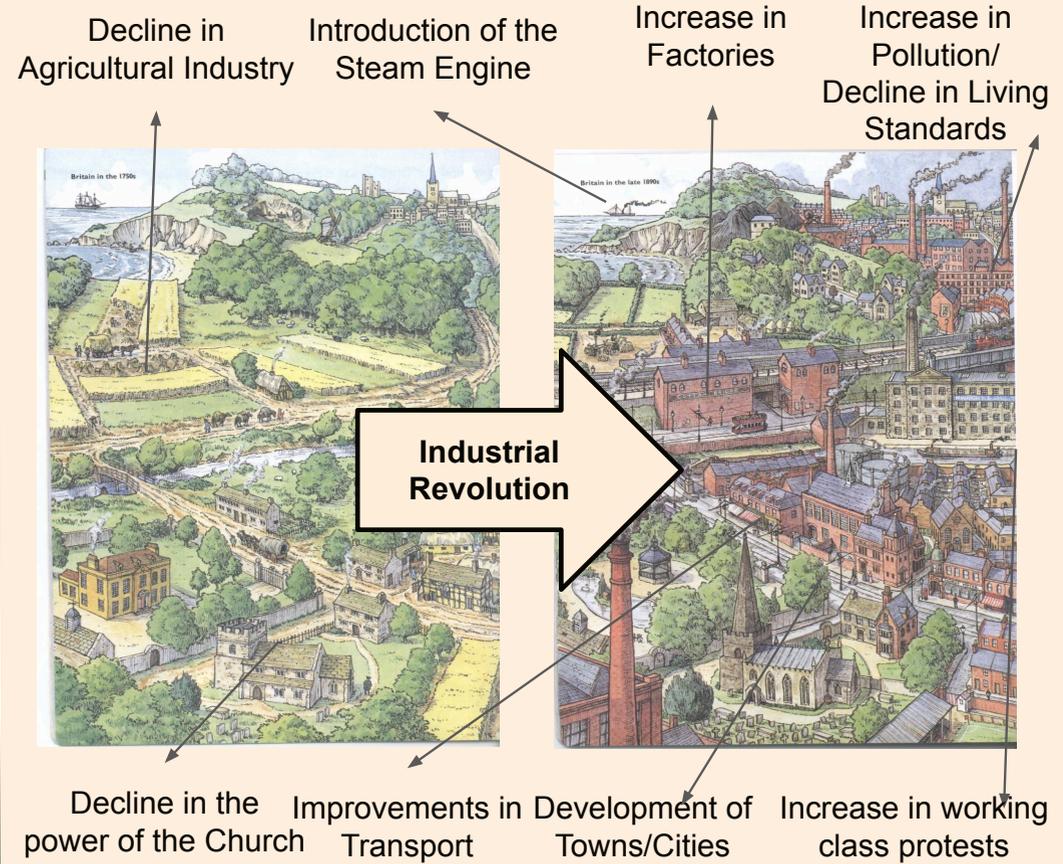
Execution of Charles I (30/6/1649)



The World turned Upside Down

Key Terms:

- Civil War:** A conflict fought between two or more sides in the same country. The English Civil War occurred from 1642-1651
- Regicide:** The action of killing a Monarch.
- Charles I:** King of England during the English Civil War (1625-1649)
- Oliver Cromwell:** Lord Protector of England during the Republic (1653-1658).
- Divine Right of Kings:** The Monarch holds God's authority and is unchallengeable.
- Parliament:** The Government of the UK which passes laws. This is made up of two sections: the House of Commons and the House of Lords.



Key Term:
Industrial revolution: A period (1700-1900) in which there was rapid technological development and urbanisation (movement of the population from countryside to city) which caused key economic and social changes.



Norman Conquest, Life in Medieval Towns and the Tudors

William defeated Harald at the Battle of Stamford Bridge. The turning point was Harald's men being tricked by the bridge



Harald Hardrada King of Norway - Invaded in 1066



Harold Godwinson - English - King in 1066



William the Conqueror - Invaded from France - crowned King of England in 1066

William defeated Harold at the Battle of Hastings. Harold's men were tired after travelling South from Stamford Bridge. William's men were well positioned and Harold was killed in battle.

The King often visited towns but used the nobles to control them

Medieval towns were often put near rivers and good farmland

The rich or nobles would live in larger manor houses



Animals roamed the towns freely. Most were sold at market

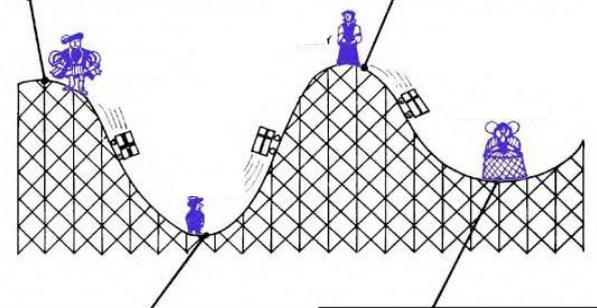
The Church was central to most towns and were well built with stone

Houses were not well built so dirt and disease was easily spread

Henry VIII
 Changed from Catholic to Protestant.
 Got rid of the Power of the Pope.
 Led the Church of England.

Mary I
 Very strict Catholic
 Changed England back to Catholic
 Burnt anyone who refused to change

CATHOLIC



PROTESTANT

Edward VI
 Very Strict Protestant
 Continued the Protestant changes of Henry VIII
 Removed colour from the church

Elizabeth I
 Protestant
 Tried to find a compromise between the two religions
 Passed the 'Religious Settlement'

Key Terms:

Catholic- A form of Christianity which encourages the glorification of God and the accumulation of wealth. It was led by the Pope.

Protestant- A form of Christianity which emerged in the wake of the Reformation and encourages a simpler and more personal relationship with God. It was led by the country's Monarch

Reformation- The term given to the 16th century break up of the Church into Catholicism and Protestantism

Heresy- A crime against the Church

Algebraic Thinking



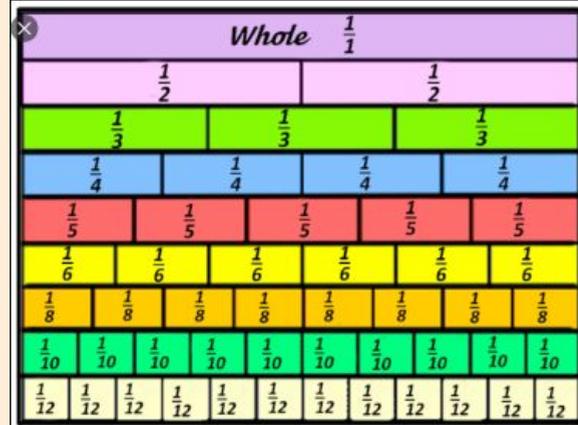
Sequence	items or numbers put in a pre-decided order	Inverse	the operation that undoes what was done by the previous operation. (The opposite operation)
Term	a single number or variable	Commutative	the order of the operations do not matter.
Position	the place something is located	Substitute	replace one variable with a number or new variable.
Rule	instructions that relate two variables	Expression	a maths sentence with a minimum of two numbers and at least one math operation (no equals sign)
Linear	the difference between terms increases or decreases by the same value each time	Evaluate	work out the answer
Non-Linear	the difference between terms increases or decreases in different amounts	Coefficient	a multiplicative factor in front of a variable e.g. $5x$ (5 is the coefficient, x is the variable)
Difference	the gap between two terms	Equality	two expressions that have the same value
Arithmetic	a sequence where the difference between the terms is constant	Equation	a mathematical statement that two things are equal
Geometric	a sequence where each term is found by multiplying the previous one by a fixed non zero number	Equals	represented by '=' symbol – means the same
Function	a relationship that instructs how to get from an input to an output.	Solution	the set or value that satisfies the equation
Input	the number/ symbol put into a function.	Solve	to find the solution.
Output	the number/ expression that comes out of a function.	Like	variables that are the same are 'like'
Operation	a mathematical process		

Place Value and Proportion



Approximate	To estimate a number, amount or total often using rounding of numbers to make them easier to calculate with	Fraction	how many parts of a whole we have
Integer	a whole number that is positive or negative	Decimal	a number with a decimal point used to separate ones, tenths, hundredths etc.
Interval	between two points or values	Percentage	a proportion of a whole represented as a number between 0 and 100
Median	A measure of central tendency (middle, average) found by putting all the data values in order and finding the middle value of the list.	Tenth	one whole split into 10 equal parts
Placeholder	We use 0 as a place holder to show that there are none of a particular place in a number	Hundredth	one whole split into 100 equal parts
Place value	The value of a digit depending on its place in a number. In our decimal number system, each place is 10 times bigger than the place to its right	Significant figure	A digit that gives meaning to a number. The most significant digit (figure) in an integer is the number on the left. The most significant digit in a decimal fraction is the first non-zero number after the decimal point.
Range	The difference between the largest and smallest numbers in a set	Recurring:	a decimal that repeats in a given pattern

Billions			Millions			Thousands			Ones		
H	T	O	H	T	O	H	T	O	H	T	O
		3	1	4	8	0	3	3	0	2	9



Application of Number

Commutative	changing the order of the operations does not change the result	Mili	prefix meaning one thousandth
Associative	when you add or multiply you can do so regardless of how the numbers are grouped	Centi	prefix meaning one hundredth
Inverse	the operation that undoes what was done by the previous operation. (The opposite operation)	Kilo	prefix meaning multiply by 1000
Placeholder	a number that occupies a position to give value	Quotient	the result of a division
Perimeter	the distance/ length around a 2D object	Dividend	the number being divided
Polygon	a 2D shape made with straight lines	Divisor	the number we divide by
Balance	in financial questions – the amount of money in a bank account	Fraction	how many parts of a whole we have
Credit	money that goes into a bank account	Equivalent	of equal value
Debit	money that leaves a bank account	Whole	a number with no fractional or decimal part
Array	an arrangement of items to represent concepts in rows or columns	Percentage	parts per 100 (uses the % symbol)
Multiples	found by multiplying any number by positive integers	Place Value	the value of a digit depending on its place in a number. In our decimal number system, each place is 10 times bigger than the place to its right
Factor	integers that multiply together to get another number.	Convert	change into an equivalent representation, often fraction to decimal to a percentage cycle



Directed Numbers and Fractional Thinking

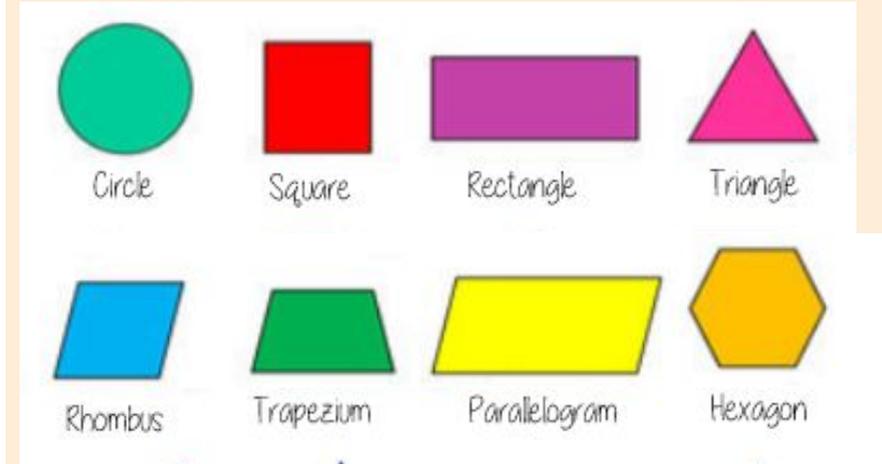
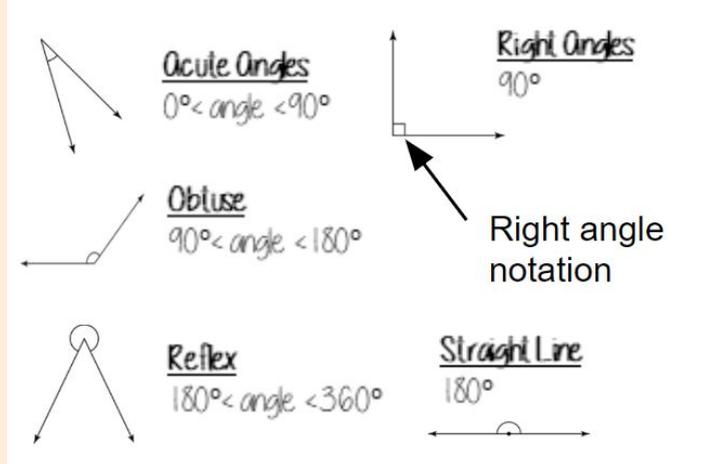


Subtract	Taking away one number from another	Numerator	The number above the line on a fraction. The top number. Represents how many parts are taken
Negative	A value less than zero	Denominator	The number below the line on a fraction. The number represent the total number of parts
Commutative	Changing the order of the operations does not change the result	Equivalent	Of equal value
Product	Multiply terms	Mixed numbers	A number with an integer and a proper fraction
Inverse	The opposite function	Improper fractions	A fraction with a bigger numerator than denominator
Square root	A square root of a number is a number when multiplied by itself give the value ($\sqrt{\quad}$ symbol)	Substitute	Replace a variable with a numerical value
Square	A term multiplied by itself	Place value	The value of a digit depending on its place in a number. In our decimal number system, each place is 10 times bigger than the place to its right
Expression	A maths sentence with minimum of two numbers and at least one math operation (no equals sign)		

Lines and Angles



Polygon	A 2D shape made with straight lines	Protractor	equipment used to measure angles
Scalene triangle	a triangle with all different sides and angles	Compass	equipment used to draw arcs and circles
Isosceles triangle	a triangle with two angles the same size and two angles the same size	Vertically Opposite	Angles formed when two or more straight lines cross at a point
Right-angled triangle	a triangle with a right angle	Interior Angles	Angles inside the shape
Frequency	the number of times a data value occurs	Sum	Total, add all the interior angles together
Sector	part of a circle made by two radii touching the centre	Convex Quadrilateral	A four-sided polygon where every interior angle is less than 180°
Rotation	turn in a given direction	Concave Quadrilateral	A four-sided polygon where one interior angle exceeds 180°





Commutative	Changing the order of the operations does not change the result	Probability	Likelihood of an event happening
Associative	When you add or multiply you can do so regardless of how the numbers are grouped	Bias	A built-in error that makes all values wrong (unequal) by a certain amount, eg a weighted dice
Dividend	The number being divided	Fair	There is zero bias, and all outcomes have an equal likelihood
Divisor	The number we divide by.	Random	Something that happens by chance and is unable to be predicted
Expression	A maths sentence with a minimum of two numbers and at least one math operation (no equals sign)	Multiples	Found by multiplying any number by positive integers
Equation	A mathematical statement that two things are equal	Factor	Integers that multiply together to get another number
Quotient	The result of a division	Prime	An integer with only two factors
Set	Collection of things	Conjecture	A statement that might be true (based on reasoning) but is not proven
Element	Each item in a set is called an element	Counter example	A special type of example that disproves a statement
Intersection	The overlapping part of a venn diagram (AND \cap)	HCF	Highest common factor (biggest factor two or more numbers and at least one maths operation (no equals sign))
Union	Two ellipses that join (or \cup)	LCM	Lowest common multiple (the first time the times table of two or more numbers match)
Mutually Exclusive	Events that do not occur at the same time		



What people have & what people are

Verb **être** (to be, being)
je suis- I am **tu es**- you are
Il est -he is **elle est** - she is
 (you can use **est** by itself to mean 'is')

Use with the verb être
 français(e) - French
 petit(e) - small malade- ill
 content(e) - happy
 anglais(e)- English
 grand(e) - tall triste- sad
 Amusant - funny calme-calm
 méchant(e) - mean
 Un prof- a teacher
 Sympa - nice/kind
 Drôle - funny
 Un homme - a man
 Une femme - a woman
 Un chanteur- a singer (m)
 Une chanteuse- a singer (f)
 Un ami - a friend (m)
 Une amie- a friend (f)
 un/le garçon - a/the boy
 un/le mot - a/the word
 un/le médecin - a/the doctor

Subject pronouns

Je- I
 Tu- you
 Il- he
 Elle- she

Articles

Un - a (m)
 Une - a (f)
 Le - the (m)
 La - the (m)
 Les- the (pl)

Using à - at/to

Je reste à l'école - I stay at school
 Luc donne un cadeau à Marie - Luc gives a gift to Marie

Verb **avoir** (to have, having) **J'ai**- I have
tu as- you have **il a** - he has **elle a** - she has

Use with the verb **avoir** une idée- an idea
 un chien- a dog un animal - an animal bon - good
 une chambre- a bedroom une règle - a ruler
 Une chose- a thing un portable - a mobile 'phone
 Un rêve- a dream la vague- the wave
 comme - like/as

Describing nouns

Many adjectives come after the noun, for example:

un ordinateur modern- a modern computer
 Une voiture rapide- a fast car voici - here is
 Un vélo cher - an expensive bike bleu(e) - blue
 jaune- yellow rouge - red vert(e)- green

Verb **faire** (to do, doing) **je fais** - I do/make
tu fais - you do/make **Il fait** - he does/makes
elle fait - she does/makes

Use with the verb **faire**: ça- that l'activité - the activity
 La cuisine - the cooking les courses - the shopping
 Le lit- the bed le ménage- the housework
 Les devoirs- homework quoi? - what?

Other high frequency verbs (long forms)

Écouter - to listen, listening
 Écrire- to write, writing
 Lire- to read, reading
 Porter - to wear
 Trouver - to find
 Parler- to speak, speaking
 When there are 2 verbs in a sentence the 2nd is in the long form Eg: J'aime parler- I like to speak

ER verbs (remove ER from the long form)

To say I (je), he (il) and she (elle) the verb must end in **e**
 To say you (tu) the verb must end in **es**
 To say they (ils/elles) the verb must end in **ent**.



[Link to Y7 phonics/SSCs](#)



Family and location

Verb **être** (to be, being)
je suis- I am **tu es**- you are
Il est -he is **elle est** - she is
Nous sommes - we are
Vous êtes- you all are
Ils sont - they are (masc)
Elles sont - they are (fem)

To describe more than one thing add 's'
 Vous êtes français - you are all French
 Ils/elles sont jeunes - they are young

Describing family

ma/la/une soeur- my/the/a sister
 mes/les parents- my/the parents
 mon/le/un frère - my/the/a brother
 Sage- wise/well behaved
 Stricte - strict grand(e)- tall
 ouvert(e) - open
 Jeune- young

Verb **avoir** (to have, having) **J'ai**- I have
tu as- you have **il a** - he has **elle a** - she has
Nous avons - we have **vous avez** - you all have
Ils ont - they have (masc) **elles ont** -they have (fem)
 (remember the s is not silent if followed by a vowel)

Saying what people have un enfant - a child(m)
 une enfant- a child (fe) la famille - the family
 Le problème- the problem difficile - difficult ici-here

Verb **faire** (to do, doing) **je fais** - I do/make
tu fais - you do/make **Il fait** - he does/makes
elle fait - she does/makes **nous faisons** - we do/make
Vous faites - you all do/make **ils font** -they do (masc)
Elles font - they do (fem)

Saying what people do/make une liste - a list
 L'attention ' the attention la fête - party
 Le lit - the bed

Talking about belongings

Mon - my (masc) Ma - my (fem) Mes - my (plural)
 Ton - your (masc) Ta - your (fem) Tes- your (plural)
 Son- his/her (masc) Sa - his/her (fem) Ses - his/her (plural)

Verb **aller** (to go/going) **Je vais** - I go/ I am going
tu vas - you go/you're going
Il va- he goes/ he's going
elle va - she goes/she's going
nous allons -we go/we're going
Ils vont/elles vont- they go/they're going

Use with the verb aller au collège- to school
 à la poste - to the post office au parc - to the park
To say 'to' a town/city use à

To say 'to the' and a noun:
Use au if the noun is masculine
Use à la if the noun is feminine
Use à l' if the noun starts with a vowel
Use aux if the noun is plural

Je vais à l'étranger - I go abroad
 Je vais à l'aéroport - I go to the airport
 Je vais aux États-Unis - I go to the USA

Other useful phrases

Je vais **en vacances**- I go on holiday
En Angleterre/France - to England/to France
de/d' - of/from (use d' before a vowel)



Using negatives and talking about the future

The verbs:
apprendre (to learn, learning)
comprendre (to understand, understanding)
Prendre - to take, taking
dire - to say, saying

J'apprends- I learn
Je comprends - I understand
Je prends- I take
Je dis - I say

The verbs **sortir** (to go out, going out) and **venir** (to come, coming)

Je sors - I go out
Tu sors - you go out
il/elle sort- he/she goes out

Je viens- I come
 (venir changes the stem and adds 'i')

Tu viens- you come
il/elle vient- he/she comes
 Je viens de Paris - I come from Paris

Asking questions using inversion
 Swap the subject and the verb (similar to how we say Are you...? Is it...? In English)

Question words
 Combien - how many?
 Que- what (can also mean that)
 Quoi - what (when you make a question by raising your voice)
 Tu fais quoi?- what are you doing?
 Quand - when
 Quand vas-tu en vacances? - when do you go on holiday? Où- where
 quel/quelle - which
 Pourquoi- why

Negative structures (not the same as a negative meaning!)
Ne-pas- not (goes around a verb)
Ne is shortened to **n'** in front of a vowel
 je **ne** suis **pas** - I am not je **n'ai pas** - I don't have

The verb **dormir** (to sleep, sleeping)
Je dors - I sleep **tu dors** - you sleep
Il dort - he's sleeping **elle dort** - she's sleeping

Talking about people's lives arriver - to arrive/arriving Changer - to change/changing
 créer- to create/creating gagner- to win, winning
 habiter - to live/living

Remember take ER off the long form
je + verb = verb ends in e
Tu + verb= verb ends in es
il/elle + verb = verb ends in e

Le monde - the world la politique - politics
 Les vêtements - clothes chez - to/at the place of

Using forms of aller to talk about the future
 (forms of aller on term 2)
Ils vont apprendre l'allemand - they're going to learn German
Nous allons aller en Allemagne - we're going to go to Germany

Modal verbs **pouvoir** (to be able)
devoir (to have to) **Vouloir** (to want)
Je peux - I can **Tu peux**- you can **il peut** he can
Elle peut - she can **Je dois** - I have to/must
tu dois- you have to/must **il/elle doit** - he/she has to/must **je veux** - I want **tu veux** - you want
il/elle veut- he/she wants



Describing people and location

Key verbs

Verb ESTAR [to be, being] for LOCATION
for MOODS
for TEMPORARY STATES

Estoy I am **estás** - you are
Está he/she/it is

Estoy en España. I am in Spain.
Estás en Madrid. You are in Madrid.
Está en Perú. He / she is in Perú.

Use with forms of ESTAR:

Blanco - white listo - ready
Seguro - safe nervioso - nervous
Serio- serious tranquilo - calm
Tonto - silly raro- strange

DAR - to give

Doy - I give das - you give
Da - he/she/it gives

Other key vocabulary

La iglesia - the church la ciudad - the city
La plaza - the square entre - between

Verb SER (to be, being) for CHARACTER
For saying WHAT SOMEONE IS LIKE GENERALLY

Soy I am **eres** you are **es** she/he/it is

Use with forms of SER:

Una opción - an option alegre- cheerful bajo -short
Guapo - good-looking alto - tall simpático - nice

Verb TENER (to have, having)
Also used instead of SER for age.

Tengo I have **tienes** you have **tiene** - he/she/it has

Use with forms of TENER:

Bolígrafo - pen cama - bed casa - house
Cámara - camera bicicleta - bicycle
barco - boat libro - book papel - paper
Moneda - coin gato - cat frase - phrase
Nuevo - new

Una - a (femimine) **un - a (masculine)**
La - the (feminine) **el - the (masculine)**

AR verbs (verbs ENDING in AR)

To mean 'I' with a verb- change ending to 'o'

To mean he/she/it with a verb- change ending to 'a'

Escuchar - to listen
Escucho - I listen
Escucha - he/she/it listens

[Link to Y7 phonics/SSCs](#)



Other key vocabulary

Y- and también - also pero - but
Muy- very hoy - today quiere - he/she wants
¿Cómo se dice en inglés? - how do you say it in English?
¿Cómo se dice en español?- how do you say it in Spanish?



Describing family and saying what people do

Verb TENER (to have, having)

Tengo I have **tienes** you have **tiene** - he/she/it has
Tenemos - we have **tienen** - they have

Adjectives (usually follow noun)
hermosa/o - pretty activo/a - active
Verde - green amarillo/a - yellow
Azul - blue rojo/a- red

AR verbs (verbs ENDING in AR)

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To mean he/she/it with a verb- change ending to 'a'

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Escucho - I listen
Escucha - he/she/it listens

Use with TENER:

El perro - the/a dog
la abuela - the grandmother
El abuelo - the grandfather
El primo - the male cousin
la prima - the female cousin

Saying what people DO

Hacer - to do/to make **hago** - I do/make **Haces** - you do/make
hace- he/she/it does/makes

Use with forms of HACER: la actividad - the activity el deporte - sport

El dibujo - drawing los deberes - homework
Cuándo - when para - for la noche - night la mañana- morning
La tarde - afternoon/evening por la tarde - in the afternoon/evening

Question words:

¿**Dónde?** - where?
¿**Qué?** - what? / which?
¿**Cómo?** - how?
¿**Cuánto?** - how much?
¿**Cuántos/as?** - how many?
¿**Quién(es)?**- who?
¿**Cuál(es)?** - which one?

Verb PODER (to be able/can)

Puedo - I can/I'm able
Puedes - you can / you're able to
Puede - he/she can / he/she is able to

Use with forms of PODER & DEBER

cambiar - to change jugar - to play lavar - to wash limpiar - to clean
Participar- to participate pedir - to ask for preguntar - to ask (question)
el compañero - the classmate (m) la compañera- the classmate (f)
El / un favor - the/a favour el material - the material algo - something
El coche - the car la ropa - the clothes el suelo - the floor si- if
Otro - another aunque - although
Eg: Puedo pedir papel - I can ask for paper debe preparar la comida -
He/she must prepare the food

Verb DEBER (to have to/must)

Debo - I have to/I must
Debes - you have to /must
Debe - he/she has to/must

Talking about LOCATION

Debajo de - under delante de- in front of Detrás de - behind
fuera de - outside of El este - the east el oeste- the west



Describing travel, technology and future plans

Key AR verbs - THEY(add an to the stem)

Verb VIAJAR (to travel, traveling)

Viajo - I travel viajes - you travel
Viaja- he/she travels viajan - they travel

Verb MONTAR (to ride,riding)

Monto - I ride montas - you ride
monta- he/she rides montan- they ride

Talking about possessions

Mi - my (single) Mis - my (plural)
Tu - your (single) Tus - your (plural)

Time expressions and adverbs/conjunctions

Completamente - completely todo- all
Normalmente - normally Sin - without
Cada- each/every de - of/from
Mañana - tomorrow/morning
Siempre- always después - after
Nunca- never a veces - sometimes
Porque - because
Al - to the (masculine)

Use with forms of VIAJAR

a Francia - to France
en julio/agosto - in July/August la montaña - the mountain
a las montañas - to the mountains El mar - the sea al
mar - to the sea las vacaciones - the holidays
Cada - each/every de- from/of durante - during

High frequency ER and IR verbs

Verb BEBER (to drink, drinking) Bebo - I drink
bebes- you drink bebe- he/she drinks beben- they drink
Use the same endings with the verb COMER (to eat)
CORRER (to run) APRENDER A (to learn to)
LEER (to read) ABRIR (to open) RECIBIR (to receive)
ESCRIBIR (to write)

Additional nouns (useful for creating sentences)

El mar - the sea las vacaciones - the holidays el hombre-
the man la cabeza - the head el agua- the water
La carne- the meat la leche- milk La fruta- the fruit el
idioma - the language la carta - the letter El parque- the park
la mujer- the woman el correo- the mail La mensaje- the
message el ordenador - the computer La llave - the key
la calle- the street el niño - the child El móvil - the 'phone
el barrio - the neighbourhood El día- the day la playa - the
beach el problema - the problem la parte- the part el
extranjero- abroad el pelo- hair el mundo- the world el cielo
- the sky

AR verbs (verbs ENDING in AR)

To mean 'I' with a verb- change ending to 'o'

To mean he/she/it with a verb- change ending to 'a'

Escuchar - to listen
Escucho - I listen
Escucha - he/she/it listens

The future tense- the verb IR (to go, going)

Voy - I go Voy a - I'm going
Vas - you go Vas a - you're going
Va- he/she/it goes
Va a - he /she/it's going
Vamos - we go
Vamos a - we're going

The future tense- the verb QUERER - to want

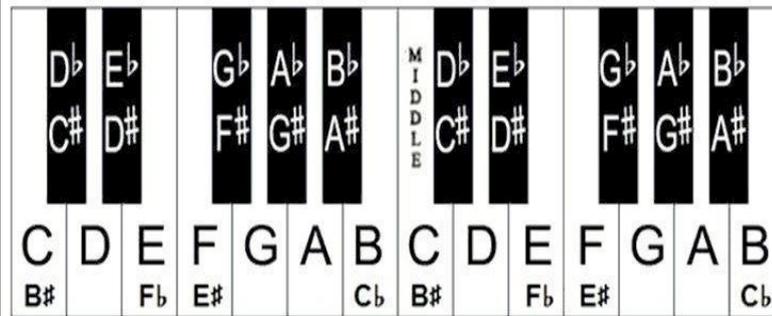
Quiero - I want Quieres- you want
Quiere - he/she/it wants
Quieren - they want



Elements of Music

KEY VOCABULARY

Tempo	Speed (fast/slow)
Allegro	Fast
Andante	Walking pace
Lento	Slowly
Accelerando	Gradually getting faster
Rallentando	Gradually getting slower
Dynamics	Volume (loud/soft)
Fortissimo (ff)	Very Loud
Forte (f)	Loud
Mezzoforte (mf)	Moderately Loud
Mezzopiano (mp)	Moderately Soft
Piano (p)	Soft
Pianissimo (pp)	Very Soft
Crescendo (Cres.)	Gradually getting louder
Diminuendo (Dim.)	Gradually getting quieter
Sforzando (sfz)	Suddenly loud/accented
Pitch	High or low
Duration	Long or short
Structure	The order the different parts of the song are played in:
Binary	2 sections - AB or AA BB
Ternary	3 sections - ABA
Rondo	5 sections - A B A C A
Monothematic	Music based on a single melodic idea
Texture	Number of parts
Solo	1 person
Unison	All doing the same thing
Monophonic	1 part/all the same
Homophonic	Same rhythm different pitch
Polyphonic	Different rhythm and pitch



Every Good Boy Does Fine F A C E

Green Bears Don't Fly Airplanes All Cows Eat Grass

Performance and composition

- Rhythm:** A pattern of sounds of different lengths
- Pulse:** A steady beat within a piece of music - like a ticking clock
- Ostinato:** Continuously repeated pattern of notes
- Imitation:** One part copying another
- Polyrhythm:** Many different rhythms played together at the same time

Notation

- Graphic Notation:** Using images or symbols to represent music
- Staff:** A set of 5 lines and 4 spaces that are used to write music
- Bar:** A small block of notes that holds a certain number of beats

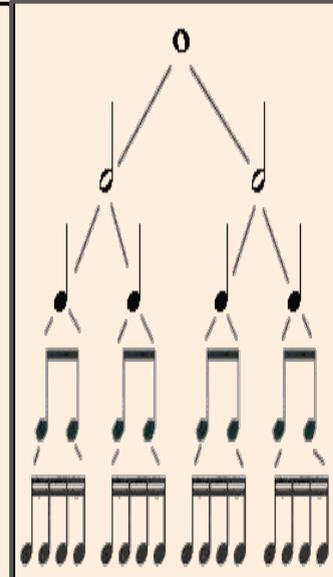
Semibreve - 4 Beats

Minim - 2 Beats

Crotchet - 1 Beat

Quaver - 1/2 Beat

Semiquaver - 1/4 Beat



Instruments of the orchestra

- **Strings:** Violin, Viola, Cello, Double Bass, Harp
- **Woodwind:** Piccolo, Flute, Oboe, Clarinet, Bass Clarinet, Bassoon, Double Bassoon, Cor Anglais
- **Brass:** Trumpet, Trombone, French Horn, Tuba
- **Percussion**
Tuned-: Xylophone, Glockenspiel, Celeste, Timpani
Untuned: Maracas, Triangle, Cymbals, Tambourine, Bongos

Influential composer Fact file - John Milton Cage Jr. Born 05.09.1912

- Experimental composer and a pioneer of indeterminacy in music
- Non-standard use of musical instruments
- One of his most famous works is 4'33" – a piece performed with no deliberate sound
- One of the earliest pioneers of Graphic Notation
- A believer in the idea that there's no such thing as silence



History of Music - Baroque (1600-1750) Classical (1750-1810)

Baroque facts: Composers were like servants providing music for wealthy families. They were paid very little.

- **Opera** had its origins in this period, originally designed for **courtly celebrations**. In **1637** 1st public opera house opened.
- New choral form called **oratorio** developed, initially in Italy. *Handel* introduced this to England. **Oratorio** is a large scale composition that is based on a text – usually a religious one. Like **Opera**, an **Oratorio** tells a story, but unlike **Opera** it does not use costumes or staging.
- **Large ensembles** were brought together for occasions, which became more regular and **formed the first orchestras**.
- **Solo harpsichord** music was made popular by composers like *Scarlatti* and *Bach*.

Baroque composers and their works:

- Henry Purcell 1659-1695 - '*Music for a While*'.
- George Frideric Handel 1685-1759 – '*The Messiah*'
- Johann Sebastian Bach 1685-1750 - '*The Brandenburg Concertos 1-6*'.

Baroque orchestra instruments usually included:

- **Strings** - violins, violas, cellos and double basses
- **Woodwind** - recorders or wooden flutes, oboes and bassoon
- **Brass** - trumpets and/or horns (without valves)
- **Percussion** - Timpani (kettledrums)
- **Continuo** (*accompaniment*) - harpsichord or organ

Compositional features/key terms:

- Long **flowing melodies** (*tunes*) often using **ornamentation** (*decorations to the melody such as trills and turns*). Contrast between loud and soft, solo and ensemble. Often uses **imitation** and **sequences**
- A **contrapuntal** texture – a piece contains 2 melodies of equal importance
- **Terraced dynamics** - sudden changes in volume

Composer Antonio Lucio Vivaldi (1678-1741)

- Italian Baroque composer, virtuoso violinist, teacher and Roman Catholic Priest
- Born in Venice. Composer of instrumental concertos, sacred choral works, over 40 operas
- Study piece: Vivaldi – 'Four Seasons' - 1723**
- Consists of **4 concerti** – each has **3 movements** for one or more **solo** instruments and **orchestra**
- The **4 concerti** represent the 4 seasons – Spring, Summer, Autumn, Winter. Often accompanied by Italian Sonnets

Key Information:

- Concerto** - Composed in 3 movements. 2 types – concerto grosso, solo concert
- Concerto Grosso:** (plural concerti grossi). Common in the Baroque era
- Music is passed between a small group of soloists and the full orchestra
- Solo Concerto** - Composed for 1 solo instrument plus orchestra. Usually contains technically demanding passages for the soloist to play
- Chamber orchestra:** A small orchestra

Classical facts: Time of social change. More focus on human rights and freedom of religion. Instrumental music very important. Orchestras included a wider range of instruments and more of them. Piano was introduced. The most important solo pieces were sonatas, (*a piece for a soloist accompanied by piano/piano solo*). The Symphony was introduced. Quickly went from 3 movements to 4 and used a lot more expression due to developments in instruments. String quartets were prevalent, again these followed the 4 movement structure. Structure became important. New form of Binary (AB), Ternary (ABA) and Rondo (ABACA) form evolved. - Dominated by Haydn and Mozart, Beethoven came at the end of the period, beginning in the same compositional style, but soon developed this into new areas marking the start of the Romantic period.

Classical composers and pieces:

- Ludwig Van Beethoven – 1770 – 1827 – '*Symphony No. 3 Eroica*'
- Wolfgang Amadeus Mozart 1756 -1791 – '*The Marriage of Figaro*'.

Classical orchestra instruments - similar to Baroque, but on a larger scale:

- **Strings** - violin, viola, cello, double bass
- **Woodwind** - recorder or wooden flute, oboe, bassoon and clarinet
- **Brass** - trumpet, horns (with valves by the end of the period)
- **Percussion** - timpani (kettledrums), triangle, hand cymbals, bass drum
- **Fortepiano** – early form of piano, had a softer **timbre** (*tone*)

Compositional features/key terms:

- **Short well-balanced melodies** and clear question and answer phrases
- Mainly simple **diatonic harmony**, (using notes which belong to the key not chromatic notes from outside the key). Use of contrasting moods.
- Mainly **homophonic textures** (*melody plus accompaniment*), some use of counterpoint (*where two or more melody lines are combined*)
- Continued to use **ornaments** for decorations of the melody

Composer Franz Josef Haydn (1732-1809):

- Often referred to as '**father of the symphony**', due to his work in establishing its form/structure
- Composed over **100 symphonies**, concertos, string quartets, piano trios and operas
- Mentored **Mozart** and taught **Beethoven**
- Study piece: Haydn – 'Clock Symphony'**
- Full name Symphony No.101 in D Major
- Known as the '**Clock Symphony**' due to the **ticking rhythm** of quaver beats in 2nd movement
- **4 Movements**. Sense of balance created through the use of **dynamics, melody, harmony** and **structure**

Key Information:

- Symphony** - Early symphonies had a standard **3 movement** form (fast-slow-fast). *Haydn* and *Mozart* developed this into a **4-movement** form
- 1st Movement: Allegro (*fast*) - sonata form
- 2nd Movement: Slow 3rd Movement: Minuet
- 4th Movement: Allegro
- **Sonata form:** Exposition, development, recapitulation and Coda
- **Minuet:** Slow dance with 3 beats per bar
- String Quartet** - Group of **four string** performer - 2 Violins, 1 Viola, 1 Cello



Blues and Music From Around The World

Key Terminology

- **Blues** – A musical style originating from African American slaves based on a chord progression known as the 12-bar blues.
- **Solo(ist)** – Name given to a performer or section in the music played on its own.
- **12-Bar Blues** – The name given to the structure and chord pattern used in Blues music.
- **Blues Scale** - A scale with Flat 3rd, Flat 5th & Flat 7th e.g. in C = C, Eb, F, F#/Gb, G, Bb, C
- **Improvisation** – Music that is made up as the performer goes along.
- **Melody** – Another word to describe the main tune; can be vocal or instrumental.
- **Riff** – A short repeating pattern of notes played alongside the chords and played on the lowest pitched instrument.

History of the Blues

- A musical style created by **African Americans** at the end of the 19th Century.
- It had **African roots** as **slaves** were taken from **Africa** to become **slaves in America**.
- **Field Hollers:** The slaves **worked 18-hour days** and would **sing while they worked**.
- When **accompanied**, it was originally a **singer and guitar/banjo**.
- **Early 20th century:** slaves moved to cities like Chicago/Detroit.
- **1940's/50's:** blues was showing Jazz influence and had amplified bands.
- **By 1960's:** blues **spread to UK** and rest of Europe showing influence across many forms of popular music including being the **driving force behind rock music**.

12 Bar Blues Chord Structure (Chords I,IV,V)

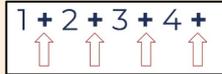
C CEG	C CEG	C CEG	C CEG
F FAC	F FAC	C CEG	C CEG
G GBD	F FAC	C CEG	C CEG

Blues Bass Riff – Uses the same 12 Bar Blues Structure as the chords

Music From Around The World

Reggae Music

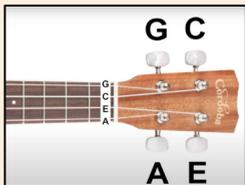
- Reggae music is from Jamaica in the Caribbean.
- It originated in the 1960's
- It is based around a simple chord sequence
- The chords are usually played on the offbeat (syncopation)- this means -in between the beats



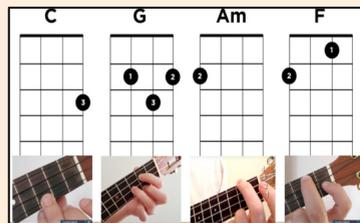
Music From The Pacifics

- Famous for its use of the ukulele
- Key composer **Israel "IZ" Kamakawiwo'ole**

-Ukulele is tuned **G C E A**



-Ukulele Chords



Samba Music:

- A **Brazilian** street carnival dance played at a **fast tempo**
- Uses a variety of **percussion** instruments
- **Cross rhythms** are created when 2 parts playing different rhythms are combined
- **Polyphonic texture** when all instruments are playing different rhythms
- **Monophonic texture** - 1 part/all playing the same

Key features:

- **Ostinato:** Continuously repeated pattern
- **Call and response:** A musical phrase (usually a solo) followed by an answering phrase (usually by the ensemble).
- **Polyrhythm:** Two or more different rhythms playing together

Samba Instruments:

- **Surdo:** a large drum, often in 3 sizes (high, medium and low pitch) played with a beater
- **Tambourim:** a small high pitched drum played with a beater
- **Agogo:** a double bell – top high pitch, bottom low pitch.
- **Repinique:** A medium sized high-pitched drum.
- **Ganza:** A handheld shaker.

Chinese Musical Features:

- Uses the **pentatonic scale**- Scale of 5 notes
- A **solo** instrument or **small ensembles**
- Influenced by **Philosophy** and historical thinkers
- **Chinese Instruments:** The **timbre** (tone) is very important
- **Woodwind** – Sheng, Guan and Dizi.
- **Strings** – Pipa, Erh-hu.
- **Percussion** – Gongs, drums and Cymbals.

Indian Musical Features:

- **Scale:** Sa, Re (Ri), Ga, Ma, Pa, Dha, Ni
- **Melody:** Rag often played on **sitar**
- **Rhythm:** Tal played on **tabla**
- **Drone:** long held note played on **tanpura**
- **Sitar:** a stringed instrument with a long neck and moveable frets.
- **Tabla:** pair of hand drums, 1 slightly larger
- **Tanpura:** long-necked stringed instrument

Warm Ups And Cool downs



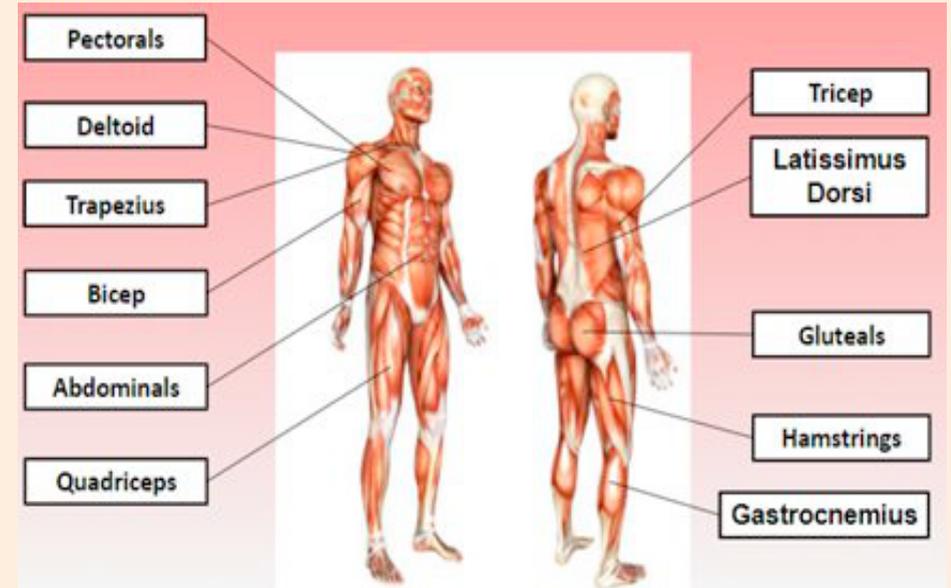
Warm Ups	Physical Benefits of a warm up
<ul style="list-style-type: none"> ● Pulse raiser - An activity that <u>increases</u> heart rate and temperature. For example, jogging. ● Mobility - An activity that takes the joint through its <u>full range</u> of movement. For example, arm circles, leg swings. ● Stretching (Static and Dynamic) - An activity that <u>increases the elasticity</u> of muscles, tendons and ligaments. For example, walking lunges. ● Dynamic movement - An activity that involves <u>changes of speed and direction</u>. For example, shuttle runs. ● Skill rehearsal - An activity that <u>mirrors game demand</u>. For example, dribbling in basketball. 	<ul style="list-style-type: none"> ● Increasing the temperature of muscles. ● Increases flexibility of muscles. ● Increases the heart rate and temperature of blood.

Rules/regulations	
Netball	<ol style="list-style-type: none"> 1. 3 second rule - This is when a player in possession has 3 seconds to make a decision on what they will do next for example pass or shoot 2. Passing - A player must move the ball around the netball court by passing the ball to a teammate
Badminton	<ol style="list-style-type: none"> 1. Winning a point - The performer must attempt to land the shuttle on their opponents side of the court to win a point. 2. Court layout - The court has two service boxes on each side with tramlines running at the back of the court and each side.
Rugby	<ol style="list-style-type: none"> 1. Passing - The ball must be passed behind when moving forwards. 2. Contact - The tackler must make contact with an opponent below the neck.

Sporting contexts	
Key term	Definition
Control	Cushioning the impact of the ball to keep it close to your body , protecting it from the opponent players.
Dribbling	Moving with the ball under close control into space and past opponents.
Pocket Pass	Moving the rugby ball to the side of your body as if you was taking it out of your pocket .
Tackling	Stopping an opposing player in possession of the ball by bringing them to the ground .
Grip	Holding the racket in your hand ' shaking hands ' position in order to hit shots during a match.
Serve	The first shot at the beginning of a point . This must be taken behind the service line and travel diagonally to the opponents service box.
Defending	Stopping the opponents scoring a goal by tackling, blocking and intercepting when they have possession of the ball.
Marking	Following an opponent's movements to stop them dribbling, passing and shooting.
Positions	Where a player plays the court . Each position has a certain role and area they allowed to enter. The positions are: GK, GD, WD, C GA, WA, GS.
Landing	The foot that makes contact with the ground first when receiving the ball from a pass.

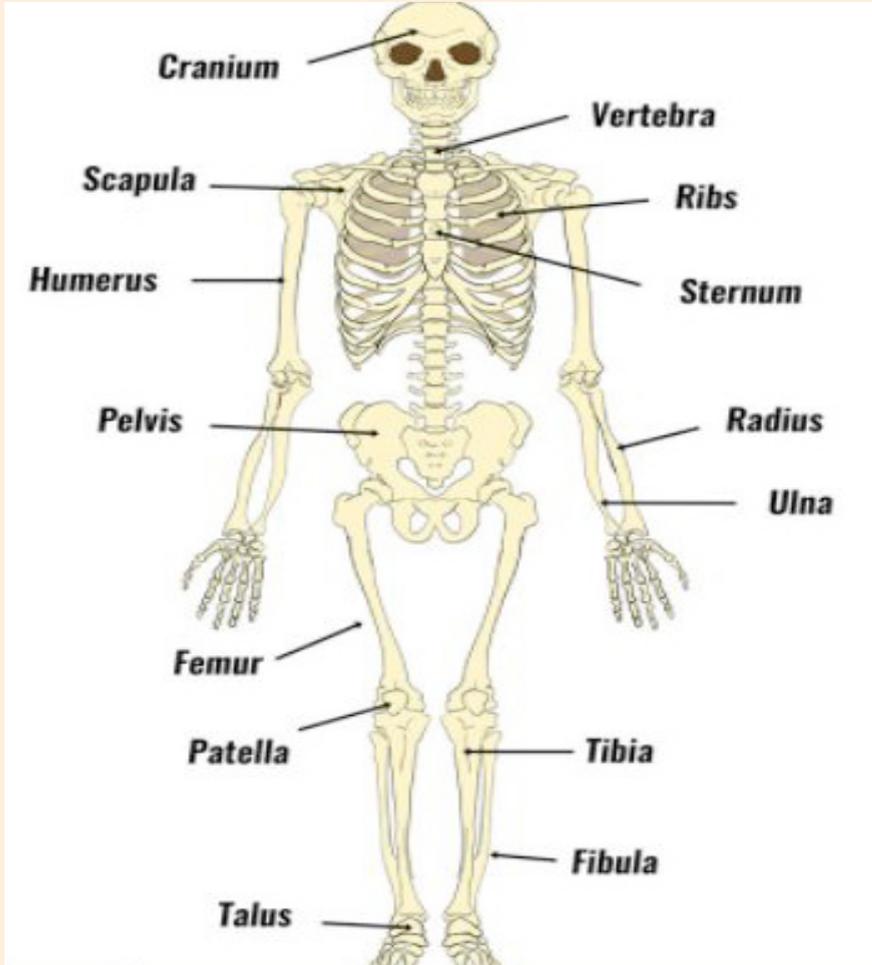


Sporting Context	
Key term	Definition
Running Technique	Arms and legs move together in order to allow maximum efficiency when running
Overtaking	Running past the runner in front of you on the outside
Terrain	The features of the land.e.g , flat, incline, declined surface.
Circuit training	A training method that requires the performer to complete a station which is a specific exercise targeting a body part . The performer completes the station and then moves onto the next station which focuses on a different exercise/body part.
Sprint training	A training method used to improve speed . Involves the performer running a distance as fast of possible , followed by a period of rest .
Pencil Roll	Arms and legs are extended at all times and never touch the mat . The performer uses their back and stomach to roll left and right
Teddy bear role	Sit in a straddle position placing hands behind the knees. Roll sideways across the back and shoulders . End in straddle position facing the opposite direction .
Body Tension	When your body is in a tensed position it helps you to hold shapes and positions still and in straight lines .



Rules/regulations	
Cross country	<ol style="list-style-type: none"> The course - You must stay within the assigned route designed for the cross county course Other participants - You must not make contact with any other participants when running the course
Gymnastics	<ol style="list-style-type: none"> Footwear - Participants must be in bare feet when performing a gymnastic routine Routine - This must have a set starting point and end point
Fitness	<ol style="list-style-type: none"> Space - You must have a safe distance between you and the next participant when exercising Equipment - All equipment should be checked to ensure that it is working correctly

Skeletal System



Functions of the skeleton	
1.	Protection - Gives protection to the vital organs from damage or injury
2.	Movement - Provides areas for muscles to attach to create movement.
3.	Support - Provides a shape and framework for support and posture
4.	Mineral Storage - Minerals such as calcium and potassium are stored to be released into the blood.
5.	Blood cell production - Contains bone marrow that produces red blood cells

Sporting Context	
Key term	Definition
Pendulum Bowling Action	Arms are extended when bowling , the lead arm moves from a high position to a low position and the bowling arm moves from a low position to high position.
Batting Stance	Feet (toes) are in line, shoulder width apart , The batter should be stood in front of the wickets facing the bowler
Bowling Grip	Using your fingers and thumb to grip the ball
Catching technique	Using two hands to catch the ball, fingers can point up if catching a highball or down if catching a low ball
Standing start	The beginning of a race when the competitor begins in an upright position . The front foot must be behind the line and the other foot is placed backwards with the heel lifted .
Balls of feet running	Landing on the front part of your foot rather than your heel to generate speed.
Throwing line	The line where you must not cross during a throwing event.

Rules/regulations	
Cricket	<ol style="list-style-type: none"> Dismissals - Batters can be dismissed by being caught, run out or bowled Bowling - you must keep a straight bowling arm when delivering the ball
Rounders	<ol style="list-style-type: none"> Bowling - The ball must be bowled from the bowling square Bases - The fielder on the base must touch the base with the ball to get the batter out

Aspirations and Careers



Term 1a: Aspirations and Careers		Term 1a: Employability Skills	Who can you turn to for help and support?
Inequality:	an unfair situation, in which some groups in society have more money, opportunities, power etc. than others	<ul style="list-style-type: none"> • Problem solving • Oral Communication • Adaptability/Flexibility • Team work • Organisation • Literacy • Numeracy • Technology skills • Reliability • Certain personality traits e.g. confidence, enthusiasm, honesty 	<ul style="list-style-type: none"> • Trusted family members • Friends • School staff • NSPCC - https://www.nspcc.org.uk/ • Childline - https://www.childline.org.uk • National Bullying Helpline - https://www.nationalbullyinghelpline.co.uk
Aspiration:	a hope or ambition of achieving something		
SMART goals:	a SMART goal is used to help guide goal setting. SMART is an acronym that stands for Specific, Measurable, Achievable, Realistic, and Time based		
Employability:	the quality of being suitable for paid work		
Transferable Skills:	a transferable skill is one that you can move between jobs		
Non-transferable Skills:	a non-transferable skill is one that is fixed to a particular job		
Term 1b: Friendships		Term 1b: What makes a good friend?	Term 1b: Signs of a Toxic Friendship
Platonic Relationship:	a friendship or relationship where there is no romantic, intimate or sexual feelings	Good friends make you feel good, listen, support each other, are trustworthy, respect boundaries and handle conflict respectfully.	A bad friend says unkind or hurtful things, pressures you to do things, is manipulative. puts you down, laughs at you/encourages others to laugh at you, talk about you behind your back, excludes you from the group, takes the 'banter' too far, shares things about you online and makes you feel bad about yourself
Toxic Relationship:	a relationship that has a negative effect on your mental health or self-esteem		
Peer Pressure:	when your classmates or friends try to influence how you act or to get you to do something	Term 1b: Types of Bullying	
Bullying:	the repetitive, intentional hurting of one person or group by another person or group, where the relationship involves an imbalance of power	Physical	The victim is physically and violently assaulted by the bully e.g. beaten up, pushed, shoved, items taken from them
Banter:	the playful exchange of teasing remarks and jokes between friends where all are in on the jokes and enjoy the exchange	Verbal	This can include: name calling, snide comments, the spreading of rumours, harassment
Bully:	a person who engages in bullying type behaviour towards one or more people	Emotional	This is difficult to see e.g. isolating the victim from a group, tormenting them and humiliating them
By-stander:	a person who doesn't actively engage in the bullying but watches and doesn't do anything to prevent it	Cyber	The use of electronic communication to bully a person e.g. sending intimidating or threatening messages, setting up websites, posting personal and embarrassing images and videos without permission
LGBTQ+:	this is an acronym that stands for lesbian, gay, bisexual, transgender and queer (or questioning) and others	Specific	This term is used to describe bullying based on a specific aspect of the victim e.g. homophobic, transphobic, racist, bullying based on religion

Healthy Lifestyle & Unhealthy Lifestyle



Term 2a: Healthy Lifestyles

Physical Health:	the condition of your body, taking into consideration everything from the absence of disease to fitness level
Calories:	the energy people get from the food and drink that they consume
Obesity:	defined by the National Institutes of Health as a BMI of 30 and above
BMI:	a person's weight in kg divided by their height in meters squared (a BMI between 18.5 and 25 indicates a normal weight)
Nutrition (a balanced diet):	the process of providing or obtaining the food necessary for health and growth
Mental Health:	a person's condition with regard to their psychological and emotional well-being
Stigma:	a mark of disgrace associated with a particular circumstance, quality, or person

Term 2b: Unhealthy Lifestyles

Smoking:	inhaling and exhaling the smoke of tobacco or a drug (usually through cigarettes or cigars)
Nicotine:	a toxic colourless or yellowish oily liquid which is the chief active component of tobacco
Alcohol:	the type of alcohol in all alcoholic drinks is the same - ethanol. Ethanol is a colourless, odourless and inflammable fluid
Binge Drinking:	consuming large quantities of alcohol in a short space of time
Drugs:	chemicals that alter, block, or mimic chemical reactions in the brain. causing physical or mental changes
Medicine:	a drug or other preparation for the treatment or prevention of disease
Addiction:	the feeling of needing a drug to get through the day
Withdrawal:	a predictable group of signs and symptoms that result from either the sudden removal of, or abrupt decrease in the regular dosage of a drug

Who can you turn to for help and support?

- Parents or trusted family members
- School safeguarding team or any member of staff
- Your GP
- NHS Eat Well: <https://www.nhs.uk/livewell/eat-well/>
- NHS Stop Smoking: <https://www.nhs.uk/live-well/quit-smoking/>
- Drink Aware 0300 123 1110 <https://www.drinkaware.co.uk>
- Talk to Frank Helpline: 0300 123 6600 <https://www.talktofrank.com>

Term 2b: Using alcohol and drugs can cause both physical and mental consequences:

- Headaches and dizziness
- Chest tightness and difficulty breathing
- Heart racing, skipped beats, palpitations
- Nausea, vomiting, diarrhoea, stomach aches
- Muscle tension, twitches, tremors, shakes, muscle
- Sweating, tingling
- Anxiety, panic attacks, restlessness, irritability
- Depression: Social isolation, lack of enjoyment, fatigue, poor appetite
- Insomnia, difficulty falling asleep or staying asleep
- Poor concentration, poor memory

Term 2a: How much exercise should you do?

- Children and young people need to do 2 types of physical activity each week:**
- aerobic exercise
 - exercises to strengthen their muscles and bones
- Children and young people aged 5 to 18 should:**
- aim for an average of at least 60 minutes of moderate intensity physical activity a day across the week
 - take part in a variety of types and intensities of physical activity across the week to develop movement skills, muscles and bones
 - reduce the time spent sitting or lying down and break up long periods of not moving with some activity. Aim to spread activity throughout the day. All activities should make you breathe faster and feel warmer

Term 2b: Risks from smoking

- Cancers
- Stroke
- Blindness
- Gum infection



Relationships & The wider world

Term 3a: Relationships

Love:	an intense feeling of deep affection or a great interest and pleasure in something
Eros:	sexual or romantic love
Philia:	friendly or brotherly love
Storge:	familial love
Agape:	an all-consuming love or unconditional love for oneself and for all others
Family:	a group consisting of parents and their children living together as a unit
Fertility:	the ability to conceive children

Term 3b: The Wider World

Citizen:	a person who, by place of birth, nationality of one or both parents, or naturalization is granted full rights and responsibilities as a member of a nation or political community
Naturalisation:	the admittance of a foreigner to the citizenship of a country
Stereotypes:	thinking all people who belong to a certain group are the same and labelling them
Prejudice:	judging someone without knowing them, on the basis of what they look like or what group they belong to
Extremism:	holding extreme political or religious views
Terrorism:	the unlawful use of violence and intimidation to bring about political or social change
Radicalisation:	a process by which an individual or group comes to adopt increasingly extreme political, social, or religious ideals and aspirations
Breast Ironing:	the practice of trying to stop a young girl's breast developing by flattening them

Term 3a: Fertility Options

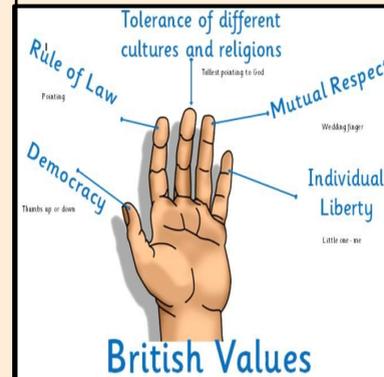
- **Artificial Insemination:** when sperm is collected and placed into the mother's uterus artificially
- **IVF:** when the egg and sperm are put together in a test tube and when an embryo forms it is placed back into the mother's womb
- **Surrogacy:** when an embryo is created and then implanted into a different woman who carries the child until birth
- **Adoption:** the legal process by which a child or a group of siblings become full, permanent and legal members of a new family

Who can you turn to for help and support?

- Parents or trusted family members
- School safeguarding team or any member of staff
- CEOPS: <https://www.ceop.police.uk/safety-centre>
- Childline: Helpline - 08001111 <https://www.childline.org.uk>
- NSPCC: <https://www.nspcc.org.uk>

Term 3a: Different Types of Families:

- **Nuclear Family:** a couple and their children
- **Extended Family:** nuclear family + grandparents and other relatives
- **Reconstituted Family:** when two families join together after one or both partners have divorced their previous partners
- **Single Parent Family:** families with a parent who is widowed or divorced or not married
- **Adopted Family:** a family that contains at least one adopted child/parent
- **Same Sex Family:** a homosexual couple living together with children





Key Concepts	
Messiah	A future King of Israel the Jewish people believe will rule over them and save the Jewish people
Covenant	A promise between God and his people
Mitzvot	A commandment from God. There are 613 in the Torah.
Monotheism	A belief in one God
Torah	The Jewish books of the law
Shema	The most important prayer in Judaism, 'Hear, O Israel: the LORD our God, the LORD is one'
Israel	The land promised to Abraham and his descendents by God and the name of a modern day country where many Jewish people live.
Anti-Semitism	Prejudice against Jewish people
Atonement	Making things right with God

Jewish Clothing



Kippah

A skullcap mainly worn by Jewish men and boys

Tallit

A prayer shawl

Tefillin

Leather boxes containing verses from the Jewish scriptures



Key People	
Abraham	One of the patriarchs of Judaism. He is believed to have been the father of the Jewish people.
Moses	One of the patriarchs of Judaism. He is believed to have written the books of the Torah.

Key Festivals	
Pesach	A Jewish festival which remembers the time when God freed the Hebrews from slavery in Egypt
Rosh Hashanah	The Jewish New Year festival
Yom Kippur	The Day of Atonement (a day of asking God for forgiveness)

Key Practices	
Bar/Bat Mitzvah	A ceremony for a boy/girl at the age of 12 or 13 to mark the time when they are expected to follow the Mitzvah
Brit Milah	The ceremony of circumcision. Where Jewish boys have their foreskin removed on the eighth day after birth
Marriage	A ceremony where a man and woman are joined together as husband and wife

Key Objects	
The Torah	The Jewish books of the law



CHRISTIANITY

Key People	
Adam and Eve	 The first people created by God. They disobeyed God and committed the first sin.
Jesus of Nazareth	 Believed by Christians to be the Son of God, he was a first century Jewish teacher living and travelling in Palestine/Israel.
The Zealots	 A group of Jewish people in the 1st century who wanted to rise up against the Roman rulers.
St. Paul	 One of the early leaders of Christianity. He spread the Gospel to many different places
Martin Luther	 A monk who protested against the Catholic Church and was part of the Christian reformation
Henry VIII	 An English king whose actions eventually led to the creation of the Church of England (Anglican Church)

Key Practices	
Baptism	The ritual through which people become members of the Church. It involves the use of water as a symbol of the washing away of sin.
Eucharist	Literally 'thanksgiving'; a ritual in which the death and resurrection of Jesus are remembered, usually using bread and wine.

Key Festivals	
Christmas	The festival/celebration to remember the birth of Jesus.
Easter	Festival/celebration of the resurrection of Jesus

Key Concepts	
Heaven	A place in which Christians believe people will be rewarded after death
Hell	A place in which Christians believe people will be punished after death
Reconciliation	Making up and rebuilding relationships between two groups/sides after disagreement.
Resurrection	The form that many Christians believe the afterlife will take, referring to either physical or spiritual bodies.
Salvation	Being saved. Saving of the soul and being able to enter eternal life in heaven.
Sin	An act against God's Commandments
The Trinity	The belief some Christians have that God as One includes God also being manifest in three Persons: the Father, Son and Holy Spirit.

Key Objects	
The Bible	Source of wisdom and authority for Christians; a holy book containing both the Old and New Testaments.
The Gospel	The 'Good News' of Jesus' teaching. The name given to the first four books of the New Testament.

**Key Objects and Places**

Arafat	The place where Prophet Muhammad preached his last sermon and pilgrims gather to pray. Part of the Hajj pilgrimage.
The Ka'aba	A cube-shaped building in the centre of the Grand Mosque in Makkah. All Muslims face towards it when they pray. Part of the Hajj pilgrimage.
The Qur'an	Holy Book and most important source of authority in Islam. It was revealed to the Prophet Muhammad and is the final revelation of God to humankind.
Makkah	A city in Saudi Arabia - the spiritual centre of Islam.
Mina	A site of pilgrimage during Hajj; where pilgrims take part in the stoning of pillars.
Mosque	A Muslim place of worship.
Muzdalifah	A site of pilgrimage during Hajj; where pilgrims hold a night prayer and rest after the Stand on Mount Arafat.

Key Practices

The Shahadah	The Muslim declaration of faith; one of the Five Pillars in Islam
Salah	Prayer; one of the Five Pillars/Ten Obligatory Acts.
Saum	Fasting from dawn to dusk during Ramadan; one of the Five Pillars/Ten Obligatory Acts.
Zakat	One of the Five Pillars; giving alms or charity.
Hajj	One of the Five Pillars; pilgrimage to Makkah, which all Muslims must attempt to undertake at least once in their lives

Key Concepts

The Five Pillars	Important duties for Muslims which support the main principles of Islam. Shahadah, salah, zakah, sawm and hajj.
The Night of Power	The night on which Muhammad received the first revelations of the Qur'an.
Pilgrimage	A religious journey to a holy site/sacred place, it is an act of worship and devotion.
Ramadan	Month during which Muslims fast (sawm) from dawn to sunset.
Tawhid	The oneness of Allah
Ummah	The Islamic community
Wudu	Ritual washing before prayer.

Key Festivals

Id-ul-Adha	Festival; celebration of the Prophet Ibrahim's willingness to sacrifice his son for Allah.
Id-ul-Fitr	Festival; celebration that comes at the end of Ramadan and marks the end of fasting.

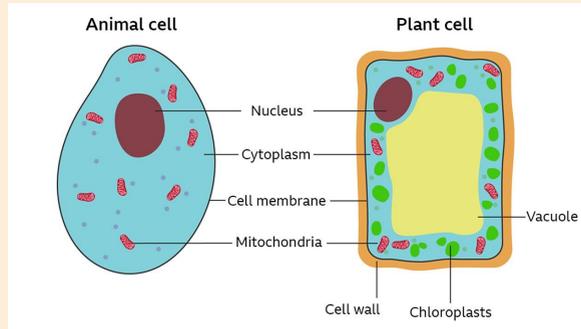
Key People

Allah	The Islamic name for God.
Muhammad	The last and greatest of the prophets. He received the words of the Qur'an
Ibrahim	One of the prophets of Allah. He rebuilt the Ka'ba.
Jibril	Angel who dictated the Qur'an to Muhammad; on Judgement Day he will assist with the weighing of a person's deeds.

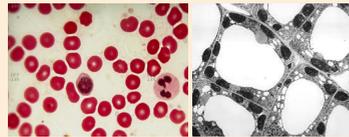
Cells and Reproduction

Key Definitions

Cell Membrane	Controls the movement of substances into and out of the cell
Cytoplasm	Jelly-like substance, where chemical reactions happen
Nucleus	Carries genetic information and controls what happens inside the cell
Mitochondrion Mitochondria (plural)	Where respiration reactions happen inside cells
Vacuole	Contains a liquid called cell sap, which keeps the cell firm
Cell wall	Made of a tough substance called cellulose, which supports the cell
Chloroplast	The site of photosynthesis, contains chlorophyll to trap light energy

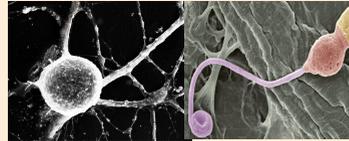


Specialised Cells



Red Blood Cell

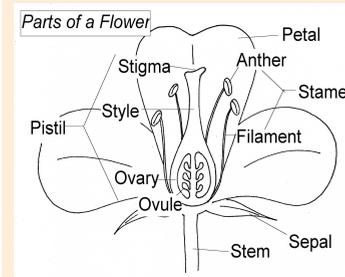
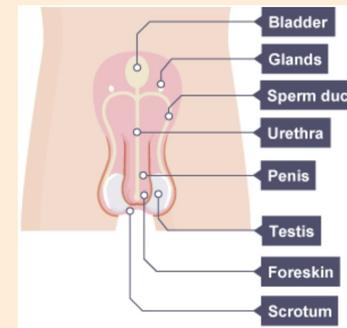
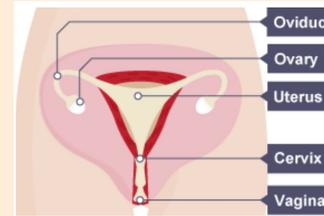
Palisade (leaf) Cell



Nerve Cell

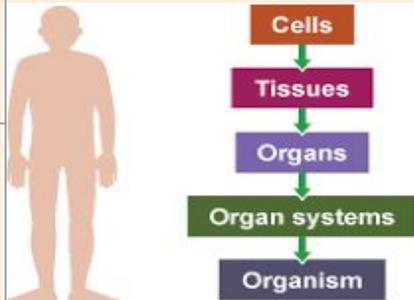
Sperm Cell

Reproductive Systems



Key Definitions

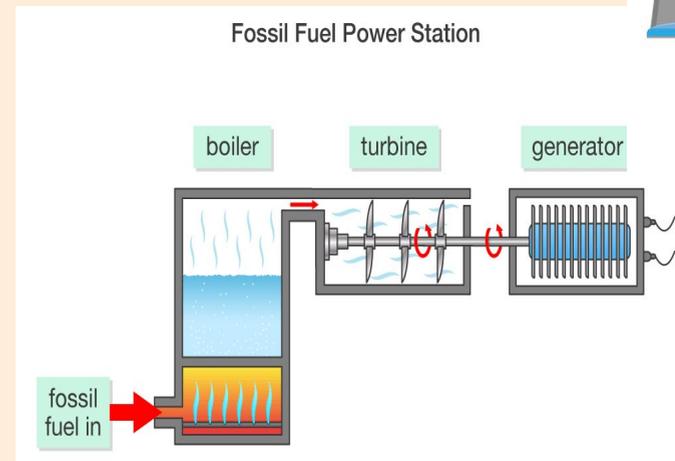
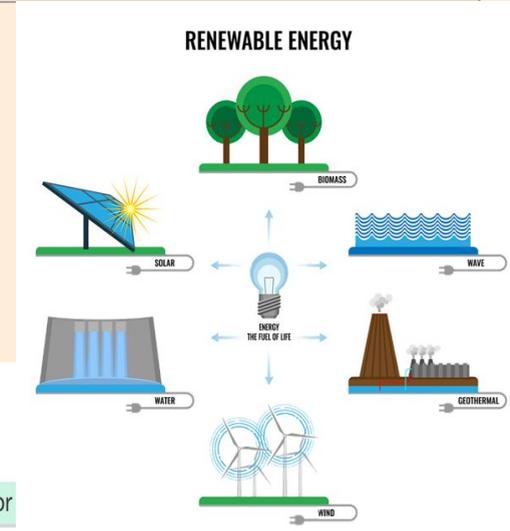
Zygote	The ovum after it has been fertilised by a sperm
Fertilisation	When male and female gametes join together.
Placenta	organ responsible for providing oxygen and nutrients, and removing waste substances.
Embryo	The fertilised egg divides to form a ball of cells.
Anther	It produces male sex cells (pollen grains)
Stigma	The top of the female part of the flower which collects pollen grains
Ovary	Produces the female sex cells (contained in the ovules)





Key Definitions	
Chemical stores	There is energy in the chemical stores associated with food and fuel. Energy is measure in joules (J). You need different amounts of energy for different activities.
Conservation of energy	Energy can neither be created nor destroyed. It can only be transferred between stores. This is known as the law of conservation of energy.
Transferring energy	Light, sound, and electricity are ways of transferring energy between stores
Temperature	Temperature is measured using a thermometer. The temperature does not depend upon on the amount of material, but the amount of energy in the thermal store.
Power	Power = Energy / time. You can work out the energy transferred by appliances in your home using the unit kilowatt hours.
Conduction and convection	Energy is transferred by conduction in solids, by convection in liquids and gases.
Radiation	Energy transfer by radiation does not need a medium to travel through. All objects emit radiation.

Cooling	If the energy transferred to an object is less that the energy transferred from it the object will cool down
Fossil fuels	Fossil fuels such as coal, oil and gas were formed over millions of years and are non-renewable. They can be used to drive a generator in a thermal power station.
Renewable energy	Wind, water and solar sources are known as renewable energy resources
Energy Types	Electrical, Nuclear, Chemical, Light, Thermal, Kinetic, Magnetic, Sound, Elastical Potential, Gravitational Potential.





Key Definitions	
Particle	A very tiny object such as an atom or molecule.
Particle Model	A way to think about how substances behave in terms of small, moving particles.
Diffusion	The random movement of particles from an area of high concentration to an area of low concentration.
Gas Pressure	Caused by collisions of particles with the walls of a container.
Density	How much matter there is in a particular volume, or how close the particles are. Density = Mass ÷ Volume
Evaporation	Change from liquid to gas at the surface of a liquid, at any temperature.
Boiling	Change from liquid to a gas of all the liquid when the temperature reaches boiling point.

Condensing	Change of state from gas to liquid when the temperature drops to the boiling point.
Melting	Change from solid to liquid when the temperature rises to the melting point.
Freezing	Change from liquid to a solid when the temperature drops to the melting point.

Density is the amount of mass in a volume. It tells us how tightly matter is packed together.

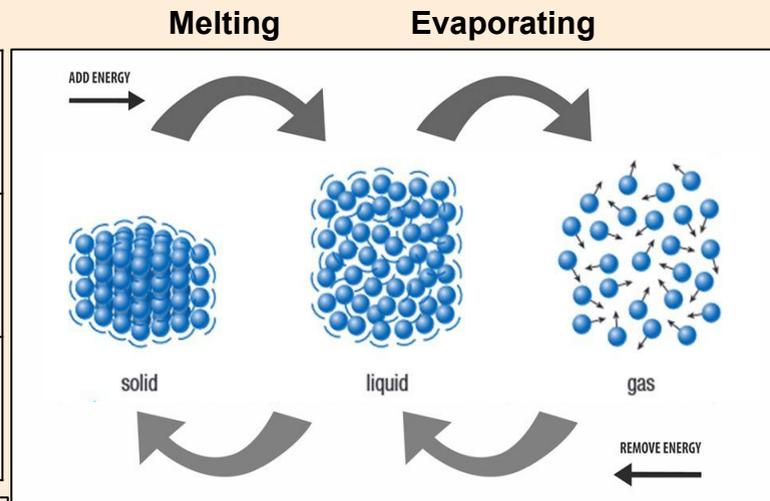


More Dense



Less Dense

Less dense materials, will float on top of a more dense material.



- Freezing** **Condensing**
- Gas pressure is the force of the gas colliding with the edge of the container.
 - You can increase the gas pressure by decreasing the volume, or increasing the temperature.
 - These changes causes more collisions more often

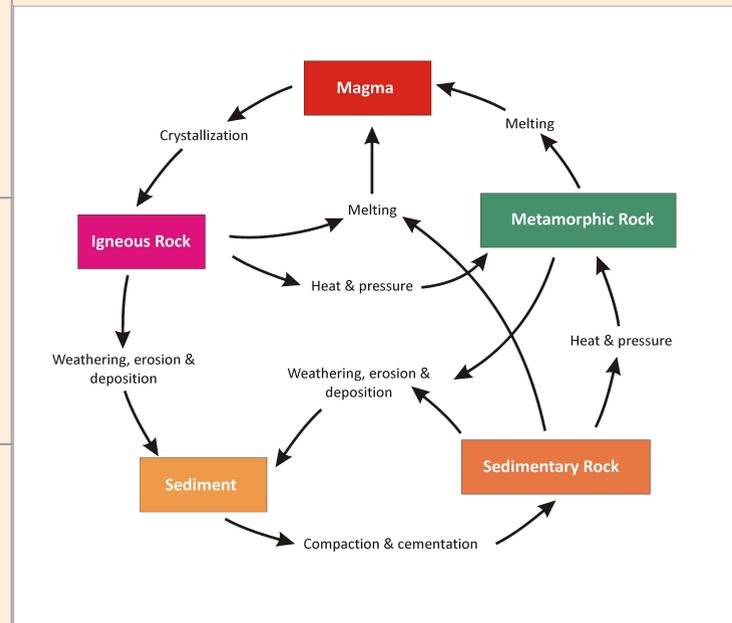
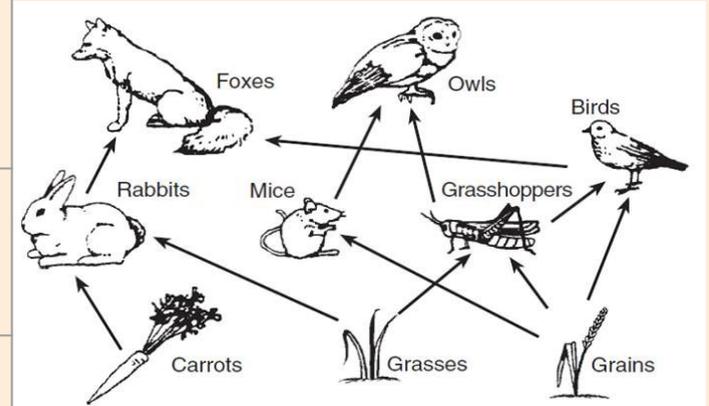
Phase	Volume and Shape	Motion	Density	Compressibility
Solid	fixed volume and shape	atoms or molecules vibrate in a fixed position relative to one another	high	difficult to compress
Liquid	fixed volume, shape conforms to the container	atoms or molecules are close together, but can still move around in a disordered way	moderate	minor compressibility
Gas	volume and shape conform to the container	particles are in constant motion, sliding past each other	low	easy to compress



Key Definitions	
Herbivore	An organism that only eats plants.
Omnivore	An organism that eats both plants and other animals.
Carnivore	An organism that only eats other animals.
Predator	An animal that preys on other animals for food.
Prey	An animal that is predated upon by a predator.
Producer	An organism that makes its own food using light energy (photosynthesis).
Consumer	An organism that eats other organisms to obtain energy.
Food web	Shows how food chains in an ecosystem are linked.
Food Chain	Part of a food web, starting with a producer, ending with a top predator.

Key Definitions	
Weathering	The wearing down of rock by physical, chemical or biological processes.
Erosion	Movement of rock by water, ice or wind (transportation).
Sedimentary rocks	Formed from layers of sediment, and which can contain fossils. Examples are limestone, chalk and sandstone.
Igneous rocks:	Formed from cooled magma, with minerals arranged in crystals. Examples are granite, basalt and obsidian.
Metamorphic rocks	Formed from existing rocks exposed to heat and pressure over a long time. Examples are marble, slate and schist.

Remember - arrows represent the flow of energy in a food web.

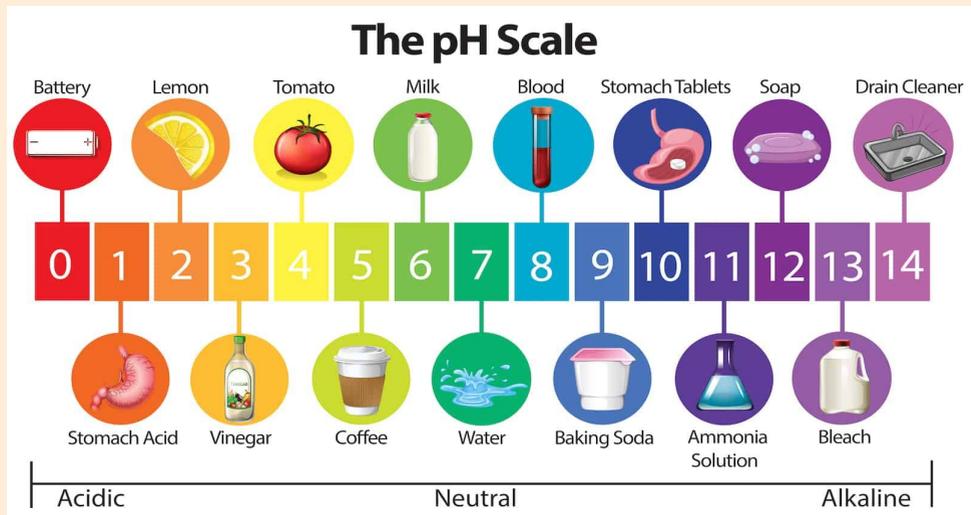




Acids and Alkalis and Chemical Reactions

Key Definitions

Acid	Substance with a pH of 1-6
Alkali	Substance with a pH 8-14
Neutralisation	When an acid and alkali react to form a chemical of pH 7
Indicator	A chemical which changes colour in different pH
Salt	A neutral substance formed in many acid reactions
Combustion	An exothermic reaction with Oxygen
Chemical Reaction	A reaction which cannot easily be reversed
Physical Reaction	A reaction which can be reversed



Gas	Test
Oxygen	Relights a glowing splint
Chlorine	Bleaches damp blue litmus paper
Carbon Dioxide	Turns Limewater cloudy
Hydrogen	Ignites with a squeaky pop

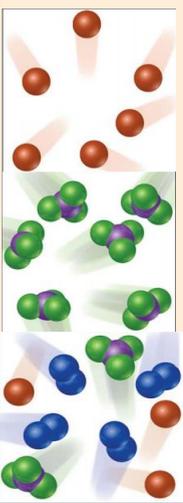
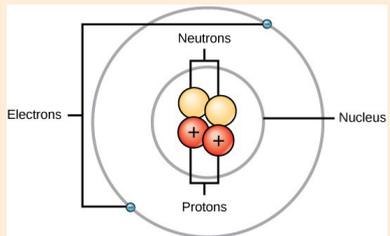
Acid + Alkali → Salt + Water
 Acid + Carbonate → Salt + Carbon Dioxide + Water
 Acid + Metal → Salt + Hydrogen
 Acid + Metal Oxide → Salt + Water

H₂SO₄	2x Hydrogen, 1x Sulphur 4x Oxygen
HCl	1x Hydrogen 1x Chlorine
HNO₃	1x Hydrogen 1x Nitrogen 3x Oxygen
NaOH	1x Sodium 1x Oxygen 1x Hydrogen
NaCl	1x Sodium 1x Chlorine
CaSO₄	1x Calcium 1x Sulphur 4x Oxygen
KNO₃	1x Potassium 1x Nitrogen 3x Oxygen



Elements, Compounds, Mixture and Solutions

Key Definitions	
Atom	The smallest possible part of an element.
Element	A pure substance made from only one type of atom. Elements are listed on the periodic table.
Mixture	When two or more elements are mixed together but are not chemically bonded
Compound	A substance made of two or more elements which are chemically combined in a fixed ratio of atoms.
Soluble	A substance that dissolves in a liquid to make a solution.
Insoluble	A substance that will not dissolve in a liquid.
Solvent	A substance (normally a liquid) which can dissolve another substance.
Solute	A substance (normally a solid) which can dissolve into a solvent.
Solution	A mixture made from a liquid and a substance dissolved into it.



Element
e.g:
Gold
Au

Compound
e.g:
Ammonia
NH₃

Mixture
e.g:
Air

	Charge	Mass
Proton	Positive (+)	1
Electron	Negative (-)	0
Neutron	Neutral (0)	1

Technique	Method
Filtration	The process of separating an insoluble solid matter from a liquid.
Distillation	The process of separating components of a mixture based on different boiling points.
Evaporation	The process of separating a soluble solid from a liquid.
Chromatography	A method for separating dissolved substances from one another.

Common Compounds

H₂O Water	2x Hydrogen, 1x Oxygen
CO₂ Carbon Dioxide	1x Carbon 2x Oxygen
NH₃ Ammonia	1x Nitrogen 3x Hydrogen
CH₄ Methane	1x Carbon 4x Hydrogen
C₆H₁₂O₆ Glucose	6x Carbon 12x Hydrogen 6x Oxygen
SiO₂ Silicon Dioxide	1x Silicon 2x Oxygen
NaCl Sodium Chloride	1x Sodium 1x Chlorine
MgO Magnesium Oxide	1x Magnesium 1x Oxygen