Glenmoor & Winton Academies
High Achievement – High Standards
Part of United Learning

Knowledge Organiser

Year 8 - 2026/27

Student Name: _

Need to ask your teacher about any of these topics? Make a note here!

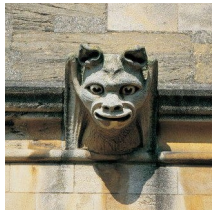
Table of Contents

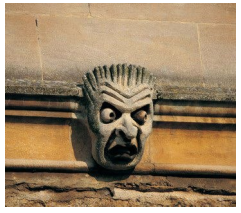
Subject (Tick Once Studied)	Page	Notes
Art	**2-3**	
❑ Gothic Architecture - Gargoyles	2	
❑ Expressionism - Portraits	3	
Citizenship	**4-9**	
❑ Health & Wellbeing	4	
❑ Relationships	5	
❑ Democracy & Government	6	
❑ Managing Money	7	
❑ Law & the Justice System	8	
❑ Media Literacy	9	
❑ **Drama**	**10-12**	
English	**13-18**	
❑ Grammar	13-14	
❑ Richard III	15	
❑ Woman in Black & Gothic Writing	16-17	
❑ In the Sea There Are Crocodiles	18	
Ethics	**19-23**	
❑ Islam	19-20	
❑ Hinduism	21	
❑ Sikhi	22	
❑ Writing Structure	23	
French	**24-29**	
❑ Le collège et le travail	24	
❑ Les Vacances et le Temps Libre	25	
❑ La Vie Saine	26-27	
❑ Le collège et le travail	28-29	
Geography	**30-40**	
❑ Population	30-31	
❑ Coasts	32-33	
❑ Ecosystems	34-35	
❑ Tectonics	36-37	
❑ Weather Systems & Climate	38-39	
❑ Geography of West Africa	40	

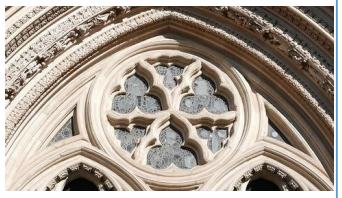
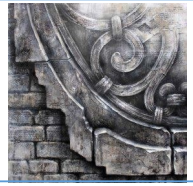
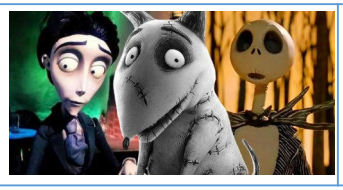
History	**41-47**	
❑ The Tudors	41-42	
❑ A World Turned Upside Down	43-44	
❑ Slave Trade & Abolition	45	
❑ Industrial Revolution	46	
❑ British Empire	47	
Mathematics	**48-55**	
❑ Number	48-49	
❑ Algebra	50	
❑ Statistics	51	
❑ Geometry and Measure	52-55	
Music	**56-59**	
❑ Terms & Definitions	56	
❑ Reading Notation	57-58	
❑ Instruments	59	
Physical Education	**60-63**	
❑ Netball	60	
❑ Rugby	61	
❑ Gymnastics	62	
❑ Vortex	63	
Science	**64-76**	
❑ Heating & Cooling	64	
❑ Earth & Atmosphere	65-66	
❑ Forces & Motion	67	
❑ Plants	68	
❑ Electricity	69	
❑ Ecology	70-71	
❑ Forces	72	
❑ Acids & Alkalis	73	
❑ Digestion & Nutrition	74	
❑ Space	75	
❑ Working Scientifically	76	
Spanish	**77-82**	
❑ Spanish - Les Vacaciones	77-78	
❑ Spanish - La Vida Sana	79-80	
❑ Spanish - El Colegio y el Trabajo	81-82	
❑ **Textiles**	**83**	

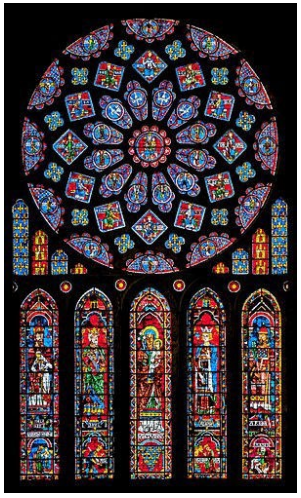
Art - Gothic Architecture - Gargoyles

1. Key vocabulary	Definition
Architecture	The art and technique of designing buildings and structures.
Gargoyle	In architecture, a gargoyle is a carved grotesque beast with a spout designed to remove water from the roof of a building.
Cathedral	A church ran by a Bishop—they usually have gothic architecture.
Stained Glass	Usually found in windows, colourful glass is used to decorate grand spaces with lots of light.
Character Design	The creation of a new character considering their visual appearance, personality and living environment.
Collage	A piece of artwork made by sticking various materials onto a background.
Mixed Media	Using more than one material in a piece of artwork.
Chalk	A soft, white material made from crushed and compressed shells.
Charcoal	A compressed stick made from lightweight black carbon residue.
Clay	A soft, loose and earthy material usually found where water once was. It is malleable when wet and hard and strong when dry.
Sculpture	A 3D artistic form that has been created with materials. It is designed to be seen 'in the round' from all angles.
Stipple	The process of dotting or tapping a medium to create a softer appearance.
Process	How something is made or the series of steps to create something.
Mood / Atmosphere	The sensation, emotion or feeling that is created as a result of visual choices.





2. Artist	Artwork summary	
Gothic		A decorative style of design found in Europe. Characterized by pointed arches, large windows and gargoyles.
Ian Murphy (1963—present)		Ian Murphy is a contemporary British Fine Artist. He found success when he was welcomed into the British Young Contemporary artists in 1985. His style includes powerful, tonal drawings and atmospheric, mixed media pieces.
Tim Burton (1958—present)		Timothy Walter Burton is an American filmmaker and producer. Known for popularising Goth culture in the American film industry, Burton is famous for his gothic horror and dark fantasy films.

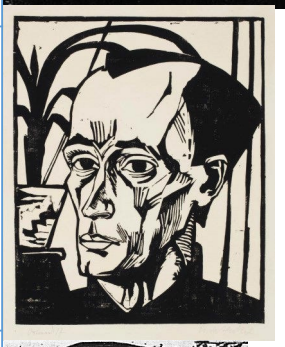


Art - Expressionism - Portraits

1. Key vocabulary	Definition
Portrait	A piece of artwork depicting only the face, head and shoulders.
Proportion	The relationship between height and width to create a harmonious or balanced image.
Graphic Design	The art of combining text and pictures. Usually for magazines, books and advertisements.
Observational Drawing	Drawing what you see in front of you. Looking and drawing as accurately as possible.
Mark Making	The different lines, dots, patterns and textures we create in artwork.
Cross-Hatching	A drawing technique to create tone or shading by using parallel lines. The lines closer together will appear darker, and lines with bigger spaces will appear lighter.

3. Printmaking	
Print	A process involving the transfer of text or designs to paper.
Relief Printmaking	A form of printmaking where the printed image is raised from the surface. Creating a surface like a stamp also known as "block printing".
Poly Block	A thin Polystyrene sheet, used as a printing block.
Brayer/Printing Roller	A small rolling tool used to rollout ink and apply pressure to the printing block.
Proof Print	A test print. Used to check if the print plate is ready to print multiples.

2 Artist/Movement	Information
Expressionism	When making portraits, Expressionist artists sought to communicate meaning or emotional experience more than to create a faithful likeness of themselves or their sitters. Primarily working in Germany and Austria during the 1910s and 1920s, and still reeling from the carnage of World War I, they were interested in capturing their subjects' psychological states. They used formal methods such as distortion, non-naturalistic colours, and unusual settings to help to achieve this.
Käthe Kollwitz (1867—1945)	Was a German artist who worked with painting, printmaking and sculpture. Her portraits captures the effects of poverty, hunger and war on the working class.
Erich Heckel (1883-1970)	A German painter and printmaker, and a founding member of the group Die Brücke ("The Bridge") which existed 1905-1913.
Ernst Ludwig Kirchner	A German expressionist painter and printmaker and one of the founders of the artists group Die Brücke or "The Bridge", a key group leading to the foundation of Expressionism in 20th-century art.



Citizenship - Health & Wellbeing

1. How to Deal with Stress

Stress	Mental or emotional strain or tension resulting from difficult circumstances. A risk factor for good mental wellbeing.
Fight or flight response	The instinctive response to a threatening situation, to resist forcibly or to run away.

Ways to reduce stress:

Organising time: This can make people feel more control of tasks they are facing and more able to handle pressure.

Relaxation Techniques: Taking purposeful breaks and find out what helps with relaxation.

Limiting caffeine intake: Caffeine may make stress worse in some people because it can raise levels of cortisol, a hormone related to stress.

Protective strategies: Practise protective strategies.

Key Concepts

Resilience	Being able to recover quickly from difficulties.
Risk Factors	Things that could result in a period of poor mental health. Such as: • Social isolation/loneliness • Traumatic life event • Severe or long-term stress • Poor physical health
Protective Factors	Things that support mental health. Such as: • Strong support network • Healthy habits; diet, sleep, exercise • Mindfulness • High self-esteem
Harm	• To damage, injure or hurt.

2. Relaxation as a protective strategy

'Rest and digest'	The nervous system response when the body enters a state of rest and repair.
Screen time	The time spent each day in front of a screen, such as TV, working at a computer, using a mobile phone or playing video games.
Flow state	The state that occurs when someone is completely immersed in a task.

Ways to promote rest:

- Do an activity that promotes 'flow' and occupies the mind.
- Do some physical activity.
- Write your worries down and throw the piece of paper away.
- Create a calm environment.

childline

ONLINE, ON THE PHONE, ANYTIME

childline.org.uk | 0800 1111

NHS

Helpful Resources

Mind UK: Mental health charity. **Website:** mind.org.uk **Helpline:** 0300 123 3393

YoungMinds: Youth Mental Health Charity. **Website:** youngminds.org.uk

Childline: Children's charity. Call their helpline for a free, private and confidential service where you can talk about anything. **Helpline:** 0800 1111 **Website:** childline.org.uk

3. Mental and Physical Health

Physical Health	A person who has good physical health is likely to have bodily functions and processes working at their peak.

Factors that contribute to a healthy lifestyle:

A healthy, varied diet: A balanced diet can support a strong immune system and keep energy up.

Regular exercise: Exercise gives people greater flexibility and strength, prevents boredom and helps sleep.

Sleeping well: When people sleep, their bodies and minds have the time to rest, recover and process all the things which have happened to them during the day.

Puberty and Emotional Wellbeing

Change	Impact
Hormonal Changes: Puberty causes changes in hormone levels such as estrogen and testosterone.	Irritability, moodiness, increased risk of depression/anxiety, decreased concentration.
Physical Changes: such as changes in body shape, body hair, facial acne.	Physical changes can reduce self- esteem and cause worry or anxiety.

Connected Careers

- Counselling/therapy
- Psychologist
- Medicine: Nurse/Doctor/Health Care assistant
- Dietician
- Personal Trainer
- Dental care

Citizenship - Relationships

1. Relationships and Sexuality	
Sexuality	A person's identity in relation to the gender or genders to which they are typically attracted; sexual orientation.
Gender Identity	The way you yourself describe your gender.

LGBTQ+ Identities:

Lesbian: A woman who has romantic and/or sexual attraction towards women.

Gay: A man who has romantic and/or sexual attraction towards men.

Bisexual: Someone who has romantic and/or sexual attraction to more than one gender.

Transgender: Someone whose gender is not the same as or does not sit comfortably with the sex they were assigned at birth.

Queer: A term used by people who want to reject specific labels of romantic/sexual orientation and/or gender identity.

Connected Careers

- Relationships counselling and therapy
- Safeguarding: police, social work, pastoral leader in schools
- Charity work

2. Boundaries	
Boundaries	'Rules' in a relationship that guide how people interact.

Examples of healthy boundaries for a safe relationship:

- Not excessively texting one another.
- Maintaining individuality, personal space, and personal hobbies.
- Having other healthy relationships that are allowed to flourish.
- Being able to say 'No' and being clear on what makes you uncomfortable.

3. Stereotypes	
Stereotypes	A widely held but fixed and oversimplified image or idea of a particular type of person or thing. E.g. the woman as the carer.
Prejudice	Pre-judgement: Negative feelings and attitudes about a person or group.
Discrimination	Treating people differently based on prejudice. For example sexism, racism, transphobia, xenophobia.
Stereotype Threat	The fear or anxiety of confirming a negative stereotype about one's social group.
Cultural Appropriation	Using things from a different culture without showing respect for it.

mind
for better mental health

childline
ONLINE, ON THE PHONE, ANYTIME
childline.org.uk | 0800 1111

Helpful Resources

- **Mind UK:** Mental health charity. Website: **mind.org.uk** Helpline: 0300 123 3393
- **National domestic abuse hotline:** 0808 2000 247
- **Women's Aid:** This charity supports young girls and women who face domestic abuse Website: **www.womensaid.org.uk**
- **Mankind:** Service supporting young boys and men who face domestic abuse Website: **www.mankind.org.uk**
- **Childline:** Children's charity. Call their helpline for a free, private and confidential service where you can talk about anything. Helpline: 0800 1111 **Website: childline.org.uk**
- **Respect:** support those exhibiting controlling behaviours 0808 802 4040
- **Galop:** Support for LGBT+ people experiencing abuse. Website: **http://www.galop.org.uk** Helpline: 0800 999 5428

Citizenship - Democracy & Government

1. How does Democracy Work?	
Democracy	'Rule by the people'. A form of government where the people rule, either directly or through elected representatives, e.g. UK.
Direct Democracy	Citizens directly vote on specific matters such as deciding whether to go to war or not.
Representative Democracy	Citizens vote for representatives who create and enact laws on behalf of the people.
Democracy in the UK	Citizens vote for their Member of Parliament to represent them in Parliament. Laws must be passed by both the House of Commons and the House of Lords.
Why Vote?	• Decide who makes the decisions on issues you care about. • Get politicians working for young adults. • Many movements have campaigned to give you the right to vote.

Helpful Resources

Parliament Website: **www.parliament.uk**

See voting history of your MP:

www.theyworkforyou.com

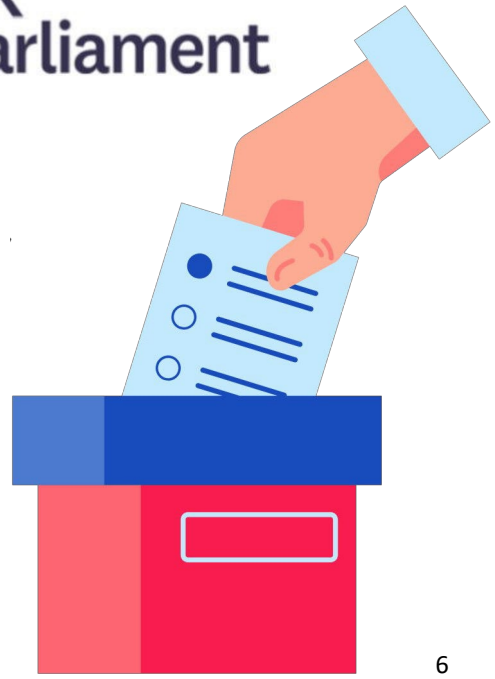
2. Democracy in the US	
Electoral College	A body of people representing the states of the US, who formally cast votes for the election of the president.
First past the post	The candidate who gets the most votes wins.
The Democrat Party	Left-leaning, more liberal political party in the US. They typically support higher taxes for higher incomes, support more government social support are more liberal on issues such as same-sex marriage and abortion.
The Republican Party	Right-leaning, more conservative political party in the US. They typically support reducing/equal income tax, private health and social care and are more conservative on issues such as same-sex marriage and abortion. As well as increase immigration controls.

Connected Careers

- Member of the civil service in departments such as the Diplomatic Service, the Treasury or security and intelligence services
- Researcher for governments
- Politician
- Communications
- Working for local authority
- Charity
- See and read more on **Unifrog.org**

3. Other Forms of Government	
Constitutional Monarchy E.g. UK	Has a democratic government that limits the control of the Monarch (King or Queen).
Dictatorship E.g. North Korea/ Nazi Germany	A country ruled by a single leader who has full power over the country. This leader is not elected.
Theocracy **E.g. Vatican/ Iran**	A God (or Gods) is recognised as the supreme authority and any human leader governs in the name of this God/s.

UK Parliament



Citizenship - Managing Money

1. Money Decisions	
Financial Security	Having enough money to fund your lifestyle, as well as work toward your financial goals.
Financial Freedom	Having enough income to pay one's living expenses for the rest of one's life without having to be employed or dependent on others.
Helpful Money Habits	• Plan and budget. • Live below your means. • Reduce your expenses. • Save as much as you can. • Be consistent.

2. Money and Mental Health	
Mental Health	The working order and wellness of your mind.
Unmanageable debt	Debt that you are not able to pay back within the given period.
Money Mule Schemes	Someone agrees to allow their bank account to be used by someone else in return for money. The bank account is usually used in criminal activities, and money may be later stolen.
Gambling	Gambling involves playing a game, placing a bet or taking a risk in the hope of winning money or something else desirable.

3. Financial Risk	
Risk	A situation involving exposure to danger.
Insurance	A method of protection against financial loss: money is paid regularly to a company who then provides money back to you if the insured item is damaged/ stolen.
'Buy now pay later'	A way to purchase a product without paying for it immediately: the money is loaned to you and you pay back, with interest later.
Financial Fraud	Money or other assets being taken through deception or criminal activity.

Tips to prevent financial fraud online:

- Use two factor authentication.
- Don't use the same password everywhere.
- Update software.
- Be careful with information posted online.
- Be careful with sharing personal information.

Connected Careers

- Retail and investment banking
- Finance managers for businesses, schools etc.
- Accountant
- Insurance advisor

  Cyber security
- See and read more on **unifrog.org**

Resources

Natwest Resources and games to teach about finances
https://natwest.mymoneysense.com/home/

Money makes sense resources **https://www.moneymakesense.co.uk/**

Childline: Free counselling service for young people to talk about any issues that is causing distress or concern.
Helpline: 0800 1111 **Website:** **www.childline.org.uk**

GamCare: Information and support for the prevention and treatment of problem gambling.
Helpline 0808 8020 133 **Website:** **www.gamcare.org.uk**

Cifas: Fraud prevention service with lots of information on preventing financial crime.
Website: **www.cifas.org.uk**

Citizenship - The Law and Justice System

1. Principles of the Law	
Justice	Fair treatment or behaviour.
Law	A system of rules that a country have agreed to follow.
Criminal Law	The part of the law that is concerned with the punishment of offenders.
Civil Law	The part of the law that deals with issues of fairness and the private relations between members of a community.

2. The Justice System in Action	
Stephen Lawrence	A black British teenager who was murdered in an unprovoked racially motivated attack in 1993, aged 18 years old.
The Macpherson Report	An inquiry into the death of Stephen Lawrence which began in 1997. It was led by Sir William Macpherson.
Crown Prosecution Service (CPS)	The agency responsible for the conducting criminal prosecutions in England and Wales.
Institutional Racism	Also known as systemic racism. It is racism which is embedded within systems and structures of an organisation, such as the Justice System.
The Double Jeopardy Rule	A rule that meant that nobody could be charged for the same crime twice. This was abolished following the Macpherson report.

3. Evaluating the Justice System	
The Justice System	The collection of agencies involved in the detection, prevention and prosecution of crimes. The Three components of the Justice system are: • Law Enforcement (Police) • Courts System • Corrections System
Evaluate	Judging and weighing the strengths and weaknesses of something. i.e. asking how fair or effective is this?
Reoffending Rates	The percentage of people after prison/other consequence commit a crime again.
Fair	Treating people equally without favouritism or discrimination.

Connected Careers

- Law enforcement
- Careers related to law:
- Bailiff, Barrister, Court legal adviser, Court assistants, Prosecutor, Judge
- Forensic science and psychology Prison and probation officer
- See and read more on unifrog.org

Resources

- See Bills that are currently being debated in Parliament here: https://bills.parliament.uk/
- See more about Stephen Lawrence at https://stephenlawrenceday.org/stephens-story/
- Childline: Children's charity. Call their helpline for a free, private and confidential service where you can talk about anything. **Helpline:** 0800 1111 **Website:** childline.org.uk
- Further resources about crime and an anonymous crime reporting online form at **https://www.fearless.org/en**

Citizenship - Media Literacy

1. Media Bias	
Media Literacy	The ability to critically analyse and evaluate the messages conveyed through media and use digital media responsibly.
Disinformation	False information that is created and spread to deliberately deceive people or give them an inaccurate understanding of an issue.
Biased Writing	The author shows favouritism or prejudice towards a particular opinion instead of being fair and balanced.
Filter Bubbles	Users are suggested content based on previous internet habits and interactions, which can isolate them from other viewpoints or interests.
Echo Chambers	Social spaces in which ideas, opinions and beliefs are reinforced within a closed group.

2. Being an Internet Citizen	
Cyberbullying	The use of electronic device to bully or threaten someone.
Free Speech	The right to hold opinions, and to receive and share information and ideas freely.
Hate Speech	Speech that attacks a person or group based on protected characteristics i.e. race/religion/ sex/sexual orientation/gender identity/ physical and mental abilities.
Active Bystander	Someone present at an event who is aware of inappropriate behaviour and chooses to challenge it and/or support the victim.

3. Risks Online	
Cybercrime	Criminal activities carried out by means of computers or the internet.
Phishing	When someone pretends to be someone else online in order to try and get your personal information.

childline
ONLINE, ON THE PHONE, ANYTIME
childline.org.uk | 0800 1111

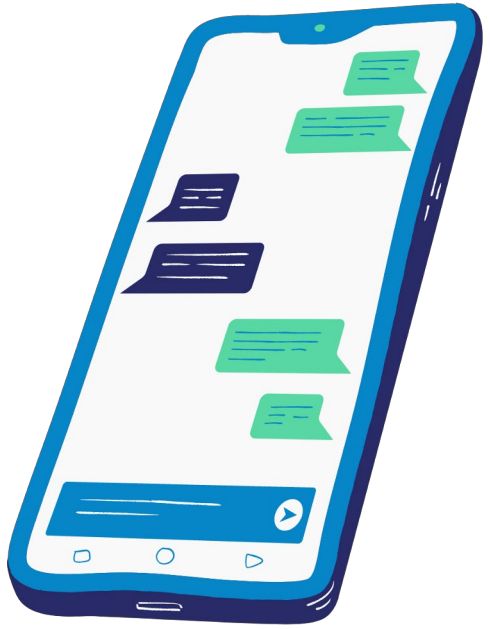
Resources

- **Childline:** Children's charity. Call their helpline for a free, private
- and confidential service where you can talk about anything.
  Helpline: 0800 1111
  Website: childline.org.uk
- **Safer Internet Centre**: https://www.saferinternet.org.uk
- **Thinkuknow:** www.thinkuknow.co.uk
- **Fact checking website:** www.fullfact.org

Connected Careers

- Journalism
- Social Media Manager
- Advertising
- Software development
- Web designer
- Intelligence officer, cyber security officer
- IT Support Technician
- See and read more on unifrog.org

CEOP REPORT
ceop.police.uk



1. Physical Skills		
Key vocabulary	**Definition**	**Words used to describe its use**
Posture	The way the body is held or the shape of the back to communicate meaning	Hunched, upright, stiff, straight, curved, arched, twisted
Gestures	The use of the hands, head or shoulders to communicate meaning	**Hands/arms** – wave, point, crossed, fists, hands on hips, covering face **Head** – Nod, shake, tilt to the side, lowered, raised **Shoulders** – shrug, one lifted, rolling backwards, rolling forwards
Facial Expressions	The use of the face to communicate meaning	**Eyebrows** – Furrowed, frowning, raised, lifted, arched **Eyes** – Squinted, wide, narrowed, heavy-lidded **Mouth** – smiling, smirking, down-turned, pout, biting your lip, agape
Eye Contact	The use of the eyes' focus to communicate meaning	Direct, avoid, lowered, lifted, darting, staring, scanning
Gait	The way a character walks to communicate meaning	Large, small, fast, slow, wide, narrow, run, limp, skip, stumble
Stance	The way a character stands including the placement of the feet and body weight to communicate meaning	Wide base, narrow base, parallel feet, feet turned out, feet turned in, knees bent, knees straight, weight on one leg, hip out to the side, weight forward, weight backwards

2. Vocal Skills		
Key vocabulary	**Definition**	**Words used to describe its use**
Pitch	How high or low the voice is to communicate meaning	High, low
Pace	How fast or slow the voice is to communicate meaning	Fast, slow, halting, rapid, hurried, rushed, steady, even, brisk
Pause	A moment of silence to build tension, add emphasis or communicate other meaning	Where in the sentence will you put the pause and how long will it be? What will you do in the pause with your physical skills?
Volume	How loud or quiet the voice is to communicate meaning	Loud, quiet
Accent	The way a character pronounces words according to their regional location or social class	American, Scottish, Welsh, Irish etc
Tone	The way the character speaks to show emotion	Warm, friendly, cheerful, calm, harsh, gruff, sarcastic, aggressive, formal, smooth, soft
Emphasis	Adding stress to a word or phrase to enhance importance and communicate meaning	Which word will you emphasise in the sentence? How will you emphasise it (make it louder, slower, higher, lower, whisper)?
Articulation	How clearly the words are pronounced to communicate meaning	Crisp, clear, sharp, mumbled, muttered, slurred, garbled

3. Use of Space		
Key vocabulary	**Definition**	**Words used to describe its use**
Levels	How high an actor is stood or sat to communicate meaning	Stand up, sit down, on a block, on a chair, on the floor (quickly, slowly, sharply, softly)
Proxemics	The distance between actors to communicate meaning	Move towards, move away, lean towards, lean away, turn towards, turn away (quickly, slowly, sharply, softly)
Blocking	The process of staging the movement of a scene	

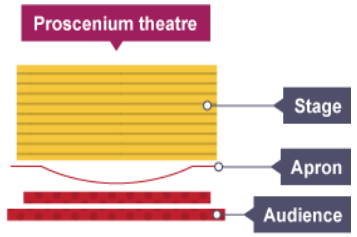
1. Creating Theatre	
Key vocabulary	**Definition**
Devising	Creating an original piece of theatre
Stimulus	An item that is used to generate and inspire ideas
Artistic Vision	What the actor/director wants the audience to experience
Character	A person in a novel, play, or film
Narrative	A series of events that make up a story
Improvisation	Making a performance on the spot with no rehearsal
Freeze Frame	A still image created by the actors to communicate meaning
Marking the moment	Highlighting or emphasising the important moments of a story

2. Performance Quality	
Key vocabulary	**Definition**
Audience Awareness	Being aware of what the audience will see, hear and experience when rehearsing or performing a scene
Clarity	Speaking clearly so the audience can hear you
Projection	The vocal and physical energy used to engage and connect with the audience

3. Movement	
Key vocabulary	**Definition**
Unison	A group of people moving as one
Canon	Performing the same phrase of movement one after the other
Dynamics	The quality of the movement relating to speed, flow or weight
Choreography	A sequence of stylised movement created to communicate meaning.
Transitions	The method of moving between scenes

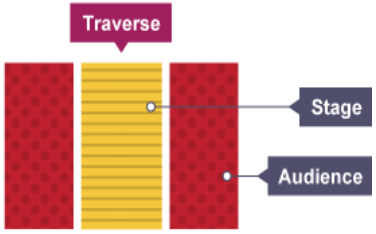
4. Stage Types

There are 4 different types of stage that you can use to perform for an audience.



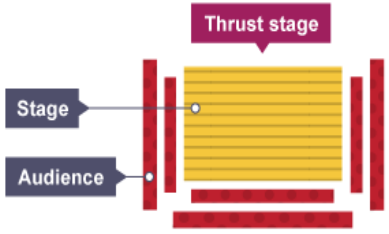
The traditional stage is called a **proscenium arch** stage and has the audience on one side of the performance space.

Any performance space with the audience on one side is also called **End On**

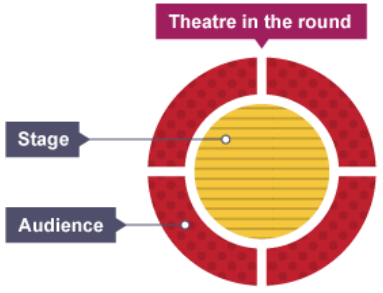


This is a **Traverse** Stage.

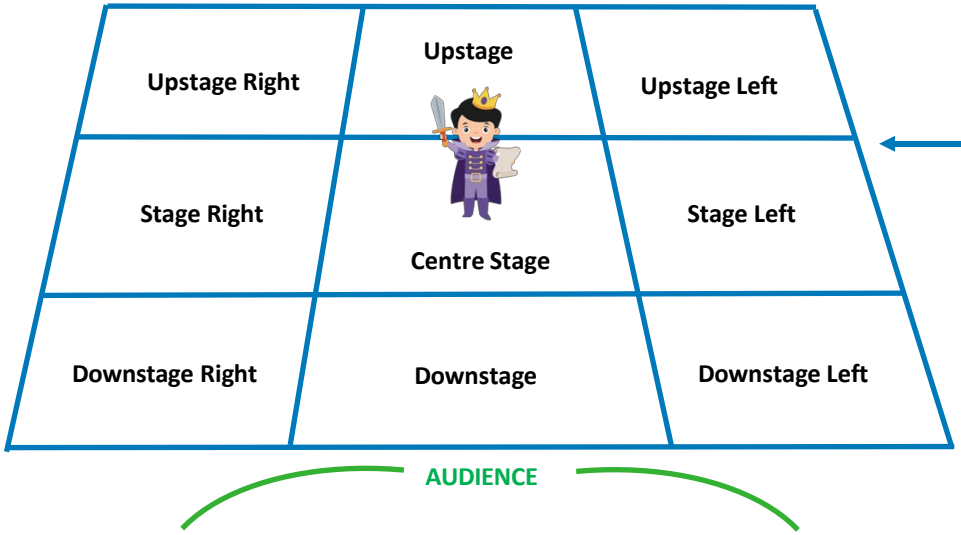
The audience are sat on 2 opposite sides of the stage and there are only 2 entrances – one at each end of the stage.



This is called a **thrust** stage**.** The audience are sat on 3 opposite sides of the stage and there are only 2 entrances – they are at one end of the stage on the left and right.



This is called an **in-the-round** stage**.** The audience are sat all around the sides of the stage. There can be any number of entrances/exits but they are through the audience.



Stage Positions

This is the language we use when we want an actor to move to a different place or face a different direction on stage.

To work them out you have to stand on the stage and face the audience. Then it is the actors left or right.

Features of a Script

Scene Title - The name and number of the scene – helps to identify where in the play it appears

Character Names Tells the actor which character is speaking – not read out loud

Stage Directions Instructions in the text which tell the actors and director what to do or add context – not heard by the audience – usually in *italics* or *(brackets)*

Dialogue - What the characters are saying in the scene

Scene Eight

Top floor landing of The Crow's Nest. Late Tuesday night. David and Gary stand outside the closed bathroom door.

David I hope this is gonna to be worth it.

Fliss appears from Room 11.

Gary At last. You said to be here for ten to.

Fliss Something was happening outside. I heard fe[et] dragging on the gravel.

David Probably a werewolf.

Fliss I knew it was a mistake to let you [t]wo in on it. What's happened to Lisa?

Sound of toilet flushing. D[avid] points to the door.

Lisa *(opening bathroom door)* You can come in now. Hiya, Fliss.

They go into the bathroom.

Lisa Anything happened then?

English - Grammar

Sentence Construction		
1	**Capital letters**	Used at the beginning of sentences and for proper nouns.
2	**Main clause**	A clause that does make sense on its own.
3	**Subordinate clause**	A clause that doesn't make sense on its own.
4	**Embedded clause**	A subordinate clause used within a main clause.
5	**Subordinating conjunction**	Introduces a subordinate clause e.g. despite, since, as, if
6	**Coordinating conjunction (FANBOYS)**	A word that connects main clauses or phrases. e.g. for, and, nor, but, or, yet, so
7	**Declarative sentence**	Makes a statement.
8	**Imperative sentence**	A command or instruction.
9	**Interrogative sentence**	Asks a question.
10	**Exclamatory sentence**	Expresses strong emotion and ends with an exclamation mark.
11	**Fragment sentence**	A sentence that does not contain a verb and/or subject.
12	**Simple sentence**	A sentence consisting of only one main clause.
13	**Compound sentence**	A sentence which includes two main clauses joined by a semi colon or coordinating conjunction.
14	**Complex sentence**	A sentence which includes a main clause and one or more subordinate clauses.
15	**Compound-complex sentence**	A sentence that contains two main clauses and one or more subordinate clauses.

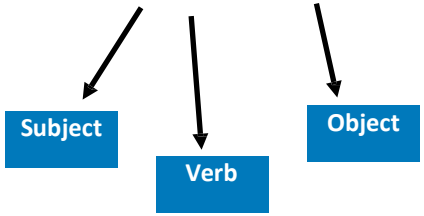
Punctuation		
16	**Full stops**	Used to mark the end of a sentence.
17	**Commas**	• To separate main and subordinate clauses. • To separate items in a list. • After introductory clauses, phrases, discourse markers.
18	**Apostrophes**	Used to show possession and omission.
19	**Semi colon**	• Used between two main clauses that are closely related. • Used in-between ideas of a list that are already complex due to the inclusion of commas and conjunctions.
20	**Colon**	• Introduce a list, information, idea and explanation. • Introduce quoted information.
21	**Dash**	• To add extra information. • To signal a change in thought or shift in tone.
22	**Hyphen**	• Used to combine words into a compound word. e.g. washing-up
23	**Brackets**	• Separates extra information in an informal style (round). • Gives alternatives (round). • Around the ellipsis that shows words have been omitted from a quote (square).

Word Types		
24	**Abstract noun**	An idea or concept. e.g. bravery, courage, love
25	**Noun**	A name, place or thing.
26	**Proper noun**	Names of people and places which require a capital letter. e.g. London, Anna
27	**Adjective**	A word that describes the noun.
28	**Verb**	Action or state (be, have).
29	**Modal verb**	A verb that shows necessity or possibility. e.g. will, should, could
30	**Adverb**	A word that describes a verb.
31	**Preposition**	Providing information on time, place, and position.
32	**Personal Pronoun**	Words used in place of names of people or things. e.g. she, I, you
33	**Collective Pronoun**	Words that are used to show a group of people. e.g. our, us, we

Simple Sentence

A sentence consisting of only 1 main clause.
EXAMPLE:

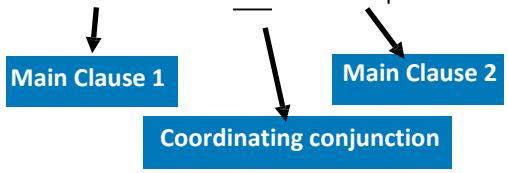
The **cat sat** on the **mat**.



Compound sentence

A sentence consisting of two main clauses joined by a coordinating conjunction or semi colon. Example:

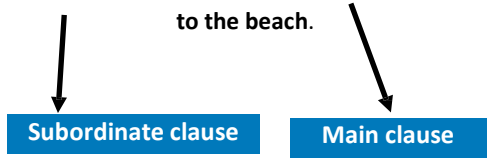
The cat sat on the mat and it fell asleep.



Complex sentence

A sentence which includes a main clause and one or more subordinate clauses. EXAMPLE:

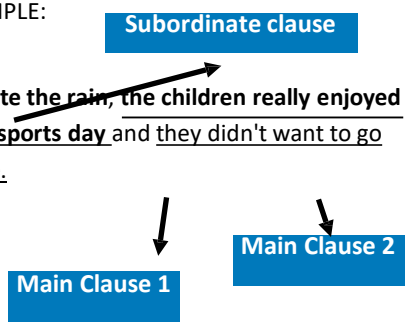
Although it was raining, **the family decided to go to the beach**.



Compound complex sentence

A sentence that contains two main clauses and one or more subordinate clauses.

EXAMPLE:



Commas	Apostrophes
1. **To separate main and subordinate clauses.** **EXAMPLE:** As I wandered through the street, I noticed the tired looking shops.	1. **Used to show omission** Omission is when we show that we have taken a letter out of a word and replaced it with an apostrophe. **EXAMPLE 1:** I **do not** think we should do this. = I **don't** think we should do this. **EXAMPLE 2: It is** clear that you are right. = **It's** clear that you are right.
2. **To separate items in a list.** **EXAMPLE 1:** I went to the shops to buy milk, eggs, bread and cheese. **EXAMPLE 2:** The door was old, worn, battered and overwhelmingly large.	2. **Used to show possession** Possession is when we show that we have used an apostrophe to show that something belongs to someone. **EXAMPLE 1:** Miss Smith must mark all the **students'** papers. **EXAMPLE 2: James'** bike was broken. **EXAMPLE 3:** The **writer's** use of the noun "table" suggests...
3. **After introductory clauses, phrases, discourse markers** **EXAMPLE:** Firstly, I believe that we should not keep animals for testing. **EXAMPLE 2:** Additionally, I strongly view healthy eating as important.	

English - Richard III

1. Attitudes in the 16th Century

	Subject	What people thought
1	**Kingship**	• The throne of England is passed from the king to their eldest son or daughter. • Kings and Queens of England claimed that God had placed them in their position. • The royal family and landowners or nobles had all the political power. • Everyday citizens had no say in the decision making of those in power.
2	**Women**	• Women were considered less important than men. • Men controlled the nation (patriarchy) and controlled their wives. • The only way that women could have any power was through their husbands.
3	**The supernatural**	• The belief in things that cannot be explained by science. • New superstitions arose due to the fear of witchcraft. • Women were those most often accused of being witches.
4	**Appearance**	• Audiences in the 16th century would expect characters with an ugly physical appearance to have ugly personalities.

2. Key vocabulary

Verbs			Adjectives		
5	**Resent**	Feel bitter about a situation.	11	**Malicious**	Intending to do harm.
6	**Aspire**	Hope to achieve something.	12	**Bitter**	Be angry/hurt about something.
7	**Betray**	Go behind someone's back.	13	**Gullible**	Easily persuaded.
8	**Loathe**	Intense dislike or disgust.	14	**Deposed**	Removed from power.
9	**Alienate**	Make someone isolated.	15	**Tyrannical**	Using power in a cruel way.
10	**Relent**	Give up resistance.	16	**Feuding**	Involved in a prolonged dispute.

3. Key dramatic vocabulary

17	**Aside**	Lines spoken by a character which the audience hears but other characters do not hear.
18	**Blank verse**	Has a regular rhythm but no rhyme scheme.
19	**Prose**	Writing in continuous form without rhythm or rhyme.
20	**Dramatic irony**	Where the audience knows more than the characters in the play.
21	**Machiavel**	Manipulative, deceptive and ruthless villain who seeks power through scheming rather than force.
22	**Monologue**	Extended speech by one character in conversation with another.
23	**Soliloquy**	A solo speech where a character reveals their thoughts aloud.
24	**Stichomythia**	Rapid alternation of single lines spoken by two characters.
25	**Tragedy**	Drama based on human suffering – typically involving death.
26	**Verse**	Has a regular rhythm and a fixed rhyme scheme.

4. Shakespeare's Language

	16th Century	21st Century		16th Century	21st Century
27	**Adieu**	Goodbye	37	**Nay**	No
28	**Alas**	Unfortunately	38	**Oft**	Often
29	**Art**	Are	39	**'Tis**	It is
30	**Aught**	Anything	40	**'Twas**	It was
31	**Dost / Doth**	Do/Does	41	**Whence**	From where
32	**Ere**	Before	42	**Wherefore**	Why
33	**Hast**	Have	43	**Would**	Wish
34	**Hence**	From here	44	**Yea**	Even
35	**Thou**	You (subject, singular)	45	**Ye**	You (subject, plural)
36	**Thee**	**You (object)**	46	**Thine/thy**	Your

English - Woman in Black and Gothic Writing

1. Key subject vocabulary		
Vocabulary		**Definition**
1	**Gothic Fiction**	A style of writing that is characterised by elements of fear, horror, death and extreme emotions.
2	**Literary Conventions**	Defining features of particular literary genres, such as novel, short story, ballad, sonnet, and play.
3	**Motif**	A repeated image or idea.
4	**Supernatural**	Something that cannot be explained by science or reason.
5	**Characterisation**	A literary device in which in an author builds up a character in a narrative.
6	**Symbolism**	Using objects or characters to represent an important idea or concept.
7	**Setting**	The time and place in which the story takes place in a piece of literature.
8	**Tension**	The feeling of suspense and anticipation.
9	**Simile**	When one thing is compared to another using like or as.
10	**Metaphor**	When one thing is directly compared to another. e.g. 'the tank is a monster'
11	**Pathetic fallacy**	When the weather or nature reflects the feelings of the character and/ or mood of the text.
12	**Imagery**	Where the writer uses words or phrases that create a certain image in the reader's mind.
13	**Personification**	Giving human qualities to an object e.g. the bullets screamed.
14	**Foreshadowing**	Warning or hint of a future event.
15	**Foreboding**	The implication that something bad will happen.
16	**Framed narrative**	A story within a story.
17	**The Uncanny**	Strange or mysterious especially in an unsettling way.

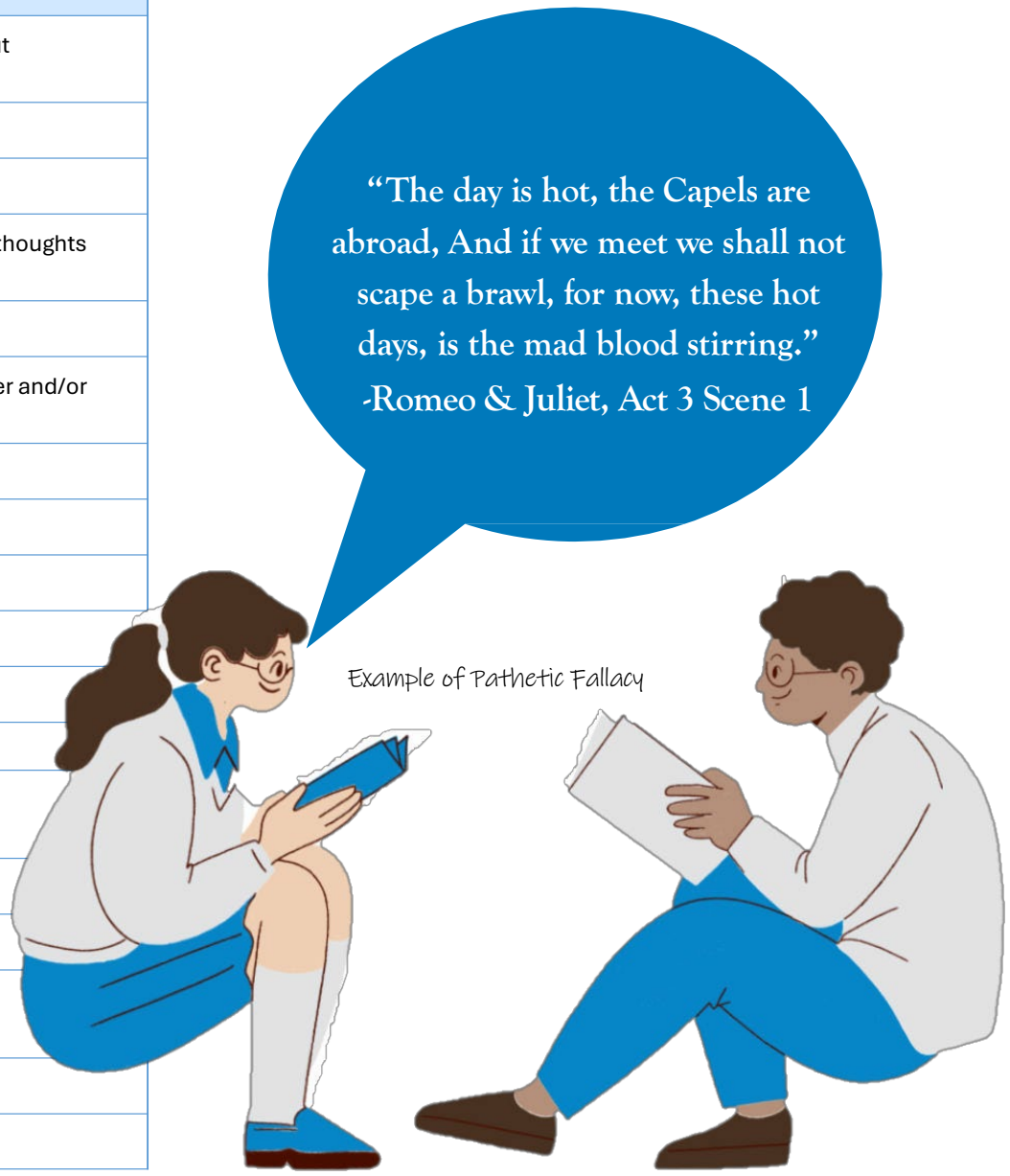
2. Key features of Gothic Horror	
18	Death and darkness
19	Supernatural (magic, ghosts, vampires, monsters)
20	Fear, haunting and isolation
21	Betrayal and revenge
22	Madness, terror and suspense

3. Key contextual ideas	
Vocabulary	**Definition**
Susan Hill	• Author of the Victorian ghost story. • Woman in Black was written in 1983 but set in the Edwardian Era.
Edwardian Era	• Between 1901 - 1910 • King Edward VII reigned as King before his death on May 6, 1910
Romanticism	• A literary genre in the 18th-19th century. • Celebrated nature, beauty and imagination. • Rejected industrialisation and rationalism.
Victorian Values	• Victorian society valued religion. • There was a strict social code of conduct. • Men were expected to always be respectful, logical and rational.
Motherhood	• Having a child out of wedlock was frowned upon. • Unmarried woman were forced to give up their children for adoption.

4. Key Characters	
Arthur Kipps	The protagonist of the novel. A successful lawyer.
The Woman in Black	A ghostly figure.
Samuel Daily	A local man who befriends Arthur.
Mr Bentley	Arthur's boss at his London law firm.
Mr Jerome	A local estate agent appointed as Arthur's guide.
Keckwick	Arthur's driver.

English - Woman in Black and Gothic Writing

5. Structure vocabulary		
	Vocabulary	**Definition**
1	**In medias res**	When a piece of writing starts in the middle of the action without an exposition.
2	**Characterisation**	The creation and construction of a fictional character.
3	**Narrator**	The person or thing telling the story.
4	**Omniscient narrator**	A narrator who writes in the third person and has access to the thoughts and feelings of the characters/the plot.
5	**Setting**	The time and place in which the story takes place in.
6	**Pathetic fallacy**	When the weather or nature reflects the feelings of the character and/or mood of the text.
7	**Pacing and delaying**	Purposefully speeding up or slowing down of the plot for effect.
8	**Perspective**	A point of view or attitude towards something.
9	**Dual narrative**	When a story is told from two viewpoints.
10	**Chronological**	When events are shown in time order.
11	**Non-linear**	When events are not shown in time order.
12	**Motif**	A repeated image or concept.
13	**Symbolism**	Using objects or characters to represent an important idea or concept.
14	**Analepsis**	A flashback which shows past events.
15	**Prolepsis**	A flash-forward which shows future events.
16	**Cyclical structure**	When a text begins and ends in the same place or with the same idea.
17	**Tension**	The feeling of suspense and anticipation.
18	**Foreshadowing**	A warning or hint at a future event.



English - In the Sea there are Crocodiles

1. Key vocabulary		
1	**Narrative**	A written account of connect events; a story.
2	**Analepsis**	A flashback which shows past events.
3	**Prolepsis**	A flash-forward which shows future events.
4	**Foreshadowing**	A warning or hint at future events.
5	**In media res**	Where a piece of writing starts in the middle of the action without an exposition.
6	**Setting**	The time and place in which a story takes place.
7	**Pace**	The speed in which events unfold in the text.
8	**Anaphora**	Repetition of the same word/phrase at the beginning of successive clauses.
9	**Cyclical structure**	When a text begins and ends in the same place or with the same idea.
10	**Pivotal moment**	An important moment that signifies a shift or change.
11	**Motif**	Repeated image or idea.
12	**Tension**	The feeling of suspense and anticipation.
13	**Tone**	The choice of writing style the writer employs to convey specific feelings, emotions or attitudes.
14	**Imagery**	Where the writer uses certain words to create a certain image in the reader's mind.
15	**Perspective**	A point of view or attitude towards something.

2. Key vocabulary		
16	**Conflict**	A struggle between opposing forces.
17	**Rite of passage**	The transition from childhood to adulthood.
18	**Emigrate**	To leave one country and permanently settle in another.
19	**Refugee**	A person forced to leave their country in order to escape war or persecution.
20	**Political refugee**	A refugee from an oppressive government.
21	**Asylum seeker**	A person who leaves their country in order to find protection from persecution in another country.
22	**Persecution**	The cruel treatment of someone based on their race, religious, or political beliefs.
23	**Propaganda**	Misleading information used to promote a political view.
24	**Militants**	A person engaged in warfare or combat.
25	**Fundamentalist**	A person who holds very firm and extreme beliefs.
26	**Extremism**	The holding of very extreme political or religious views.
27	**Taliban**	A fundamentalist, Islamic group in Afghanistan.

Ethics - Study of Islam

1. Origins of Islam and Prophets	
Abrahamic Faiths	• Islam, Judaism and Christianity are known as the Abrahamic faiths • Monotheistic faiths • Share a common history, tracing their origins to Prophet Ibrahim and his son Ismail by his wife Hajar
Adam (Adam)	• First human created from 'The soil of many colours' • Forgiven by Allah
Nuh (Noah)	Warned his people about the flood
Ibrahim (Abraham)	• Monotheist who re-built the Kaaba • Was willing to sacrifice his son Ismail
Musa (Moses)	• Led Israelites out of Egypt • Received 10 Commandments
Isa (Jesus)	• Born of the virgin Maryam • Through Allah performed miracles e.g. healing miracles • Not God in human form
Muhammad	The final prophet, the Seal of the Prophets

2. Nature of Allah	
99 Names	Ways to describe what Allah is like. e.g. Most Merciful, Most Wise, The Opener, The One, The Creator
Tawhid 	The oneness of Allah.
Shirk	The sin of worshiping something other than Allah.
Transcendent	Allah is beyond the physical world including time and space
Immanent	• God is always close to humans. • *'Closer than your jugular vein.'*

3. Sources of authority and wisdom	
Qur'an	• Islamic holy book, written in Arabic, 114 chapters (surahs) • Revealed to Muhammad over 23 years. • Reveals the nature of Allah and is a guide to living. • Means 'to recite'. • Uncorrupted
Hadiths	• Recordings of what the Muhammad said • Guidance on how to live a good life • Not as important as the Qur'an
Sunnah	• A collection of practices, sayings and approvals on the Prophet Muhammad. • Helps them apply the teachings of Qur'an
Shariah	• Means the 'path to water' • Names for Allah's law • Different interpretations e.g. main law in Saudia Arabia including crime

4. Life of Prophet Muhammad		
Pre-Islamic Arabia	• A polytheistic society made up of many tribes (corrupt & nomadic) • Worshipped different gods at the Kaaba • Charged people to worship	
His early Life	• Was born in 570 CE in Makkah in Saudi Arabia • Muhammad gained an excellent reputation and the nickname 'Al-Amin' meaning 'trustworthy' • Married Khadija a successful businesswoman • Rejected the worship of idols (believed in tawhid)	
Night of Power	The night Angel Jibril first revealed the Qur'an's message to Muhammad.	
Hijrah	Means 'migration' (of Muslims from Makkah to Medina). Muhammed was made to do this as he was being persecuted	
Conquest of Makkah	Muhammad peacefully reclaimed Makkah with an army of 10,000 using torches.	
Final Sermon	A speech by the Prophet Muhammad, delivered on Mount Arafat, a place outside of Makkah	**Key Messages** Respect all human dignity. *'Do treat your women well and be kind to them'* *''Beware of Satan'* Promote equality of races- *'No Arab has superiority over a non-Arab.'*

5. Life after Prophet Muhammad	
Death of Muhammad	Muhammad died in 632AD causing disagreement over his successor.
Shia	• Around 10% of Muslims. • Ali (Muhammad's son-in-law) should have been the leader. • Became the fourth caliph (leader). • Believe in **Adalat—God's justice.** • Allah does not plan our lives.
Sunni	• Around 90% of Muslims. • Abu Bakr (Prophet Muhammad's friend) was the rightful leader. • Became the first caliph (leader). • Believe in **Al-Qadr** (Allah has planned everything).

Islam: Key Vocabulary

Kaaba	Medina	Taqwa	Sunnah	Constitution of Medina	Barzakh	Day of Judgement	Jannah	Jahannam
The sacred cube shaped structure in Makkah that Muslims face during prayer In Makkah	A city where Muhammad established	Constant awareness of Allah	A collection of practices and sayings of the Prophet Muhammad	A document created by Muhammad to establish peace and cooperation in Medina	Cold sleep entered upon death.	Israfil will blow trumpet twice. Angels Raqib and Atid present your book of deeds to Allah.	Paradise ('garden') with 7 stages. Contains 'rivers of milk and honey'.	Place of torture ('depths') with 7 stages. People will wear 'garments of fire'.

Ethics – Study of Islam

6. Five Pillars of Islam

PILLAR	FACTS	TEACHING
Shahadah	• Declaration of faith • Said at birth, death and reversion • Soldiers say it in battle • Emphasises tawhid and prophethood	*"I bear witness there is no God but Allah, and Muhammad is His messenger"*
Salah	• Prayer 5 times a day • Face Mecca and use a prayer mat • Friday prayers at mosque (men)= jummah	*"Glorify Him in the mornings and evenings"*
Zakat	• 2.5% tax donated to charity (e.g. poor and travellers) • National Zakat Foundation= Raised £28 million since its founding	*"Those who help the poor are warriors for God's cause"*
Sawm	• Fasting during Ramadan • No eating, drinking during day • Evening meal= iftar	*"Shaytan is chained & gates of Jahannam are locked during Ramadan"*

Hajj	WHAT?	WHY?
	Travel to Mecca.	Birthplace of Prophet Muhammed.
	Wear white robes.	State of purity (ihram).
	Circle Kaaba 7 times (tawaf).	Muhammad circled Kaaba as he smashed false idols.
	Drink water from Zam Zam well.	To remember Angel Jibril leading Hajar to the water.
	Throw stones at pillars of Jamarat.	To remember Ibrahim throwing stones at Shaytan/resisting temptation.
	Sacrifice an animal (sheep or goat).	To remember Ibrahim being willing to sacrifice his son Ismail.

7. Ramadan and Eid-al-Fitr

Ramadan	• The ninth month of the Islamic calendar • Holiest month • Night of Power on the 27th Night • Fast during daylight hours • Also avoid gossiping, smoking and digital devices • Develops compassion with the Ummah • Interfaith activities	*'Those who fast are close to God'*
Eid- al-Fitr	• Festival of 'the breaking the fast.' • End the end of the month of Ramadan • Thank Allah for giving them strength and discipline • Iftar meal with dates and water, a sunnah act • Decorate homes • Families gather and take time off work	*'The Provider'* *'Eid Mubarak'*

8. Sharia Law and different interpretations

School	Who	Where	Focus
Hanafi	Sunni	South Asia, Turkey	Flexible interpretations of the Qur'an. It emphasises reason
Hanbali	Sunni	Saudi Arabia	Follows the Quar'an and Hadith very strictly
Ja'fari	Shia	Iran, Iraq	Follows the teachings of the Prophet's family

9. Gender Equality

Worship in the mosque	• Mosque- typically led my male imams • Caliphs were also male • Women can attend worship in mosques • Men and women pray separately
Women in Islam	• Khadija- a successful and powerful businesswoman • Fatima- 'greater-Mary' (Shia Islam) wise and devoted • Mariam Mosque in Denmark 2015- female imams
Equality and Sharia Law in Saudi Arabia	• Criticised for unfair treatment of women e.g. sons inherit twice as much as daughters • Only 20% of workforce are women • Gender pay gap • 2018 law allowed women more freedoms
Empowered women now	• Mariam Khan a British Muslim feminist • Wrote am essay 'It's not about the Burqa.'

10. Clothing, Culture and Choice

Modesty	• A principle in Islam often expressed through clothing and behaviour • Different debates about faith, freedom and women's rights • Some believe women should wear hijab, niqab and burqa
Burqa Ban	• Laws that prohibit wearing full face vells in public spaces in countries e.g. Denmark, France • They believe in keeps the public safe and promotes fairness • Some are against burqa ban as it takes away a woman's right to choose

Islam: Key Vocabulary

Wudu	Caliphs	Imam	Dua	Niyyah	Ummah	Sunnah act	Sadaqah	Hijab	Burka	Niqab
Ritual washing before prayer	A leader in Sunni Islam, who succeeded the Prophet Muhammad in leading the ummah	A leader in Shia Islam or someone who leads prayer at the Mosque in Sunni Islam	Personal prayers	The correct intention focused on Allah	Worldwide Muslim community	Refers to the actions of the Prophet Muhammad	Additional, voluntary contribution to charity	A headscarf worn by some Muslim women as a sign of modesty	A full body covering worn by some Muslim women for reasons of modesty	A face veil worn by some Muslim women as part of modest dress

Ethics - Hindu Dharma

1. Dharmic faiths in the UK

Origins and context	• One of the world's oldest religions • Over 4000 yrs old • Originated in Indian subcontinent
Different interpretations	Hindu communities worldwide adapt their traditions to local cultures while maintaining core beliefs
Migration	Hindus migrated from India, East Africa and the Caribbean to the UK.
British values	Hindu values such as non-violence, respect for all beings and family devotion align to British values and support multiculturalism and social harmony

2. Cyclical time-Infinite cycles of creation, preservation and destruction

Law of karma	Belief that the things you do in life will eventually return to you, either in this life or the next.
Samsara	The cyclical nature of birth, death, and rebirth, driven by karma.
Moksha	The ultimate goal for Hindus is to escape samsara and achieve moksha

3. Nature of God

Monotheistic or Polytheistic	Both One supreme reality Multiple deities
Pantheism	The belief that God is present in everything; in nature, people, and the universe.
Brahman	The one, divine ultimate reality. Everything comes from Brahman and returns to it.
Trimurti	The three main deities to help humans understand Brahman: Braham, Visnu and Shiva.
Brahma	Hindu deity of creation. Hindus believe Brahma created the universe and all living things, often said to have been born from a lotus flower growing from Vishnu's navel.
Vishnu	Hindu deity known as the protector of the universe, part of the Trimurti. He appears in many forms (avatars) to help restore balance in the world
Shiva	Hindu deity known as the destroyer, part of the Trimurti. He helps make way for the new and brings balance.

4. Sacred texts

The Vedas	Oldest and most important texts in Hindu tradition. Ancient scriptures including hymns, prayers, and teachings.
The Upanishads	Philosophical texts including key concepts such as Brahman, atman and moksha.
The Bhagavad Gita	Lord Krishna's teachings on duty (dharma) devotion (bhakti) and liberation (moksha).
Varna	The four traditional groups in Hindu society (Brahmins/Priests, Kshatriyas/warriors, Vaishyas/farmers, and Shudras/workers), each with different roles and duties.
Ashrama	The four stages of life in Hindu Dharma (student, householder, retiree, and spiritual seeker) each with its own duties.

5. Worship- Hindu worship can be performed privately at home or publicly in the Mandir.

Murtis 	Sacred images or statues of deities. An example is Vishnu, shown with blue skin and four arms holding a conch shell, discus, lotus flower, and mace. These show his role as the preserver of the universe.
Puja worship at home 	Daily worship to connect with the divine. A Puja tray is used, and each item has symbolic meaning. Examples are: • Bell - To wake up the deity. • Arti or Diya lamp - removes darkness. • Water and spoon - represents life and care. • incense - To purify and appeal to the sense of smell
Puja worship in a Mandir 	Hindus visit mandirs to pray, feel close to the divine, and join in rituals. Inside are murtis of deities. Rituals include: • Removing shoes as a sign of respect • Ringing a bell to announce presence • Lighting a lamp (arti) before the murti

6. Festivals

Ramanyana	Ancient Hindu story about Prince Rama, his wife Sita, and his battle against demon king Ravana.
Diwali 	Festival of lights celebrating the victory of good over evil in the Ramayana. Many Hindus light lamps, share sweets and enjoy fireworks.

7. Rituals

Namakarana	Hindu naming ceremony, where the child's name is chosen and blessings are given.
Funerals	Involves cremation and rituals to guide the atman's journey, with prayers to help achieve moksha.

8. Pilgrimage

The largest religious gathering held every 12 years. Millions bathe in sacred rivers to cleanse sins and attain spiritual growth. Bathing in the river Ganges is believed to support the soul's journey towards moksha.

9. Ethical system

Cause and effect	Hindus believe that karma determines our future experiences. If you live a good life and do moral actions you will gain good karma
Caste system	Traditional system in Hindu society that grouped people into different roles (Varna), like teachers, protectors or traders, based on birth
Ahimsa	The important principle of non-violence-supporting peace and avoiding harm to living beings.
Mahatma Gandhi	An example of ahimsa, Mahatma Gandhi led India's independence movement through non-violent resistance and civil disobedience.

Deity	Avatar	Reincarnation	Atman	Mandir	Sanatana Dharma	Varnashrama Dharma
Term for a god or goddess. In Hindu Dharma, there are many deities, each representing aspects of Brahman.	A deity appearing on Earth in human or animal form to help restore balance and protect good.	The belief that the atman will be reborn in a different physical form or body after death, until it achieves moksha.	Inner self or soul Eternal and identical to Brahman	A temple, a sacred space for Hindu puja worship	Universal, eternal duties to live a truthful, compassionate and disciplined life.	Duties based on role (Varna) and stage (ashrama).

Ethics - Sikhi

1. Context and influences

Origins	Started in the Punjab region of South Asia (now present-day India and Pakistan) in the late 15th century.
1947 Punjab Partition	Punjab was split into two identities: • West Punjab (5.5 million Muslims) • East Punjab (4.5 million Hindus and Sikhs)
Influences	Sikhi is a unique, distinct monotheistic religion. ***"God is neither Hindu, nor Muslim"***
Sikhs worldwide	• 5th largest world religion • 30 million worldwide, 25 million thought to live in India.
Sikhs in the UK	0.9% of the population of England and Wales (according to 2021 census).
Key facts	• Members= called Sikhs meaning 'learners' • Sikhism= westernised name, given to the religion based upon the British domination of India.

2. Life and teachings of Guru Nanak

10 Gurus	• The founding fathers of the faith. • Starting with Guru Nanak and ending with Guru Gobind Singh (1708). • Lived spiritually pure lives and shared divine wisdom.
Guru Nanak	The founder of Sikhi (1469-1539 CE) Born a Hindu but rejected the caste system.
NANAK'S KEY TEACHINGS	
Oneness of God	***'Ik-Onkar'***- there is one universal God.
Mool Mantar	The opening lines of the Sikh holy book (Guru Granth Sahib): ***"There is One Universal Creator Truth is the name"***
Equality	Rejected patriarchal society and believed men and women are equal ***"From women, man is born".***
Service	Through acts of charity, Sikhs develop compassion ***"Serve others as the Lord's own".***

3. Sikh identity (The 5 K's)

Guru Gobind Singh	The last human guru, known for establishing the Khalsa and making the Guru Granth Sahib the 'eternal guru'.
Khalsa	Set up in 1699, the Khalsa is a group of committed Sikhs, who follow core principles, e.g. honesty and discipline.
Amrit Sansar	The name for the Sikh ceremony of initiation to the Khalsa. This signifies a Sikh's vow to follow the Khalsa code of conduct and dedicating themselves to God.
The 5 K's	Five symbols worn by Khalsa Sikhs to show their faith and commitment: • Kesh (uncut hair) • Kangha (a comb) • Kara (a steel bracelet) • Kachera (cotton underwear) • Kirpan (a sword) 
VAISAKHI DAY	
• Birthday of the Khalsa being formed. • Vibrant, colourful processions led by 5 men wearing orange holding swords upright, hymns sung, visit Gurdwaras.	

4.Written authority: Sikh scripture

Guru Granth Sahib	• Holy scripture: consisting of hymns, poems and writings written using the Gurmakhi alphabet. • Considered the eternal 'Living Guru' as the line of living gurus ended. • Believed to be the correct word of God and so is treated with respect.
Gurbani	Meaning *'from the guru's mouth'*. The Guru Granth Sahib contains writing from other gurus.
TEACHINGS IN THE GURU GRANTH SAHIB	
Waheguru	Only one God who is formless, eternal and beyond human understanding.
Creation	Divine spark of God lives in every part of God's creation.
Afterlife	• There is no afterlife, the goal is to become 'one' with Waheguru. • The soul endures the cycle of samsara, based on karma (the law of cause and effect). • Mukti = freedom from the cycle of samsara (ultimate goal).

5. The ethical role of the Gurdwara

Gurdwara	A Sikh place of worship (200 Gurdwara's in Britain).
Focus on spirituality	• Gather for prayer • Hymn singing • Readings from scripture
Focus on community	Langar meal (community kitchen)- free vegetarian food offered to all regardless of gender, status or wealth.
Sewa	• Selfless service without reward. • Sikhs want to volunteer to help with the running of the Langar each week. • Shows belief that we all belong to the same human family, and we can serve God by helping others: **"If you serve the creation, you serve the creator".**

Guru	Sewa	Gurdwara	Waheguru	Mukti	Sikh	Sikhi	Khalsa
A spiritual teacher. In Sikhi, there were ten human Gurus who taught important lessons.	Selfless service; helping others without expecting anything back.	A Sikh place of worship where people pray, sing and share food.	The Sikh name for God, who is one, formless and beyond human understanding.	Freedom from the cycle of birth and death; a goal in Sikhi.	A follower of Sikhi, a dharmic faith that teaches equality, honesty and helping others.	A dharmic faith that teaches equality, honesty and helping others. Started by Guru Nanak.	A group of committed Sikhs who follow a strict code of conduct and show dedication to their faith.

Ethics – Writing Structure

1 mark

Define- state what is meant by…

Question 1 (1 mark)

1. State what is meant by the Qur'an.

1

Learn these off your key vocabulary bank at the bottom of each KO!
If you can't remember word for word, then use your own language to try and define. Even better, use an example to ensure the definition is secure!

3 marks

Describe three…

Discourse markers

- **Sequential:** 'Firstly…
- **Comparative:** 'Similarly…
- **Adding:** 'Also, Additionally, Moreover…'

3 full sentences, NOT bullet points!
Read the question carefully 'what, why, importance, two'
Use as much tier 3 vocabulary as possible.
Join points together using discourse markers for flow.

2x

P.E.E. Paragraphs

4 marks

Explain two…

P: State whose perspective you have chosen and their view.
'Sunni Muslims believe…
'Literal Christians see…
'Some Hindu's reject…

Ev: Give examples, statistics and/ or teachings to support the view above.
'For example…
'This can be seen in the Islamic teaching…
'This is demonstrated by…

Ex: Justify why the evidence links to your point- say why!
'This is because…
'Therefore, this suggests…
'This highlights the belief that…
Aim: include how this belief or practice impacts a believer (think/act/feel).

French - Les Vacances et le Temps Libre

1.	Où vas-tu tes vacances?	Where do you go on holiday?
	Je vais	I go
	On va	We go
	En France	To France
	En Espagne	To Spain
	En Italie	To Italy
	En Allemagne	To Germany
	En Grèce	To Greece
	Au Portugal	To Portugal
	Au Mexique	To Mexico
	Aux États-Unis	To the USA

2.	Où restes- tu en vacances?	Where do you stay on holiday?
	Je reste	I stay
	Nous restons / on reste	We stay
	À la montagne	In the mountains
	À la campagne	In the countryside
	À la plage	At the beach
	Au bord de la mer	By the seaside
	En ville	In town
	Dans un camping	On a campsite
	Dans un hôtel	In a hotel

3.	Comment voyages- tu?	How do you travel?
	Je voyage/ On voyage	I/We travel
	En voiture	By car
	En bateau	By boat
	En train	By train
	En avion	By plane
	En car	By coach

Opinions		
Qu'est-ce que tu aimes faire pendant les vacances?		What do you like to do during your holidays?
	J'aime	I like…
	J'adore	I love
	Je préfère	I prefer
	Je n'aime pas	I don't like
	Je déteste	I hate…

Remember: An infinitive means 'to something' and ends in an –er, -ir or—re in French

4. Qu'est-ce que tu as fait l'année dernière ? What did you do last year?		
	L'année dernière	Last year
	Je suis allé en / au…	I went to + country
	J'ai bronzé	I tanned
	J'ai joué au tennis/au volley	I played tennis/ volleyball
	J'ai nagé dans la mer	I swam in the sea
	J'ai acheté des souvenirs	I bought souvenirs
	J'ai mangé des spécialités locales	I ate local specialities
	On a voyagé en	We travelled by
	J'ai fait des sports nautiques	I did water sports
	J'ai pris des photos	I took photos
	J'ai lu	I read
	J'ai fait du tourisme	I did sightseeing
	Je suis allé (e) aux musées	I went to the museums
	Je suis resté (e)	I stayed
	C'était	It was

5.	Qu'est-ce que tu vas faire?	What are you going to do?
	Je vais	I am going…
	Je ne vais pas	I am not going …
	On va	We are going …
	Je voudrais	I would like to…
	Ce sera	It will be

6.	Infinitifs	Infinitives
	Me relaxer	To relax
	Aller à la plage	To go to the beach
	Lire	To read
	Visiter les musées	To visit museums
	Nager dans la mer	To swim in the sea
	Faire des sports nautiques	To do water sports
	Manger aux restaurants	To eat at restaurants
	Visiter des monuments	To visit monuments
	Faire du tourisme	To go sightseeing
	Prendre des photos	To take photos
	Acheter des souvenirs	To buy souvenirs

Opinions		
	Amusant	Fun
	Génial	Great
	Fantastique	Fantastic
	Incroyable	Incredible
	Relaxant	Relaxing
	Passionnant	Exciting
	Nul	Rubbish
	Ennuyeux	Boring

What to include in your writing (key)	
C	Connectives
O	Opinions
R	Reasons
N	Negatives
E	Extra detail
T	Time expressions
T	Tenses
I	Interesting adjectives
	Masculine
	Feminine
	Plural

French - Les Vacances et le Temps Libre

7. Quels sont tes projets pour ce weekend?	What plans do you have for this weekend?
Je vais	I am going...
On va	We are going...

Jouer au basket	To play basketball
Aller à la plage	To go to the beach
Aller au parc	To go to the park
Aller au centre de loisirs	To go to the leisure centre
Regarder un film	To watch a film
Regarder la télé	To watch TV
Faire les magasins	To go shopping
Sortir avec mes amis	To go out with my friends
Faire mes devoirs	To do my homework
Faire de la natation	To go swimming
Faire du sport	To do sport

8.	Qu'est-ce que tu aimes faire pendant ton temps libre?	What do you like to do in your free time?
	J'aime	I like...
	J'aime bien	I quite like...
	J'adore	I love...
	Je préfère	I prefer...
	Je n'aime pas	I don't like...
	Je déteste	I hate...
	J'ai horreur de	I hate...

9. Tu voudrais aller au cinéma?	Do you want to go to the cinema
Tu veux	Do you want..?
Oui, je veux	Yes, I want...
Oui, je voudrais	Yes I would like...
D'accord	Okay
Peut-être	Maybe
Désolé(e)	Sorry
Je ne peux pas	I can't
Je dois faire mes devoirs	I have to do my homework
Je dois aider ma mère	I have to help my mum
Je dois m'occuper de mon frère / ma soeur	I have to look after my brother/sister

Time expressions		
PRESENT TENSE		
	Normalement	Normally
	Tous les ans	Every year
	Puis / ensuite	Then/Next
PAST TENSE		
	L'année dernière	Last year
	L'été dernier	Last summer
FUTURE TENSE		
	L'année prochaine	Next year
	L'été prochain	Next summer
	Dans le futur	In the future

10. Qu'est-ce que tu fais normalement le weekend?	What do you normally do at the weekend?
Je joue au foot / au tennis / au netball	I play football / tennis / netball
Je joue à des jeux vidéos	I play video games
Je reste chez moi	I stay at home
J'écoute de la musique	I listen to music
Je regarde la télé	I watch TV
Je vais en ville	I go to town
Je sors avec mes amis	I go out with my friends
Je fais du shopping	I do shopping
Je ne fais rien	I do nothing

Opinions		
	Je pense que	I think that
	À mon avis	In my opinion
	Je trouve que	I find that
	C'est	It is...
	C'était	It was...
	Ce sera	It will be...

Divertissant	Entertaining
Cool	Cool
Important	Important
Génial	Great
Marrant	Funny
Joli	Pretty
Inoubliable	Unforgettable

Ennuyeux	Boring
Dangereux	Dangerous
Stupide	Silly/stupid
Affreux	Awful
Une perte de temps	A waste of time

French - Le Temps Libre et la Vie Saine

1.	Qu'est-ce que tu aimes regarder ?	What do you like to watch?
	Les feuilletons	Soaps
	Les dessins animés	Cartoons
	Les documentaires	Documentaries
	Les séries américaines	American series
	Les séries policières	Police series
	Les émissions de sport	Sports programmes
	Les émissions de télé réalité	Reality TV shows
	Les infos	News

2.	Je préfère	I prefer…
	Je préfère regarder	I prefer to watch…
	Je regarde	I watch...
	J'aime	I like...
	J'aime bien	I really like...
	J'adore	I love...

3.	Quel genre de film aimes-tu?	What type of film do you like?
	Les films d'amour	Love films
	Les films d'horreur	Horror films
	Les films d'action	Action films
	Les films de science-fiction	Science-fiction films
	Les films de guerre	War films
	Les westerns	Western films
	Les dessins animés	Animated films
	Les films fantastiques	Fantasy films
	Les documentaires	Documentaries
	Les comédies	Comedies

Opinions sur la télé et les films	Opinions on TV and films
Parce qu' / Car	**Because**
Ils / elles sont	**They are…**
Drôles	Funny
Divertissant(e)s	Entertaining
Effrayant(e)s	Scary
Violent(e)s	Violent
Triste(s)	Sad
Captivant (e)s	Gripping
Informatif (ve)s	Informative

4. Quelle musique écoutes-tu?	What music do you listen to?
J'aime écouter	I like to listen
J'écoute	I listen
Je n'écoute jamais	I never listen
De la musique pop	Pop
De la musique rap	Rap
De la musique hip-hop	Hip Hop
De la musique électronique	Electronic music
De la musique RnB	RnB
De la musique classique	Classical music
De la musique jazz	Jazz music
De la musique rock	Rock music
Un peu de tout	A bit of everything

Reasons	
Parce que	**Because**
C'est original	It is original
C'est entrainant	It is catchy
C'est relaxant	It is relaxing
Ça me donne envie de danser / chanter / pleurer	It makes me want to dance / to sing / to cry
Ça me rend heureux / triste	It makes me happy / sad

5.	Qu'est-ce que tu manges?	What do you eat?
	Au petit-déjeuner	At breakfast
	Au déjeuner	At lunch
	Au dîner	At dinner
	Je mange	I eat
	Je prends	I have (eat)
	De la soupe	Some soup
	Des pâtes	Some pasta
	Du poisson	Some fish
	Des frites	Some chips
	Des légumes	Some vegetables
	De la viande	Some meat
	Du riz	Some rice
	Des escargots	Some snails
	Je bois	I drink
	De l'eau	Some water
	Du café	Some coffee
	Du jus d'orange	Some orange juice

What to include in your writing (colour key)	
C	Connectives
O	Opinions
R	Reasons
N	Negatives
E	Extra detail
T	Time expressions
T	Tenses
I	Interesting adjectives
	Masculine
	Feminine
	Plural

French - Le Temps Libre et la Vie Saine

6.	Que voudrais-tu manger?	What do you want to eat?
	Je voudrais manger	I would like to eat
	Je voudrais boire	I would like to drink
	Une crêpe	A crêpe
	Parce que c'est	Because it is
	Délicieux	Delicious
	Malsain	Unhealthy
	Salé	Salty
	Sucré	Sweet
	Aigre	Sour

7.	Qu'est-ce que tu portes ?	What do you wear?
	Je porte	I wear
	Un pull	A jumper
	Un jean	Jeans
	Un tee-shirt	A t-shirt
	Une robe	A dress
	Une veste	A jacket
	Une chemise	A blouse
	Une jupe	A skirt
	Des baskets	Some trainers
	Bleu/e (s)	Blue
	Noir/ e (s)	Black
	Blanc/he (s)	White
	Gris/e (s)	Grey
	Rouge/s	Red

8.	Qu'est-ce que tu vas acheter ?	What are you going to buy?
	Demain	Tomorrow
	Ce weekend	This weekend
	Je vais aller	I am going to go
	À la boulangerie	To the bakery
	À la boucherie	To the butcher's
	À l'épicerie	To the grocer's
	À la librairie	To the book shop
	À la pharmacie	To the pharmacy
	À la pâtisserie	To the pâtisserie
	Au magasin de souvenirs	To the souvenir shop
	Au magasin de chaussures	To the shoe shop
	Je vais acheter	I am going to buy
	Un stylo	A pen
	Des petits gâteaux	Some small cakes
	Des médicaments	Some medication
	Un livre	A book
	Du pain	Some bread
	Ce sera utile	It will be useful
	Ce sera cher	It will be expensive
	Ce sera bon marché	It will be cheap

Time expressions (Past)	
Hier	Yesterday
Récemment	Recently
La semaine dernière	Last week

9.	Qu'est-ce qu'il faut faire pour rester en forme?	What must we do to stay in shape?
	Il faut	You must
	Il ne faut pas	You must not
	Manger des fruits	Eat fruits
	Faire de l'exercice	Do exercise
	Éviter des sucreries	Avoid sugary foods
	Dormir de bonne heure	Sleep early
	Manger équilibré	Eat a balanced diet
	Fumer	Smoke
	Boire de l'alcool	Drink alcohol
	C'est mauvais pour la santé	It is bad for your health
	C'est bon pour la santé	It is good for your health
	C'est sain	It's healthy
	C'est malsain	It's unhealthy

10.	Qu'est- ce que tu as fait hier?	What did you do yesterday?
	Je suis allé au gymnase	I went to the gym
	J'ai fait de l'exercice	I did some exercise
	J'ai fait du sport	I did sport
	J'ai mangé cinq fruits et légumes	I ate 5 fruits and vegetables
	J'ai mangé équilibré	I ate a balanced diet
	J'ai dormi 8 heures	I slept 8 hours
	J'ai bu de l'eau	I drank water
	C'était vraiment sain	It was really healthy

French - Le collège et le travail

1.	Quelles matières étudies-tu?	What subjects do yo study?
	J'étudie	I study
	J'aime étudier	I like to study
	Le français	French
	L'EPS	P.E
	L'anglais	English
	L'art / le dessin	Art
	Le théâtre	Drama
	La géographie	Geography
	L'histoire	History
	L'éducation religieuse	R.E
	La musique	Music
	La technologie	Technology (DT)
	L'informatique	I.T.
	Les maths	Maths
	Les sciences	Science

2. Quelle est ta matière préférée ?	What is your favourite subject?
Ma matière préférée c'est	My favourite subject is
Parce que	Because
Car	Because
Puisque	Because
Ça m'intéresse	I'm interested in it
J'ai des bonnes notes	I get good marks
Le prof m'aide	The teacher helps me
Le prof explique bien	The teacher explains well
C'est actif / créatif	It's active/creative

3. Qu'est-ce qu'il faut faire ? (Les règles)	What must you do? (Rules)
Il faut	You must
Être poli	Be polite
Écouter en classe	Listen in class
Porter un uniforme	Wear uniform
Arriver à l'heure	Arrive on time
Faire les devoirs	Do homework
Il ne faut pas	You must not
Porter des piercings	Have piercings
Courir dans les couloirs	Run in the corridors
Manger du chewing-gum	Chew gum
Utiliser le portable en classe	Use your phone in class

4. Qu'est-ce qu'il faut porter ?	What must you wear?
Il faut porter	You must wear
Je porte	I wear
Je dois porter	I have to wear
Une cravate	a tie
Une chemise	a shirt
Une veste	a blazer
Une jupe	a skirt
Un pantalon	Trousers
Des chaussettes	Socks
Des chaussures	Shoes

5. Que penses-tu des règles ?	What do you think of the rules?
Je pense que c'est	I think that it is
Je trouve ça	I find it

Juste	**Fair**
Normal	Normal
Important	Important
Utile	Useful
Nécessaire	Necessary

Injuste	**Unfair**
Énervant	Annoying
Stupide	Stupid
Inutile	Useless

What to include in your writing	
C	Connectives
O	Opinions
R	Reasons
N	Negatives
E	Extra detail
T	Time expressions
T	Tenses
I	Interesting adjectives
	Masculine
	Feminine
	Plural

French - Le collège et le travail

PRESENT TENSE

6.	Quelles activités fais-tu?	What activities do you do?
	Je joue d'un instrument	I play an instrument
	Je joue dans l'orchestre	I play in the Orchestra
	Je chante dans la chorale	I sing in the choir
	Je suis membre de l'équipe de…..	I am a member of the…….team
	Je parle une langue étrangère	I speak a foreign language
	Je ramasse les déchets	I pick up litter

7. Qu'est-ce qu'ils font comme travail?	What do they do for a job?
Il est / Elle est	He is / She is
Professeur	A teacher
Infirmier/ière	A nurse
Cuisiner/ ière	A chef
Serveur/euse	A waiter
Coiffeur/euse	A hairdresser
Vendeur/euse	A sales assistant
Récepionniste	A receptionist
Dentiste	A dentist
Médecin	A doctor
Pompier / ière	Fireman / woman
Chanteur/euse	A singer
Footballeur/euse	A footballer
Agent de police	A police officer

8. Quels clubs y-a-t-il ?	What clubs are there?
Il y a	There is / There are
Dans mon collège il y a beaucoup de clubs	In my school there are lots of clubs
Un club d' échecs	Chess club
Un club de sport	Sports club
Un club de langues	Languages club
Un club éco	An eco-club
Un orchestre	An orchestra
Un club de théâtre	A drama club

9. Qu'est-ce qu' il / elle doit faire ?	What does he / she have to do?
Il / elle doit	He / she has to
Aider les enfants	Help children
S'occuper des patients	Look after patients
Préparer les repas	Prepare meals
Servir les clients	Serve customers
Couper les cheveux	Cut hair
Travailler à la caisse	Work on the till
Répondre au téléphone	Answer the phone
À son avis c'est	In his / her opinion it is
Répétitif	Repetitive
Créatif	Creative
Stressant	Stressful
Relaxant	Relaxing
Bien payé	Well-paid

Time expressions		
	Quand fais-tu ça ?	**When do you do that?**
	Après le collège	After school
	Pendant la pause déjeuner	During lunch
	Tous les mercredis	Every Wednesday
	Tous les jours	Every day
	Quelquefois	Sometimes

FUTURE TENSE

10.	Quel serait ton boulot idéal ?	What would your ideal job be?
	Je voudrais…	I would like…
	Je veux	I want…
	Je ne voudrais pas	I would not like
	Être	To be
	Travailler	To work
	Faire	To do
	Ce serait	It would be
	Gratifiant	Rewarding
	Un défi	A challenge

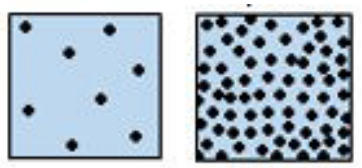
11. Les projets d'avenir	Future plans
Je voudrais voyager	I'd like to travel
J'aimerais me marier	I'd like to marry
J'aimerais avoir des enfants	I'd like to have children
Je voudrais gagner beaucoup d'argent	I'd like to earn lots of money
Je voudrais être heureux/euse	I would like to be happy

Geography - Population

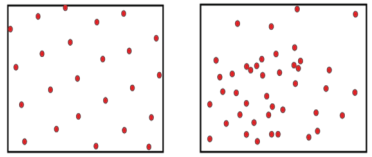
1. How is our population distributed globally?

Key vocabulary	Definition	Example
Population distribution	The spread of people across an area.	Even or uneven
Population density	Number of people per km^2	Sparse or dense
Sparsely populated	Very few people per km^2	Himalayas
Densely populated	Lots of people per km^2	Western Europe
Rural / Urban	**Rural** = Countryside / **Urban** = Towns and cities	New Forest/ Bournemouth

Density



Distribution

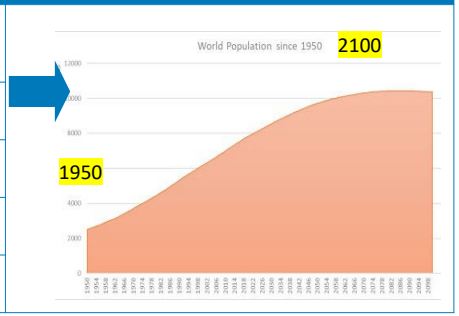


2. What influences population distribution?

Category	Factor	Explanation for sparsely populated areas.
Physical factors	**Relief**	Steep ground is difficult/expensive to build on e.g. Himalayas.
	Climate	Too cold or hot to grow crops, Ideal to grow crop.
	Soil	Crops do not grow if soil is infertile.
Human factors	**Jobs**	If few jobs, people will migrate to other areas for work.
	Transport	If transportation links are good people be attracted.

3. How will world population change?

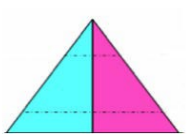
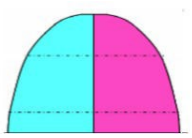
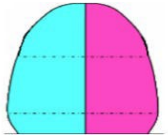
Population explosion	World population has exploded since 1950 and will peak in 2100. Mostly in LICs/NEEs.
Natural increase	When birth rates > death rates.
Natural Decrease	When death rates > birth rates.
Birth Rate (BR)	Number of babies born per 1000 people per year
Death Rate (DR)	If few jobs, people will migrate to other areas for work.



4. Why are birth rates (BR) and death rates (DR) different in HICs, LICs and NEEs?

Country	Explanation of birth rate	Explanation of death rate
High Income Countries: BR ↓ DR ↓	• Women have careers = marry later & have fewer children. • Contraception available. • Children are expensive.	• Good access to health care. • Education about well-being. • Disposable income to buy heathy food.
Newly Emerging Economies: BR↘ DR↘	• As country develop, people are moving to cities, less children are needed to work in fields. • Contraception becomes available.	• Increased access to clean water. • Better health care.
Low Income Countries: BR ↑ DR ↘	• Children needed to help on farms. • Lack of family planning education. • Girls marry young. • High infant mortality rate.	• Lack of access to clean water. • Poor access to health care.

5. What are population pyramids?

Population structure	Number or percentage of people in each age range, separated into gender.		
Economically active	16-65 age group - working age so pay taxes to the government.		
Dependants	Do not work <15 (young dependents) & >65 (elderly dependents).		
Population pyramids: Graph showing pop structure	LIC 	NEE 	HIC 
What does the shape of the pyramid tell us about the population structure?	• Wide base = ↑ BR • Short = ↓ life expectancy. • Youthful population	• Narrowing base= BR ↘ • Widening top =DR↘	• Narrow base = ↓BR • Wide top/tall = ↑ LE • Ageing population

6. What are the impacts of overpopulation?

Key vocabulary	Definition
Overpopulation	When the number of people in a region exceeds the capacity of that region's resources to support them.
Pressure on resources	The need for timber, food, fuel and water can put pressure on supplies.
Environmental degradation	Increased air, land and water pollution from industrial processes harms the local environment.
Strain on infrastructure	Many people in one area needing to use the transport network, electricity grid and water supply can lead to shortages. School places and medical appointments become more difficult to get.
Increasing unemployment	Too many people for the number of jobs available leads to more people without an income. This can lead to increased poverty and lower quality of life for some.
Deforestation	Large areas of natural forests and habitats are cleared to make way for new towns, roads and farmland.

Geography - Population

7. What are the impacts of an ageing population in the UK?

Ageing population = A high proportion of elderly people (over 65) in relation to younger people.

Why? Better health care and better diets and fitness levels, this increases life expectancy

Negatives	Positives
💰 More money needed for state pensions so there is less to spend on investment in services such as schools 🧍 2/3 hospital beds taken by elderly, this means there is longer waiting times and more pressure put on the NHS	💰 Elderly have disposable income (grey pound), this is spent in shops and restaurants, which will create jobs and boost the local economy. 💰 Elderly look after grandchildren, this means parents can return to work, saving them money and meaning they contribute more tax.

Management strategies

- Increase the retirement age= more people paying taxes for longer and less years claiming a pension.
- Increase tax for the working population= more income for the government to use for paying pensions.
- Access to free or funded childcare= to encourage more women to have babies, who will grow up to become economically active and pay tax in the future.

8. What are the impacts of a youthful population?

A high proportion of young people (under 15 years) in relation to elderly people

Negatives	Positives
• Strain on natural resources = environmental damage, deforestation and water shortages if not managed sustainably • Overpopulation = overcrowding in cities, housing shortages and traffic problems • Education requirements = the government will need to invest more into schools and teachers	• Builds a larger future workforce = more people of working age to boost economic productivity • Increased tax revenue in the future= improvements in public services like healthcare, education and transport • Future business development = young people had new ideas to create new businesses, creating jobs and strengthening the economy

Management strategies

- Invest in healthcare= reduces infant mortality, so families will have fewer children.
- Family planning= men and women can make choices about how many children to have
- Investment in education= more career opportunities so will have fewer children later in life
- Improving women's rights = more women have access to education and careers meaning few children are had

9. What is migration?

Key vocabulary	Definition
Migration	The movement of people from one place to another.
Forced migration	Where the person has no choice but to leave their home for their own survival.
Voluntary migration	Where the person chooses to leave, usually for social and economic reasons.
International migration	Movement from one country to another.
Internal migration	Movement from one place to another in the same country.

10. Why do people migrate?

Source country—Where the migrants come from.

Host country— Where the migrants move to.

Push factors	Negative factors which make people want to LEAVE a place.	**Pull factors**	Positive factors which make people move TO a place.
◊ Lack of education ◊ Poorly paid jobs ◊ Wars or conflicts		◊ Higher wages ◊ Better access to education ◊ Better healthcare	

11. What are the causes and impacts of migration?

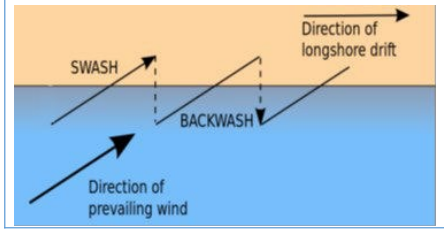
Case study: India to the United Kingdom

	Push / Pull factors	Impacts (point)	Double development
Source – India Push factors	Conflict in the Kasmir region.	Positive for India: Migrants sent remittances home - $89 billion in total sent home from international migrants to India, including $3billion from the UK.	This means there is more money available for families living in India. Therefore, ,more people can afford healthcare and education so quality of life improves.
	Low annual wages of $1656.	Negative for India: Reduction in the skilled workforce as people chose to move to the UK.	This means there are less people to work in healthcare and IT, especially in Kerala. Therefore, some roles are not filled and projects take longer.
Host – UK Pull Factors	Higher paid jobs for skilled workers in the NHS.	Positive for UK: There are more highly skilled workers in the National Health Service (NHS).	This means it is easier to get a medical appointment, as a result more people can be treated so life expectancy will remain high.
	World-famous universities such as Oxford and Cambridge.	Negative for UK: $3 billion of migrant's earnings sent back to India as remittances.	This means less income is being spent in the UK. As a result, UK business will not earn as much money generating less tax.

Geography - Coasts

1. Waves	
Key vocabulary	**Definition**
Prevailing wind	The most common wind direction.
Swash	Movement of the waves UP the beach in the direction of the prevailing wind.
Backwash	Movement of the waves DOWN the beach at a right angle due to gravity.
Fetch	Distance the wave has travelled.

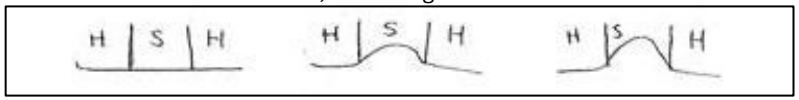
2. What processes occur along our coast?	
Key vocabulary	**Definition**
Erosion (HAAS)	The wearing away of rock
Hydraulic power	The sheer force of the water compressing air into cracks causes bits to break off.
Abrasion	Sediment scraping against the cliff (like sandpaper) removing small bits.
Attrition	'Smashing' of sediment against each other becoming more rounded
Solution	Acids in sea water dissolve certain types of rock, such as limestone or chalk, causing them to gradually erode over time.
Weathering	The break down of rocks where they are (in situ)
Freeze thaw weathering	The breaking up of rock caused by the repeated cycle of freezing and thawing of water in a crack.
Chemical weathering	The breaking down of rock caused by chemicals (e.g. weak acid rain).
Deposition	Dropping of material. Occurs when there is a loss of energy like in sheltered bays.
Transportation	The movement of material.
Longshore drift	The zig zagged movement of sediment along the coastline.

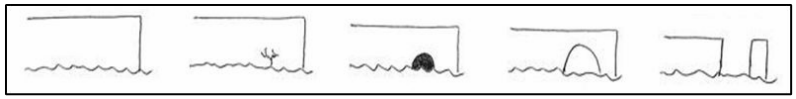


Prevailing wind blows at an...
Angle to the coastline
Swash moves sediment up the beach at an angle.
Backwash moves sediment back down at 90° due to gravity.
Sediment is transported along the coast as...
Longshore drift

Constructive waves	Destructive waves
• Build up the beach • Strong swash, weak backwash • Low, long waves	• Destroy the beach • Weak swash, strong backwash • Tall, short waves

3 and 4. Erosional landforms	Include processes
Landform	**Formation**
Headlands and bays	• Some coast lines have bands of hard and soft rock (discordant). • Destructive waves erode the coast by **abrasion**. • Soft rock erodes faster and **retreats** creating a bay. • Hard rock erodes slower, remaining stuck out as headlands.
Cave, Arch, Stack	• Destructive waves attack the base of a cliff through **hydraulic action** opening up cracks. • Cracks widen by **hydraulic action** creating a cave The cave is enlarged by **abrasion**, eventually cutting through the headland to make an arch. • As the arch is unsupported, eventually it will collapse due to **gravity.** • A stack is formed.





Geography - Coasts

5. Depositional landforms

Landform	Formation		
Beaches	• Beaches form when **deposition** occurs. • There needs to be a source of sediment nearby like soft cliffs. • Constructive waves **deposit** material in sheltered areas (bays).		
Sandy beaches Typically found in sheltered bays Have gentle slopes	**Shingle beaches** Typically found in more exposed areas Have steeper slopes due to larger, heavier material	**Mixed beaches** These have distinct zones- sandier closer to the water and coarser material further up the beach	

6. What are the causes and effects of coastal erosion?

	Point	Develop
Causes	**Differing geology**	Soft rock erodes faster than hard rock (headlands & bays).
	No management	If there is no hard engineering, erosion is more likely.
Effects	**Communities**	People can't sell their homes. People have to leave their community, feel isolated.
	Environment	Loss of coastal habitats, lowers biodiversity. Beaches are removed (coastline more vulnerable).

9. Other threats to coastal areas

Threat	Causes	Impacts
Plastic pollution	• 9.5% rise in plastic litter • UK households discard around 1.7 billion pieces of plastic weekly • Recycling rates remain low- under 17% recycled	• Many species mistake plastic for food- this blocks their digestive systems, causes starvation and can lead to death • Animals become trapped in plastic waste leading to injuries, infections or drowning
Sewage pollution	• Southern water discharged raw sewage into Chichester Harbour • In 2024, raw sewage was discharged into English rivers and coastal water for 3.61 million hours	• Over 1850 illness reports linked to sewage-contaminated water in England 2024 • Shellfish farms have been contaminated with E.coli bacteria, harming exports and local marine businesses • Coastal water became unsafe for swimming, fishing, and tourism
Oil and chemical spills	• March 2023- pipeline leak at Poole Harbour released 200 barrels of oily water • Between 2023-2024, there were reportedly 700 oil and chemical spills in UK waters	• Contamination of marine habitats, disruption to fishing and tourism and threats to wildlife • Thick oil coats the bodies of birds, mammals, and fish- damaging and feathers and fur which reduces insulation and buoyancy
Sea level rise and climate change	• UK sea levels have risen 13.4 cm since 1993 (compared to a global average of 10.6 cm)	• Low-lying areas face escalating flood risk and increased rates of coastal erosion • Marine and coastal infrastructure such as roads, utilities, homes and habitats are increasingly vulnerable

8. How effective is coastal management in Bournemouth?

Why does it need management?	• Without management coastline would erode at 1 m per year. • Beach vital for tourism (tourist spend £413 million each year) • Cliffs are collapsing (e.g. Durley Chine and East Cliff 2024) • Protects 3114 homes and 109 businesses		
	Point	**Develop** **This means that...**	**Double Develop** As a result...
How has the coast been managed?	Hard engineering 53 groynes to be replaced	Reduce longshore drift creating a wide beach	Waves lose their energy before the cliff
Bournemouth Beach Management Scheme 2015-2032	Soft engineering – 3 lots of beach nourishment every 5 years	Replaces sediment lost through longshore drift	Wider beach absorbs more wave energy
How successful was this management?	Groynes less successful- trapped sediment, starving Barton on Sea's beaches.	More coastal erosion occurs at Barton on Sea.	Houses are at risk of cliff collapse.
	Groynes more successful— groynes trap the sediment and create a wider beach.	Creates 9000 jobs for local people.	Have a higher income and pay more tax to the government.
	Beach nourishment more successful- Wide beaches attracting tourists.	£413 million is brought into the area.	Councils receive more income through tax improving the area.
	Beach nourishment less successful– needs to be completed often, 3 times every 5 years.	Can be expensive– costing over £50 million.	Less income can be used to improve infrastructure in Bournemouth such as roads.

7. How do we manage our coastline?

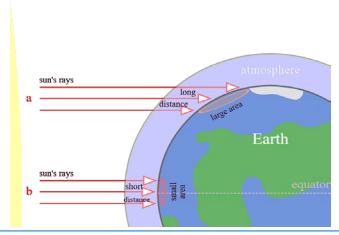
Type	Definition	Type	Description	Explanation	Advantages	Disadvantages
Hard engineering	Man-made structures built to control the sea. Reduces flooding and erosion.	**Sea walls**	A hard wall made from concrete.	Reflects the waves energy back out to sea.	Last a long time- around 100 years	They are expensive and can be seen as ugly
		Groynes	Wooden fences going out into the sea.	Reduce longshore drift by trapping sediment so a wider beach.	Creates wider beaches which can increase number of tourists	They increase erosion further along the coast
Soft	A natural approach to managing the coast.	**Beach nourishment**	Sand from elsewhere is added to beaches.	Wider beaches reduce erosion and flooding.	Cheap and looks natural	Needs repeating due to longshore drift which becomes expensive
		Managed retreat	Removing all sea defences	Allows low-value land areas to flood and create natural buffers such as salt marshes	Cheapest strategy	Houses and businesses can be lost to sea

Geography - Ecosystems

1. What is an ecosystem?

Key vocabulary	Definition
Biome	A plant and animal community covering a large area of the Earth's surface e.g. Tropical Rainforest
Ecosystem	A community of plants and animals that interact with each other and their physical environment
Habitat	The place where an organism lives
Biodiversity	The variety of plants and animals found in a particular ecosystem or biome

2. Global temperature

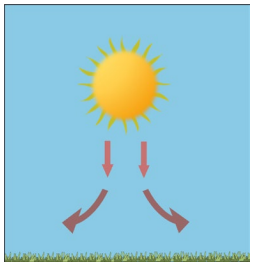
Key vocabulary	Definition	
Solar insolation	The amount of the Sun's energy received by a place	
Differential heating: The Earth is curved. This means different parts of the planet receive different amounts of solar insolation.		Areas near the Equator receive more direct sunlight. Heat energy is concentrated over a smaller area. As a result, temperatures a higher in these regions. Areas near the Poles receive less direct sunlight. Heat energy is spread out over a larger area so is less concentrated. As a result, temperatures are lower in these regions.
Precipitation	Rain, snow, hail or sleet	
CCCR	At the Equator, warm air rises, **C**ools, **C**ondenses, forms **C**louds and **R**ains	

3. Global precipitation

Tropical rainforest = rising air

1. Near the Equator, temperatures are higher.
2. Air heats up
3. Warm air is lighter (less dense), so it rises
4. As warm air rises, it cools and condenses to form clouds
5. Constant cloud formations leads to more rainfall
6. Tropical rainforests form here

Deserts = sinking air



1. A 30°N and 30°S, the air cools
2. Cool air Is heavier (more dense), so it sinks
3. Sinking air warms as it sinks
4. There is no condensation so clouds cannot form
5. No clouds means there is little rainfall
6. Deserts form here

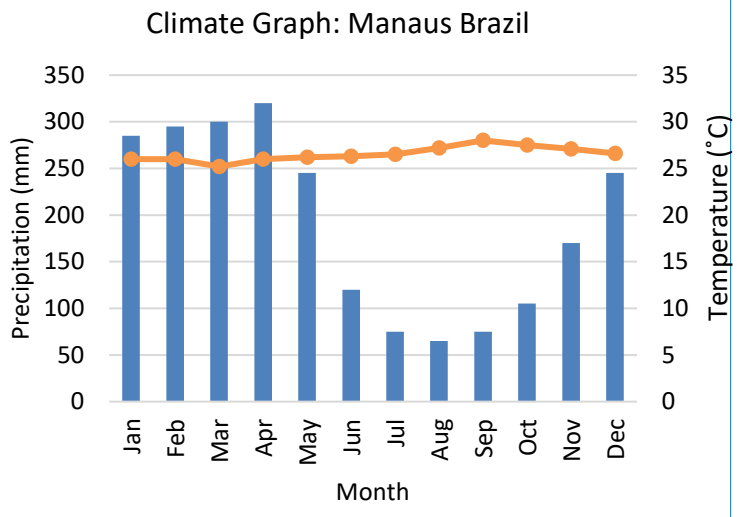
4. Climate graphs

Key vocabulary	Definition
Climate graph	A visual that shows the average monthly temperature and rainfall for a particular location

The left Y axis shows precipitation in mm.

Precipitation is shown sing a blue bar chart.

The x axis shows the months of the year.



The right Y axis shows temperature in °C.

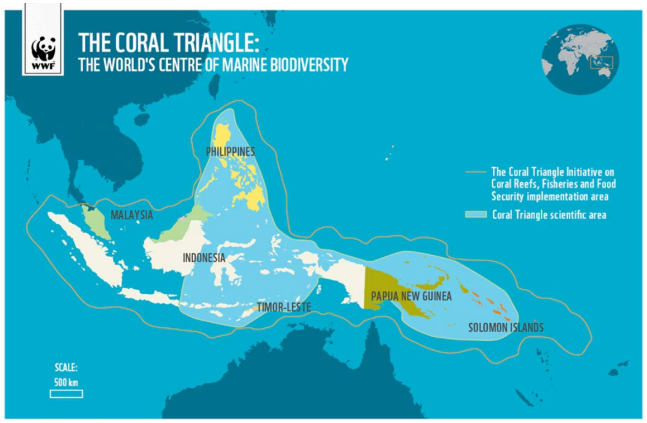
It is shown using a line graph (usually red).

Temperature is plotted in the middle of each month

Geography - Ecosystems

5. Features and Adaptations of Coral Reefs	
Adaptation	The adjustment of organisms to their environment in order to improve their chances at survival in that environment
Coral	A marine organism made up of thousands of tiny animals called polyps, which love together in large colonies. Each tiny animal builds part of a joint skeleton.
Feature	**Description**
Interdependence	The way that species, places, environments and systems are connected, and how a change in one can impact others e.g. polyps and coral The microscopic algae that lives inside the coral provides food to the coral through photosynthesis. In return, the coral give the algae shelter and nutrients.
Ideal conditions	• Warm water (23-29°C) • Shallow water (less than 60m deep) • Clear water • Salt water
Biodiversity	Coral reefs cover less than 1% of the ocean floor but provide a home for around 25% of all marine species.
Plant/Animal	**Adaptation**
Seagrass	• Have flexible stems and ribbon-like leaves that bend with the waves and currents (less likely to break in shallow water). • Can photosynthesise underwater due to thin leaves. • Roots anchor into the sandy seabed this helps to prevent breaking and erosion
Sea Turtle	• Hard shell provides protection from predators. • They can hold their breath for long dives. • Feeds on seagrass and algae, helping keep the ecosystem balanced.
Clownfish	• Covered in a mucus layer, this prevents them from being stung by anemones that they live in • Bright colours provide warning to predators and helps them to recognise each other • Small size allows them to move easily among coral branches

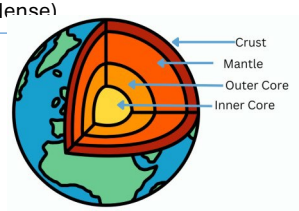
6. Threats and Management of the Coral Triangle (Philippines)	
Coral Triangle (Philippines)	Region in the Pacific Ocen home to the world's richest marine biodiversity. Home to around 75% of the world's coral species.
Threats	
Coral bleaching	Rising sea temperatures make the coral expel the algae under stress. This means the coral no longer has food and dies. The coral then turns white and ruins the ecosystem because the habitat can no longer support other plants and animals.
Overfishing	Many people in the Philippines rely on the reef fish for food. This means the reefs are overexploited (taking more than nature can replace), reducing biodiversity and fish stocks. This will have knock-on effects on the entire coral reef food web.
Pollution	Plastic, agricultural fertilisers and untreated sewage enter the sea. This clouds and pollutes the water. This means light is reduces for photosynthesis and smothers coral.
Tourism	As tourism increases, resorts are expanding and infrastructure damages the seagrass beds. As tourists touch or walk on coral it causes them to bleach. Damage from tourists causes the habitat to be destroyed and biodiversity to decrease.
Management	
Marine Protected Areas (MPAs)	Specific zones in the ocean where human activities such as fishing, mining and tourism are restricted carefully. Aim to conserve fish populations by giving them safe areas to breed and reproduce. Now over 1,900 MPAs in the Coral Triangle.
The Bantay Dagat (sea patrol)	Community-based volunteer groups of over 10,000 people. They guard the reef against illegal practice such as dynamite fishing. They enforce community MPAs
The Blue Alliance	Organisation that monitor businesses for their pollution. They provide loans to companies to help them to be more reef-positive businesses (limit their environmental impact on coral reefs). They have developed 12 reef-positive businesses.
Green Fins	List of 15 rules that diving companies have to follow to improve environmental behaviour among dive and snorkel operators. In the Philippines, dive centres commit to sustainable practices and are assessed annually.



Geography - Tectonics

1. What is planet Earth made of?

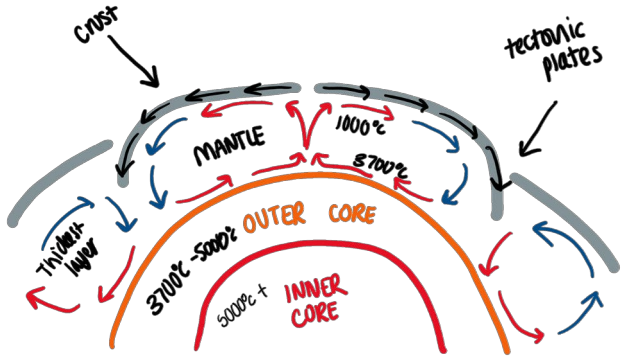
Key vocabulary	Definition
Crust	Outer layer made of rock. Split into plates. Can be **continental** (thick, less dense) or **oceanic** (thin, dense)
Mantle	Thickest layer made from solid rock (magma).
Outer core	Made from liquid nickel and iron.
Inner core	Centre of the Earth made from solid nickel and iron. 5500°C.
Convection currents	Heat currents in the mantle which make tectonic plates move due to friction.



4. Why do plates move?

Convection currents

Continuous heat currents in the mantle which make tectonic plates move due to friction



1. Heat from the Earth's core warms the lower mantle, causing hot, less dense rock to rise upwards towards the upper mantle
2. In the upper mantle, the hot rock spreads and moves sideways
3. As it cools, it becomes denser and sinks back down
4. This moves tectonic plates that sit on top of the mantle

2. What happens at the plate margins?

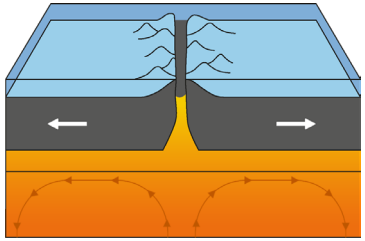
Tectonic plates	The Earth's crust is made of slabs of rocks (7 major and 8 minor plates) that sit on top of the mantle. The plates fit together like a giant puzzle.
Plate margin / Plate boundary	Where two tectonic plates meet and either collide, move apart or slide past each other.
Global distribution	Tectonic hazards mainly occur along the plate margins. Earthquakes occur at all margins, but volcanoes are found only on destructive and constructive.

3. How have continents moved over time?

Continental drift	A theory that proposed Earth's continents were once one landmass that gradually drifted apart over time. It has been a recognised theory since the 1960s.
Evidence	
Coastlines	The coastlines of continents like South America and Africa, fit together like pieces of a jigsaw- suggesting they were once connected.
Types of rock	Similar types of rocks (and mountain ranges) were found on coasts across several continents now separated by oceans- suggesting they were once connected.
Fossils	Fossils of the same plants and animals are found across several continents that are now split apart- suggesting they were once part of the same habitat across different continents

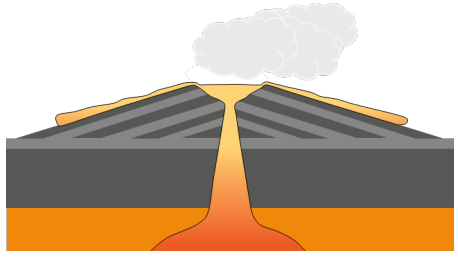
5. Constructive plate boundary < >

Example: Mid-Atlantic ridge, Iceland



1. Two tectonic plates move away from each other due to convection currents in the mantle
2. As the plates separate, a gap forms in the crust, reducing pressure on the mantle below. This creates a rift.
3. This reduced pressure causes rock in the mantle to melt, forming magma. This magma rises through the gap
4. Magama erupts on the surface as runny lava, cooling to form new crust. This creates mid-ocean ridges or rift valleys
5. Repeated eruptions of thin, runny lava build up wide, gently sloping shield volcanoes

Rift	an area where two tectonic plates are moving apart, causing the Earth's crust to thin, crack and stretch which allow magma to rise and create new crust.

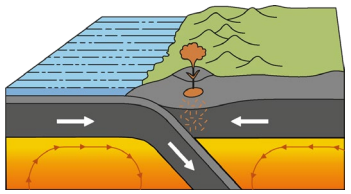


Shield Volcanoes:
- Frequent, gentle eruptions
- Gently sloping slopes
- Wide base
- Runny lava due to low viscosity (like water)

Geography - Tectonics

6. Destructive plate boundary ><

Example: Mount Fuji, Japan (Pacific and Eurasian Plate)



1. An oceanic plates moves towards a continental plate due to convection currents in the mantle
2. The denser oceanic plate is forced down into the mantle.
3. As the oceanic plate sinks, it encounters high temperatures and pressure, causing it to melt and form magma. Earthquakes can occur as this happens.
4. The magma rises through cracks in the continental crust
5. Magma erupts explosively because it is thick and viscous. Layers of lava and ash build up steep-sided composite volcanoes

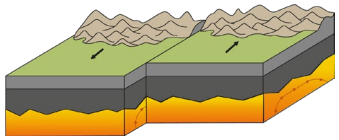
Subduction zone	where the oceanic plate sinks underneath the continental plate and melts to generate magma and causes earthquake and volcanic activity

Composite volcanoes:

- Infrequent, explosive eruptions
- Cone shaped
- Steep-sided slopes
- Thick, sticky slow-moving lava due to high viscosity (like honey)
- Ash cloud

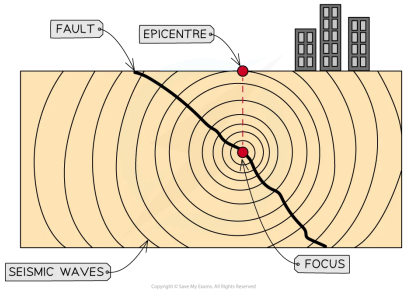
7. Conservative plate boundary / /

Example: San Andreas Fault, California, USA



1. Plates slide past each other horizontally due to convection currents in the mantle
2. The plates do not slide smoothly; friction cause them to get stuck. Pressure builds up over time as convection currents continue to try to move plates
3. When the pressure is released, the plates slip forward causing seismic waves in the form of an earthquake
4. No magma rises and no new land is formed so there are no volcanoes

Seismic waves	vibrations of energy that travel through the Earth's layers, caused by the sudden breaking of rock
Focus	The point inside the Earth's crust where the earthquake starts; it is the place where the rocks first break and release energy in the form of seismic waves
Epicentre	the point on the Earth's surface directly above the focus



8. Opportunities and Challenges of living near volcanoes (Iceland)

Globally, around 800 million people live within 100km of an active volcano, which is roughly 11% of the world's population.

Opportunities	
Fertile soil	Volcanic ash enriches soil, allowing crops like potatoes and barley to grow in some areas, helping farmers increase their profits
Tourism	Iceland's volcanoes attract millions of visitors, boosting the economy
Geothermal energy	About 90% of homes in Iceland are heated by geothermal energy, this means less fossil fuels are used and as a result does not impact the environment
Challenges	
Evacuations	Volcanic eruptions leads to evacuation. In 2023 and 2025, 4,000 residents were evacuated, this means people cannot access their homes, work or school.
Lava flows	Lava flows can bury and destroy habitats, turning areas of woodland into black rock fields. This destroys soil fertility and decreased biodiversity
Travel disruptions	Ash clouds disrupt travel. In 2010, over 100,000 flights were cancelled. This cost the airline industry $1.7 billion.

9. NEE earthquake - Turkey / Syria 2023

Syria GNI per capita of $800 (in 2020).	Conservative plate margin. 2 EQs 7.8 and 7.5 magnitude.	Epicentres in south Turkey, around 20km of large towns such as Iskenderun.

Example of a PDD: A huge fire in the port of Iskenderun broke out, hundreds of shipping containers caught fire. This means that the international port had to be closed. As a result, trade and incoming aid could not carry on, suspending the rescue effort.

Impacts	**Primary (direct)**	Damage to the sewage and water pipe network in 10 provinces.	164,321 buildings collapsed or are heavily damaged.
Impacts	**Secondary (indirect)**	A huge fire at one of Turkey's main ports, Iskenderun.	4 million children had an interruption in their education.
Responses	**Immediate (hours and days)**	Temporary sanitary facilities installed.	Food and water supplies were given to easy access places.
Responses	**Long-term (weeks, months and years)**	Project of constructing 650,000 new houses.	Damaged valuable artifacts were safely placed in 20 containers for restoration by museums.

10. Predicting and responding to earthquakes

Earthquakes are hard to predict. Scientists can identify areas where earthquakes are more likely but cannot predict exact time or location.

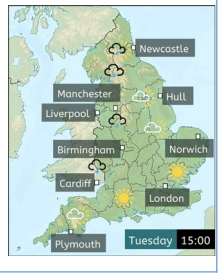
Historical data analysis	This involves studying past earthquake patterns in a region This helps identify fault lines and areas with a history of frequent earthquakes
Animal behaviours	Observing unusual behaviour in animals before earthquakes. Some animals may sense vibrations or changes underground, but this is not a reliable method.
Seismic monitoring	Using seismometers to detect small tremors or foreshocks. Clusters of small earthquakes can sometimes occur before a larger one

Planning Plans can be put into place before and after an earthquake to reduce its impacts	**Protection** Infrastructure such as buildings and roads can be strengthened to withstand an earthquake
Earthquake drills- Teaching people what to do before, during and after an earthquake such as 'drop, cover and hold on', evacuating safely and knowing where to assemble afterwards.	**Earthquake resistant buildings-** Rules that make sure buildings are designed to withstand shaking. Stronger buildings are less likely to collapse, saving lives.
Land use planning- Deciding where it is safe to build homes, schools and hospitals. High-risk areas (e.g. near fault lines or unstable ground) can be avoided or used for parks or open spaces instead.	
Training emergency services- Creating detailed plans for how emergency services (police, fire, ambulance) will respond after an earthquake. This includes practicing rescue techniques, coordinating communication between services and learning how to work in damaged buildings or areas with blocked roads	

Geography - Weather Systems & Climate

1. What is the difference between weather and climate?

Key vocabulary	Definition
Weather	Day to day conditions of the atmosphere e.g. rain
Climate	Average weather conditions over longer periods (at least 30 years) in a specific areas e.g. the UK has a temperate climate
Weather maps	A map that shows the current or predicted weather conditions over an area. It can show temperature, rain (precipitation) and wind conditions

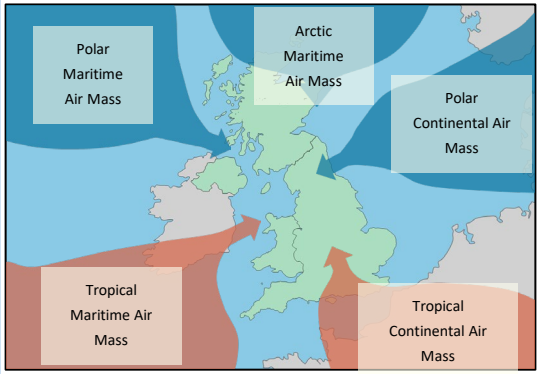


2. How can weather be measured?

Condition	How it is measured
Temperature	Temperature is measured using a thermometer. It is measuring how hot or cold the air is at a specific time.
Precipitation	Precipitation is measured using a rain gauge. It can be a simple cylinder or automatic centre. It helps to know how much rain has fallen in a particular location which helps to predict flooding, droughts or wet weather patterns.
Wind speed	Wind speed is measured using an anemometer. It helps to predict storms, wind chill and movement of weather systems.
Wind direction	Wind direction is measured using a wind vane. It is measuring the direction wind has come from.

4. Air masses in the UK

A large body of air with similar temperature and humidity throughout



Maritime air masses originate over the sea and can bring wetter weather.

Continental air masses originate over land and can bring drier weather.

Tropical air masses form in low latitudes near the Equator and are warm.

Polar or Arctic air masses form at high latitudes and are cold.

3. Factors affecting climate

Factor	How it affects climate
Latitude	Latitude controls how much solar energy a place receives. Sunlight hits the equator more directly - Low latitudes have a warmer climate. High latitudes have a colder climate.
Altitude	Altitude is how high a place is above sea level. Temperature decreases with height. Air is thinner higher up, so it cannot hold as much heat.
Distance from the sea	The sea heats up and cools down more slowly than land. Coastal locations will experience cooler summers, milder winters and more rainfall Inland locations will experience hotter summer, colder winters and a drier climate
Wind direction	Wind brings the weather from where it has travelled. Winds traveling over the sea brings moist air and rain. Winds travelling over land are drier.

5. Low pressure

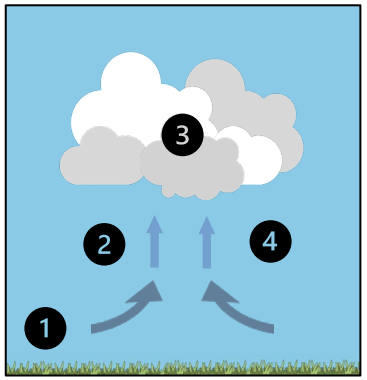
Air pressure = the force of the air pushing down on the Earth
Air moves from high to low pressure.

Low pressure = an area of rising air where air pressure is lower than the surrounding area

1. Warm air close to the surface begins to rise
2. When air rises it cools
3. Cooling air causes water vapour to condense into clouds
4. Clouds bring rain and storms leading to unsettled weather

Low pressure in the winter:
Brings cloudy skies and frequent rain.
Air is colder so precipitation may fall as now or sleet.
Strong winds can make the weather feel colder and cause travel disruption.

Low pressure in the summer:
Brings cloudy skies and heavy rainfall.
Warm air rises quickly, which can lead to flash floods and thunderstorms.
There are often strong winds and short periods of very intense thunderstorms.



6. High pressure

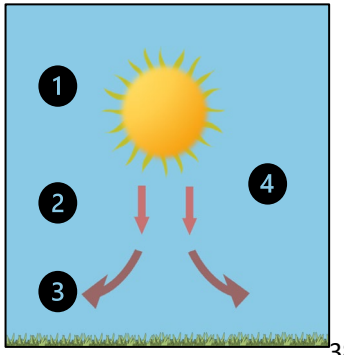
Air pressure = the force of the air pushing down on the Earth
Air moves from high to low pressure.

High pressure = an area of sinking air where air pressure is higher than the surrounding area

1. Air cools and becomes denser
2. Dense air his heavy so it sinks
3. As air sinks, it warms which prevents condensation
4. Without condensation, clouds do not form leading to clear skies

High pressure in the winter:
Brings clear skies and calm conditions.
Air is sinking and warming, stopping clouds from forming.
Overnight, frosts can develop on the ground and fog in the air, the weather is often cold.

High pressure in the summer:
Brings clear skies and high temperatures.
Air is sinking and warming, stopping clouds from forming.
Winds are generally light and there is very little rainfall.



Geography - Weather Systems & Climate

7. Low-pressure event- Storm Eunice, UK, 2022

Causes

- Strong polar vortex (circulation of winds), which created low pressure in the Arctic
- High winds from the Arctic
- Faster jet stream (high altitude, fast flowing air current)

Impacts

- Homes and businesses experienced power outages
- Travel disruptions e.g. trains and flights cancelled and blocked roads
- Roofs were torn off buildings e.g. the O2 Arena
- Schools and businesses were closed (including Glenmoor and Winton Academies)

Responses

Immediate: The reaction of people as the disaster happens and in the immediate aftermath (hours and days)	**Long-term:** Later reactions that occur in the weeks, months and years after the event
• The Met Office issued red weather warnings • The M4 Prince of Wales Bridge, Humber Bridge and M48 Severn Bridge were closed • The ambulance service in South-Central England region declared a critical incident due to demand on its emergency services	• Insurance payouts for damage caused totalled between £200 and £350 million

8. Extreme weather event- Palisades Wildfires, Southern California, January 2025

Extreme weather: a weather event that is significantly different from the average or usual weather pattern and is especially severe or unseasonal.

Wildfire: An uncontrolled fire that spreads quickly through vegetation, such as forests, grasslands or shrubland.

Causes

- High pressure bring prolonged dry and warm weather
- Long drought
- Very dry vegetation
- Warm, dry winds (Santa Ana winds) made the fire spread quickly

Impacts

- 23,448 acres of land was burned (almost 18,000 football pitches)
- 12 people died
- Direct economic losses of up to $10.1 billion
- 6,837 homes destroyed

Responses

- Insurance companies paid out more than $4.2 billion in claims
- 105,000 people were evacuated
- 7,500 emergency personnel and firefighters were deployed
- Environmental Protection Agency (EPA) cleared 2.6 million tonnes of hazardous material

Geography – The Geography of East Africa

1. Introduction to East Africa

Key vocabulary	Definition
Region	An area of the Earth's surface defined by shared physical or human characteristics that distinguish it from surrounding areas.

Countries in East Africa:

- Burundi
- Comoros
- Countries in East Africa:
- Djibouti
- Eritrea
- Ethiopia
- Kenya
- Madagascar
- Malawi
- Mauritius
- Mozambique
- Rwanda
- Seychelles
- Somalia
- South Sudan
- Tanzania
- Uganda
- Zambia
- Zimbabwe

2. Growing cities

Key term	Definition
Urban population	The number of people living in towns and cities
Urbanisation	The increasing proportion of people living in towns and cities

17 of the world's 20 fastest growing cities are in Africa

Nairobi, Kenya

- Population over 5 million
- Kenya's capital and largest city
- Known for its tech industry
- Faces challenges such as traffic congestion, informal settlements and pollution
- Rapidly expanding into surrounding rural areas

3. Migration

Key vocabulary	Definition
Migration	The movement of people
Voluntary migration	Moving by choice to improve life or find opportunities
Forced migration	Moving because you have no choice. This may be caused conflict, danger, or natural disasters

Examples of migration in East Africa:

- In the past, movement was often linked to farming seasons, trade and family connections
- Droughts and floods can destroy crops and force families to find safer places
- Conflict in countries such as Ethiopia, South Sudan and Somalia has caused many people to leave their homes to stay safe
- Many people move from rural areas to cities like Addis Ababa or Nairobi to look for work and higher wages

4. Tourism

Key vocabulary	Definition
Mass tourism	A form of tourism that involves tens of thousands of people going to the same resort often at the same time of year
Coral reef	A marine ecosystem formed by the growth of coral that protects the coast from erosion and provides a habitat for marine plants and animals.

Where do people visit in Kenya?
Maasai Mara = safari holidays
Mombasa = beach holidays

Opportunities	Challenges
• Tourism brings in $5.3 billion to Kenya's economy each year • Travel and tourism generated 226,500 jobs directly in 2013	• Large hotels are damaging coastal habitats such as coral reefs • Roads in Mombasa have become busy with traffic

5. The Nile

The River Nile has two tributaries- the Blue Nile and the White Nile

What resources does the River Nile provide?

- **Transport for trade** – was used as a 'highway' for trade since ancient Egyptian times. Nowadays, the main goods being transported are agricultural products like grains and cotton
- **Drinking water-** The Nile is the main drinking source for around 300 million people in north-eastern Africa
- **Irrigation-** The flooding of the River Nile is very predictable, allowing farmers to develop an agricultural calendar based on the flood cycle
- **Fishing-** The River Nile contains over 100 species of fish which are an important food source for people in the region
- **Energy-** The River Nile has many dams along its course such as the Grand Ethiopian Renaissance Dam. They bring electricity to million of homes and drives development
- **Biodiversity –** The River Nile is home to over 800 animal species. The Nile provides a unique habitat for the plants and animals.

6. The East African Rift Valley

Key vocabulary	Definition
Rift Valley	A flat, low-lying area created by tectonic plates moving apart

The Rift Valley spans over 4,000 miles.
It starts in Ethiopia and extends down through to Mozambique.
There are over 100 volcanoes within the rift valley

Mount Nyiragongo Democratic Republic of Congo	**Erat Ale** Ethiopia	**Ol Doinyo Lengai** Tanzania
Composite volcano One of the world's most active volcanoes	Shield volcano Contains one of the few persistent lava lakes on Earth	Composite volcano The only known active volcano that erupts natrocarbonatite lava, which is cooler and less viscous than typical lava

7. Ecosystems

Savanna	Warm grassland with a mix of tall grasses and a few trees, and it has two main seasons: a wet season with lots of rain and a dry season with very little.
Mangrove	An area of trees that live in tropical coastal swamps and has special roots that stick out of the water or mud so it can breathe and stay stable.
Tropical storms	a strong, spinning weather system that forms over warm ocean water.
Adaptation	The adjustment of organisms to their environment in order to improve their chances at survival in that environment
Biodiversity	The variety of plants and animals found in a particular ecosystem or biome

History - The Tudors

1. Why were people criticising the Catholic Church?	
Reformation	• A movement in the 16th century which led to a break with the Catholic Church and the beginning of the **Protestant** Church
Printing press	• A revolutionary invention created by Gutenberg in 1455 • It took power away from the Church as it allowed new books and translations of the Bible to be published
Martin Luther	• A German monk who helped start the Reformation by criticising the practices of the Catholic Church
95 Theses	A document outlining Martin Luther's 95 criticisms of the Catholic Church. It accused the Church of: • Corruption • Misleading teachings about purgatory and indulgences • Greed
Heretic	• Someone with religious views that disagree with official Church teaching

2. What caused the Protestant Reformation?	
Henry VIII (1509-1547)	King of England who broke with the Catholic Church to form the Church of England
Primogeniture	A system of inheritance, where the eldest son has the right to inherit the throne
Cardinal Wolsey	Henry VIII's Lord Chancellor from 1515 to 1529, the Pope's representative in England
Catherine of Aragon	Henry VIII's first wife. Their marriage lasted for 24 years and was annulled in 1533
Anne Boleyn	Catherine of Aragon's lady-in-waiting, who was much younger than Catherine and ambitious
Act of Supremacy	1534. Henry VIII officially broke away from the Roman Catholic Church and became Head of the Church of England

Male Heir	Money	Power
Annulment - To declare that a marriage never actually existed **Heir** - A person who inherits the throne	**Warfare**—Henry needed money to fund his wars against France **Revenue** - The annual income of the King to pay for wars and other expenses	**Faction** – political groups who fought for power and influence over Henry. **Royal Supremacy** – the King replaced the Pope's religious power in England.

3. How did people react to the Protestant Reformation?	
Thomas Cromwell	Henry VIII's chief minister
Dissolution of the Monasteries	Henry VIII's actions to strip monasteries of their wealth & land
The Six Articles 1539	• Outlined religious policy in England following the break from Rome • Transubstantiation still supported and ordinary people only allowed to receive the bread during communion
Pilgrimage of Grace 1536	Northern nobles were angered by the Dissolution of the Monasteries and rebelled against Henry VIII
Robert Aske	Leader for the Pilgrimage of Grace

How far did religion change under the Tudors?	
Edward VI (1547-1553)	Devout Protestant. Henry VIII's third child and only son by Jane Seymour
Edward's changes to the Church	• Redecorated Churches to be plain; white walls; no art • Church services and Bible to be in English instead of Latin • Mass banned
Mary I (1553-1558)	Devout Catholic. Henry VIII's eldest daughter by Catherine of Aragon
Counter-Reformation	• Catholic fight back against spread of Protestantism. • Churches returned to Catholic appearance • Mass reintroduced and delivered in Latin • Refusal to convert resulted in being burnt at the stake, giving Mary the nickname • 'Bloody Mary'
Martyr	A person who dies for their beliefs

1509 Henry VIII becomes King	**1517** Martin Luther writes the 95 Theses	**1521** Henry writes a pamphlet criticising Luther	**1533** Henry marries Anne Boleyn	**1534** Act of Supremacy passed	**1536** The Dissolution of the Monasteries begins	**1536** The Pilgrimage of Grace	**1539** The Six Articles

History - The Tudors

4. Diversity in Tudor England	
African Tudors	Over 200 people of African origin lived in England during the Tudor period.
John Blanke	• Trumpeter in the Tudor court • Played at the funeral of Henry VII and coronation of Henry VIII
Cattelena of Almondsbury	Unmarried woman who owned a cow and sold produce to her non- farming neighbours
Jaques Francis	• Deep sea diver employed by Henry VIII • Helped to recover items from the sunken Mary Rose • Defended is employer at trial

6. Elizabeth I's problems on becoming Queen of England	
Elizabeth I (1558-1603)	Moderate Protestant. Second daughter of Henry VIII by Anne Boleyn
Problems on becoming queen	• **Religion**: England had returned to Catholicism under Mary, but Elizabeth was Protestant • **Marriage**: Elizabeth was unmarried and had no children • **War:** Foreign threats were posed by the Catholic nations of France and Spain • **Mary Queen of Scots**: Elizabeth's Catholic cousin and Queen of Scotland who had a claim to the throne
Religious Settlement	• Elizabeth's religious policy. • Combined elements of Catholicism and Protestantism
Changes under the Religious Settlement	• Catholics not forced to covert to Protestantism • Priests were allowed to marry • Statues saints were banned

8. Challenges to the Religious Settlement	
Papal Bull	A formal announcement made by the Pope which excommunicated Elizabeth
Recusants	Extreme Catholics who refused to attend compulsory Protestant church services
Puritans	A group of extreme Protestants who were against Catholic styles of worship
Plots against Elizabeth	The Ridolfi Plot (1571), the Throckmorton Plot (1583) & the Babington Plot (1586) were all plans to murder Elizabeth and replace her with Mary Queen of Scots

5. The Catholic Threat: Spanish Armada	
Phillip II of Spain	King of Spain and briefly of England after marrying Mary I in 1554. He was devoutly Catholic and fought against the spread of Protestantism
Spanish Armada	Fleet of Spanish warships sent to invade England
Reasons for the Invasion	• The execution of Mary Queen of Scots • English pirate ships stealing gold from Spanish ships • He wanted to make England Catholic again
Reasons the Invasion Failed	• English ships could move faster • English used fireships to sink the Spanish fleet • Spanish made navigational errors

7. Life in Elizabethan England	
Theatre	• Helped establish a community of actors and playwrights • Popular as accessible to all forms of society • Puritans viewed theatres as distractions from religious duties
Leisure	• Nobility took part in hunting, fencing and reading. • Middle classes participated in football and wrestling.
Poverty	• Population increase from 2 to 4 million • Two groups of poor people: "deserving" and "undeserving" • Homeless were treated poorly and could be imprisoned or executed • Overseer of the Poor: responsibility was to manage the poor members of society

9. Elizabethan Exploration	
Age of Exploration	15th to 17th century where Europeans explored more of the world
Key explorers	**Sir Francis Drake:** First Englishman to circumnavigate the world. Knighted by Elizabeth I **Sir Walter Raliegh:** Established England's first colony in North America
Indigenous peoples	People who lived in a territory prior to colonisation

1547 Edward VI becomes king	**1553** Lady Jane Grey is queen for 9 days	**1553** Mary I becomes queen	**1558** Elizabeth I becomes queen	**1559** The Religious Settlement	**1570** Pope declares Elizabeth a heretic	**1587** Execution of Mary Queen of Scots	**1588** The Spanish Armada	**1603** Death of Elizabeth I

History - England: A World Turned Upside Down 1603-1707

1. From Tudors to Stuarts	
James I (1603-1625)	• James VI of Scotland became James I of England • Elizabeth's successor as she had no children • Protestant
Why did Catholics dislike James I?	• Ordered a new English Bible (King James Bible) to be written • Continued to fine Catholics • Ordered all Catholic priests to leave the country
Gunpowder Plot (5th November 1605)	• Catholic plot led by Robert Catesby to kill James I • Plan was to blow up the Houses of Parliament. It failed when Guy Fawkes was caught below Parliament • Plotters were hanged, drawn and quartered
Monteagle letter	• Sent to Lord Monteagle warning him not to attend Parliament. The letter was then given to the king's advisor, Robert Cecil

2. Events of the English Civil War	
English Civil War (1642-1651)	• War fought between Charles I and Parliament to determine who should have governing authority
Cavaliers (Royalists)	• Supporters of Charles I from mainly the northern parts of England • Generally Catholics • Wore red sashes
Roundheads (Parliamentarians)	• Supporters of Parliament mainly from southern and eastern parts of England • Generally Puritans • Wore yellow sashes
Oliver Cromwell	• Member of Parliament and strict Puritan • Given the job to train England's first professional army
New Model Army	• Parliament's professional army • Consisted of infantry, cavalry and artillery
Key Battles	• Battle of Edgehill: Both sides suffered heavy casualties • Battle of Naseby: Defeat for the Cavaliers

3. Causes of the English Civil War	
Charles I (1625-1649)	• Protestant • King who fought the Civil War against parliament
Money	• In 1626 Parliament did not grant Charles I an income for life, only a year. • In 1635 Charles I extended **Ship Money** to be paid by everyone in the country
Power	• In 1629 Charles I dissolved Parliament and ruled alone for 11 years (**Eleven Year Tyranny**) • **Grand Remonstrance** passed by Parliament. A list of demands including that • Parliament should have control over changes to the Church • **Nineteen Propositions** passed to limit the power of the king • Charles I believed in the **Divine Right of Kings**, that he had been appointed by God to rule • Lost wars with France and Spain
Religion	• Charles tried to introduce a **New Prayer Book** to Scotland in 1637 through Archbishop Laud which had Catholic ideas. Scotland was more Puritan than England • Charles I married a Catholic, Henrietta Maria, suggesting he favoured the Catholics too much

4. Trial and Execution of Charles I	
Treason	The crime of betraying one's country
Charles' execution	• 59 MPs signed his death warrant • Executed by beheading
Rump Parliament	154 MPs who ruled England after Charles' execution
Commonwealth	Declaration made by Parliament that England would be ruled in the interests of the people and without a monarch
Lord Protector	Oliver Cromwell dismissed Parliament in 1653. Named himself Lord Protector and ruled England with the support of the army

1605 Gunpowder Plot	**1625** Charles I becomes king	**1629** 11 Year Tyranny begins	**1635** Ship Money expanded	**1637** New Prayer Book in Scotland	**1640** Parliament recalled	**1642** Civil War starts	**1649** Charles executed

History - England: A World Turned Upside Down 1603-1707

5. Witchcraft 1645-47	
Matthew Hopkins	English witch hunter during the English Civil War. Went by the title 'The Witchfinder General'
Punishments for the accused	• Hanging was the most common method of execution • Others faced torture and imprisonment
James VI of Scotland's 'Daemonologie'	• Written to convince people of the reality of witchcraft • Dialogue urged the detection and punishment of witches

6. The Glorious Revolution and Act of Union	
James II	• Catholic monarch and brother to Charles II • Favoured Catholics which caused issues with Parliament
Glorious Revolution 1688-1689	• James II replaced with the joint monarchy of his daughter Mary and her Dutch husband, William of Orange. • Mary and William were both Protestants.
English Bill of Rights	Declared no Catholic could rule England again. It also guaranteed more freedom and power for Parliament
Act of Union	• Formally united the Kingdom of England and the Kingdom of Scotland into a single Kingdom of Great Britain • English and Scottish parliaments were dissolved and replaced by a single parliament of Great Britain, located in Westminster

7. Interregnum and Cromwell	
Interregnum	The period of time between the execution of Charles I in 1649 and the Restoration of Charles II in 1660
England under Oliver Cromwell	• Replaced Rump Parliament with Barebones Parliament • Barebones Parliament replaced with Protectorate • A strict Puritan he banned theatres, pubs and Christmas • Encouraged Jewish people back to England
Uprisings in Ireland	• Cromwell aimed to eliminate any threat from Royalist forces • Drogheda: Cromwell's forces stormed the town resulting in the massacre of soldiers and civilians • Wexford: A similar massacre followed

8. Additional Key People	
Thomas Fairfax	Commander of the New Model Army
Prince Rupert	Nephew of Charles I who led the Cavalier cavalry
Richard Cromwell	Son of Oliver Cromwell who succeeded his father as Lord Protector in 1658

9. Restoration of the monarchy	
Causes of the Restoration	• When Oliver Cromwell died his son, Richard, took over but was • unpopular and forced out of power by the army • The army tried to rule England without parliament
General Monck	• Head of the army in Scotland • Believed restoring the monarchy would stabilise England
Charles II	Son of Charles I invited back to England to become king in 1660
Declaration of Breda	• Promises Charles II made to become king. Written in Breda, Holland • Promises included religious freedom, pardons for Parliamentarians, wages for the army and return of land to Royalists

1649 Charles I executed	**1649** Irish rebellions put down by Cromwell's army	**1653** Cromwell becomes Lord Protector	**1658** Cromwell dies	**1660** Declaration of Breda	**1660** Charles II becomes king	**1685** James II becomes king	**1689** King William II and Queen Mary II take the throne	**1689** English Bill of Rights	**1707** Act of Union

History - The Slave Trade & Abolition

1. What was Africa like in the 16th century?

The Kingdom of Benin	• One of the most developed kingdoms in Africa • Situated in modern day Nigeria • Organised system of government; wealthy; traded with other parts of Africa and later, with Europeans
The Songhai Empire	• Situated in modern day Mali • Established trade routes from the coast to central Africa • Had a flourishing culture; centre of learning and Islam

3. The Slave Trade Triangle

Trade Triangle	• European ships transported manufactured goods to Africa e.g. guns, hardware and cloth • These goods were traded for Enslaved Africans who were then transported to America and the Caribbean • Slaves grew raw materials e.g. sugar, cotton and tobacco on plantations to be sent back to Europe.
Plantation	• A large farm or estate where one main crop was grown by enslaved Africans • Mostly grew sugar, cotton and tobacco
The Middle Passage	The second stage of the trade triangle where Africans were transported to America and the Caribbean.
Countries involved in slavery	• British, Portuguese, Dutch, Spanish, Danish, & French empires all traded slaves • British Empire dominated global trade and the Slave Trade. Liverpool and Bristol were the main cities to benefit from the Slave Trade

5. Abolition: White campaigners

Abolition	Banning or getting rid of something
White abolitionists	• **Granville Sharp**: A lawyer who set up the Abolition Committee • **William Wilberforce**: MP who brough the Abolition Bill to parliament every year between 1790-1806 • **Josiah Wedgwood**: A potter who created the symbol of the Abolition Committee "Am I not a man and a brother?" • **Thomas Clarkson**: campaigner who told people about the horrors of slavery; asked ordinary workers to sign petitions; gave speeches for abolition
The Abolition Committee	A group of influential men in Britain that campaigned to end the slave trade
How this helped abolition	• They raised awareness amongst the British public of the true nature of slavery. Opinion gradually turned against slavery • Parliament was needed to pass the laws

2. How were enslaved Africans treated?

During the Middle Passage	• 10-20% of enslaved Africans died on the voyage • Densely packed on the ships, and chained together • Poor hygiene on ships led to many illnesses • During the voyage of the Zong 133 sick slaves were thrown overboard
On arrival in the Americas	Would be sold by auction to plantation owners
On plantations	• Field Slaves: Would carry out tough manual labour such as harvesting crops and crushing & boiling sugar • Domestic Slaves: Would work in the owner's house • Slaves would be harshly punished for trying to run away or for lack of work

4. The actions of black people

Resistance	• Refusing to cooperate e.g. deliberately working slow • Cultural Resistance: e.g. by continuing to use their native languages
Slave Rebellion	• **Toussaint L'Ouverture** led a rebellion in St. Domingue (modern day Haiti; a French colony) slaves declared Haiti independent • Around 10% of slave ships mutinied although few succeeded
Olaudah Equiano	• Ex-slave who became an abolitionist • Wrote a best-selling autobiography in 1789 *The Interesting Narrative of the Life of Olaudah Equiano*
How this helped abolition	• Mutinies and revolts raised awareness in Europe • European governments became scared of future revolts • Equiano's book helped Africans to be seen as people not property • Challenged European ideas about what ex-slaves could achieve

6. Economic reasons

Boycott	To stop buying goods. Public awareness caused a sugar boycott
Slavery not profitable	Economist Adam Smith argued that a 'Free market' was better Slavery was bad for business as slaves had no incentive to work Paid workers would not need food and accommodation like slaves
Petition	A list of requests or demands signed by many people
How this helped abolition	Sugar boycotts and the growing idea of the free market made the slave trade far less profitable.

1607-1732 British colonies created in Americas	**1781** Slave Ship Zong	**1789** Equiano writes his autobiography	**1791** Haitian Revolution	**1797** Abolition Committee created	**1807** Abolition Bill – slave trade becomes illegal in British Empire	**1833** Slave ownership in British Empire banned

History - The Industrial Revolution

1. Context of the Industrial Revolution	
Revolution	A change which means nothing will ever be the same again
The Industrial Revolution	The change from agrarian (farming) society to an industrial (manufacturing) one
The British Empire	• Supplied many of the raw materials that helped drive the Industrial Revolution. • Provided a market to buy manufactured goods
Rural Urban	• Countryside, agricultural based society and cottage industry • City and towns, factory based industry

2. Class Struggles	
Class system	**Upper Class** wealthy landowners and aristocrats **Middle Class** industrialists, merchants, and professionals **Working Class** factory workers and coal miners
Luddites	• Gangs of weavers and textile workers who broke machinery • Government responded by making machine breaking punishable by death
Tolpuddle Martyrs	• Farm labourers from Dorset unhappy with their wages and working conditions • Formed secret union called the Friendly Society of Agricultural Labourers • Sentenced to 7 years labour in Australia but later pardoned

3. Transport and Technology	
Canals	• Man-made waterways used to move raw materials such as coal and manufactured goods • A slow and expensive method of transport
Locomotive	• A steam train • James Watt designed a steam engine in 1776
Turnpike Trusts	• Companies given permission from Parliament, to borrow money from banks and use it to build newer and better quality roads. • They would then charge a 'toll' (a fee) for everyone that wanted to use it

4. Women in the Industrial Revolution	
Domestic role of women	Women traditionally stayed in the home providing service as caregivers or worked in agriculture or cottage industries as spinners
Changing role of women in work	Women took on factory and mining roles as they moved into the towns and cities. Paid less than men and provided cheap labour
Match Girls Strike	Estimated 1,400 women went on strike and marched against their employer, Bryant & May. Protested against poor working conditions
Phossy Jaw	Rotting of the Jaw caused by white phosphorous used in match factories

5. Individuals and Inventions	
Richard Arkwright	• Industrialist who created the water frame which could used water power to spin cotton
James Hargreaves	• Inventor of the 'Spinning Jenny' which could spin 8 threads at once
George Stephenson	• Engineer who created the first passenger train in 1825 • Known as the 'Father of Railways'
Isambard Kingdom Brunel	• Engineer who designed the Great Western Railway • Designed the Clifton Suspension Bridge • Box Tunnel: Two-mile tunnel through the hills of Bath
Sarah Guppy	• Barnacle buster; prevent barnacles and marine growth from • building up on the hulls of wooden ships

6. Children in the Industrial Revolution	
Why were children used to work?	• Children did not have to be paid as much as adults • Children were small enough to crawl under machinery / work in mines
Royal Commission	• A commission of inquiry appointed by the Crown on the recommendation of the government • Investigated working conditions for children in factories and mines
Factory Act 1833	• Passed to protect children at work • Stated that no child under the age of 9 could work in a factory
Collieries	• A coal mine

1764 The Spinning Jenny invented	**1769** The water frame invented	**1776** Watt builds his steam engine	**1813** Execution of 14 Luddites	**1825** Stephenson invents first passenger train	**1830** Opening of the Liverpool Manchester railway	**1833** Factory Act passed to protect children at work

History - The British Empire

1. Context of the British Empire	
Empire	A group of countries ruled over by a leader
Colony	A country ruled by another
Colonisation	The process of establishing control over other countries
Reasons for Britain gaining an Empire	• **Geographical**: Britain is an island with skilled sailors • **Military:** GB had invested in gunpowder technology, powerful navy • **Economic**: GB was the first industrialised nation, desire for overseas markets, GB used **chartered companies** (trade company not under government control) • **Political:** GB had a stable government

2. India: What was the turning point in Britain's relationship with India?	
British Raj	The period of British rule of India
East India Company	The main British trading company in India
Key Events	**Indian Mutiny**: Indian soldiers (sepoys) fought against British control of the army **Amritsar Massacre**: Up to 1000 Indian civilians killed by the British Army **Rowlatts Act:** Gave the British more power to treat the Indian people harshly.

3. The Americas: How did Canada become part of the British Empire	
Walter Raleigh	Explorer who founded the first British colony in the Americas
13 Colonies	The 13 original British colonies in America
First Nations	Native populations in what becomes known as Canada
Hudson Bay Trading Company	Traded furs in North America from 1670
7 Years War	• A global war between the British, Spanish and French • A large amount of fighting took place in the Americas

4. Africa: How did the 'scramble' change Africa?	
Royal African Company	An English Trading company one of the founders was Charles II
Transatlantic slave trade	• The trade in enslaved Africans • Britain was the main European country involved in the trade
Scramble for Africa	• European countries competing for control of African territory • Occurred between 1800 - 1900
Cecil Rhodes	• A businessman and politician who was heavily involved in the colonisation of southern Africa • Rhodesia (modern Zimbabwe) was named after him

5. Australia: How did the Aborigines experience the Empire?	
Aborigines	Indigenous people of Australia
Penal Colony	A colony where prisoners are sent as punishment
Transportation	Sending criminals to a prison colony as a punishment
The Black War	Frontier war between settlers and Tasmanian aborigines
William Cuffey	A black campaigner who was sent to the Tasmanian Penal Colony

6. What is the legacy of the British Empire?	
Decolonisation	The process of colonies gaining independence
Legacy	The impact of the British Empire on the present day
English Exceptionalism	The belief that England and the English people are superior to all other nations

1584 Walter Raleigh founds the colony of Virginia in America	**1757** East India Company takes control of Bengal	**1770** The British 'claim' Australia	**1783** The US win their independence	**1802** Tasmanian genocide begins	**1857** The Indian Mutiny	**1858** The British government take direct control of India	**1919** The Amritsar massacre	**1947** India & Pakistan gain independence

Mathematics - Number

Key vocabulary	Definition
Ascending	Increasing in size (or numerical value)
Compare	To look at two or more numbers and say what is similar or different.
Composite Numbers	A positive integer with more than two factors.
Consecutive	Describing things which follow each other in a particular order.
Cube Numbers	The result of multiplying a number by itself twice. 1, 8, 27, 64, 125, 216, 343, 512, 729, 1000
Decimal Places	The number of digits to the right of a decimal point in a decimal number.
Degree of Accuracy	Describing how precise or accurate a value is, in terms of number of decimal places or significant figures.
Denominator	The bottom number of a fraction. Must be an integer.
Descending	Decreasing in size (or numerical value)
Difference	The result of a subtraction.
Divisible	One number is divisible by another if it is capable of being divided exactly, without a remainder.
Equivalent	Of equal value.
Estimate	To find an approximate answer to a calculation by rounding the numbers involved, commonly to 1 significant figure.
Evaluate	To find the numerical value of.
Factor	An integer that divides another integer exactly, without a remainder.
Factor Pair	A set of two factors that have a particular product.
Fraction	A number which represents part (or parts of) a whole.
Highest Common Factor	The largest number that divides exactly into two or more numbers.
Improper Fraction	A fraction where the numerator is larger than the denominator.

Key Equivalents		
FDP Conversion	$1 = \frac{1}{1} = 100\%$ $0.5 = \frac{1}{2} = 50\%$ $0.1 = \frac{1}{10} = 10\%$ $0.25 = \frac{1}{4} = 25\%$	$0.75 = \frac{3}{4} = 75\%$ $0.2 = \frac{1}{5} = 20\%$ $0.\dot{3} = \frac{1}{3} = 33.\dot{3}\%$

Key vocabulary	Definition
Indices	The power of a number which shows how many times the number is multiplied by itself.
Inequality	The relationship between two numbers that are not equal to each other, shown using the symbols <, > , ≤, ≥ or ≠.
Integer	A whole number including positive and negative numbers and zero.
Lowest Common Multiple	The smallest number which appears in the list of multiples for two or more numbers.
Mixed Number	A number formed of both an integer (whole number) and a fraction.
Multiple	The result of multiplying a number by an integer, i.e. the times tables of a number.
Numerator	The top number of a fraction. Must be an integer.
Order of Operations	**BIDMAS**—Brackets, Indices, Division & Multiplication and Addition & Subtraction.
Power of 10	The product of multiplying 10 by itself, a number of times.
Prime Number	A positive integer with only two factors, 1 and itself. 2, 3, 5, 7, 11, 13, 17, 19, 23, 29
Product	The result of a multiplication.
Proper Fraction	A fraction in which the numerator is less than the denominator.
Remainder	In division, the amount leftover when a number does not divide exactly.
Square Numbers	The result of multiplying a number by itself. 1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225
Square Root	The particular factor of a number which can be multiplied by itself to produce that number.
Sum	The result of an addition.
Unit Fraction	A proper fraction with a numerator of 1.
Significant figures	The significant figures of a number are the digits which **carry meaning** (ie. are significant) to the size of the number. The **first significant figure** of a number **cannot be zero**.

Key vocabulary	Definition
Equivalent Fractions	Fractions which have different numerators and denominators but represent the same value.
Percentage Increase/ Decrease	Calculating a percentage of an amount and either adding this onto (increasing) or subtracting this from (decreasing) the original amount.
Percentage Change	To calculate the percentage change, use the following: $\frac{difference}{original} \times 100$
Percentage Multiplier	The number you multiply a quantity by to increase or decrease it by a percentage. E.g. to increase by 10% the multiplier is 1.1.
Significant figure	The significant figures of a number are the digits which **carry meaning** (i.e. are significant) to the size of the number. The **first significant figure** of a number **cannot be zero**.

Key vocabulary	Definition	
Cube Root	The particular factor of a number which can be multiplied by itself twice to produce that number.	
Key units of measurement	**Time** 1 hour = 60 minutes 1 minutes = 60 seconds 1 hour = 3600 seconds	**Length** 1 cm = 10mm 1m = 100cm 1km = 1000m
	Mass 1kg = 1000g 1 tonne = 1000kg	**Area** $1cm^2 = 100mm^2$ $1m^2 = 10000cm^2$

Mathematics - Algebra

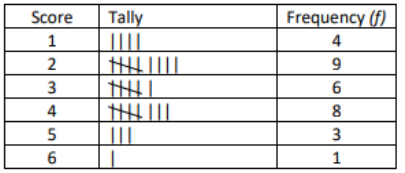
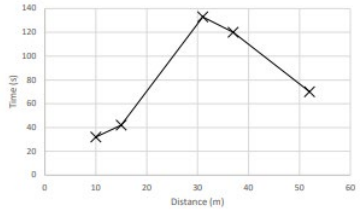
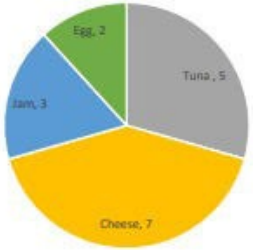
Key vocabulary	Definition
Algebra	A branch of mathematics in which letters are used to represent numbers.
Coefficient	A constant value which multiplies a variable. Always written before the variable.
Constant	A fixed number on its own.
Equation	A mathematical statement in which two expressions with equal values are connected by an equals sign.
Expand	To remove the brackets from an expression by multiplying terms and simplifying as necessary.
Expression	An algebraic expression is made up of two or more terms combined by operators.
Factorise	To rewrite an expression in brackets. Completed by finding the highest common factor, placing this outside the bracket and dividing by this to get an expression for inside the bracket.
Formula	An equation that shows the relationship between two or more variables.
Identity	An equation that is true for all values.
Linear	Contain only variables with a power of one, such as x
Simplify	To write an expression or fraction in a more concise form using the rules of algebra.
Solution	The value or values that can be substituted for the unknown in an equation to make it true.
Solve	To find the solution(s) to an equation by isolating the unknown.
Subject	The dependant variable in a formula or equation, identifiable by being on its own on one side of the equals sign.
Substitution	The process by which symbols are replaced by numbers in order to evaluate an expression or formula.
Term	A constant, variable or coefficient and one or more variables.
Unknown	A value that is not known in an equation.
Variable	A symbol, often a letter, whose value can vary.

Key vocabulary	Definition
Inverse operation	The opposite operation that is being performed on a variable.
Term	A constant, variable or coefficient and one or more variables.
Inequality	Inequality Symbols $\neq$ not equal $<$ less than $\leq$ less than or equal to $>$ greater than $\geq$ greater than or equal to

Key vocabulary	Definition
Direct Proportion	If two quantities are in direct proportion, as one increases, the other increases by the same percentage.
Inverse Proportion	If two quantities are inversely proportional, as one increases, the other decreases by the same percentage.
Scale Factor	A number by which a shape is enlarged
Ratio	Comparing the size of one part to another. The ratio of a to b is written as a:b.
Equivalent ratio	Equivalent ratios are found by multiplying/dividing all parts of the ratio by the same value.

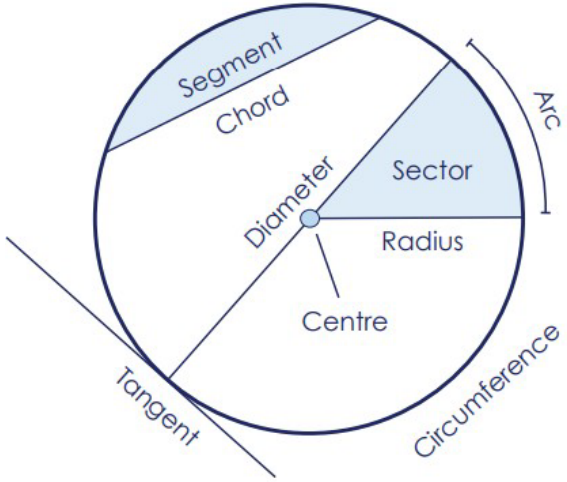
Mathematics - Statistics

Key vocabulary	Definition
Average	A single number or value that is used to represent a set of data. There are three main averages we focus on: mode, median and mean.
Data	Information in the form of facts and numbers.
Data point	A single item from a data set.
Data Set	A collection of data which all refers to the same category or topic.
Intersection	The numbers of elements that belong to both/all sets. In a Venn Diagram, this is where the circles overlap.
Mean	The sum of all the values in a data set, divided by the number of values in the data set.
Median	The middle value in an ordered list.
Mode	The most common value. It is possible to have more than one mode, or no mode.
Qualitative Data	A type of data that can be grouped under named categories, often described as data that can be described.
Quantitative Data	Types of data that can be represented numerically, often described as data that can be counted.
Range	The difference between the smallest and largest value.
Two-way Table	A diagram in which frequencies for two categories may be organised; one variable in rows and the other in columns.
Venn Diagram	A diagram in which circles are used to illustrate the relationships between different sets. Must have a box drawn around it.

Key Term	Definition	Examples
Frequency Table	A table showing how often something occurs. Can include tally charts.	
Line Graph	Uses lines to join points on a graph to represent a data set.	
Bar Chart	A way of displaying data using horizontal or vertical bars which are the same width and have gaps between them.	
Pie Chart	A method of displaying proportional information by dividing a circle up into different- sized sectors.	

Key vocabulary	Definition
Frequency	How many times something occurs.
Continuous data	Data that can take any value. E.g. height, weight, length.
Discrete data	Data that can only take certain values. E.g. shoe size.

Mathematics - Geometry & Measure

Key vocabulary	Definition
Parts of a circle	
Arc	A section of the circumference.
Sector	The area bounded by two radii and an arc.
Chord	A straight line joining any two parts of the circumference.
Circumference	The distance around the outside of the circle.
Diameter	A straight line going from one end of the circle to another passing through the centre.
Segment	The area bound by the circumference and a chord.
Tangent	A straight line that touches the circumference at a single point.
Pi (π)	The ratio of a circle's circumference to its diameter.

Key vocabulary	Definition
Circumference	The perimeter of the circle. C = πd
Radius	$diameter \div 2$
Diameter	$2 \times radius$
Perimeter of semi-circle	$p = \frac{\pi d}{2} + d$
Perimeter of quarter circle	$p = \frac{\pi d}{4} 2r$
Perimeter of three-quarter circle	$p = \frac{3}{4}\pi d + 2r$
Area of a circle	$A = \pi r^2$
Area of a semi-circle	$A = \frac{\pi r^2}{2}$
Area of a quarter-circle	$A = \frac{\pi r^2}{4}$
Area of three-quarter circle	$A = \frac{3\pi r^2}{4}$

Mathematics - Geometry & Measure

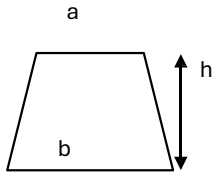
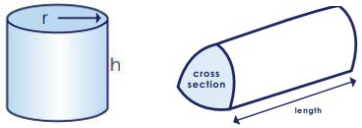
Key vocabulary	Definition
Acute Angle	An angle less than 90°.
Adjacent	Next to, or near.
Area	A measure of the space inside a closed two-dimensional shape.
Axes	The straight lines on a graph used to define the position of a point. The x-axis goes across (horizontal). The y-axis goes up (vertical).
Centimetre (cm)	A metric unit of length equal to one hundredth of a metre. 100cm = 1m
Compound Shape	A shape made up of two or more geometric shapes.
Coordinate	An ordered pair of points that show an exact position on a set of axes. Written (x, y).
Exterior Angle	An angle between one side of a shape and a line extending from an adjacent side.
Irregular Polygon	A polygon with unequal length sides and angles.
Kilometre (km)	A metric unit of length equal to one thousand metres. 1 km = 1000m
Line of Symmetry	A line that can divide a shape into identical halves, which are mirror images of each other.
Metre (m)	The base unit of length in the international system of units.
Midpoint	The point exactly halfway between two points.
Millimetre (mm)	A metric unit of length equal to one thousandth of a metre. 10mm = 1cm
Obtuse Angle	An angle measuring between 90° and 180°.
Order of Rotation	The number of times that a shape appears identical during a turn of 360°.
Origin	The point with coordinate (0, 0).
Parallel	Two lines that will never cross and that will remain the same distance apart.
Perpendicular	Two lines that meet at an angle of 90°.

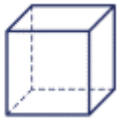
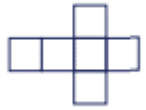
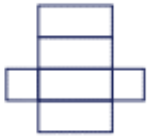
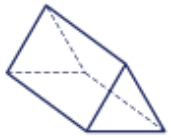
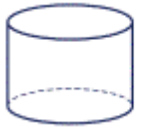
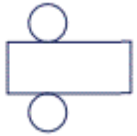
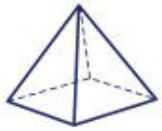
Key vocabulary	Definition
Perpendicular	Two lines that meet at an angle of 90°.
Perimeter	The total distance around the outside of a closed two-dimensional shape.
Polygon	A closed two-dimensional shape made up of all straight edges.
Protractor	An instrument used to measure angles.
Quadrilateral	A two-dimensional shape with four sides.
Reflex Angle	An angle measuring between 180° and 360°.
Regular Polygon	A polygon with sides of equal length and angles of equal size.
Right-angle	A 90° angle.
Rotational Symmetry	A symmetry in which a shape may be rotated about a central point and appears identical after a turn of less than 360°.
Square Units	Units used to measure area.
Triangle	A two-dimensional shape with three sides.
Vertex	A point on a polygon at which two lines meet to form an angle.

Key Term	Definition
Angles around a point	Angles around a point sum to 360°.
Angles on a straight line	Angles on a point on a straight line sum to 180°.
Angles in a triangle	Angles in a triangle sum to 180°.
Angles in a quadrilateral	Angles in a quadrilateral sum to 360°.

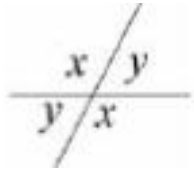
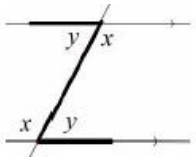
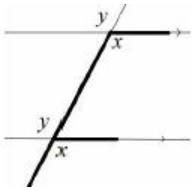
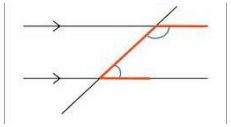
Key vocabulary	Definition
Area of a rectangle or square	Length x width
Area of a parallelogram	Length x perpendicular height
Area of a triangle	$\frac{\text{Base x perpendicular height}}{2}$
Area of a trapezium	$\frac{a + b \times h}{2}$, where a and b are parallel sides.

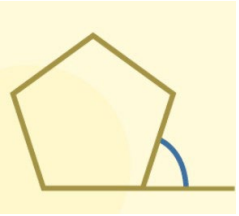
Mathematics - Geometry & Measure

Key vocabulary	Definition
Area of a trapezium	$\frac{1}{2}(a+b)h$ 
Face	A face is a single flat surface.
Edge	An edge is a line segment between two faces.
Volume	The amount of 'space' a solid object occupies. Units: ***mm³, cm³, m³***, etc. The volume of a prism ***V = Area of Cross Section x Length*** The volume of a *cylinder* ***= πr² h*** 
Volume of a cube / cuboid	Length x width x height
Prism	A 3D shape with a constant cross-section.
Cross-section	The 2D shape that is consistent throughout the prism

Key vocabulary	Definition	Shape	Net
Cube	6 square faces 12 edges 8 vertices		
Cuboid	6 rectangular faces 12 edges 8 vertices		
Triangular Prism	5 faces 9 edges 6 vertices		
Cylinder	3 faces 2 edges 0 vertices		
Square-based Pyramid	5 faces 8 edges 5 vertices		
Triangular-based Pyramid	4 faces 6 edges 4 vertices		
Cone	2 faces 1 edge 1 vertex		
Sphere	1 face 0 edges 0 vertices Half a sphere is known as a hemisphere.		

Mathematics - Geometry & Measure

Key vocabulary	Definition	
Vertically Opposite Angles	Vertically opposite angles are equal.	
Alternate Angles	Alternate angles are equal.	
Corresponding Angles	Corresponding angles are equal.	
Co-Interior Angles	Co-Interior angles add up to 180°.	

Key vocabulary	Definition
Sum of all angles in Polygons	n is the number of sides. $(n-2) \times 180$
Internal angle in regular polygon	$\frac{(n-2) \times 180}{n}$
External angle	The angle between a side of a polygon and an extended adjacent side. 
Exterior angle regular polygon	$\frac{360}{n}$

Music - Terms and Definitions

1. Elements of music	
Dynamics	The volume of the music.
Melody	The tune.
Pitch	How high or low the sound is.
Rhythm	The pattern of beats in a piece of music.
Tempo	The speed of the music.
Texture	The layers in a piece of music.
Tonality	Major or minor music.
Structure	The sections in a piece of music.
Harmony	The accompaniment.

2. Dynamics key terms	
Italian term	**English definition**
Pianissimo	Very quiet
Piano	Quiet
Mezzo piano	Moderately quiet
Mezzo forte	Moderately loud
Forte	Loud
Fortissimo	Very loud
Crescendo	Gradually getting louder
Diminuendo	Gradually getting quieter

3. Rhythmic key vocabulary	
Polyrhythm	Multiple rhythms played at the same time of equal importance.
Call and response	A soloist calls a rhythm and the group respond with a similar or matching phrase.
Ostinato	A repeating pattern which can be rhythmic or melodic.
Pulse	A steady beat.
Syncopation	An off-beat rhythm.

4. Tempo key vocabulary	
Tempo	The speed of the music
Largo	Very Slow
Adagio	Slowly
Andante	At a walking pace
Allegro	Fast
Presto	Very Fast
Accelerando	Gradually speeding up
Rallentando	Gradually slowing down

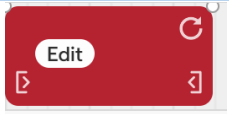
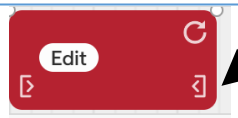
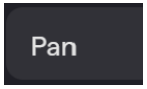
Notes

5. Tonality key vocabulary	
Major	Happy sounding music
Minor	Sad sounding music

6. Texture key vocabulary	
Monophonic	One melody or rhythm.
Homophonic	Melody and accompaniment.
Polyphonic	Multiple melodies or rhythms played at the same time.

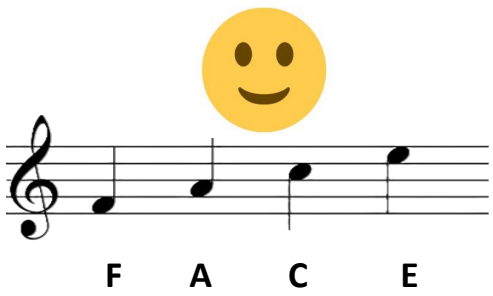
7. Melodic key vocabulary	
Conjunct	Melody moving in steps
Disjunct	Melody moving in leaps
Ascending	A melody getting higher in pitch
Descending	A melody getting lower in pitch

Music Technology

8. Music Technology		
	**Region**	Contains the music that has been composed.
	**Extend the Region**	Used to fit more notes into a region.
	**Loop**	Used to repeat an idea.
	**Inputting Notes**	Used to input individual notes.
	**Automation**	Used to add dynamics and panning.
	**Panning**	Moving the sound to just the left speaker, right speaker or both.

Music - Notation

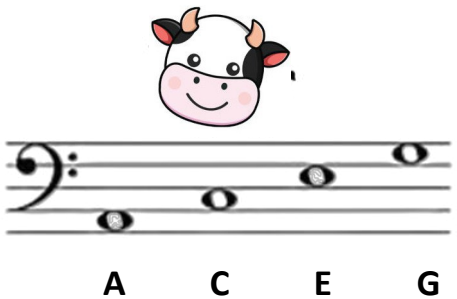
Treble Clef Notes on the stave



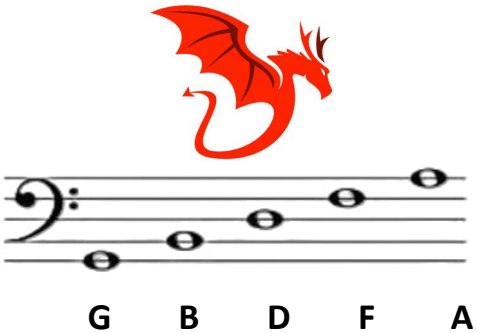
FACE in the space

Eddie's Green Boots Don't Fit

Bass Clef Notes on the stave



All Cows Eat Grass



Great Big Dragons Fly Away

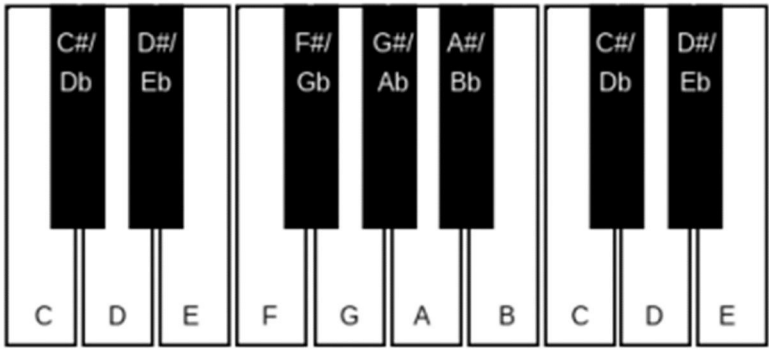
Treble Clef Ledger Lines

Bass Clef Ledger Lines

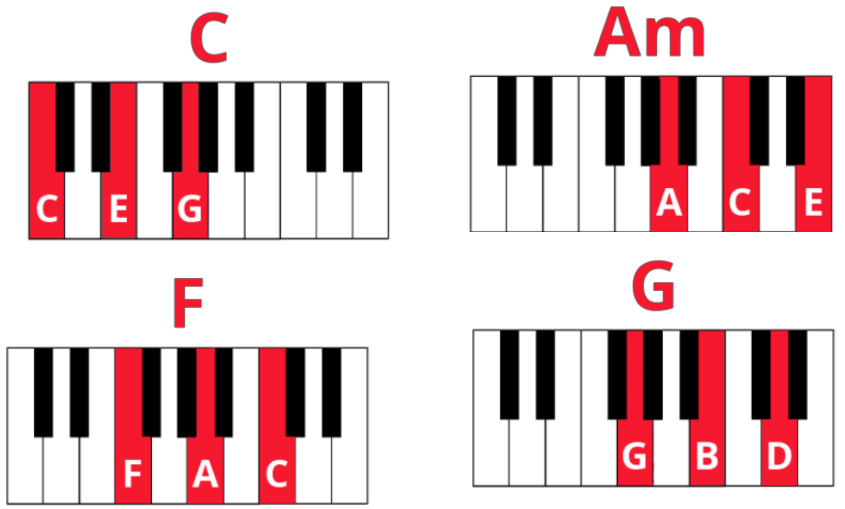
Notes and Rests			
Symbol	Term	Rest	Duration
	**Semiquaver**		1/4 beat
	**Quaver**		1/2 beat
	**Crotchet**		1 beat
	**Minim**		2 beats
	**Semibreve**		4 beats

Music - Instruments

The notes on the keyboard



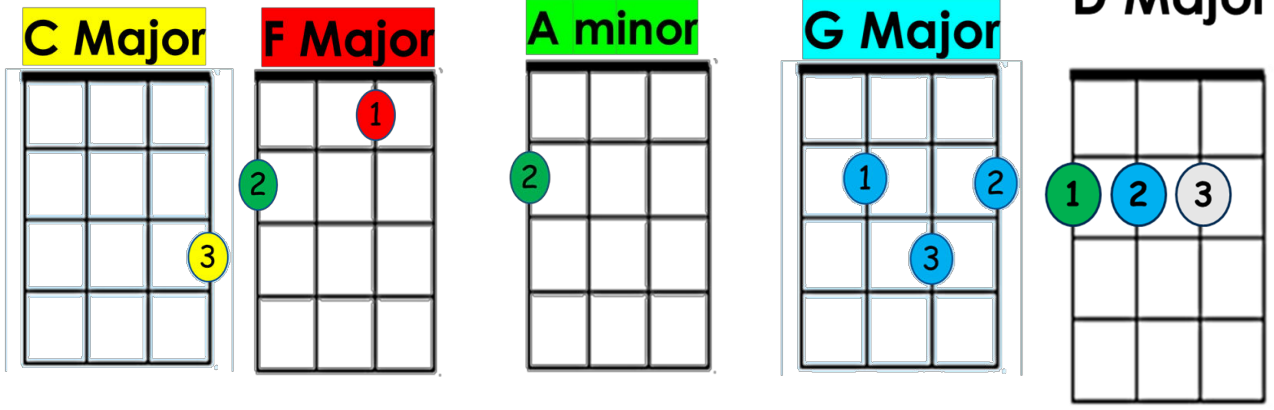
Piano Chords



12 Bar Blues in C major

1 C	2 C	3 C	4 C
5 F	6 F	7 C	8 C
9 G	10 F	11 C	12 G

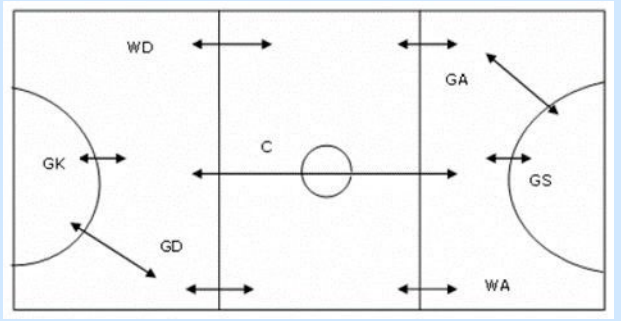
Ukelele Chords



Physical Education - Netball

1. Positions	Roles
GS	**Goal Shooter** - Can move anywhere within their goal third.
GA	**Goal Attack** - Can move anywhere within their goal third and the centre third.
WA	**Wing Attack** - Can move within their goal third and centre third, but not the D.
C	**Centre** - Can move anywhere across the court, apart from either of the D.
WD	**Wing Defence** - Can move within the centre third and defensive third but not the D.
GD	**Goal Defence** - Can move anywhere within their goal third and the centre third.
GK	**Goalkeeper** - Can move anywhere within their goal third but cannot leave it.

2. Court Layout



3. Key Rules

Rule	Definition	Sanction
Free Pass	When a rule is broken that does not directly affect another player. This is when a penalty pass is awarded. **No players are out of play.**	
Penalty Pass	When a rule is broken that directly affects another player. The player who committed the foul must stand next to the player and is out of play until the pass has been made.	
Receiving C pass	Must receive the centre pass in the centre third. Full foot must be in centre circle	Ball is turned over
Obstruction	A player must always be at least 3 feet (0.9M) away from an opponent with the ball when defending.	Penalty Pass
Contact	Players cannot make physical contact with each other on court.	Penalty Pass
Held ball	Holding the ball for more than 3 seconds	Free Pass
Over a Third	The ball cannot be thrown over a complete third of the court without being touched or caught by a player	Free Pass

4. Key Skills

Key Skills	What is it?	Why is it used?
Passing	**Chest**	Fast and powerful short distance pass	Get the ball to your team with **accuracy**.
	Bounce	Short pass to go under a defender	
	Shoulder	Loop a player for distance	
Shooting	**BEEF:**	Balan ce Elbow Eye Flick/Follow Through	Get ball through the net.
Defend	**Rebounds**	Jumping to regain or retrieve a loose ball	Turn over ball or regain possession.
	Intercepting	When a player regains possession of the ball	
	Marking	Staying on your player	
Attack	**Dodging**	Quick movement to get in front of opposite. This is to get into space.	To get free to receive a pass. This is used during a centre pass or back line.

Physical Education - Rugby

1. Key Skills			
Key Skills		**What is it?**	**Why is it used?**
Passing	**Drawing the player**	The ball carrier must **"draw"** the defender, by getting into a position where the defender has no choice but to tackle.	To give your teammate more time and space.
	Spin	A longer pass between two players.	
Tackling	**Basic Tackle**	**NHS** - Knees, Hips, Shoulder **Tower of Power** **Ring of steel** - Arms wrap around the ball carrier's legs/ midriff in a strong embrace. No need to lock arms or fingers together. **Cheek 2 Cheek** - head on the correct side of the ball carrier by placing face cheek to their bum cheek.	Be able to successfully tackle the player to ground.
Scrums	**Crouch Bind Set**	The Forwards, push against one other to try win the ball back. **Crouch**- 3 Players per team get into a joined tower of power position. **Bind**- Opposition Props (side of scrum) players grab each other's upper arms. **Set**- Players engage and push one another to try and win the ball which is rolled in between them.	Crating a fair way to restart the game following a forwards pass or knock on.
Ball Handling	**Switch/ Dummy Switch**	1.A switch is where **two players cross over**, and the ball carrier pops the ball to the other. 2.A dummy switch is the same, however the ball carrier **pretends** to give the ball.	To change the point of the attack.
	Loop	The ball carrier passes to the player outside of them and follows their pass ready to receive the ball back from them.	To create more space for the attack.
Rucking	**Rucking (Golden Meter)**	This means the first player **going past the ball (1 meter),** in the ruck, clearing out any opposing team members.	To retain possession after a tackle.
	Counter Rucking (Jackal)	If the attacking team are slow to the ruck, the initial player from the defending team should look to **'Jackal'** the tackled player.	To steal possession off the attacking team after a tackle.
Attack	**Sidestep**	The ball carrier looks **steps one way and then quickly changes** in their line of running in the opposite direction.	To outwit a defender and avoid a tackle.

2. Key Rules		
What it is	**Sanction**	
Forward pass	In rugby, a pass must go backwards or laterally.	Scrum
Offside	A player is in an offside position if that player is further forward (nearer to the opponents' goal line) than the teammate who is carrying the ball or the teammate who last played the ball.	Penalty
Ruck	1.Players must enter the ruck through the gate and not from the side. If this is not done correctly this is called '**in at the side**'. 2.Players must always remain on their feet and not use their hands in the ruck. If this is not done correctly then it is called '**Playing the ball on the floor**'.	Penalty
Tackle	1.The tackler must release the ball carrier once the tackle has been made. If this is not done correctly this is called '**Not releasing the player**'. 2.The tackler must then roll away or get back to their feet, before re-joining play. If this is not done correctly or the player is slow to roll away this is called '**Not rolling away**'. 3.The ball carrier must also release the ball once they have been tackled to the floor. If not done correctly or quickly this is called '**Not releasing the ball**'.	Penalty
Knock On	If a player drops the ball and it goes forward towards the opposition Try line.	Scrum
Deliberate Knock on	If a defending player slaps/ drops the ball and it travels towards the opposing, try line.	Penalty

Physical Education - Gymnastics

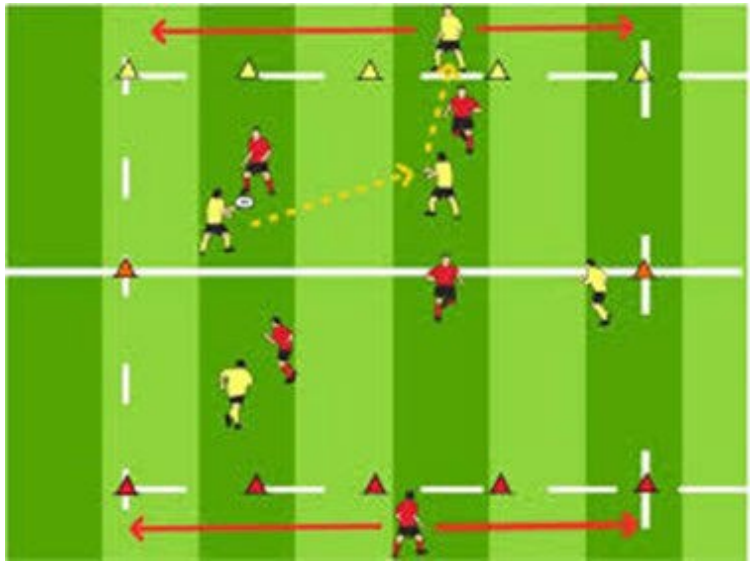
1. Key Skills		
Key Skill	**What is it?**	**Why is it used?**
Counter Tension	Balances that involve being in contact with another person and leaning away to create a balance.	To add difficulty to an individual balance/skill. To create different levels. To create new shapes.
Counter Balance	Balances that involve using another person to lean on to, lift, hold or balance on top of.	To create different levels. To add difficulty to an individual balance/skill. To create new shapes.
Linking	Moving from one skill to another without stopping.	Increase difficulty of skills. Create sequences and routines.
Entry	The movement **INTO** a skill.	Allows you to link a variety of skills together easily.
Exit	The movement OUT of a skill.	Allows you to link a variety of skills together easily.
Sequence	A series of skills linked together.	To demonstrate ability to link skills together.
Change direction	Performing different skills to take you to different parts of the floor area.	To help you to travel around the floor area.
Canon	Performing the movement one after another.	To create different dynamics in a routine.
Unison	Performing the movement at the same time.	To create different dynamics in a routine.

Key vocabulary	
Vocabulary	**Definition**
Extension	Straightening/extending the arms and legs to show clarity of shape. EG: point the toes, keeping legs straight.
Balance	The ability to hold a centre of mass over a base of support e.g. an arabesque requires you to be able to balance on one foot.
Control of movement	How the movement is held at the start, during (balance, speed), and at the end – there should be no wobbling or falling over!
Aesthetics	How a skill looks to the audience with correct technique.
Fluency	Moving from one skill to another easily and smoothly.
Body tension	Tensing & stretching the muscles in order to keep the body in line & held in a shape during a skill.
Points of contact or support (POC/S)	The different parts of the body you can use to balance on and the number of them you use when creating a balance. E.g. a headstand uses the head and both hands to maintain the
Strength	Maximum force that can be generated by a group of muscles EG: being able to hold another person's body weight in a pair balance.

Physical Education - Vortex

1. Phases of Warm up	What is it?	Specific Examples	Benefits of a warmup
Pulse Raiser	Slowly increasing HR	Jogging around the vortex pitch	Warming up muscles Preparing the body physically and mentally for competition Increase body temperature - Improve flexibility of muscles and joints therefore reducing the chance of injury.
Mobility	Taking joints to their full range of movement	Circling shoulders – opening and closing the gate	
Stretching	Static-stationary/ Dynamic-moving stretches	Hamstring stretch or lunges	
Dynamic Movements	Show a change in speed and direction	Sprint shuttles, fast feet and side steps	
Skill Rehearsal	Practising movement patterns and skills that will be used in the activity	Throwing and catching	

2. Key Skills		
Skill	**What is it?**	**Why is it used?**
Throwing	Passing the vortex from one player to another.	Used to move the vortex on the pitch towards the attacking end.
Catching	Receiving the vortex in your hands.	To receive the vortex from your team. Can either be stationary or moving.
Marking	Staying close to someone from the other team.	To prevent the other team from getting the ball and to try and gain possession of the vortex through an interception.
Dodging	Quick movement using changes of direction and speed.	Allows you to get into space or away from the opposition to receive a pass.



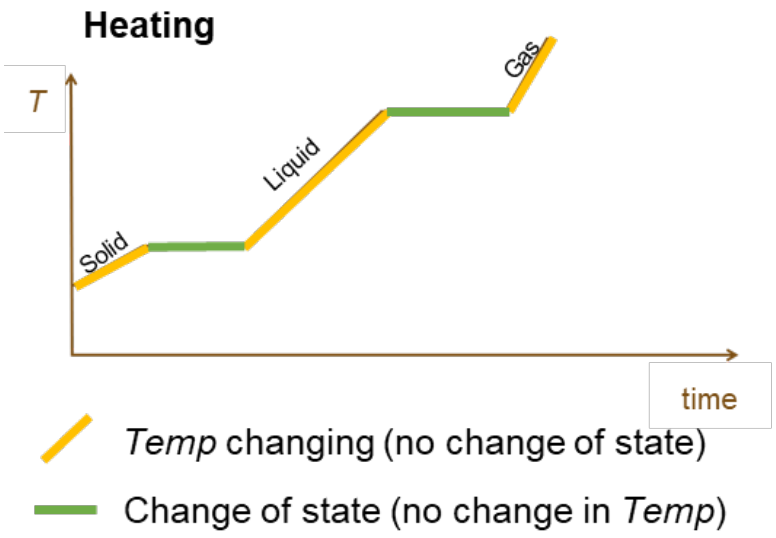
3. Key Rules		
Contact	If you play dangerously or cause harm to another player by trying to win the vortex.	Free pass to the other team from where the offence took place.
Out of play	If the vortex is thrown out of the playing area.	The other team throws it in from where it went out.
Scoring	Passing the vortex to your teammate within the end zone without them dropping it. The player then joins them in the end zone. Last player on the field can take 5 steps with vortex.	If they drop it, no goal is scored. If they catch it successfully play restarts from the centre. First team to have all players in the end zone wins.
End Zone	This is where one player stands to receive the vortex from teammates.	This player can move within the zone to catch the vortex. No defender are allow in this area.

Science – Heating and cooling

1. Heating and cooling	
Key vocabulary	**Definition**
1. Temperature	A physical quantity which is a measure of the average energy of particles due to their motion
2. Thermal Equilibrium	When two objects reach the same temperature with no net flow of energy between thermal stores
3. Internal energy	Total energy within an object due to the motion and position of its particles
4. Pressure	Quantity resulting from a force acting on a surface
5. Thermal conduction	Spontaneous process of energy transfer between a hotter and a cooler object in contact, without the movement of the material
6. Conductor	A substance that allows energy to be transmitted easily through it
7. Insulator	Poor thermal conductors that minimise energy transfer to/from thermal stores

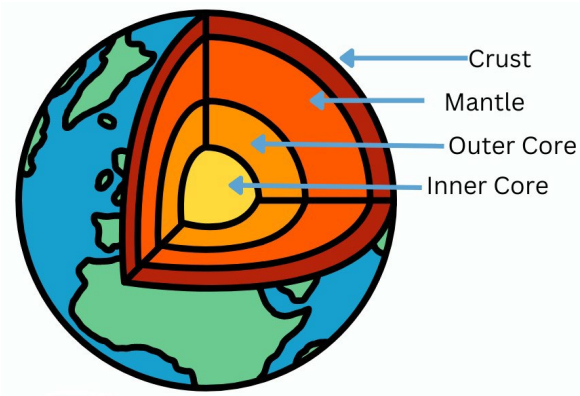
2. Real world contexts	
Context	Explanation
1. Building design	• To maintain steady temperature independent of surroundings. • The greater the energy supplied, the greater the fuel use and costs. • e.g loft insulation, double glazing, draught excluders and cavity-wall insulation
2. Greenhouse Effect	The retention of heat in the atmosphere caused by the build-up of greenhouse gases
3. Weather systems	Driven by temperature differences of different surfaces of the Earth. • Low density air exerts less force on Earth's surface: low-pressure. • Air rises in low-pressure systems.

3. Conduction, convection and radiation	
1. Conduction	• Energy is transferred from particles with lots of energy to neighbouring particles, by vibrations. • Metals are the best thermal conductors
2. Convection	• Movement of a hotter fluid to a colder region • Temperature difference in a fluid causes convection currents. 1. A region of the fluid gets hotter. Particles move more. The separation between particles increases. Its density decreases. 2. The less dense region rises 3. A region of fluid that is colder sinks to replace the hotter fluid.
3. Radiation	• Energy transfer to or from a thermal store by absorption or emission of light • No contact necessary: can be transmitted through a vacuum



Science – Earth and atmosphere

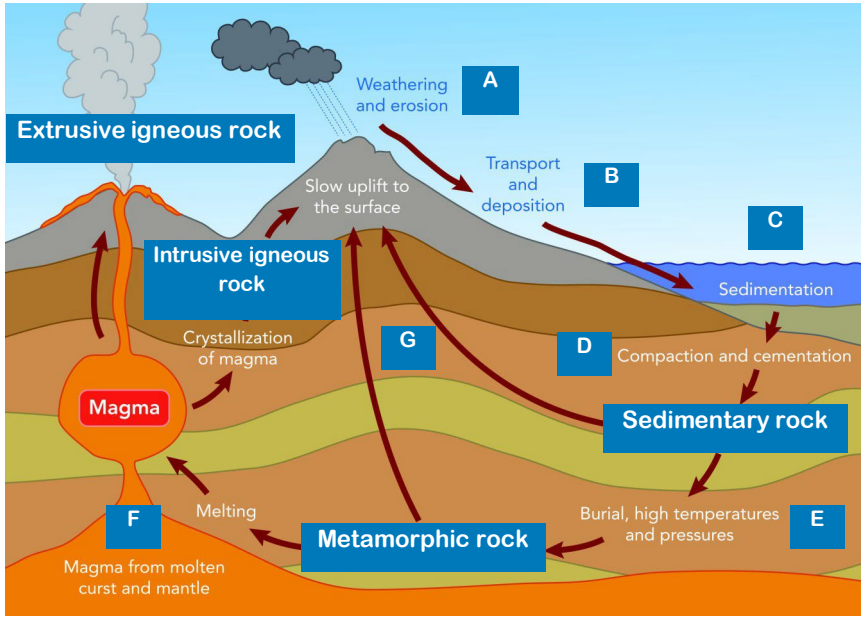
1. Structure of the Earth	
Layer	**Description**
1. Crust	Top layer of the Earth that is relatively thin and rocky
2. Mantle	Thickest layer made from molten rock that can flow
3. Outer core	Made from liquid nickel and iron
4. Inner core	Centre of the Earth made from solid nickel and iron



2. Composition of the current atmosphere	
Gas	**Percentage (%)**
Nitrogen	78
Oxygen	21
Other gases e.g. carbon dioxide	1

3. The rock cycle		
Letter	**Process**	**Description**
A	**Weathering and erosion**	Weathering breaks down rocks on the surface of the Earth
B	**Transportation and deposition**	Rivers and streams transport rock particles to other places. Rock particles are deposited in lakes and seas
C	**Sedimentation**	Rock particles form layers in lakes or seas
D	**Compaction and cementation**	Pressure from the above layers compresses the layers and causes particles to cement together
E	**High temperature and pressure**	Rocks underground get heated and put under pressure, and are changed into metamorphic rock
F	**Melting**	Rocks underground that get heated so much they melt turn into magma. Some reaches the surface as lava and cools quickly to form extrusive rock
G	**Slow uplift to the surface**	Some magma rises slowly cooling slowly within the earth to form intrusive rock

4. Types of rock		
Rock	**How it is formed**	**Properties**
1. Sedimentary	Broken remains of other rocks by weathering, which are joined together	• porous (contains small holes) • soft • contains fossils • made of layers of grains
2. Igneous	Molten rock that has cooled and solidified – either intrusive or extrusive	• hard rock • does not contain fossils. • contains crystals (intrusive igneous rock has cooled slowly and has large crystals, extrusive igneous rock has cooled quickly and has small crystals)
3.Metamorphic	High heat and pressure	• hard rock • contains distorted layers and crystals • colourful

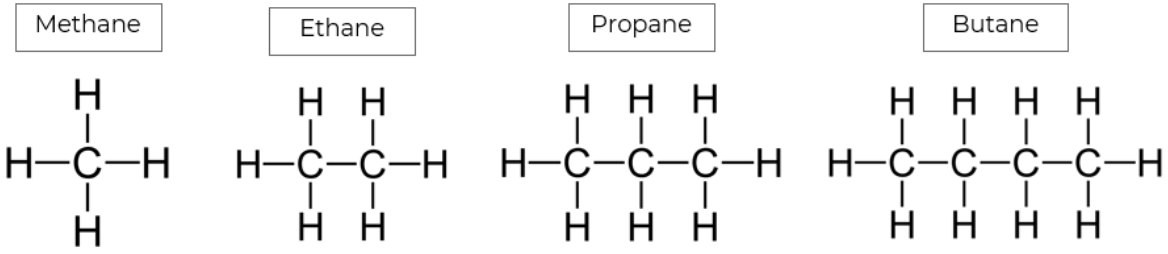


Science – Earth and atmosphere

1. Materials	
Key vocabulary	**Definition**
Monomer	Substance made of single molecules
Polymer	Substance made from long chains of monomers
Ceramic	Materials made out of clay soil that have been dug up from the ground and heated in a kiln
Composite	Made from two or more different types of material
Resources	Any materials that are useful
Hydrocarbons	Compounds that contain hydrogen and carbon only
Fossils	The remains of a dead organism from millions of years ago trapped in rocks

2. Crude oil	
Definition	A mixture of different length hydrocarbons (compounds made from carbon and hydrocarbon atoms only)
Formation	Formed from ancient remains of plankton from millions of years ago
Uses	Can be extracted and separated for fuels and plastics

Alkanes C_nH_{2n+2}

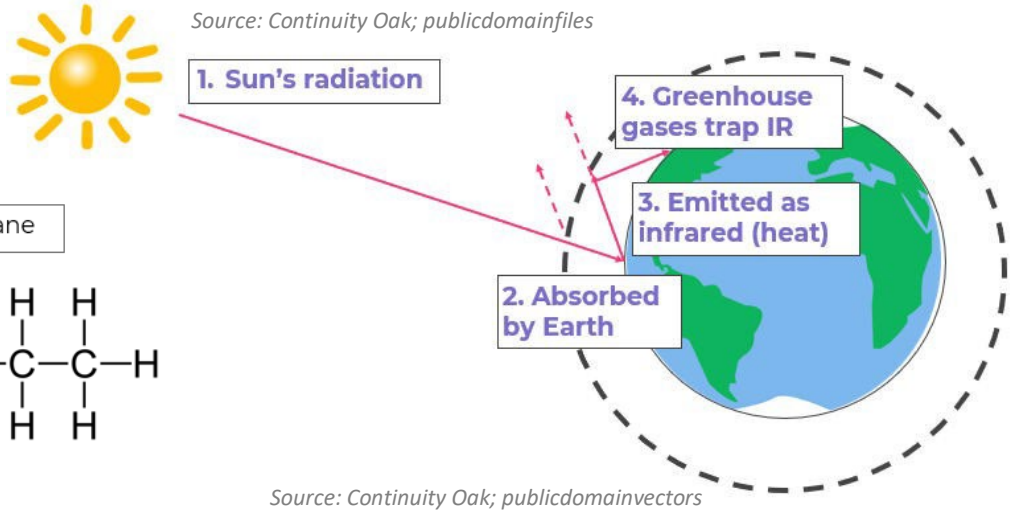


Source: Continuity Oak; [Wikimedia Commons] - [Ethan Lewis]

3. The carbon cycle	
Stage	**Description**
1	Carbon enters the atmosphere as carbon dioxide from respiration and combustion
2	Carbon dioxide is absorbed by producers through photosynthesis
3	Animals feed on the plant passing the carbon compounds along the food chain. Most of the carbon they consume is exhaled as carbon dioxide formed during respiration
4	Decomposers eat the dead organisms and carbon in their bodies is released, as carbon dioxide. In some conditions, decomposition is blocked. The plant and animal material will become fossil fuels

4. Greenhouse gases	
1. Global warming	The rise in the average temperature of the Earth's surface
2. Greenhouse effect	The retention of heat in the atmosphere caused by the build-up of greenhouse gases
3. Greenhouse gases	Gases responsible for global warming - carbon dioxide, methane and nitrous oxides
4. Effects of climate change	Droughts, ice caps melting, extreme weather patterns, flooding, rising sea levels

Source: Continuity Oak; publicdomainfiles



Source: Continuity Oak; publicdomainvectors

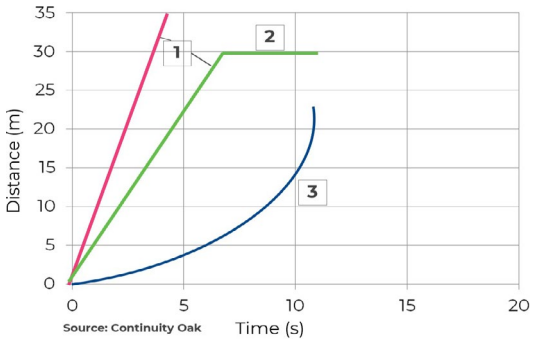
Science – Forces and motion

1. Key vocabulary

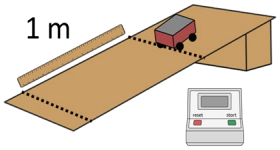
Key vocabulary	Definition
1. Speed	The rate of change of distance
2. Instantaneous speed	The speed at a particular moment in time
3. Relative motion	• movement of one moving object relative to another object • depends on the frame of reference
4. Acceleration	The change in speed over time
5. Resultant force	Result of forces interacting (sum or difference)

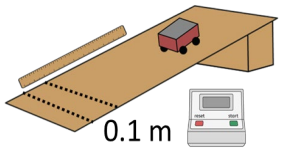
2. Distance- time graphs

1	Travelling at a constant speed
2	Stationary
3	Object is accelerating



3. Measuring speeds (time and distance)

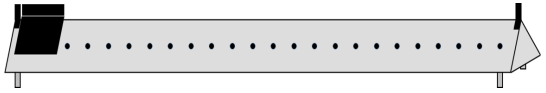




Ramp is 'banked up' to reduce effect of friction.

uniform speed – select greater distance

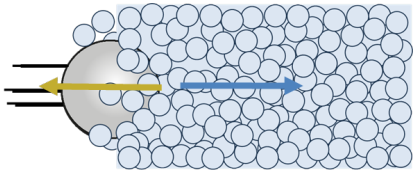
changing speed – select small distances



Air track removes almost all friction.

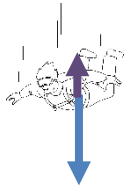
4. Motion in fluids

1. Forces that act against motion in fluids	• Friction • Drag (air resistance/ water resistance)
2. Drag force depends on:	• Material of fluid • Speed of relative motion • Shape of object • Size of front surface • Smoothness of surface

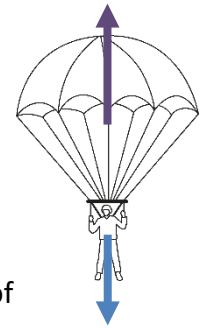


- Relative motion between fluid and object.
- Object pushes forwards on particles of fluid.
- Particles push backwards on object = **drag force**.

5. Motion through air



Accelerates until drag equals size of weight.

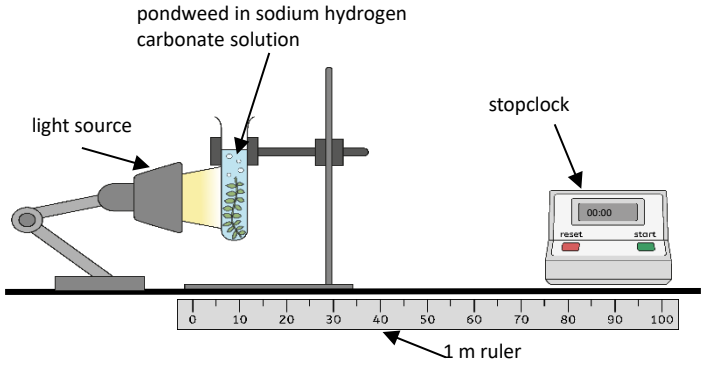


Parachute released, increases drag, resultant force acts upwards, decreases speed, drag decreases etc.

Science – Plants and their processes

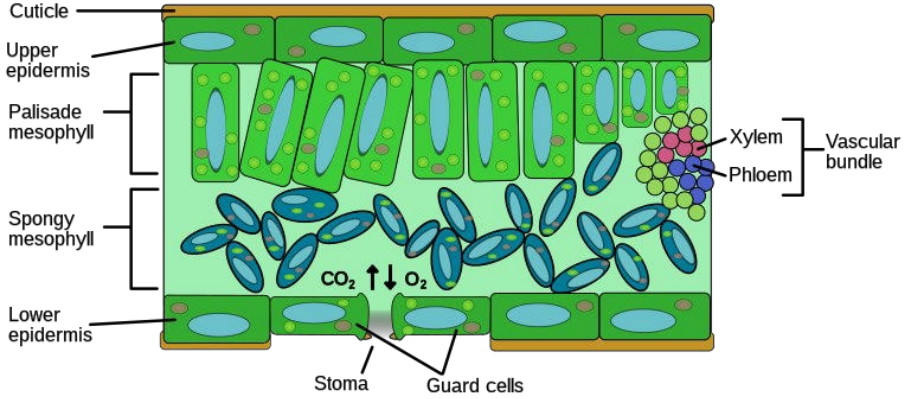
1. Plants as an organism	
Part of plant	**Function**
1. Flower	The reproductive organ of the plant
2. Leaf	Absorbs light for photosynthesis
3. Stem	Connects the other organs and transports substances
4. Roots	Anchor the plant and absorb water and mineral ions

2. Photosynthesis
Endothermic chemical reaction that takes place in chloroplasts in leaves that produces glucose and oxygen from carbon dioxide and water
Carbon dioxide + water —> glucose + oxygen
$6CO_2 + 6H_2O \longrightarrow C_6H_{12}O_6 + 6O_2$



3. Uses of glucose from photosynthesis
1. Converted into starch for storage
2. Used to produce fats and oils for storage
3. Used to produce cellulose, which strengthens the cell wall
4. Used to produce amino acids for protein synthesis (to produce proteins, plants also use nitrate ions that are absorbed from the soil)
5. Used for respiration

4. Organisation in plants	
Part of plant	
1. Waxy cuticle	Physical barrier to infection that prevents water loss
2. Epidermis	Type of plant tissue that covers the surface of a plant allowing light through
3. Palisade mesophyll	Tightly packed cells in leaf where photosynthesis takes place. Contains many chloroplasts.
4. Spongy mesophyll	Tissue in the leaf with air spaces between cells – specialised for gas exchange.
5. Stomata/stoma	Opening that allows CO_2 water vapour and O_2 to diffuse in and out of the leaf, usually on the underside of the leaf
6. Guard cells	Cells that open and close stomata to allow gas exchange to enter the leaf for photosynthesis



5. Transport in plants	
1. Transpiration	The loss of water vapour from the leaves by evaporation from cells and then out through the stomata.
2. Translocation	The movement of dissolved sugar around the plant.

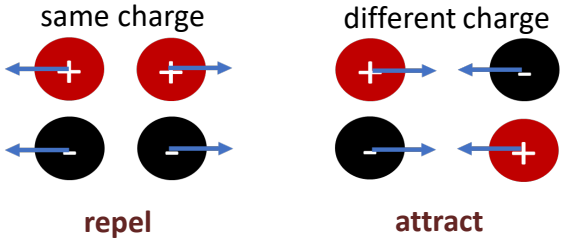
6. Factors Affecting Transpiration	
Factor	**Effect on the rate of transpiration**
1. Temperature	Increasing temperature increases the rate as water evaporates quickly.
2. Humidity	Increasing humidity decreases the rate as water evaporates slowly.
3. Wind speed	Increasing wind speed increases the rate as water evaporates quickly.
4. Light	Increasing light increases the rate as stomata open.

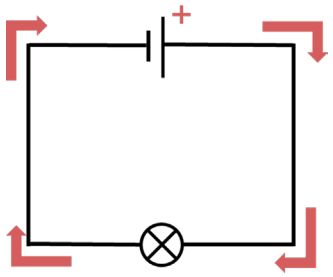
Science - Electricity

1. Key vocabulary	
Key vocabulary	**Definition**
1.Current	The rate of flow of charge measured in Amps (A) using an Ammeter
2. Electron	Subatomic particle, with a negative charge
3. Potential Difference (voltage)	The amount of energy being carried by the electrons and the amount of energy they are transferring to the components It is measured in volts (V) using a Voltmeter
4. Resistance	Resistance opposes the flow of current in a circuit. Measured in Ohms (Ω)
5. Factors affecting resistance in a wire	• as the length increases the resistance increases • as the cross-sectional area increases, resistance decreases • as the temperature increases the resistance increases • the material of the component effects the resistance
6. Conductor	An electrical conductor is a material which allows electrons to flow through it easily. It has a low resistance
7. Insulator	Material that does not allow electrons to flow through it easily. It has a high resistance
8. Series circuit	Circuit with only one branch. The current stays the same in all parts of the circuit, whereas potential difference is shared between the components
9. Parallel circuit	Circuit with multiple branches. Current in a parallel circuit is shared between the branches, whereas the potential difference across all the branches is the same as the potential difference across the cells

2. Static Electricity	
1. Static electricity	Caused when electrons are transferred from one insulator to another by friction
2. Static charges	• If an object gains electrons, it becomes negatively charged • if an object loses electrons, it becomes positively charged • opposite charges attract, like charges repel

Effects of Electrostatic Force

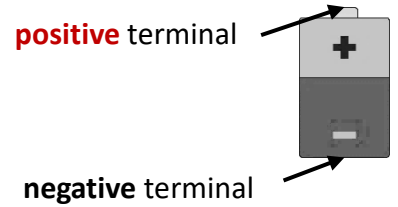




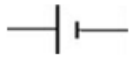
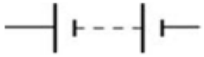
Current flows '**from positive to negative**'

3. Sources of electricity	
Primary sources	• Fossil fuels (coal, oil, natural gas) • Nuclear fuel • Renewable energy (e.g. solar, wind, tidal, biomass)

4. Batteries
• An energy source for circuits • Two terminals • Chemical reaction of reactants inside when terminals connected in a circuit



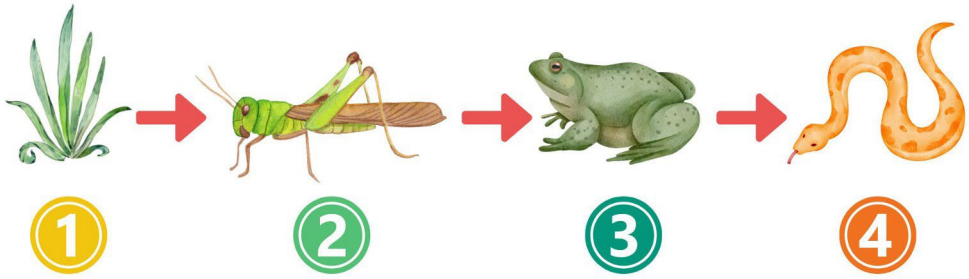
5. Sources of electricity	
Primary sources	• Fossil fuels (coal, oil, natural gas) • Nuclear fuel • Renewable energy (e.g. solar, wind, tidal, biomass)

Symbol	Component
	Cell
	Battery
	Voltmeter
	Ammeter
	Lamp
	Resistor
	Switch

Source: Continuity Oak; Image created by R Humphries

Science – Ecology - Interactions and interdependence

1. Food Chains		
Number on diagram	**Part of food chain**	**Definition**
1	**Producer**	The start of a food chain, usually a plant, they produce their own food via photosynthesis
2	**Primary consumer**	The first consumer in the food chain; they feed on the producer
3	**Secondary consumer**	The second consumer in the food chain; they feed on the primary consumer
4	**Tertiary consumer**	The third consumer in the food chain. This consumer does not usually have any predators and is the end of the food chain



2. Classification	
Key term	**Mnemonic**
Kingdom	**K**eep
Phylum	**P**onds
Class	**C**lean
Order	**O**r
Family	**F**rogs
Genus	**G**et
Species	**S**ick
Binomial name	The scientific name given to a species. It is always the genus and then the species written in italics, with the genus capitalised. E.g. *Panthera leo*

3. Key vocabulary	
1. Environment	All the conditions surrounding a living organism e.g. water, soil, temperature
2. Habitat	The place in which an organism lives
3. Population	Total number of a single species living in the same habitat
4. Community	The populations of all the different organisms living in the same habitat
5. Ecosystem	The interaction between the community and the habitat in which organisms live
6. Interdependence	Within a community each species depends on other species for food, shelter, pollination, seed dispersal etc
7.Photosynthesis	The process plants use to produce food using sunlight (carbon dioxide + water → glucose + oxygen)
8. Herbivore	An organism which only eats plants
9. Carnivore	An organism which only eats other animals
10. Omnivore	An organism with a diet made up of both plants and animals
11. Predator	An animal that hunts, kills and eats other animals for food
12. Prey	Organisms that predators hunt and kill for food
13. Extinction	When there are no more individuals of a certain species left alive
14. Species	An organism which is able to breed to produce fertile offspring
15. Variation	The differences between organisms of the same species e.g. environmental or inherited
16. Adaptation	Organisms have features that enable them to survive in the conditions in which they normally live
17. Competition	Plants compete for light, space, water and mineral ions. Animals compete for food, mates and territory
18. Bioaccumulation	The gradual build up over time of a chemical in a food chain
19. Pesticides	These are not broken down in the food chain and accumulate. The further up the food chain, the higher the concentration of toxic chemicals. Examples are mercury and DDT
20. Quadrat	A grid used during sampling to count the number of organisms in an area

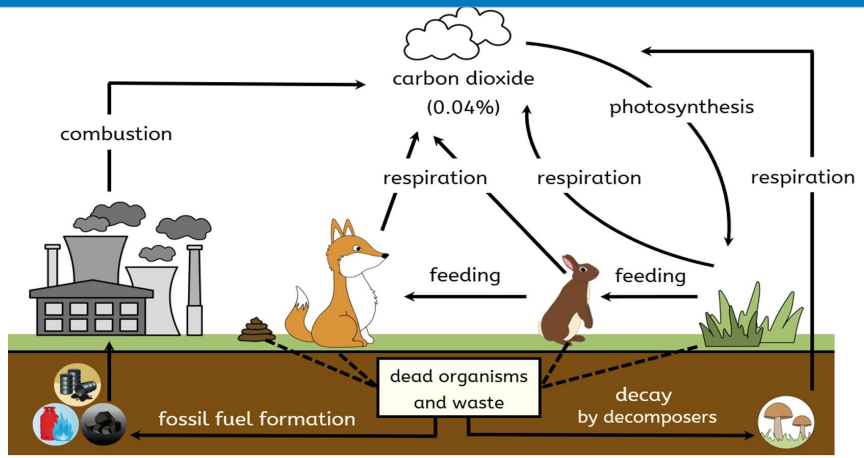
Science – Ecology - Interactions and interdependence

1. Biodiversity	
1. Biodiversity	The variety of all the different species of organisms living in the same ecosystem
2. Factors that reduce Biodiversity	Destruction of habitats, global warming, waste and deforestation
3. Maintaining biodiversity	Breeding programmes, protection and regeneration of habitats, keeping hedgerows in farmers' fields, reduction of deforestation and carbon dioxide emissions, recycling rather than using landfill

2. Natural Selection	
1. Charles Darwin	Wrote the theory of natural selection in his book 'On the Origin of Species' in 1859
2. Natural selection	Genetic variation due to a genetic mutation and those best adapted for survival in their habitat will survive, reproduce and pass on the successful genes to offspring
3. Evolution	The change of inherited characteristics within a population over time through natural selection, which may result in the formation of a new species

3. Extinction	
Factor	**Reason**
1. New disease introduced	A species is not adapted to fight off a new disease
2. New predators	A species is not adapted to avoid being preyed upon
3. Change in the physical environment	A species is not adapted to the change in its environment e.g. loss of shelter or food
4. New species introduced	A species is not able to compete for resources against another species
5. Habitat destruction	Deforestation for agriculture and urbanisation

4. Carbon cycle



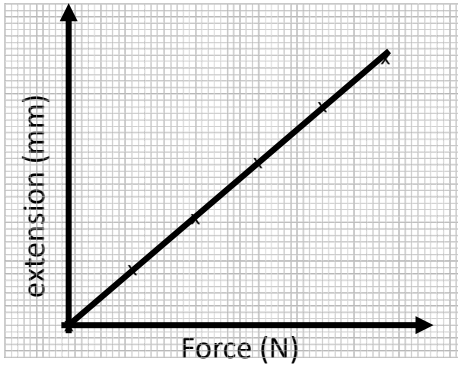
5. Adaptations	
Type of adaptation	**Description**
1. Structural	Physical features like thick fur, sharp claws and spines on plants
2. Behavioural	Actions like migration, huddling for warmth and growing towards light
3. Functional	Internal processes like producing venom, conserving water and slowing heart rate during hibernation

6. Decay	
1. Decay	The breakdown of dead organisms and waste by decomposers It recycles nutrients and returns carbon dioxide to the atmosphere
2. Ideal conditions for decay	1.Plenty of oxygen, so that decomposers can respire 2.Warm temperatures so that decomposers are more active 3.Moisture to allow chemical reactions to take place

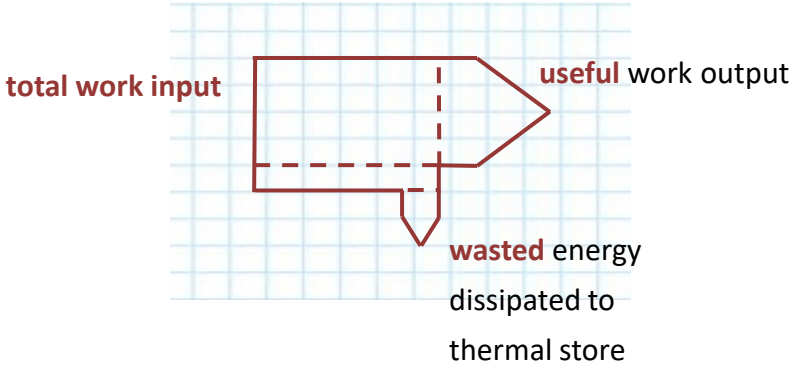
Science – Forces and work

1. Key vocabulary	
1. Compression	Process of squashing causing contraction
2. Tension	Process of stretching causing extension
3. Hooke's law	As the force increases, the extension of a spring increases proportionally (see graph below)
4. Elastic deformation	When objects extend under tension and return to their original shape and size when the force is removed
5. Elastic limit	The point past which an object will not return to its original shape when force is removed

Force-extension Relationship

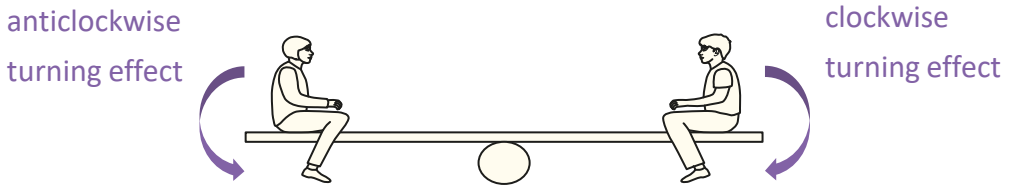


2. Efficiency	
Efficiency	The proportion of useful energy transfer by an object
Equation:	Efficiency= useful work output (J) ÷ total work input (J)



3. Mechanical work	
Mechanical work	Mechanical work is done when a force is exerted and moves an object through a distance
Equation:	Work done (J)= Force (N) x Distance (m)

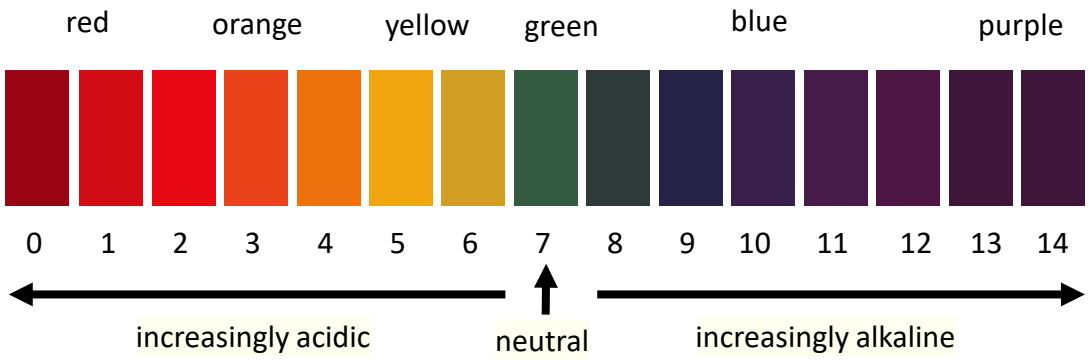
4. Turning effects	
1. Turning effect	How strongly a force makes something turn around a pivot.
2. Objects turn if they have:	• A pivot to turn around • A force acting a distance from the pivot
3. Equation	Turning effect (Nm)= Force (m) x Distance from pivot (m)
4. Rotational equilibrium	Unmoving and having balanced turning effects acting on it; no overall turning effect



5. Simple machines	
1. Levers	•Levers turn about a pivot •Longer distance from pivot means less effort needed.
2. Pullies	Easier to pull down on a rope attached to a heavy load than to pick it up directly.
3. Gears	Toothed wheels (cogs) that fit together and turn each other.
4. Hydraulic machines	A more advanced machine, putting an enclosed liquid under pressure.

Science – Acids and alkalis

1. Acids and alkalis	
Key Vocabulary	**Definitions**
1. Acids	Contain H+ ions, have a pH of less than 7
2. Alkalis	Contain OH- ions, have a pH of more than 7 (max 14)
3. Base	a family of chemicals that react in similar ways and have a pH greater than 7
4. Neutral	pH = 7
5. Neutralisation	Reaction between acid and alkali which produces a salt and water
6. Indicator	Changes colour in acids or alkalis. E.g. universal indicator



2. Common salts			
Acid	**Chemical formula of acid**	**Salt name**	
1. Hydrochloric acid	HCl		chloride
2. Sulfuric acid	H_2SO_4		sulfate
3. Nitric acid	HNO_3		nitrate

3. Reaction types	
Metals and acids	Metal + acid → salt + hydrogen
Neutralisation	acid + alkali → salt + water
Metals oxides	acid + metal oxide → salt + water


oxidising


flammable


serious health hazard


corrosive


toxic


environmental hazard

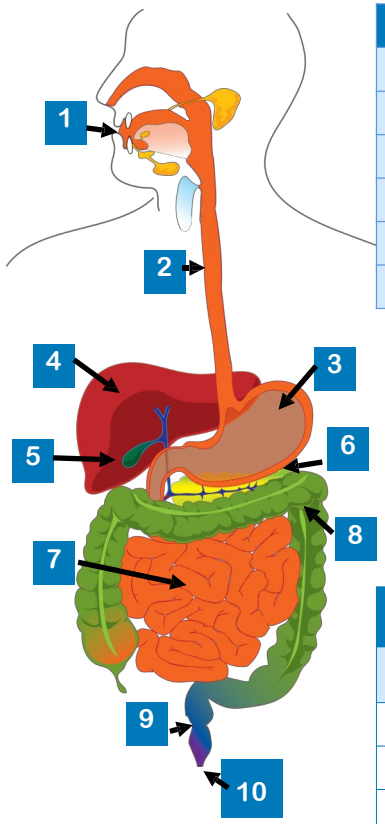

moderate health hazard (irritant)

4. Acid rain	
1. Acid rain	• Rain that has a pH below 5 and is caused by pollutant gases
2. Causes of acid rain	• Sulfur dioxide - released when fossil fuels that contain sulfur are burned • Nitrogen oxides - form when nitrogen and oxygen in the air react at high temperatures in vehicle engines and power stations
3. Impact of acid rain	• Acid rain reacts with metals (causing corrosion) and rocks (chemical weathering) • Damages buildings, statues and metal structures • Makes lakes and rivers more acidic, which can kill fish and other aquatic organisms • Damages the waxy cuticle of leaves, reducing photosynthesis, and removes minerals from soil, slowing plant growth

Science - Digestion and Nutrition

1. Parts of the digestive system

#	Organ	Function
1	**Mouth**	Mechanical digestion by chewing and saliva from salivary glands
2	**Oesophagus**	Muscular tube which moves ingested food to the stomach by peristalsis
3	**Stomach**	Mechanical digestion by churning. cells in the lining of the stomach release acid to kill bacteria
4	**Liver**	Produces bile (neutralises stomach acid and emulsifies fats)
5	**Gall bladder**	Stores bile
6	**Pancreas**	Produces and releases digestive enzymes
7	**Small intestine**	Where large molecules are broken down into small soluble molecules that can diffuse into the blood. It has a large surface area, good blood supply and thin membranes so nutrients can diffuse quickly into the blood
8	**Large intestine**	Where water is absorbed into the blood stream
9	**Rectum**	Where faeces is stored
10	**Anus**	Ring of muscle allowing faeces to exit the body

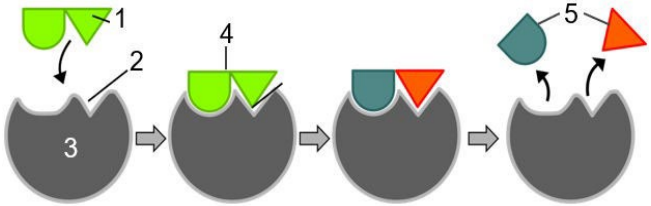


2. Digestive enzymes

Enzyme	Site of production	Site of action	Substrate	Product
Carbohydrase - e.g. amylase	Salivary glands, pancreas and small intestine wall	Mouth, small intestine	Carbohydrates	Simple sugars
Protease	Stomach, pancreas, small intestine wall	Stomach, small intestine	Proteins	Amino acids
Lipase	Pancreas, small intestine wall	Small intestine	Lipids	Glycerol and fatty acids

3. Lock and Key model

Number	
1	Substrate
2	Active site
3	Enzyme
4	Enzyme-substrate complex
5	Products



Source: Continuity Oak

4. Food tests

Nutrient	Reagent	Positive result
Starch	Iodine	Orange —> blue/black
Protein	Buiret solution	Blue —> lilac
Glucose	Benedict's solution (requires heating)	Blue —> green, yellow or red
Fats	Ethanol and water	Colourless —> cloudy

5. Nutrient groups

Nutrient	Function
Carbohydrate	Quick release energy
Protein	Growth and repair
Fat	Energy store, insulation and protection of organs
Vitamins and minerals	Maintain health e.g. calcium for strong teeth and bones
Fibre	Helps digestive system run smoothly, by helping the food to pass through the gut
Water	Needed for cells and body fluids

Science - Space

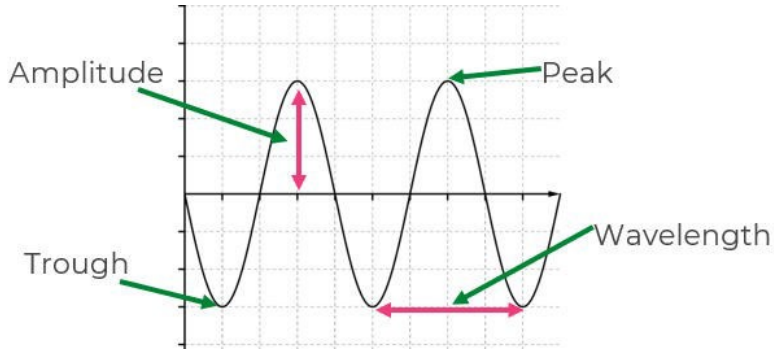
1. Planets and solar system	
Key vocabulary	**Definition**
1.Earth	Planet we inhabit (live on)
2. Day	1 rotation of the Earth - takes 24 hours
3. Year	1 orbit of the Earth around the Sun - takes 365 ¼ days
4. Summer	Season when hemisphere is tilted towards the Sun
5. Winter	Season when hemisphere is tilted away from the Sun
6. Seasons	The different periods of a year caused by the tilt of Earth's axis
7. Hemisphere	Southern and Northern halves of the Earth
8. Orbit	Pathway around an object due to the force of gravity
9. Axis	The line that the Earth rotates about, which is tilted at an angle of 23.5°
10. Gravity	Gravity is a force of attraction between all objects with mass
11. Mass	The amount of matter an object contains. Mass is measured in kilograms (kg)
12. Weight	The force acting on an object due to the pull of gravity Weight (N) = Mass (kg) x gravitational field strength (N/kg)
13. Solar	Associated with the sun
14. Lunar	Associated with the moon

2. Planets and their order in the Solar System

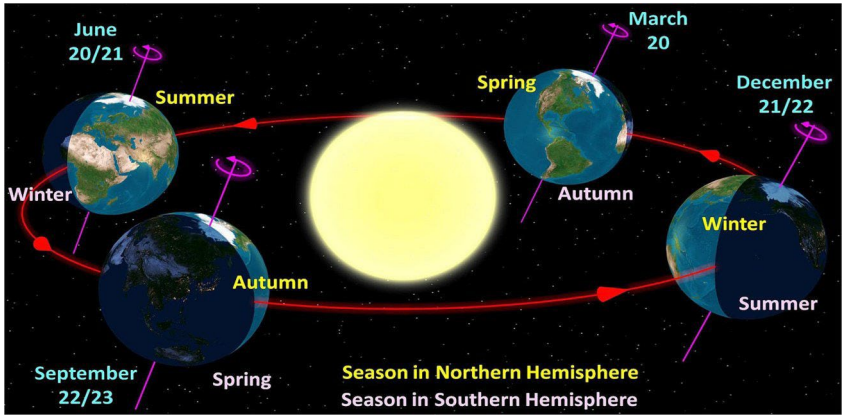
Mercury → Venus → Earth → Mars → Jupiter → Saturn → Uranus → Neptune

My → Very → Enthusiastic → Mother → Just → Served → Us → Noodles

3. Waves	
Key vocabulary	**Definition**
1.Wave	Waves transfer energy from one place to another
2. Transverse	A wave that has oscillations perpendicular to the direction of energy transfer i.e. water waves, EM waves
3. Longitudinal	A wave that has oscillations parallel to the direction of energy transfer, have areas of compressions and rarefactions, i.e. sound
4. Frequency	The number of waves passing a point each second
5. Amplitude	The height of a wave above the zero line
6. Wavelength	The distance covered by a full cycle of the wave, usually measured from peak to peak, or trough to trough
7. Oscillation	The repeated and regular fluctuations, above and below the same position



Source: Continuity Oak; Credit: Mr Benyohai



Seasons

Source: Continuity Oak; North season, Tau'olunga, Creative Commons

Working Scientifically

1. Variables	Definitions and examples
Independent (IV)	The values that are changed or selected by the investigator.
Dependent (DV)	The value is measured for each change of the IV.
Control (CV)	This would affect the outcome of the investigation and therefore has to be kept constant.
Hypothesis	A suggestion of how variables are linked, which can be investigated.

3. Calculations	Definitions
Mean	Add the values and divide by the total number of values. Remember to discard any anomalies.
Range	The maximum and minimum values, or difference between them
Interval	The spacing between readings e.g. measuring every 10cm interval would be 0.1m
Resolution	The smallest division able to be measured using a measuring instrument e.g. a balance that measures to 0.1g
Uncertainty	Interval within which the true value can be expected to lie e.g. a length of 56 cm ±2 cm would mean the true value could be anywhere between 54 cm and 58 cm. Equal to half the range.

5. Key	Definitions and examples
Accurate	Close to the true value
Precise	A small spread of values around the mean value
True value	This is the value that would be obtained in an ideal measurement
Valid conclusion	A conclusion which has been supported by valid data, ie data that has been collected as part of a fair test and with minimal errors
Fair test	Only the IV has been allowed to affect the DV.

6. Graph key vocabulary	Definitions and examples
Axis	x = IV, y = DV
Line of best fit (science only)	•straight line drawn with ruler or a smooth curve •shows the trend between two variables •NEVER dot to dot!
Anomaly	Result that does not fit the pattern. Ignore in mean calculations or when drawing line of best fit.

2. Errors	Definitions
Random error	Results varying in an unpredictable way. These can be reduced by taking more measurements and calculating a mean.
Systematic error	Measurements being different to the true value by a consistent amount each time. Can be addressed by taking the error into account
Zero error	When a zero measurement is not a true zero, e.g. a non-zeroed balance. Can overcome the error by adjusting the data appropriately
Measurement Error	the difference between a measured value and true value. Can be overcome by repeating and calculating a mean

4. Command words	Definition
Describe	To recall facts, events or a process accurately
Explain	To state the reasons why something happens
Suggest	To apply your scientific knowledge and understanding to a new/unfamiliar situation. Use words such as might or could
Compare	To describe the similarities and/or differences. Use words and phrases such as more than, less than, whereas, however. Use data in your answer if provided
Determine	To use given data or information to obtain an answer
Evaluate	To use the information supplied in the question, as well as your own knowledge and understanding, to consider evidence for and against and a conclusion
Justify	To use evidence from the information supplied to support an answer
Predict	Suggest a sensible answer
Plan	Write a step-by-step method to carry out an experiment

7. Prefixes	Value	Order of magnitude	Prefix symbol
mega	1 000 000	10^{6}	M
kilo	1 000	10^{3}	k
centi	0.01	10^{-2}	c
milli	0.001	10^{-3}	m
micro	0.000 001	10^{-6}	μ
nano	0.000 000 001	10^{-9}	n

Spanish - Les Vacaciones Y El Tiempo Libre

1 ¿Adónde vas de vacaciones?	Where do you go on holiday?
Normalmente voy…	Normally I go…
A Francia	To France
A España	To Spain
A Italia	To Italy
A Alemania	To Germany
Al extranjero	Abroad
Al Reino Unido	To the United Kingdom
A Europa	To Europe
A los Estados Unidos	To the USA

2 ¿Dónde te alojas/te quedas?	Where do you stay?
Me alojo…	I stay…
Nos alojamos…	We stay…
En las montañas	In the mountains
En el campo	In the countryside
A la playa	At the beach
En la costa	By the seaside
En la ciudad	In town
En un camping	On a campsite
En un hotel	In a hotel
En una villa	In a villa

3 ¿Cómo viajas?	How do you get there?
Viajo/Viajamos…	I travel/we travel…
En coche	By Car
En barco	By Boat
En tren	By Train
En avión	By Plane
En autobús	By Bus

Opinions

¿Qué te gusta hacer durante las vacaciones?	What do you like to do during your holidays?
Me gusta…	I like…
Me mola…	I really like…
Me encanta…	I love…
Prefiero..	I prefer…
Odio…	I hate…

4 ¿Adónde fuiste el año pasado?	Where did you go last year?
Fui a…	I went to…
Fuimos a…	We went to…
Nos alojamos en…	We stayed in…
Fui con…	I went with…

5 ¿Qué hiciste el año pasado?	What did you do last year?
Visité los museos	I visited museums
Me bañé en el mar	I bathed in the sea
Descansé a la playa	I relaxed on the beach
Tomé el sol	I sunbathed
Compré recuerdos	I bought souvenirs
Jugué al tenis	I played tennis
Comí al restaurante	I ate at a restaurant
Leí libros	I read books
Hice turismo	I went sightseeing
Hice deportes acuáticos	I did water sports

Remember: An infinitive means 'to something' and ends in an 'ar', 'er' or 'ir' in Spanish

6 ¿Cuáles son tus planes para las próximas vacaciones?	What are your plans for your next holiday?
Voy a…	I am going…
No voy a..	I am not going …
Vamos a…	We are going …
Me gustaría…	I would like to…

Infinitivos	Infinitives
Descansar	To relax
Ir a la playa	To go to the beach
Leer	To read
Visitar los museos	To visit museums
Comer platos típicos	To eat local dishes
Bañarse en el mar	To bathe in the sea
Hacer deportes	To do sports
Ir a los restaurantes	To go to restaurants
Visitar monumentos	To visit monuments
Hacer turismo	To go sightseeing
Tomar el sol	To sunbathe
Comprar recuerdos	To buy souvenirs

7 ¿Qué te gustaría hacer en el futuro?	What would you like to do in the future?
Me gustaría ir a..	I would like to go to…
Al campo	To the countryside
Al extranjero	Abroad
A la ciudad	To the city
A la costa	To the coast

Spanish - Les Vacaciones Y El Tiempo Libre

8 ¿Qué planes tienes para	What plans do you have
Voy a…	I am going…
Vamos a…	We are going…

Ir de compras	To go shopping
Ir a la playa	To go to the beach
Ir al parque	To go to the park
Ir al poldeportivo	To go to the sports centre
Ver una película	To watch a film
Ver la tele	To watch TV
Jugar al baloncesto	To play basketball
Salir/Quedar con mis amigos	To go out with/meet up with my friends
Hacer mis deberes	To do my homework
Hacer natación	To go swimming
Hacer deporte	To do sport
Pasear	To go for a walk

	9 ¿Qué te gusta hacer en tu tiempo libre?	What do you like to do in your free time?
	Me gusta…	I like…
	Me mola…	I really like…
	Me encanta…	I love…
	Prefiero..	I prefer…
	Odio…	I hate…

10 ¿Quieres ir al cine?	Do you want to go to
¿Quieres….	Do you want..?
Sí, quiero…	Yes, I want…
Sí me gustaría..	Yes I would like…
Vale	Okay
Quizás	Maybe
Lo siento, no puedo	Sorry I can't
Tengo que hacer mis deberes	I have to do my homework
Tengo que ayudar a mi madre	I have to help my mum
Tengo que cuidar a mi hermano/a	I have to look after my borther/sister

Time expressions	
PRESENT TENSE	
Generalmente	Generally
Normalmente	Normally
Cada año	Every year
Todos los años	Every year
El primer día	The first day
Luego	Then/Next
PAST TENSE	
El año pasado	Last year
El verano pasado	Last summer
FUTURE TENSE	
El año que viene	Next year
El año próximo	Next year
El verano que viene	Next summer
En el futuro	In the future

11 Qué haces en tu tiempo	What do you do in your free time?
Toco la guitarra	I play the guitar
Veo la televisión	I watch TV
Escucho música	I listen to music
Practico deporte	I practise sports
Leo libros	I read books
Uso las redes sociales	I use social media
Salgo con mis amigos	I go out with my friends

	Opiniones	Opinions
	Pienso que	I think that
	En mi opinión	In my opinion
	Es…	It is…
	Fue…	It was…
	Será…	It will be…

Divertido	Fun
Emocionante	Exciting
Guay	Cool
Entretenido	Entertaining
Gracioso	Funny
Fenomenal	Amazing
Bonito	Beautiful
Inolvidable	Unforgettable

Aburrido	Boring
Pesado	Boring
Peligroso	Dangerous
Tonto	Silly/stupid
Terrible	Awful
Una pérdida de tiempo	A waste of time

What to include in your writing	
C	Connectives
O	Opinions
R	Reasons
N	Negatives
E	Extra detail
T	Time expressions
T	Tenses
I	Interesting adjectives
	Masculine
	Feminine
	Plural

Spanish - El Tiempo Libre y la Vida Sana

1 ¿Qué te gusta ver?	What do you like to watch?
Los dibujos animados	Cartoons
Los documentales	Documentaries
Las noticias	News
Las series de delito	Crime series

Prefiero…	I prefer…
Prefiero ver…	I prefer to watch…
Veo..	I watch...
Me gustan...	I like...
Me gustan mucho...	I really like...
Me chiflan...	I love...
Me encantan...	I love...

2 ¿Qué tipo de película prefieres?	What type of film do you prefer?
Las películas de terror	Horror films
Las películas de acción	Action films
Las películas de ciencia ficción	Science fiction films
Las películas de amor	Love films
Las comedias	Comedies

Opiniones de tele y películas	Opinions on TV and films
Porque	Because
Son...	They are...
Divertido/as	Fun
Entretenido/as	Entertaining
Tonto/as	Silly/stupid
Informativo/a s	Informative
Educativo/a s	Educational
Emocionantes	Exciting
Cautivantes	Gripping
Infantiles	Childish

3 ¿Qué tipo de música te gusta escuchar ?	What type of music do you like listening to?
Me encanta escuchar…	I love listening to…
Me gusta escuchar…	I like listening to…
Nunca escucho..	I never listen to...
Música pop	Pop music
Rap	Rap
Hip hop	Hip Hop
Música latina	Latin music
Música clásica	Classical music
Música jazz	Jazz music
Música rock	Rock music

Porque	Because
Me da energía	It gives me energy
Me hace feliz	It makes me happy
Me hace bailar	It makes me dance
Me molesta	It annoys me

Opiniones de música	Opinions on music
Es...	**It is...**
Pegadiza	Catchy
Relajante	Relaxing
Repetitivo/a	Repetitive
Imaginativo/a	Imaginative
Lento/a	Slow
Rápido/a	Fast

4 ¿Qué comes?	What do you eat?
Como…	I eat…
Para el desayuno como…	For breakfast I eat…
Para el almuerzo como…	For lunch I eat…
Para la cena como…	For dinner I eat…
Fruta	Fruit
Verduras	Vegetables
Pollo	Chicken
Cereales	Cereal
Helado	Ice cream
Dulces	Sweets
Hamburguesas	Burgers
Patatas fritas	Chips
Carne	Meat
Arroz	Rice
Bebo…	I drink…
Agua	Water
Té	Tea
Café	Coffee

Spanish - El Tiempo Libre y la Vida Sana

5 ¿Qué quieres comer?	What do you want to eat?
Quiero comer...	I want to eat ...
No quiero comer ...	I don't want to eat ...
Me gustaría probar...	I would like to try...
Me gustaría comer...	I would like to eat...

Opiniones	Opinions
Pienso que	I think that
En mi opinión	In my opinion
Es...	It is...
Sería...	It would be...

Agrio	Sour	**Salados/as**	Salty
Delicioso/a	Delicious	**Deliciosos/as**	Delicious
Sano/a	Healthy	**Sanos/as**	Healthy
Rico/a	Rich	**Ricos/as**	Rich
Picante	Spicy	**Picantes**	Spicy
Dulce	Sweet	**Dulces**	Sweet

Son...	They are...
Serían...	They would be...

6 ¿Estás en forma?	Are you in shape?
Hago ejercicio	I do exercise
Como bien	I eat well
Nunca bebo agua	I never drink water
(No) Voy al gimnasio	I (don't) go to the gym
Hago deporte	I do sport
Como comida basura	I eat junk food
No como verduras	I don't eat vegetables
Voy al polideportivo	I go to the sports centre

7 ¿Qué se puede hacer para estar en forma?	What can you do to stay in shape?
Para estar en forma...	To stay in shape...
Se puede...	You can...
Se debe...	You must...
Hay que...	You must...
Hacer ejercicio	Do exercise
Comer más fruta	Eat more fruit
Dormir 8 horas al día	Sleep 8 hours a day
Beber mucha agua	Drink lots of water
Evitar la comida basura	Avoid junk food

8 ¿Qué hiciste recientemente para estar en forma ?	What did you do recently to stay in shape?
Fui al gimnasio	I went to the gym
Hice deporte	I did sport
Jugué al fútbol	I played football
Hice ejercicio	I did exercise
Comí mucha comida sana	I ate lots of healthy food
Dormí ocho horas	I slept for 8 hours

Opiniones de vida sana	Opinions on a healthy life
Es sano	It's healthy
Es esencial	It's essential
Es importante	It's important
Es bueno para la salud	It's good for the health
Te da energía	It gives you energy
Te hace feliz	It makes you happy
Te hace sentir bien	It makes you feel good

9 ¿Qué te gusta llevar?	What do you like wearing?
Me gusta llevar	**I like to wear...**
Llevo...	**I wear...**

Un vestido	**A dress**
Una chaqueta	**A jacket/blazer**
Una camisa	**A shirt**
Una camiseta	**A t-shirt**
Una falda	**A skirt**
Unos pantalones	**Some trousers**

10 ¿Qué vas a comprar?	What are you going to buy?
Voy a comprar...	I am going to buy...

Los colores	The colours
Negro	Black
Gris	Grey
Amarillo	Yellow
Verde	Green
Blanco	White
Rojo	Red
Azul	Blue
Naranja	Orange
Rosa	Pink

Spanish - El Colegio Y el Trabajo

1 ¿Qué asignaturas estudias?	What subjects do you study?
Estudio...	I study...
Tengo...	I have...
(El) español	Spanish
(El) francés	French
(El alemán	German
(El) inglés	English
(El) arte/(el) dibujo	Art
(La) geografía	Geography
(La) historia	History
(La) religión	R.E
(La) música	Music
(La) tecnología	Technology
(La) informática	I.T
(La) educación física	P.E
(Las) ciencias	Science
(Las) matemáticas	Maths

Time expressions	
Los lunes	On Mondays
Los martes	On Tuesdays
Los miércoles	On Wednesdays
Los jueves	On Thursdays
Los viernes	On Fridays
Todos los días	Every day
De vez en cuando	From time to time
A veces	Sometimes

Opinions	
2 ¿Qué asignaturas estudias?	What subjects do you study?
Me encanta	I love it
Me gusta	I like it
Porque...	Because...
Es divertido	It is fun
Es relevante	It is relevant
Es práctico	It is practical
Es mi asignatura favorita	It is my favourite subject
Me interesa	It interests me
No me gusta	I don't like it
Porque...	Because...
Es difícil	It is difficult
Es inútil	It is useless

Me encantan	I love them
Me gustan	I like them
Porque...	Because...
Son divertidas	They are fun
Me interesan	They interest me

Saco buenas notas	I get good grades
El profesor me ayuda	The teacher helps me
El profesor es simpático	The teacher is nice
El profesor explica bien	The teacher explains well
El profesor me da muchos deberes	The teacher gives me lots of homework

3 ¿Qué se debe hacer?	What must you do?
Se debe...	You must...
Hay que...	You must/have to...
Escuchar en clase	Listen in class
Escuchar al profe	Listen to the teacher
Llevar uniforme	Wear uniform
Llegar a tiempo	Arrive on time
Hacer los deberes	Do homework
No se debe...	You must not...
Está prohibido...	It is forbidden to ...
Llegar tarde	Arrive late
Llevar piercings	Wear piercings
Llevar maquillaje	Wear makeup
Comer chicle	Chew gum
Pelearse con otros alumnos	Fight with other students

4 ¿Qué piensas de las reglas ?	What do you think of the rules?
Son...	They are...

Justas	Fair
Prácticas	Practical
Útiles	Useful
Importantes	Important
Necesarias	Necessary

Injustas	Unfair
Estúpidas	Stupid
Inútiles	Useless
Tontas	Silly
Estrictas	Strict

Spanish - El Colegio Y el Trabajo

5 Háblame de las actividades extraescolares	Talk to me about extra curricular activities
En mi colegio	In my school
Hay...	There is...
Un club de teatro	A drama club
Un club de deporte	A sports club
Un club de idiomas	A languages club
Un club de música	A music club
Donde...	Where
Me divierto	I have fun
Practico el fútbol	I practise football
Hablo español	I speak Spanish
Toco un instrumento	I play an instrument
Juego con mis amigos	I play with my friends

***Grammar note**

Notice that we use 'toco' for instruments but 'juego' for activities.

Time expressions	
Antes del colegio	Before school
Después del colegio	After school
A la hora de comer	At lunch time
Durante el recreo	During break
Los lunes	On Mondays
Todos los días	Every day

6 ¿Qué hacen de trabajo?	What do they do for a job?
Es...	He/she is...
Trabaja como...	He/she works as...
Profesor/a	A teacher
Médico/a	A doctor/a
Enfermero/a	A nurse
Cocinero/a	A chef
Camarero/a	A waiter
Dependiente/a	A sales assistant
Cantante	A singer
Futbolista	A footballer
Dentista	A dentist
Recepionista	A receptionist

¿Cómo es su trabajo ?	What is his/her job like?
En su opinión.	In his / her opinion
Es...	It is...

Fácil	**Easy**
Creativo	**Creative**
Relajante	**Relaxing**
Interesante	**Interesting**

Repetitivo	**Repetitive**
Estresante	**Stressful**
Dificíl	**Difficult**
Pesado	**Dull/Boring**

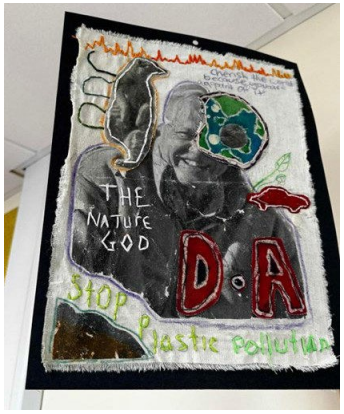
Los clientes son simpáticos	The customers are nice
Los clientes son terribles	The customers are horrible
Mi jefe es estricto	My boss is strict

	Tiene que...	He/she has to...
	Enseñar a los niños	Teach children
	Cuidar a la gente	Look after people
	Preparar comida	Prepare food
	Atender a los clientes	Serve customers
	Vender productos	Sell products
	Hablar por teléfono	Talk on the phone

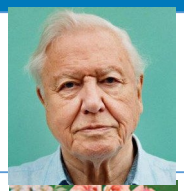
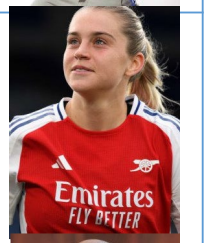
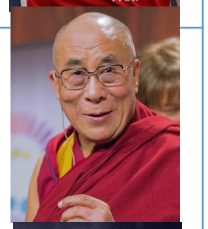
7 ¿Cuál sería tu trabajo ideal?	What would your ideal job be?
Mi trabajo ideal sería...	My ideal job would be..
Me gustaría ser...	I would like to be...
Me gustaría trabajar como..	I would like to work as..
Porque	Because
Me gusta...	I like...
Trabajar con niños	To work with children
Trabajar al aire libre	To work outdoors
Trabajar en equipo	To work in a team

8 ¿Qué planes tienes para el futuro?	What plans do you have for the future ?
En el futuro	In the future
Me gustaría...	I would like...
Tener una familia	To have a family
Casarme	To get married
Ganar mucho dinero	To earn lots of money
Viajar	To travel
Vivir en otro país	To live in another country
Sería...	It would be...

Design and Technology - Textiles - Icons & Idols



Key vocabulary	Definition
Mono print	Mono printing is a printmaking technique where a single, unique print is created by applying ink to a flat surface and then transferring the image to paper or fabric.
Heat press	A heat press is a machine that applies heat and pressure to transfer designs onto various materials like fabric.
Appliqué	Applique is a needlework technique in which one or more pieces of fabric are attached to a larger background fabric to create pictures or patterns.
Calico	Calico is a plain-woven cotton fabric that is unbleached and un-dyed, it's known for its natural, rustic appearance affordability, and durability.
Needle	A sewing needle is a long, slender tool with a pointed tip at one end and a hole (the eye) at the other for passing thread.
Thread	In sewing, a thread is a thin strand of material, often made of fibres or filaments, used to join fabric pieces together.
Embroidery	Embroidery is the art of decorating fabric or other materials using a needle to stitch thread or yarn.
Icons and idols	An "icon person" is someone who is widely admired and influential, often representing a specific movement, idea, or era. They are considered to have a profound impact on society and culture.

Icons	Information	
David Attenborough	A conservationist campaigning for animal conservation, care and protection. Uses documentaries to spread awareness.	
Frida Kahlo	Frida Kahlo was a Mexican painter known for her many portraits, reflecting her experiences with chronic pain, personal struggles, and her complex identity. She often depicted herself with symbolic elements, like skulls or bleeding hearts.	
Stormzy	Stormzy is known for his significant charitable work, particularly focused on combating racial inequality and empowering young Black people. Stormzy established the #Merky Foundation to fight racial inequality and empower Black communities in the UK.	
Alessia Mia Teresa Russo	Alessia Mia Teresa Russo is an English professional footballer who plays as a forward for Women's Super League club Arsenal and the England national team. She is the current holder of FWA Women's Footballer of the Year for the season 2024-25.	
The Dalai Lama	The Dalai Lama is the spiritual leader of Tibetan Buddhism and the Tibetan people, believed to be a reincarnation.	
Albert Einstein	Albert Einstein is renowned for his groundbreaking contributions to physics, particularly the theory of relativity, including both the special and general theories.