Year 8 Knowledge Organiser
Term 3

This booklet contains some of the key content we want the students to learn this term. Knowledge Organisers are placed in the relevant Google Classroom.

How students and parents can use a Knowledge Organiser to maximise learning:

- Pick a subject to recall and memorise
- **Look** at the pages for that subject
- **Read** the page information for that subject
- **Cover** the page of information
- **Write** the information for that subject from memory
- **Check** what you have written. Correct mistakes and add anything you have missed
- Your teacher will **quiz** you in class to see what you can recall
- **Repeat** the process over time and focus on the information you keep missing or make mistakes on

Contents

Art

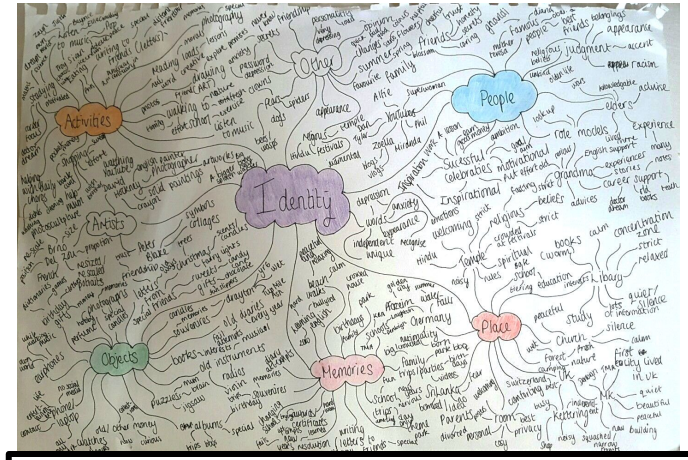
Year 8 - Identity Project

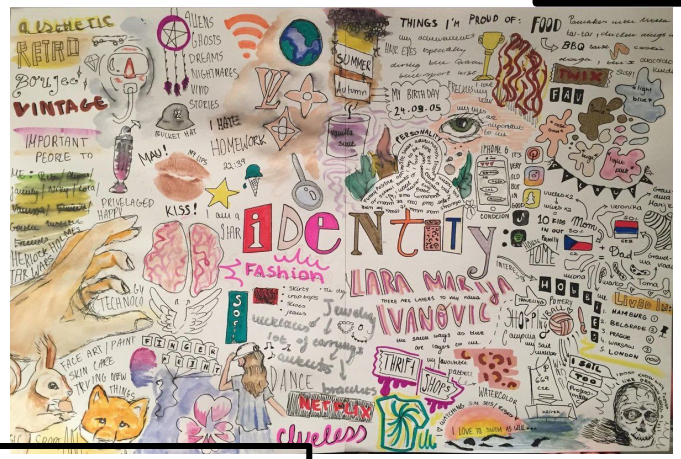
Assessment Objectives:

AO1 – Developing ideas through research
AO2 – Using resources, experimenting with different media and ideas
AO3 – Recording ideas (photos & drawings)
AO4 – Personal response

Overview of Topic

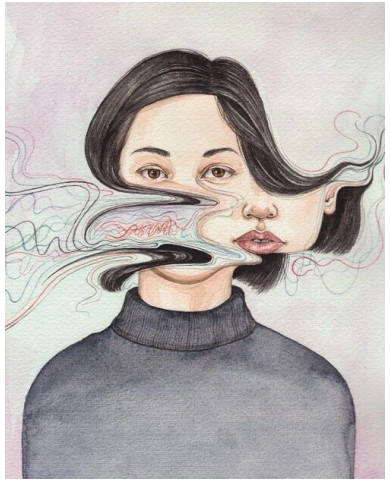
In this project you will explore the theme of 'Identity'. Following the GCSE style project, you will complete a Mind Map exploring the theme of 'Identity.' You will use your previous skills to complete research on Artists looking at concept, material and techniques used to gain inspiration. You will then develop your own idea for a Final Piece which you will produce in lessons using your choice of materials.





Mind Maps

Examples of Identity Final Piece's



Keywords

Identity: the fact of being who or what a person or thing is.
Characteristic: the qualities or features that belong to them and make them recognisable i.e. height, accent, heritage, personality traits.
Research: studious inquiry especially the investigation or experimentation aimed at the discovery and interpretation of facts.
Inspiration: the process of being mentally stimulated to do or feel something, especially to do something creative.
Time management: the ability to use one's time effectively or productively, especially at work.
Problem Solving: the process of finding solutions to difficult or complex issues.

Art

Step 1: Sketch out

Before you create your piece (no matter what material you are using) you need to **SKETCH** out your subjects/design.

This does not mean a full shaded drawing!

But **LIGHT lines** to show the **BASIC shapes** and where on the page they are going to be.

Step 2: Create the Background

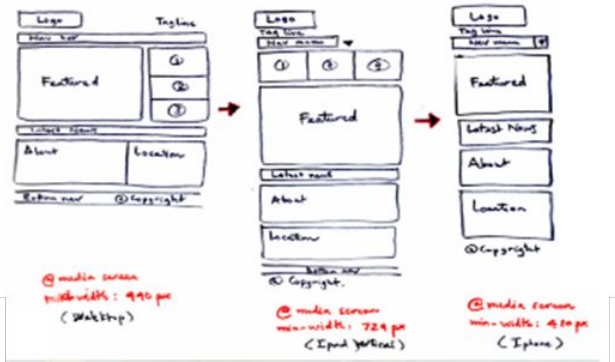
Step 3: Main subject

Step 4: Refining: Improving on subtly changes you can make and adding details to make your work the best it can be.

Shopping List

- **Materials** you need
- **Reference images**
- **Ideas/Mood board** (At GCSE we use Sketchbooks!)
- **Time: Make a plan for each lesson**

Computing



Using the planning techniques should enable you to be able to produce a **visualisation diagram** or **sitemap** of the website that is in your client brief. It should represent the full consideration of the client brief.

How does the appearance of websites change on different devices?

1. The screen resolution you are using can change the look of a site.
2. The operating system used can change the look of a site.
3. Fewer images may be used on mobile versions.
4. The web browser used may change things.
5. The orientation can change.

Advantages and disadvantages of using the Internet

Advantages	Disadvantages
1. Easy communication across the world	1. Viruses
2. 24/7 access to information	2. Cyber-bullying / Trolling
3. Entertainment	3. Viruses
4. Online Banking	4. Exposure to inappropriate material
5. Online Shopping	5. Identity theft
6. Learning Resources and information availability	6. Leakage of private information

What are the common features of websites?

Interactive elements: e.g. rollovers, animations, games, adverts, surveys, forums, quizzes, comment boxes, audio files

Motif Development

The ability to create and develop motifs is an essential skill for a choreographer. A motif can be a single movement or a phrase of movement that is either learnt or created by an individual and/or group. A motif is often the central part of a dance, a section which is repeated, but developed each time to show contrast and variety. There are many developments that can be used to vary a motif, including; canon, levels, fragmentation and retrograde. These motifs are then linked together using transitions and structuring methods.

Endpoint

Over the next term you will understand and apply a range of choreographic skills to taught and created motifs. This will be completed through learning and developing set motifs, as well as creating your own movement using a set stimulus. You will be expected to understand and apply the choreographic skills, as well as evaluate your progress.

Reminder

Dance club for will take place on Monday's 3-4pm in the Dance Studio.

Motif	A set phrase of movement that can be repeated and developed
Choreography	A method of creating your own movement
Choreographic Intention	The aim of the dance, what the choreographer aims to communicate
Motif developments	Methods used to vary/develop a movement phrase
Retrograde	To perform a motif in a reverse order
Fragmentation	To re-order the motif

Home Learning Tasks

Rehearse the taught motifs	Create an 8/16 count motif	Revise the keywords

Health & Safety in dance

Exercise in safe spaces. Be mindful of others.	Keep your head up and know what is around you.	Warm up properly including stretching your muscle.	Bend your knees when you land from jumps.	Make sure that liquids are kept well away from the dance surface.	Remove jewellery and wear suitable clothing.	Be respectful and compassionate to others.

CHOREOGRAPHY
Year 8

Structure
The ways in which a dance is made, built, ordered or organised.

Binary	AB
Ternary	ABA
Narrative	ABC
Episodic	A B C D
Arch	ABCBA
Rondo	ABACADA

Motif
A movement phrase encapsulating an idea that is repeated and developed throughout the dance

Motif Development
Change the:
- Level
- Size
- Direction
- Dynamic

Communication of Intent
Choreographic Intention: The aim of the dance; what the choreographer aims to communicate.
- Mood(s)
- Idea(s)
- Style/Style Fusion
- Meaning(s)
- Theme(s)

Aural Settings
An audible accompaniment to the dance
- Song
- Instrumental
- Orchestral
- Found sound
- Silence
- Spoken word
- Natural sound
- Body percussion

Aural Setting – Effects on choreographic outcomes
- Mood
- Atmosphere
- Contrast
- Variety
- Structure
- Relationship to theme/idea

Choreographic Devices
Methods used to develop and vary material.
- Repetition
- Climax
- Highlights
- Manipulation of Number
- Contrast
- Unison
- Canon
- Motif and Development

Choreographic Processes
Activities involved in creating dance
- Researching
- Improvising
- Selecting
- Developing
- Structuring
- Refining
- Generating

Action
What?
- Travel
- Turn
- Elevation
- Gesture
- Stillness
- Use of different body parts
- Floor work

Space
Where?
- Pathways
- Levels
- Directions
- Patterns
- Spatial design
- Size of movement

Dynamics
How?
- Fast/Slow
- Sudden/Sustained
- Strong/Light
- Direct/Indirect
- Flowing/Abrupt
- Acceleration/ Deceleration

Relationships
With?
- Lead & Follow
- Mirroring
- Action/Reaction
- Accumulation
- Counterpoint
- Complement & Contrast
- Contact
- Formations

Design and Technology

Materials and their Properties: Timbers & Manufactured Boards

Hardwoods

They are deciduous trees which means that in winter, they lose their leaves.

These trees are broadleaved, bushy and slow growing.

Overall they tend to be harder to work with and more expensive than other types of timbers.

They are less porous and denser cell structure which makes them harder wearing and less prone to rotting.

Types:

Name	Characteristics	Uses
Ash 	Flexible, tough and shock resistant, laminates well. Pale brown/cream.	Sports equipment and tool handles.
Beech 	Fine finish, tough and durable. Dense close grain with an	Children's toys, models and furniture.
Mahogany 	Easily worked, durable and finishes well. Rich reddish brown in	High end furniture and joinery.
Oak 	Tough, hard and durable, high quality finish possible. Light brown with variable grain.	Flooring, furniture, and railway sleepers.
Balsa 	Very soft, and lightweight but can snap. Pale cream/ white in colour. Unusually fast growing	Prototyping and modelling - especially in model aircraft.

Softwoods

They are coniferous trees which means that they keep their leaves in winter = evergreen.

These trees are tall and 'Christmas tree' tree shaped.

Overall they tend to be easier to work with and less expensive than other types of timbers.

They are more porous (holes) and if unprotected will rot. They have cones for leaves and grow quickly.

Types:

Name	Characteristics	Uses
Larch 	Durable, tough and good water resistance. Machines well.	Exterior cladding, flooring, machine mouldings and furniture.
Pine 	Lightweight, easy to work but can split.	Interior construction, cheaper furniture and decking.
Spruce 	Easy to work, high stiffness to weight ratio.	Construction, furniture and musical instruments.
Redwood 	Easy to work and machines well, some rot resistance.	Outdoor furniture, beams, posts and decking.
Cedar 	Easy to work, can blunt tools, finishes well and naturally resistant to rot.	Outdoor furniture, fences and cladding for buildings.

Manufactured Boards

They are sheets of processed natural timber and adhesives - so they are human made boards

These are usually made from waste wood, low-grade and recycled timber.

Can be covered by thin slices of high quality wood known as veneer to make it look aesthetically pleasing.

Cheaper than natural timber. They come in boards and have no grain.

Types:

Name	Characteristics	Uses
MDF 	Rigid and stable, good value with a smooth easy to finish surface.	Flat pack furniture, toys and kitchen units.
Plywood 	Stable in all directions as alternating layers. Flexible versions available.	Furniture, shelving, toys, interior and exterior construction.
Chipboard 	Good compressive strength, not water resistant and prone to chipping on edges.	Flooring, low end kitchen units and worktops.
OSB 	Rigid and even strength, good water resistance.	Construction in interior and exterior house building.
Block board 	Stable, tough and heavy. Finishes well.	Furniture, doors, shelving and indoor construction.
Hardboard 	Flexible, even strength and easily damaged by water.	Furniture and photo frame backing.

Source/Origin

Timber comes from **trees** - this is known as the source or origin of the material. This is how we change into timber.

1. When trees are cut down, this is known as **felling.** This can be through machine or chain saws, just like the image.

2. Branches are cut off and the logs are stored until they are transported to a **sawmill.**

3. When at the sawmill, machines such as **band saws** and **circular saws** are used to create boards/planks.

Environmental Impact

Wood is considered a **sustainable resource** as new trees can be grown to replace those felled. Here are some **issues and positives** surrounding the impact that wood is having on the environment:

- In many places, wood is being used at a greater rate which means it is unsustainable.
- Illegal felling is leading to deforestation as people aren't replanting trees.
- Deforestation helps with global warming.

- To make sure you are buying sustainable timber, you need to make sure it is approved by the **Forest Stewardship Council** or the **Endorsement of Forest Certification.**

FSC

Materials and their Properties: Polymers (Plastics)

Thermoforming

This group of polymers are able to be formed into a different shape over and over again. Known as thermoplastics.

These are generally more flexible, especially when heated.

These are easier to recycle.

Can be formed into complex shapes.

Types:

Name	Characteristics	Uses
Polyethylene terephthalate 1 PETE	Easily blow moulded and fully recyclable.	Bottles, food packaging, sheeting and some food wraps.
High density Polyethylene 2 HDPE	Lightweight, rip and chemical proof.	Milk bottles, pipes, hard hats and wheelie bins.
Polyvinyl Chloride 03 PVC	Flexible, high plasticity, tough and easily extruded.	Raincoats, pipes, Electrical tape and blow up mattresses.
Low density Polyethylene 4 LDPE	Very flexible and tough with a high strength to weight ratio.	Plastic carrier bags and black bin bags.
Polypropylene 5 PP	Flexible, tough, lightweight, easily cleaned and safe with food.	Kitchen, medical and stationery products.
High Impact Polystyrene (HIPS). 6 PS	Flexible, impact resistant, lightweight and can be food safe. Toxic when burned.	Vacuum formed products such as food containers or yoghurt pots.
Acrylic 7 OTHER	Tough but brittle, easily scratched . Common in school workshop for the laser cutter.	Car lights, display stands, trophies, jumpers, hats and gloves.

Polymorph

Non toxic, easily mouldable and re-mouldable when heated. Used for modelling or personalisation of hand grips.

Thermosetting

This group of polymers, once set in shape CANNOT be reformed. Known as thermosets.

These are generally more rigid before and after they've been heated.

These are harder to recycle.

Make excellent electrical insulators.

Types:

Name	Characteristics	Uses
Epoxy resin 	Stronger than other resins, expensive and heat resistant.	Bonding different materials together.
Melamine formaldehyde 	Food safe, hygienic and lightweight.	Kitchenware - but it can't be put in the microwave
Urea formaldehyde 	Heat resistant and very good electrical insulator	Electrical fittings, casings, buttons and handles.
Polyester resin 	Reasonably strong, heat resistant and a good electrical insulator.	Waterproof coatings and flooring.
Phenol formaldehyde 	Very hard and brittle. An excellent electrical insulator.	Electrical components, mechanical parts.

Biopolymers

Newer plastics are made from **vegetable starches** and can be composted - these are great for the environment. Here are some:

PLA - Polylactic Acid

Non toxic, easily shaped and typically used for 3D printers.

Used for pens, phone cases, disposable food and drinks containers.

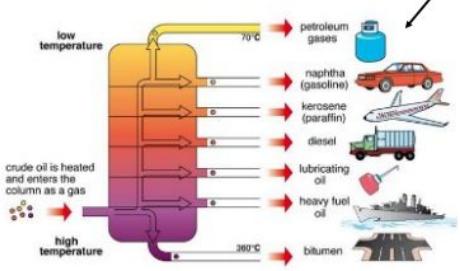
Source/Origin

Polymers come from **crude oil.** They can also come from **gas** and **coal.** This can be found beneath the Earth's surface. Below is how we get it and change it into polymers:

1. The oil is **extracted** from beneath the surface and stored. This can be done on land or in the sea.

2. This oil is then **transported** via a **crude tanker** to somewhere called an **oil refinery.**

3. When at the refinery, the oil is heated and at **different temperatures** this creates the different **products.**



Environmental Impact

Polymers are considered a **finite resource** - this means that it will run out eventually as we only have a limited amount. However with development in technology there are some **biodegradable** ones, here are some of the impacts:

- Do not biodegrade easily so release harmful toxins in landfills.
- Causes **air, visual** and **water pollution.**
- Takes a lot of energy to produce.

- Some are able to be recycled so they don't use raw material (brand new e.g. crude oil).
- New technology has given way to fully biodegradable ones - **biopolymers,** so they are non toxic and not from a finite resource.

Design and Technology

Materials and their Properties: Metals & Alloys

Ferrous

This group of metals all contain iron.

Most of these metals are magnetic and will rust if they are exposed to moisture without a protective finish.

Iron is what causes the metals to rust quicker. They tend to have a higher melting point.

26 Fe Iron 55.845

Types:

Name	Characteristics	Uses
Low Carbon Steel (Mild Steel) 	Tough and ductile, easily machined, formed, brazed or welded.	Construction, nails, screws, nuts and bolts. Many car bodies.
High Carbon Steel 	Less ductile and harder than mild steel. Very hard wearing and keeps and edge well.	Garden or workshop tools, blades, scissors, wood and metal cutting tools.
Cast Iron 	Hard but brittle. Easily cast into complex shapes but some are hard to machine.	Kitchen pots and pans, machine bases and bodies, drain covers and vices.

Non Ferrous

This group of metals do NOT contain iron.

Most of these metals are not magnetic and do not rust.

These can **Oxidise**. React with oxygen that causes the surface to change colour.

They include precise metals such as gold, silver and platinum and others such as lead and mercury which are poisonous.

26 Fe Iron 55.845

Types:

Name	Characteristics	Uses
Aluminium 	Lightweight, high strength to weight ration, ductile and difficult to weld.	Pots and pans, sports car body panels, bike frames, drinks cans, foil or takeaway trays.
Copper 	Ductile, malleable and a good electrical conductor.	Plumbing supplies, and electrical cables.
Tin 	Soft, malleable and ductile, a good electrical conductor.	Used to produce cans and plating surfaces to make them last.
Zinc 	Fair electrical conductivity, malleability and ductility; however, better when alloyed.	Mainly used to galvanise steel to prevent rusting.

Alloys

This group of metals is a mixture of at least one pure metal and another element.

The reason metals are alloyed is so that the added element makes the metal better - it improves it in some way.

These are more difficult to recycle as the metal has been mixed with something else.

Types:

Name	Characteristics	Uses
Brass 	A heavy alloy of zinc and copper that is malleable, easy to cast and machine.	Musical instruments, bushes and plumbing filaments.
Stainless Steel 	Hard very smooth but difficult to weld. A ferrous metal alloyed with chromium, nickel and manganese.	Cutlery, kitchen and medical equipment.
High Speed Steel 	Able to withstand the high temperatures created when machining at high speed, keeps cutting edges well.	Cutting tools such as drill bits, mill cutter, taps and dies.
Duralumin 	Alloy of aluminium, copper, magnesium and manganese. Creates greater hardness and tensile strength.	Aircraft components sports car wheels and casings.

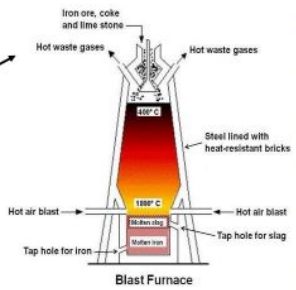
Source/Origin

Metals come from the **ground/rocks** typically the Earth's crust - this is known as the source or origin of the material.

This is how we **extract** (remove) metals from the ground and create **iron ore**.

1. The material is mined using machines - the main two types are **surface mining** and **underground mining.**

2. These rocks are then **transported** to a factory to be separated from waste material.



Blast Furnace

3. To create the **iron ore**, the rocks are placed through the top of the furnace and it is heated.

As it heats, it starts to become a liquid and this sinks to the bottom.

As it becomes a liquid it is carried away from the bottom to be **refined** further into metals.

The waste material leaves in the other direction and is known as the **slag.** Waste material also leaves as gases.

Environmental Impact

Metal is considered a **finite resource** - this means that it will run out eventually as we only have a limited amount. These are some of the impacts that metal has on the environment:

- Finite resource so it will run out eventually.
- Causes **air pollution** from the gases that are released.
- Causes **visual pollution** from the mines that are created to get the raw material.
- Takes a lot of energy to produce.

- Can be recycled over and over again. The quality will always be the same as the original so the material won't weaken over time.
- Lasts a long time and so it won't need to be replaced.
- Most metals can be recycled.

Environment

The 6Rs	Meaning
Reuse	To use a product again either for the same purpose or a different one
Reduce	To have less of material/packaging/pollution when making products by making them more efficient
Recycle	Breaking down and forming the material into another product
Refuse	Customers not buying or supporting products that make an environmental impact
Rethink	Designers and customer rethinking their decisions when making and buying products.
Repair	Fixing a product rather than throwing it away. Extending its life rather than using more resources to make another Often products are **Designed for Maintenance** so can easily be repaired. E.g. Using screws so even non-specialists can take a product apart, or using components that can easily be replaced like fuses or batteries

Life Cycle Assessment

This is when a designer looks at the environmental impact a product makes over its life time and how it could be reduced. Including:

- Impact of materials
- Impact of processes
- Product Miles (how far a product has to travel to get from factory to consumer)
- Impact while in use
- Impact when disposed of (6Rs)

Sustainability is maintaining our planet and its resources and making a minimal negative impact

Finite Resources *Will run out of eventually*	**Infinite Resources** *Can be re-grown and re-bread. Will not run out of*
Plastics	Paper
Metals	Boards
Polymers (Textiles)	Natural Timbers
	Cotton
	Leather

Planned Obsolescence	This is where products "die" after a certain amount of time. E.g. Disposable cups, Phones, Lightbulbs, Printer Ink, etc This can have a big environmental impact as customers are throwing away lots of products, and resources are being used to create new ones.

Drama

Terrible Fate of Humpty Dumpty

Summary

The Terrible Fate of Humpty Dumpty is about a boy called Terry Dumpton, who is nicknamed Humpty Dumpty. He is bullied in his new school by a gang, led by Stubbs. Terry's only friend – Sammy – is a coward, who can't stand up for himself. As the bullying progresses, Terry begins to skip school, worrying his parents.

In the beginning scene, the bullies (and Sammy) are pressuring Terry into climbing a pylon, which is an electrical building. They want him to get one of the bullies' Frisbee. To prove he's not a coward, Terry climbs the pylon. This results in him being electrocuted and dying.

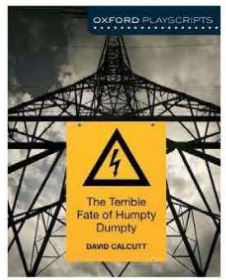
Through flashbacks, we find out the events that lead to his death. In other scenes, we learn about the police investigation and how Terry's parents – as well as others in the community – are affected by what has happened to him. In the end, Sammy finally admits what happened to Terry, and justice is served.

Key Vocab

Cross-Cutting	Alternate one scene with another.
Director	Someone who is in charge of the creative vision of a theatre production.
Designer	Someone who makes creative decisions about the performance, such as the costume, set or lighting.
Empathy	The ability to understand and share the feelings of another person.
Evaluation	Reflecting on what has gone well, and what could be improved next time.
Hot Seating	A rehearsal technique, in which a character is questioned by the rest of the group.
Interpretation	A stylistic representation of a creative work or dramatic role.
Marking the Moment	A dramatic technique used to highlight a key moment in a scene.
Proxemics	The amount of space between people to communicate relationships and emotions.

Characters

Terry Dumpton	Quiet, reserved, the gang's victim
Stubbs	Powerful, intelligent, the gang leader
Jimmy	Gang member, a bit of a thug, not very intelligent
Pete	Gang member, a joker
Kathy	Gang member, tough
Kay	Gang member, tough
Janet	Gang member, scared of the others
Tracey	Gang member, scared of the others
Sammy	Terry's friend, weak, hanger-on of the gang
Mrs Dumpton	Terry's mother, strong, family's breadwinner, in her 30s
Mr Dumpton	Terry's father, out of work, in his 30s
Lesley Dumpton	Terry's younger sister, about 8 years old
Ross Webster	Local press reporter, ambitious, in his early 20s
Mrs Vickers	Witness, in her mid-40s, a little vain
The Head Teacher	Defensive, in her early 40s
Mrs Williams	Acquaintance of Mrs Dumpton, in her 30s
Mrs Clark	Janet's mother, friend of Mrs Williams, in her 30s



Themes

Bullying	**Fear**
Children	**Gangs**
Cruelty	**Morals**
Death	**Peer pressure**

Drama

Totally Over You

Summary

Totally Over You is a play about a group of teenage girls who are obsessed with celebrity. Led by Kitty, they decide to dump their boyfriends, convinced that they will be instant stars even though Jake tells Kitty, 'You can't sing, you can't act, you're OK-looking but you're not models.' The boys' revenge is swift and effective. They turn the tables when Victor organises the drama class and convinces the girls that the boys they have just abandoned are in fact the celebrated band, Awesome.

The girls are familiar with every nuance of celebrity: sleeping in the totally fantastic house next to the totally buff boyfriend, the breakfast conference calls to Japan, the lunches, the red carpet at the film launch and the stalker.

At the beginning of the play Kitty is the leader of the gang and has been used to that position for some time. She is humbled and matures during the play. When she threw Jake over it was a very significant act. They had been going out for six weeks and in adult terms it was the equivalence of a divorce. At the end, Sinita, Rochelle and Hannah have been embarrassed but are not unduly damaged. Kitty, however, has been profoundly changed, calling herself, 'Stupid freaking stupid freaking idiot bitch to believe. I just wanted to believe so much.' Jake finds the courage to express his feelings. 'I feel everything for you Kitty. I feel love. I feel like kissing and cuddling and all that kind of love. But also like sex kind of love. Like I want to see you naked…And I feel hate.'

Characters

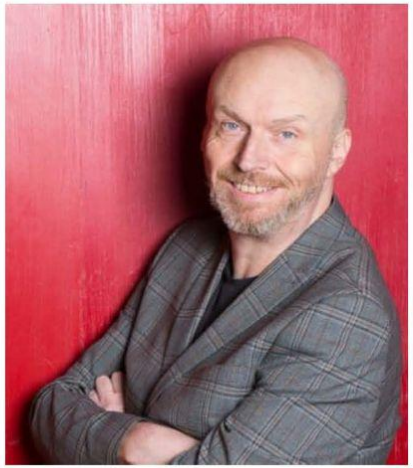
Kitty	Jake
Rochelle	Dan
Hannah	Tyson
Sinita	Framji
Letitia	Victor
Donna	Michael
Rachel	Rubin
Indu	

Production Elements

Costume	The clothes the actor wears to help portray a specific character.
Lighting	Lighting can be used to create different atmospheres, as well as transitions between scenes.
Props	Any object that is handled by an actor. This can help create a more naturalistic performance.
Set	Furniture that can be used to help show the world and location of the production.
Sound Effects	Recorded sound that can add to the atmosphere of a play or film. This might also be created on stage by the performers.

Performance Skills

Body Language	Accent
Eye Contact	Diction
Facial Expression	Emphasis
Gesture	Pace
Levels	Pause
Movement	Projection
Posture	Tone
Proxemics	Volume



Mark Ravenhill, writer of *Totally Over You*, written in 2003

Themes

Celebrity	Insecurity
Coming of Age	Love
Friendship	Romance

English

Global Voices - Knowledge Organiser

Exam Question

'People in society have lost their compassion, understanding and empathy.'

Write a speech stating whether you agree or disagree with the statement.

Success Criteria

- **Inform**
- **Persuade**
- **Entertain**

Checklist

- **Vocabulary used** - Is it ambitious? Does it create vivid imagery for your audience? Is it used correctly and effectively?
- **Language techniques** - Have you used techniques? Are these techniques effective? How are they used?
- **Structure -** How is your speech structured? Does it follow a specific structure or narrative?
- **Content -** How does your speech and topic impact your audience? What is your purpose? How do you want to make a change?

Structure of Speeches	Planning	Keywords	
Describe Describing a specific scene which portrays your point of view.		Perspective	Persuade
		Anecdote	Authenticity
Position Making your perspective clear, an overview of what you think and why.		Direct Address	Rule of Three
		Rhetoric	Oppression
Relevance Explaining why this issue is important to our society and the negative effect it's causing.		Statistic	Hyperbole
		Prejudice	Directives
Now Asking readers to take action in a way that is achievable.			

Connectives / Discourse Markers

Position - Firstly, Secondly, Thirdly, Next, Meanwhile, Subsequently, Finally, In conclusion.

Emphasise - Importantly, Significantly, In particular, particularly, crucially, most importantly, and above all.

Addition - Furthermore, Additionally, As well as, likewise, Moreover, Another point to consider, Besides.

Contrast - Although, Whereas, Otherwise, Alternatively, Nevertheless, Notwithstanding, Regardless.

Where food comes from

- Food is sourced, processed and sold in different ways.
- Geography, seasonality, weather and climate influence the availability of food and drink.

All food must be grown, reared or caught
In the past food was grown, prepared and cooked at home or sold by small-scale producers or merchants.

Some people still grow food at home or on allotments. Food can also be bought from a wide range of sources, including:

- cafes/coffee shops;
- convenience stores;
- farmers markets;
- farm shops;
- markets;
- on-line retailers;
- restaurants;
- supermarkets;
- takeaway outlets.

Food Processing
Food processing is any deliberate change to food that happens to a food before it is available to eat. Processing makes food safer to eat by killing existing bacteria and slowing bacterial growth.
Food is processed for a number of reasons:

- to extend shelf life;
- to add variety;
- for convenience;
- for consumer's health.

Innovations in food processing have led to the development of functional foods; these provide benefits over and above the basic nutritional value, e.g. dairy products containing probiotic bacteria.

Food provenance
Food provenance is about where food is grown, caught or reared, and how it was produced. Food certification and assurance schemes guarantee defined standards of food safety or animal welfare. There are many in the UK, including:

World food
A number of ingredients and foods that are now readily available have been introduced to the UK over a long period of time. Many are imported from other countries giving access to ingredients and foods that would not normally grow in the UK.
The availability of these ingredients and foods gives a wide choice throughout the year.

Food availability
Some ingredients or foods are available throughout the year because they have been imported from other countries where they are in season at different times of the year.

Climate and terrain are two key factors that affect food availability and where food is grown, reared and caught.

There is a great variety of food grown all over Europe. The type of farming is partly determined by the climate and the geography of the country or region. The terrain or landscape determines which crops are grown or animals reared. Cereal crops are grown in flat plains, whereas sheep can be reared in hilly terrain.

Seasonality
Fruit and vegetables naturally grow in cycles and ripen during a certain season each year. Some meat and fish can also be seasonal. Advantages of buying food in season include:

- it is fresh;
- best flavour, colour and texture;
- optimal nutritional value;
- supports local growers;
- lower cost;
- reduced energy needed to transport.

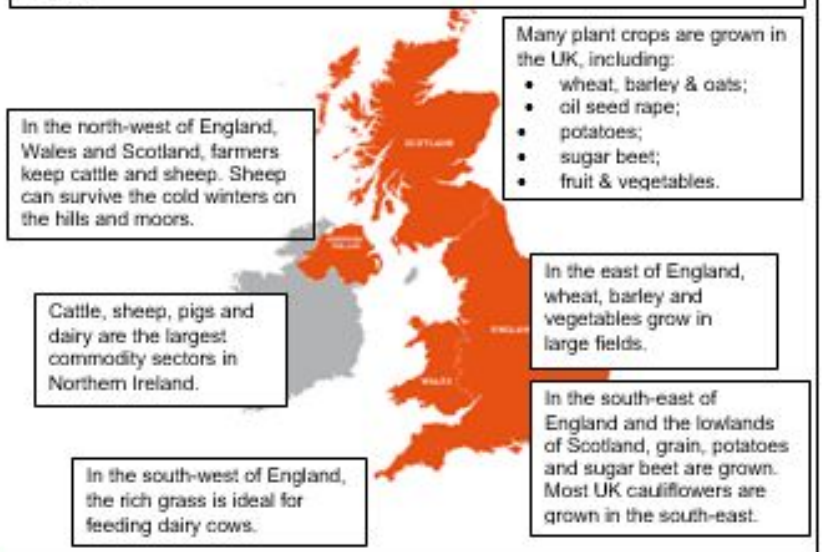
Climate change
There is worldwide concern about climate change and the increased number of extreme or unusual weather conditions.
Changes in temperature can affect plant growing seasons and livestock conditions. It is very likely to affect food security at a global, regional and local level.

Food security
Food security exists when everyone has access to enough affordable, safe and nutritious food to keep them healthy, in ways the planet can sustain in the future.

To find out more, go to: https://bit.ly/3rjJo8S

Key terms
Food processing: Any deliberate change to food that happens to a food before it is available to eat.
Seasonality: Food grown at a particular time of year.
Food certification and assurance schemes: Defined standards of food safety, quality or animal welfare.
Food security: Having access to sufficient quantity of affordable, nutritious food.
Food provenance: Knowing where food was grown, caught or raised and how it was produced.

Map showing key growing areas in the UK – some parts of the UK have excellent soil for crops, while others are used for cattle, sheep, pigs and poultry.



Tasks

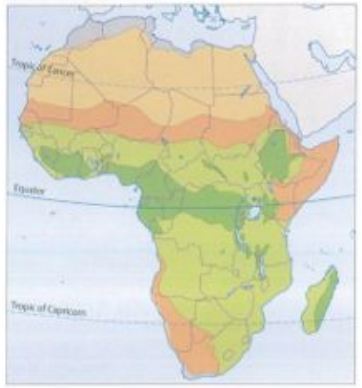
- Choose a food commodity and research how it is produced and processed. Create farm to fork food chain cards to illustrate what you have found out.
- Research the following ingredients and state where in the world they are traditionally grown, reared or caught: avocado, lamb, nutmeg, oats, olive oil, spinach, squid, sugar beet.

Geography

Year 8

Topic 1 Knowledge Organiser

Africa



A) Africa's physical Geography

- The longest river in the world is in Africa. The River Nile is 6,800km long
- The tallest mountain in Africa is Mount Kilimanjaro in Tanzania.
- The largest desert in the world, the Sahara Desert is in northern Africa
- The Atlantic Ocean is to the west of Africa, The Indian Ocean to the east.

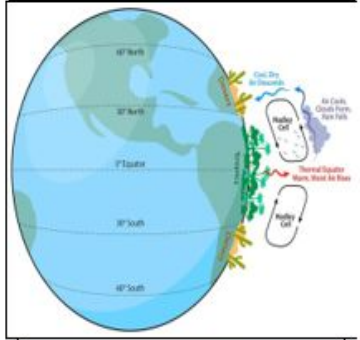
B) Africa's Biomes

There are 3 main biomes in Africa. A biome is a large geographical area where the climate, vegetation and wildlife are similar. These biomes are

1. Tropical rainforest is in central Africa along the **equator**
2. Hot deserts are in northern and southern Africa near to the **Tropic of Cancer** and the **Tropic of Capricorn.**
3. The Savanna is near to the **equator** but further north and south than the tropical rainforest

C) Why is it hot and wet in central Africa but dry in the north and south?

1. The sun is most **intense** (at its
2. hottest) over the equator Warm air on the **equator** rises. As it rises it cools and **condenses** (clouds form). This results in rainfall over the equator.
3. The cool dry air will sink back down sideways over the deserts. Because this air is sinking no clouds can form, and it is dry air, so it won't bring any rain.
4. This circular movement of air is called the **Hadley cell**
5. When air rises it creates an area of low pressure
6. When air sinks it creates an area of high pressure.



D) Calculations

- Mean – add up all the numbers and divide by the total that there are
- Median – place the numbers in order from lowest to highest and select the middle number
- Mode – the number that occurs the most often
- Range – the difference between the highest number and the lowest number.

E) How have plants and animals adapted to survive the hot desert conditions?

The quiver tree	The tree is covered in white powder to reflect the sunlight. Day time temperatures up to 45 degrees Celsius. It can self-amputate its branches to help save water
The fennec fox	The fennec fox has large ears to help **radiate** the heat
Kangaroo rat	The kangaroo rat is **nocturnal**. It comes out at night when temperatures are cooler.

F) Desertification

Desertification land starts to turn into desert and is where once **fertile** becomes **infertile**. This is a big problem in northern Africa in a region called the Sahel.

The main causes are…

- **Overgrazing** – too many cattle on the land can strip it of its vegetation. Once the vegetation is not there to protect the soil is can become very dry and cracked because of the sun.
- **Overcultivation** (over farming) – trying to grow too many crops can take all of the nutrients out of the soil leaving it infertile.
- Lack of rainfall can result in the soil drying out and becoming **infertile**.

G) How can desertification be reduced?

1. Stone lines can be built. When it does rain this helps to trap water and **nutrients** that are being washed away. While the water is trapped is has time to be **absorbed** by the soil.
2. The **Great Green Wall of Africa** is a plan to plant trees **8000km** across Africa. Trees help to protect the soil from the hot sun and wind.

H) Intermediate technology

This is technology that is made out of local materials and resources. It can be easily used and fixed by local people.

In Africa a rope pump is used to help people to access clean water from deep underground.

This is a good example of intermediate technology because…

1. It is cheap to make
2. Local people can easily use the rope pump
3. Local people can be taught how to fix the rope pump if it breaks
4. It is made out of materials that are easily available.

I) Access to water

Access to water can affect people's **economic** and social **wellbeing**

Economic

If people are drinking dirty water, they will become ill and unable to work. This will affect their income.

If people are unable to **irrigate** (water) their farm, they will be unable to grow crops, or keep animals and so will lose income.

Social

If people are drinking dirty water they will become very ill. 2000 children die every day as a result of diarrhoea, an illness caused by drinking dirty water.

Women and young girls have to walk many miles each day to fetch water in poorer parts of the world. This prevents girls from going to school and getting an education.

Geography

Africa knowledge organiser

B) Africa's Biomes

There are 3 main biomes in Africa. A biome is a large geographical area with a distinct climate and vegetation type. These biomes are

1. Tropical rainforest is in central Africa along the **equator**
2. Hot deserts are in northern and southern Africa near to the **Tropic of Cancer** and the **Tropic of Capricorn.**
3. The Savanna is near to the **equator** but further north and south than the tropical rainforest

D) Development

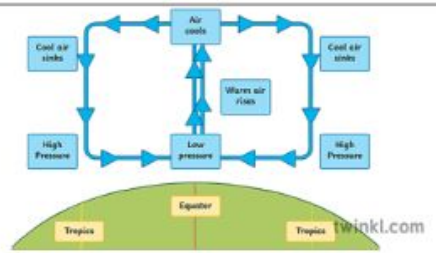
- Africa is a continent with 54 different countries in.
- Some of these countries are more developed than others.
- Development is measured using development indictors
- An economic measure of development is average income (how much money people earn).
- A social indicator is life expectancy (the average age people live to). This tells us a lot about the healthcare in a country
- Literacy rate is a social indicator of development and tells us the % of people that can read and write.

A) How are we all connected to the continent of Africa?

- Homo Sapiens, the first modern humans evolved in Africa 200,000 years ago
- Homo Sapiens started to migrate out of Africa between 70,000 and 100,000 years ago
- All humans on earth originate from the Homo Sapiens that once only lived on the African continent.

C) Why is it hot and wet in central Africa near the equator but dry 30° north and south?

1. The sun is most intense/concentrated on the equator
2. This causes warm air to rise
3. Warm air can hold water vapour
4. The warm moist air rises up into the atmosphere (sky)
5. As the air sinks it becomes cooler and the water vapour condenses (turns from a gas into rain droplets)
6. This forms clouds and causes rainfall
7. The air is now dry as it doesn't have any moisture in it
8. The dry air spreads sideways and sinks down over 30° north and south of the equator
9. This is where the deserts are
10. Clouds do not really form here because the air is sinking and not rising.
11. When air rises it creates an area of low pressure
12. When air sinks it creates and area of high pressure



E) How has Africa's history affected its levels of development today?

- There are vast (big) inequalities (differences) in development across the 54 countries in Africa. Some are much more developed than others.
- In 1884 the continent of Africa was carved up and divided between different countries in Europe who colonised it (wanted to own and control the land and people).
- This was called the scramble for Africa.
- The new borders that were created pushed people of different ethnicities and cultures with different languages together into new countries.
- The African people and leaders had no say.
- The European power exploited the people and resources. For example, rubber from rubber trees in the Congo was transported to Belgium and used to help make that country rich.
- European countries took control of the farmland and made farmers grow crops that could be sold, the wealth going back to Europe.
- The European powers did not invest in trying to help the African countries industrialise and so they fell behind.

F) Why is the population increasing faster in poorer (less developed) countries in Africa?

- The population of a country increases if the birth rate is higher than the death rate. This means more babies are being born than people are dying.
- In less developed countries girls do not receive a good education. Many get married young and have large families.
- In some countries having lots of children is part of the culture and so the birth rate is high.
- In less developed countries women don't have access to family planning services and can't access contraception that would help to prevent pregnancy.

G) Why is soil important to people in Niger?

- Soil is formed by the **weathering** (breaking up) of rocks and the **decomposition** (breaking down) of dead matter like leaves. This helps to put **nutrients** in the soil that it is fertile.
- In Niger over 50% of people rely on farming for their food and income (money) so the soil is very important.
- Farmers in this country are subsistence farmers. They farm to provide for their families and to survive. They farm to get by.
- The key word for farming is **agriculture.**

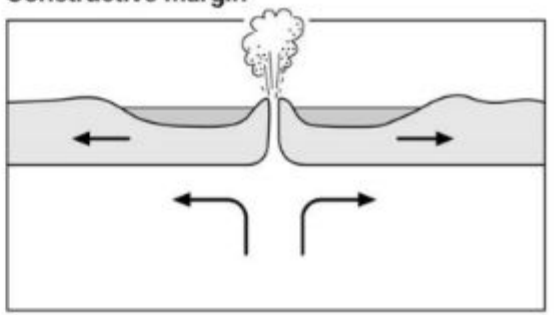
H) How can agriculture (farming) put the soil at risk?

- In Niger the soil can be damaged by soil **erosion.** This is where soil is blown away by the wind or washed away by rainfall. This eventually makes the soil **infertile** so crops can no longer grow.
- This can happen if farmers plant crops in the same area of land year after year. Eventually the crops (vegetation) will take all the **nutrients** out of soil.
- Once this happens the vegetation cannot regrow, and the soil is no longer protected from the wind and rain.
- If farmers keep too many cattle (goats and sheep) on the land they will eat all of the grass.
- This removes the protective cover for the soil and again will mean it can be washed or blown away **(eroded)**

I) Why is the DRC at risk from volcanic eruptions?

- The Democratic Republic of Congo (DRC) is a country in central Africa.
- There is a dangerous volcano here called Mount Nyiragongo.
- This volcano has formed here because the DRC lies on top of a **constructive plate boundary.**
- Here two tectonic plates and moving apart from each other, or away from each other in opposite directions.
- As the two plates part magma rises up through the gap created.
- When it spills onto the earth's surface this is a volcanic eruption.

Constructive margin



History

Year 8
The Civil rights movement in the USA

Overview

This topic concentrates on the issue of race relations in the USA from the 1950s onwards. It starts with recapping the issue which started centuries earlier with the slave trade, which began in the 16th century and gathered pace in the 17th and 18th centuries. When slavery ended in the USA in 1863, the formation of the Ku Klux Klan in 1866 and the Jim Crow laws meant that the fight for equality would be a long one. Segregation law made progress impossible, but actions by Black Americans and some White American supporters changed that, and the 1950s saw the start of a real push for equality for Black Americans.

Key events

American Civil war – 1861 – 1865
The American Civil War was fought over the issues of slavery and states' rights.
It was fought between the Union and Confederate states.

Jim Crow laws - Laws to keep black and white people apart: segregated black and white people in places like trains, shops, churches, parks and schools.

Brown versus Topeka - Linda Brown's parents went to the Supreme Court to challenge segregated education. 17 May 1954 the decision to ban school segregation was announced.

Montgomery bus boycott – a 381 day bus boycott in Montgomery, Alabama. it ended when segregation was declared unconstitutional by the U.S Supreme Court

Little Rock High - nine black students, led by Elizabeth Eckford tried to enrol at Little Rock High School, Arkansas. The President had to send in the National Guard to protect the students from racist abuse and violence.

Freedom rides - They established 30 Freedom schools in towns throughout Mississippi to help people train for the literacy tests Three project volunteers were murdered.

Civil rights Act - Ended segregation in public places and banned employment discrimination.

Voting Rights Act - Removed barriers to black enfranchisement in the South, banning literacy tests and voting taxes.

Key people and groups

Rosa Parks - Refusal to give up her seat on a bus sparked the Montgomery Bus Boycott.

Martin Luther King - Baptist minister who played a key role in the American Civil Rights movement from the mid-1950s until his assassination in 1968

Emmett Till - A 14-year-old African American who was murdered in Mississippi in 1955.

Ku Klux Klan - Violent, white group. Used terror to oppress black people in the South.

White citizens council - Formed to campaign against Civil Rights groups such as NAACP. They wanted to prevent black people from voting.

NAACP - Civil Rights group: National Association for the Advancement of Coloured People.
CORE - Civil Rights group: Congress of Racial Equality
SNCC - Civil Rights group: Student Nonviolent Coordinating Committee

Malcolm X - African American leader in the civil rights movement. Advocated Black empowerment.

Black power movement - Occurred in the 1960s and 70s. It wanted black people to have more pride in their heritage. They called for 'land, bread, housing, education, clothing, justice and peace.'

Keywords

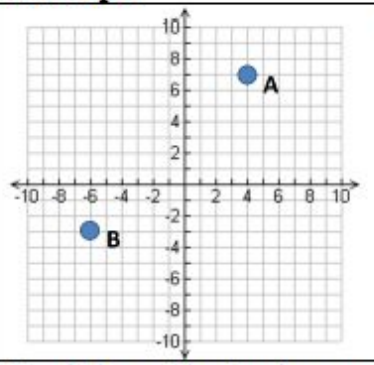
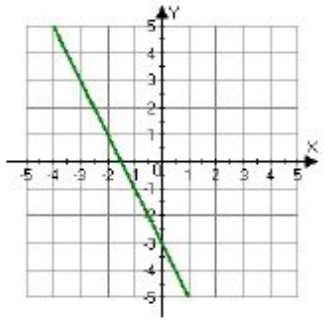
Emancipation - Freeing someone from the control of another.
Abolition - The act of officially ending or stopping something.
Segregation - A system that keeps different groups separate from each other
Oppression - prolonged cruel or unjust treatment.
Enfranchisement - the giving of a right or privilege, especially the right to vote.
Boycott - To refuse to buy, use, or participate in (something) as a way of protesting.
Desegregation - The process of ending the separation of different racial, religious, or cultural groups.
Inferior - A person lower than another in rank, status, or ability.
Lynching - Executing someone (usually by hanging) without a legal trial.

Timeline

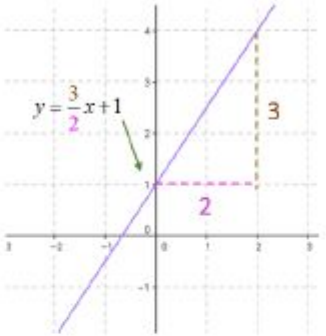
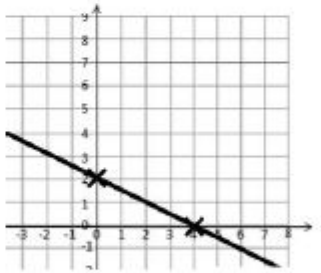
1863 Slavery was banned in the USA
1875 Supreme Court Ruling: National government would not intervene in state voting
1896 Supreme Court Ruling: states could introduce segregation laws
1939-1945 – World war 2
1954 Brown versus Topeka case
1955-56 Montgomery Bus Boycott
1957 Little Rock High
1961 First freedom ride
1963 Birmingham demonstrations
1963 March on Washington
1964 Civil Rights Act
1964 Freedom Summer
1965 Voting Rights Act
1965 Malcolm X assassinated
1968 Mexico Olympics
1968 Martin Luther King assassinated
2009 Barack Obama became the first black president of the USA: served 2 terms.

Maths

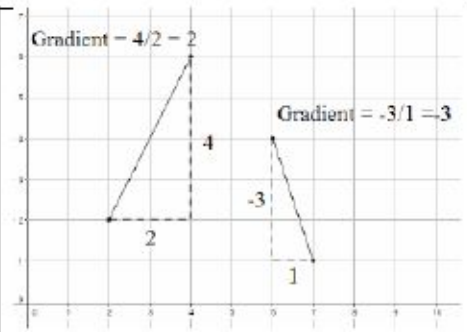
Topic: Coordinates and Linear Graphs

Topic/Skill	Definition/Tips	Example
1. Coordinates	Written in **pairs**. The **first** term is the **x-coordinate** (movement **across**). The **second** term is the **y-coordinate** (movement **up or down**)	 A: (4,7) B: (-6,-3)
2. Midpoint of a Line	Method 1: **add the x coordinates and divide by 2, add the y coordinates and divide by 2** Method 2: Sketch the line and find the values half way between the two x and two y values.	Find the midpoint between (2,1) and (6,9) $\frac{2+6}{2} = 4$ and $\frac{1+9}{2} = 5$ So, the midpoint is (4,5)
3. Linear Graph	**Straight line** graph. The general equation of a linear graph is $y = mx + c$ where m **is the gradient** and c **is the y-intercept**. The **equation** of a linear graph can contain an **x-term**, a **y-term** and a **number**.	Example:  Other examples: $x = y$ $y = 4$ $x = -2$ $y = 2x - 7$ $y + x = 10$ $2y - 4x = 12$

Maths

4. Plotting Linear Graphs	Method 1: **Table of Values** Construct a table of values to calculate coordinates. Method 2: **Gradient-Intercept Method** (use when the equation is in the form $y = mx + c$) 1. Plots the y-intercept 2. Using the gradient, plot a second point. 3. Draw a line through the two points plotted. Method 3: **Cover-Up Method** (use when the equation is in the form $ax + by = c$) 1. Cover the x term and solve the resulting equation. Plot this on the $x - axis$. 2. Cover the y term and solve the resulting equation. Plot this on the $y - axis$. 3. Draw a line through the two points plotted.	<table><tr><td>x</td><td>-3</td><td>-2</td><td>-1</td><td>0</td><td>1</td><td>2</td><td>3</td></tr><tr><td>y= x +3</td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr></table>   $2x + 4y = 8$

Maths

5. Gradient	The gradient of a line is how **steep** it is. **Gradient** = $\frac{\textbf{Change in } y}{\textbf{Change in } x} = \frac{\textbf{Rise}}{\textbf{Run}}$ The gradient can be positive (sloping upwards) or negative (sloping downwards)	
6. Finding the Equation of a Line <u>given a point and a gradient</u>	**Substitute** in the **gradient (m)** and **point (x,y)** in to the equation $\boldsymbol{y = mx + c}$ and **solve for c**.	Find the equation of the line with gradient 4 passing through (2,7). $y = mx + c$ $7 = 4 \times 2 + c$ $c = -1$ $y = 4x - 1$
7. Finding the Equation of a Line <u>given two points</u>	Use the two points to **calculate the gradient**. Then **repeat the method above** using the gradient and either of the points.	Find the equation of the line passing through (6,11) and (2,3) $m = \frac{11 - 3}{6 - 2} = 2$ $y = mx + c$ $11 = 2 \times 6 + c$ $c = -1$ $y = 2x - 1$

8. Parallel Lines	If two lines are **parallel**, they will have the **same gradient**. The value of m will be the same for both lines.	Are the lines $y = 3x - 1$ and $2y - 6x + 10 = 0$ parallel? Answer: Rearrange the second equation in to the form $y = mx + c$ $$2y - 6x + 10 = 0 \rightarrow y = 3x - 5$$ Since the two gradients are equal (3), the lines are parallel.
9. Perpendicular Lines	If two lines are **perpendicular**, the **product** of their **gradients** will always equal -**1**. The gradient of one line will be the **negative reciprocal** of the gradient of the other line. You may need to rearrange equations of lines to compare gradients (they need to be in the form $y = mx + c$)	Find the equation of the line perpendicular to $y = 3x + 2$ which passes through (6,5) Answer: As they are perpendicular, the gradient of the new line will be $-\frac{1}{3}$ as this is the negative reciprocal of 3. $$y = mx + c$$

PE

KS3 PE KNOWLEDGE ORGANISER – ATHLETICS

TRACK EVENTS

CORE SKILLS	ADVANCED SKILLS
100m, 200m, 800m, 1500m	
1. Starting 2. Finishing 3. Posture 4. Leg action 5. Arm action 6. Head carriage	1. Starting (use of sprint start) 2. Leg action (foot strike / cadence) 3. Bend running (where relevant) 4. Stride pattern/pacing

Decision making and tactical awareness, to include:

1. Pre-race tactics
2. Changing and adapting your race tactics
3. Positioning in the field, where to run in the pack, when to lead and when to follow (where appropriate)
4. Timing of kicking for the finish line
5. When to dip for the finish line Awareness of the rules and regulations of the event and their application (including officials commands/signals)

JUMPING EVENTS

CORE SKILLS	ADVANCED SKILLS
HIGH JUMP, LONG JUMP, TRIPLE JUMP	
1. Approach 2. Synchronisation of arm and leg action 3. Flight 4. Landing	1. Approach: - Hitting appropriate speed for take off 2. Efficient transition between technical phases of the movements 3. Flight: - Appropriate elevation 4. Landing - movement of the body beyond initial point of contact (long jump and triple jump)

Decision making and tactical awareness, to include:

1. Pre-event tactics
2. Tactics for qualifying jumps/Entry height and the choice of when to 'pass' on a height/round
3. Changing and adapting your jump tactics:
5. Consideration of weather conditions
6. Appropriate distance/number of steps chosen for run up
7. In competition check mark adjustment
4. Awareness of the rules and regulations of the event and their application (including officials commands/signals)

THROWING EVENTS

CORE SKILLS	ADVANCED SKILLS
SHOT, DISCUS, JAVELIN	
1. Initial stance 2. Grip 3. Throwing action 4. Release phase 5. Recovery phase / follow through	1. Travel: - use of cross step/glide (where applicable) - rotational throws (where applicable) 2. Release phase: - Appropriate angle of release 3. Efficient transition between technical phases of the movements

Decision making and tactical awareness, to include:

1. Pre-event tactics
2. Tactics for qualifying throws
3. Changing and adapting your jump tactics:
   - Consideration of weather conditions
   - Check mark adjustments (Javelin only)
4. Awareness of the rules and regulations of the event and their application (including officials commands/signals)

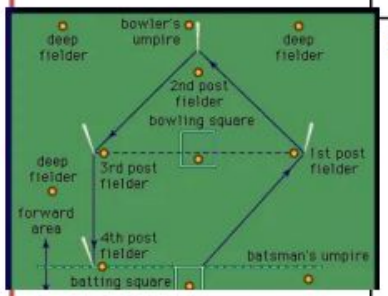
PE

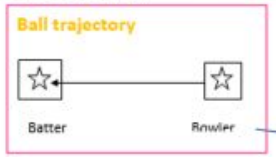
Year 8 PE- Rounders

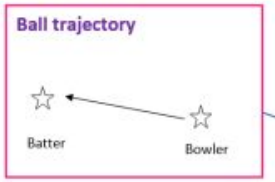
Key words in rounders: Deception: to trick your opponent by using a tactic/ technique they aren't expecting. Outwit: to get the better of your opponent to win/ score. Trajectory: The angle the ball should travel

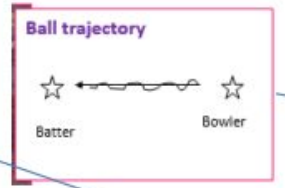
RULES OF PLAY

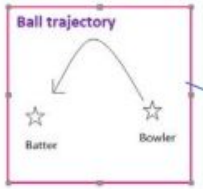
1.. You must keep in contact with a post once you have decided to stop.
4. A no ball is: above the batters head, below the knee, the wrong side of the body, too wide and too close into the body.
5. You must run around the outside of the posts
6. . If you hit a ball behind, then you must wait at first post until the ball comes forward of the batting box. You may then run on.
7. If you hit the ball and get all the way round you score 1 rounder, if you get to 2nd post, you score ½ a rounder. If you do not hit the ball but get all the way round you score ½ a rounder. You also score ½ a rounder if you get 2 no balls bowled at you.
8. You get ½ a rounder for obstruction if the fielders get in the way of your run to a post.











Exit Routes: Find a team near you:
Find a team near you
https://www.roundersengland.co.uk/team-locations

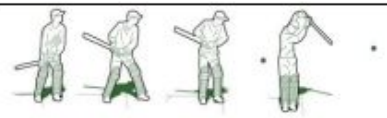
Wider reading/ video: batting
https://www.youtube.com/watch?v=smTBrE52Fag

Skill/tactic	Teaching points
Batting	• Stand sideways on to the bowler with the bat up and behind you. The arm will be in a 90 degree angle. • Step in with the opposite leg. • Swing through with the hips and follow through with the bat to contact the ball. • Move body and arm position to hit ball in a different direction but always in front of you. • DO NOT DROP THE BAT and unless the umpire shouts no ball you must run.
Bowling	• Straight bowl- swing your ball holding arm back, as you swing the arm forwards step in with the opposite foot. Release the ball around hip height and follow through straight and pointing at the batter. • Spin bowl- swing your ball holding arm back, as you swing the arm forwards step in with the opposite foot. As you release the ball around hip height twist your hand Clockwise (closing a door) Follow through straight at towards the batter. • Riser- Keep your body low by bending the knees, as you swing your arms forward, step forward with the opposite foot. Release the ball around knee height. Follow through higher than release. • Donkey drop- swing you ball holding arm back, as you swing the arm forwards step in with the opposite foot. Release the ball around rib height and follow through above the batter. • **What could you change these further to outwit your opponent?**

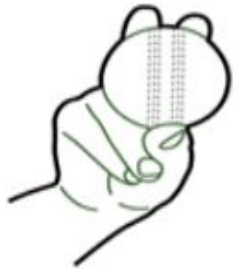
PE

KS3 PE KNOWLEDGE ORGANISER – CRICKET

Batting

Grip	
Footwork	
Front foot defensive	
Front foot drive	
Back foot defensive	
Back foot drive	
Running between wickets	

Bowling

Grip (Seam bowler)	
Grip (off break)	
Grip (leg break)	
Run up and delivery stride	

Fielding

1. Stopping the ball
2. Pick up and throw - Underarm
3. Pick up and throw on the run
4. Pick up and throw for a run out – underarm and overarm (outfield)
5. Catching – Basket catch
6. Catching – Butterfly catch

Decision making and tactical awareness

1. Selection of appropriate batting shot
2. Decision making of running between the wickets
3. Where to bowl the ball
4. Awareness of the rules and regulations of the sport and their application
5. Understanding and use of positions and roles in batting and fielding
6. Effective decision making for running between wickets

Humanism:

Humanists do not believe in a god. They believe it is possible to live a good and fulfilling life without following a traditional religion.

They do not follow a holy book either. Instead, Humanists value traits like reason and rely on science to explain the way things are.

Humanists believe that people have one life to live - there is no afterlife. As a result, they focus on being happy and making the most of their life. They also believe they have a duty to support others.

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Sikhism:

Sikhs believe in one God called **Waheguru** which means 'Wonderful Lord' or 'Wonderful Teacher'. Sikhism has approximately 27 million followers worldwide, with about 83% of Sikhs living in India. Over 430,000 Sikhs live in the UK.

Religious symbol

The **Khanda** is the symbol of the Sikh faith. It consists of three different types of weapons:

- A double edged sword or **khanda** in the centre.
- A round throwing weapon known as a **chakkar**.
- Two single-edged swords called **kirpans**, crossed either side of the other weapons.

The Khalsa

The **amrit** ceremony is one of the most important ceremonies in Sikhism. It was started by **Guru Gobind Singh**, the tenth Sikh Guru, who called for Sikhs to defend their faith against the persecution that was happening to them at the time. Guru Gobind Singh asked for volunteers who were prepared to die for their faith. Five men volunteered, but instead of being killed, they were spared and became known as the **panj piare** – which means 'the five beloved ones'. They were the first members of the Sikh community known as the **Khalsa**.

When Sikhs undergo the amrit ceremony today and join the Khalsa, they must promise to keep all the rules of the Sikh faith, and also to wear the **5 Ks**. Click the picture below to find out more about the 5Ks.

The Sikh 5 Ks - Introduction

The 5Ks are the five artefacts of faith worn by all baptised Sikhs. Many non-baptised Sikhs may also wear some or all of these Sikh symbols. The baptised Sikhs both male and female are required to wear the 5Ks at all times. If a Sikh is going to fly, they may wear a pendent of the 5Ks to pass through airport security.

This commitment first came into place in 1699, when Guru Gobind Singh announced them at the Vaisakhi gathering. The 5Ks are items of faith which display and show the wearer's conviction to God and are a constant reminder of their love for Him.

Kesh

Sikhs are required to not cut any of their hair and this is known as Kesh. They believe that hair is a gift from God and therefore it would be wrong to cut it. Instead they believe they should work with what nature has provided, instead of working against it. This also means that Sikhs should not dye or bleach their hair, as this is both damaging to the hair and working against nature.

Sikhs cover their hair with a turban to help keep their Kesh clean and manageable. By wearing a turban they are also reminded that their thoughts should be focusing on God and to not have an ego.

Kesh does not just apply to the hair on a Sikhs head, but to all body hair. This means that Sikhs should not, for example, shave or pluck their eyebrows. Sometimes hospitals will tell of chases where a Sikh was very reluctant to have any body hair shaved before an operation!

Kanga

Sikhs are not allowed to cut their hair as they believe it is a gift from God. They therefore they use a wooden comb known as a Kanga to maintain it. This is because they should not just accept what God has given it, but look after it too.

The Kanga serves as a reminder to maintain the body and to keep mind in a clean and healthy state. Sikhs believe we should comb our mind with Gurbani (divine word) just as we comb our hair. When Sikhs comb their hair they see strands of hair fall out. This is a reminder to them that nothing is permanent and therefore they should focus on their spiritual development and not become attached to material objects. Also, when they comb their hair they have to comb out knots. Just as we have knots in our hair, so do we also have knots in our lives, which we must try to keep free from trouble.

Kara

Sikhs wear a steel bracelet or bangle around their right wrist, which is known as Kara. The Kara is round and therefore has no beginning or end (it is eternal) like God, and that Sikhs have a bond with him. In the UK wedding rings use the same symbolism to relate the love of the married couple. The Kara should only be made of steel and not from precious metals. This is because not everyone may be able to afford gold or silver and therefore by everyone wearing steel it makes them all equal, as they are in the sight of God.

The Kara is a reminder to Sikhs to do good deeds and to refrain from doing wrong. If a Sikh goes to steal something with their right arm, they will see the Kara and know that what they are doing is wrong and are reminded that God is watching them. This will prevent them from committing the crime.

The Kara may have once had a practical purpose of protecting the right arm from the sword, or Kirpan, that Sikhs carried in defence.

Kachera

All Sikhs must wear standard cotton underwear known as a Kachera. This is must be a natural, comfortable and dignified to reflect a Sikhs modesty and control of sexual desire. Kachera are normally knee length shorts and are worn by men and women. They do not come in different sizes and are adjusted to fit by drawstrings.

Kachera were very practical for soldiers, who because they were wearing their Kachera were always ready for ready for battle and could move freely, compared to other clothes at the time. In today's society they are now often worn as an undergarment. By wearing the Kachera a Sikh is reminded to control their desire for the opposite sex and stay loyal to their wife or husband.

Kirpan

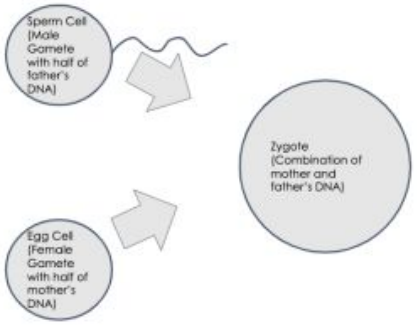
Sikhs are required to carry a small sword at all times known as a Kirpan. Most Sikhs wear it under their clothes. This is used to protect the weak and needy, as well as for self defence. It should only be drawn as a last resort in a righteous cause and never used in anger. It is legal in the UK for Sikhs to carry the Kirpan on them – even at school.

Some Kirpans have a safety protection on them, which means that the blade will not pull away from the scabbard on the first pull. This delay by having to pull again at the blade allows the Sikh to think again about their actions and if it is right to use violence. This prevents them from carrying out an action they may regret. Wearing the Kirpan gives you the power to kill someone, therefore you have to control your anger more than the other person who does not carry such a weapon. The word Kirpan comes from Kirpa which means an act of kindness, while aan means honour and self-respect. To call it a dagger or a knife is insulting as the concept behind it is to follow the path of high principles and pure actions.

Science

Variation

1. **Variation** is the different **characteristics** between individual organisms.
2. There is variation between populations of different species.
3. There is also variation within a species.
4. Examples of variation within humans include hair colour, eye colour, height, weight, skin colour, nose shape and finger length.
5. Variation can be caused by **inherited** (genetic) factors, **environmental** factors or a combination of the two.
6. **Characteristics** can be physical, behavioural, and physiological.
7. Characteristics are **inherited** from parents through reproduction.
8. Inherited variation is caused by the fusing of **gametes** in sexual reproduction and by **random mutations** in DNA.
9. The DNA inherited that causes a characteristic is called the **genotype**.
10. The **phenotype** is the physical characteristic resulting from the genotype.
11. DNA that is passed to offspring can be randomly mutated and result in new phenotypes that were not present in previous generations.



Artificial Selection

12. Crops and domesticated animals are the result of artificial selection (selective breeding).
13. **Selective breeding** is when **humans choose** plants or animals with particular **characteristics** to breed.
14. Selective breeding is continued over many generations until the desired characteristic in the offspring are present.
15. These characteristics are chosen for appearance or for their usefulness to humans.
16. Examples of selective breeding are pet dogs, crops resistance to disease, cows that make a lot of milk.
17. Selective breeding can cause inbreeding if closely related individuals are used so that offspring have inherited disease.

Natural Selection

18. Within a community, organisms compete for biotic and abiotic factors to survive and reproduce.
19. **Adaptations** are characteristics that allow an organism to survive and **reproduce** in its habitat.
20. Adaptations can be physical structures, behavioural or functional.
21. **Natural selection** is when **variation** in the population makes some organisms **better suited** to live and reproduce in a particular environment.

Evolution

22. **Evolution** is a change in the inherited characteristics of a population **over time**, caused by natural selection.
23. Evolution can cause the formation of a new species.
24. If two populations cannot interbreed to form fertile offspring, then they are different species.
25. **The Theory of Evolution by Natural Selection** states that all life has evolved from simple organisms more than three billion years ago.

Extinction and Human Impact

26. **Extinction** is when there are no living individuals of a species left in the wild and in captivity.
27. Extinction can be caused by **changes** to **habitats**, new **predators** or **competitors**, or new **diseases**.
28. **Extremophiles** are organisms that live in extreme conditions of temperature, pH, salt or pressure.
29. This is an extreme example of how environmental pressures result in species specifically suited to thriving in that environment.
30. An **ecosystem** is made up of populations of different species interacting with each other and the abiotic environment.
31. Each species competes with other species for **natural resources**.
32. A variety of species helps to maintain the cycling of nutrients and population control.
33. The more species and the more variation in the ecosystem, the more **resilient** it can be to environmental disturbance.

Science

Rock cycle

1. Magma and lava are **molten** (melted, very hot liquid) rock.
2. **Magma** is molten rock underground.
3. **Lava** is molten rock above ground.
4. When molten rock cools it solidifies to form igneous rocks.
5. Igneous rocks formed from magma underground are **intrusive** rocks.
6. Intrusive rocks cool slowly and have large crystals.
7. Igneous rocks formed from lava above ground are extrusive rocks. E.g., granite.
8. **Extrusive** rocks cool quickly and have small crystals. E.g., obsidian.
9. Rocks can be broken down into small pieces by **weathering**.
10. Weathering can be physical e.g., water getting into cracks and expanding when it freezes, forcing the crack wider.
11. Weathering can be chemical e.g., acid rain reacting with the rock to make salts.
12. Weathering can be biological e.g., tree roots forcing cracks wider.
13. **Erosion** is the movement of pieces of rock away from where they started.
14. Erosion can involve the wind, flowing water or ice, and gravity.
15. When pieces of rock sink to the bottom of lakes or seas they form layers of sediment. This is **sedimentation**.
16. Layers of sediment build up in layers and the bottom layer becomes compressed.
17. Dissolved minerals fill any spaces and bind rock particles together; this is **cementation**.
18. Sedimentation, compression, and cementation form sedimentary rocks. E.g., chalk or sandstone.
19. If rocks are pushed deep underground, they experience tremendous heat and pressure.
20. Heat and pressure change the structure of igneous and sedimentary rocks to form metamorphic rocks. E.g., marble formed from chalk.
21. The formation of rocks is related to each other in the rock cycle.

Water cycle

22. Water constantly evaporates from land surface, rivers, and the sea.
23. Sublimation is solid turning into a gas.
24. Water sublimes from ice and snow.
25. As water vapour rises it condenses into droplets.
26. Clouds are formed from **condensed** water droplets.
27. The droplets in clouds often freeze.
28. When droplets in clouds are heavy, they fall back to earth as **precipitation**.
29. Precipitation is hail, rain, sleet, and snow.
30. Water that falls over the sea goes back into the sea.
31. Water that falls over land goes into rivers or groundwater and makes its way back to the sea.
32. This cycle is called the water cycle.
33. The water cycle provides fresh water for animals and plants on land.
34. Plants take water from the ground and move it to their leaves where it evaporates into the atmosphere; this is **transpiration**.
35. Animals and plants produce water through **respiration**.
36. Animals **excrete** water in urine, faeces, and sweat.
37. Animals and plants decay when they die, which releases water.

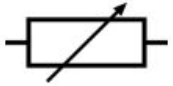
Electrical Circuits

1. **Current** is the **rate of flow of charge** and is measured in **Amps** (A) by an **Ammeter**.
2. Ammeters are connected in series.
3. Current transfers energy.
4. Current needs a **complete circuit** to flow.
5. Voltage is the **amount of energy** shifted from the power source to the moving charge, or from the charge to the circuit component
6. Voltage is measured in **Volts** (V) using a **Voltmeter**.
7. Voltmeters are connected in parallel.

Resistance

8. Resistance **decreases current**.
9. Resistance is measured in **ohms** (Ω).
10. Resistance is added by **all components.**
11. Electrical conductors have low resistance.
12. Electrical insulators have high resistance.
13. The circuit symbol for a resistor is:

14. A **variable resistor** can **change** the resistance in a circuit, whereas other resistors have a fixed resistance that cannot be changed.
15. The circuit symbol for a variable resistor is:



Ohm's Law

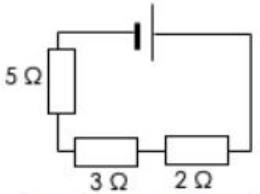
16. Current through a component depends on both **resistance** of the component and **voltage** cross the component.
17. **Increasing** the **voltage** gives the charges a bigger push, which **increases** the **current**.
18. **Increasing** the **resistance** makes it harder for the current to flow, which **decreases** the **current**.
19. Current, voltage or resistance can be calculated using the equation:
    $V = IR$ **(Ohm's Law)**.

Measuring Resistance

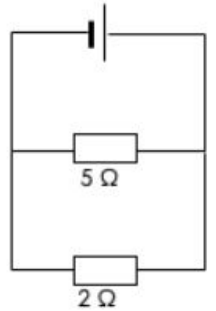
20. Resistance is measured by measuring voltage and current and using $R = \frac{V}{I}$
21. A **longer wire** has a **greater resistance.**
22. Resistance of a wire is also affected by the type of metal the wire is made of.

Resistance in Series and Parallel Circuits

23. Resistance in **series** is the **sum** of individual resistors.



24. The total resistance of this circuit is **10 Ω.**
25. Resistance in **parallel** is **less than** the **lowest** resistance branch.



26. The resistance of this circuit is **less than 2 Ω.**

Science

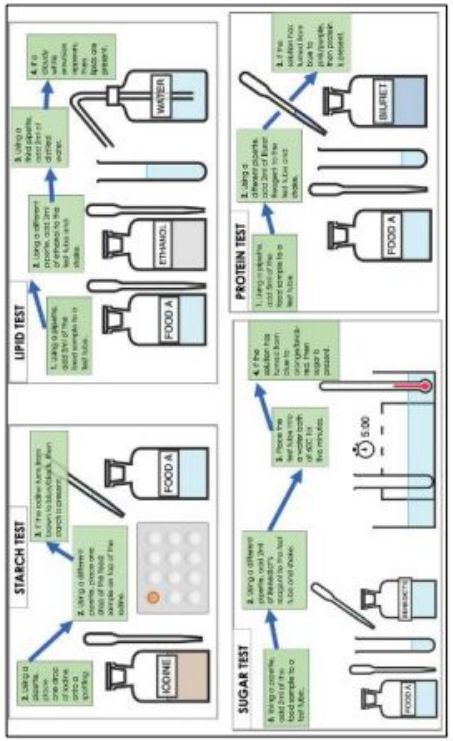
Diet and Nutrition

1. The contents of a healthy human diet include carbohydrates, lipids (fats and oils), protein, vitamins, minerals, dietary fibre and water

2. A balanced diet includes all the nutrients our body needs in the **right quantities**
3. **Carbohydrates** are important to provide energy. Carbohydrates are found in foods such as bread, potatoes, rice and pasta
4. **Lipids** (fats) are important for providing energy and insulation. Lipids are found in foods such as nuts, dairy products, meat, oils and sweets
5. **Proteins** are important for growth and repair of cells and tissues. Proteins are found in foods such as eggs, pulses, fish, meat, nuts and dairy products
6. **Vitamins** and **minerals** are important because they all have roles in essential processes in the body. Vitamins and minerals are found in high quantities in fruit and vegetables, but are provided by all parts of the diet
7. Calcium is an example of a mineral used in making bones and teeth
8. **Fibre** is important for adding bulk to food and helping it pass through the digestive system. Fibre is found in foods such as fruit, vegetables and wholegrain cereals
9. **Water** allows for transport of substances around the body and for chemical reactions to occur in cells
10. Malnutrition occurs when a person does not have a balanced diet
11. Imbalances in the diet can result in health consequences, including obesity, starvation and deficiency diseases

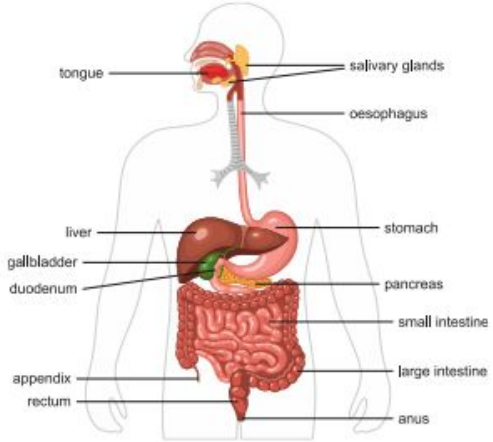
Food Tests

12. **Iodine** solution changes colour from brown to black in the presence of **starch**
13. **Benedict's** reagent changes colour from blue to orange/red when heated in the presence of simple sugars such as **glucose**
14. **Biuret** reagent changes colour from blue to purple in the presence of **protein**



The Digestive System

15. The digestive system **breaks down** molecules in food into soluble substances that can be **absorbed** and used by cells
16. Food passes through the **mouth**, **oesophagus**, **stomach**, **small intestine**, **large intestine**, and **rectum**



17. **Mechanical** digestion is the physical cutting, squashing and churning of food in the digestive system, e.g. by teeth or the stomach
18. **Chemical** digestion is when enzymes and other chemicals are used to speed up reactions in the digestive system
19. In the mouth, mechanical and chemical digestion occur
20. The salivary glands secrete enzymes which begin the process of chemical digestion
21. The oesophagus moves food into the stomach
22. In the stomach, mechanical and chemical digestion occur
23. The stomach contains acid
24. Water is absorbed into the bloodstream from the large intestine
25. Undigested food leaves the digestive system via the anus
26. Bile is made in the liver and stored in the gall bladder
27. Bile is alkaline and neutralises the acid in the stomach

The Small Intestine

28. **Chemical** digestion takes place in the small intestine. Small, soluble molecules move into the bloodstream by **diffusion**
29. The small intestine is well adapted to its function because it has many **villi** which increase the **surface area** to increase diffusion of nutrient molecules into the blood.
30. It also has a good **blood supply** which allows nutrient molecules to be absorbed into the blood

Enzymes

31. Enzymes speed up chemical reactions in the body
32. Digestive enzymes break down large nutrient molecules into smaller molecules that can be absorbed into blood and used by cells
33. **Carbohydrases**, such as amylase, break down **carbohydrates** into simple **sugars**
34. **Lipases** break down **lipids** into **glycerol** and **fatty acids**
35. **Proteases** break down **proteins** into **amino acids**
36. The lock and key theory models how enzymes work by having an active site that is a specific shape to the substrate it joins to

Plant Nutrition

37. Plants require minerals for healthy growth
38. Plants need **nitrates** to make proteins for growth.
39. Plants need **magnesium** to make chlorophyll.
40. Plants get the magnesium and nitrates they need from the **soil** via their **roots**
41. Plants can be damaged by deficiencies. A deficiency in magnesium affects **photosynthesis**

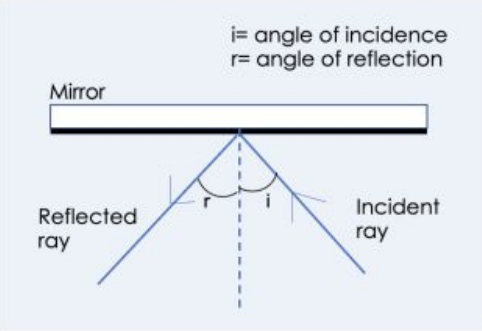
Science

Understanding Light

1. Light travels at 300 million metres per second (m/s).
2. Light travels faster than sound.
3. Light always travels in straight lines from a **luminous** object.
4. **Shadows** form when light is blocked by an **opaque** object.
5. **Ray diagrams** can show how light reflects off mirrors, forms images, and refracts.
6. Ray diagrams are always drawn with a ruler and pencil.
7. Angles are measured from the normal line with a protractor.
8. **The normal line** is the dotted line from which angles are measured, at right angles (90°) to the surface.
9. Arrows are used to show the direction the light is travelling in.
10. **Transparent**: A material that allows most light to pass through it.
11. **Translucent**: A material that allows some light to pass through it.
12. **Opaque**: A material that allows no light to pass through it.

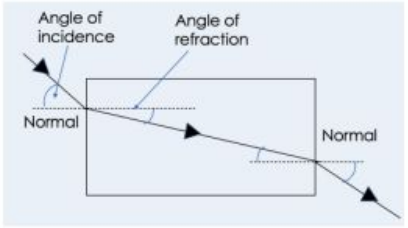
Reflection

13. Reflection occurs when light hits a smooth surface (e.g. a mirror).
14. The light hits the surface and is reflected into the eye.
15. The angle of incidence is equal to the angle of reflection – this is the law of reflection.



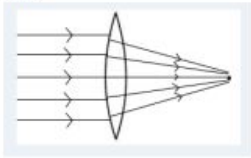
Refraction

16. Refraction is the **change** in the **direction** of light going from one material (**medium**) into another.
17. This change in direction is because light changes **speed** when it moves from one medium to another.
18. When light enters a **more dense** medium it bends **towards** the normal.
19. When light enters a **less dense** medium it bends **away** from the normal.
20. Refraction in water makes objects look as though they are nearer the surface than they actually are.

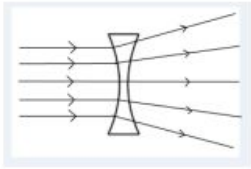


Lenses

21. Lenses refract light.
22. **Convex** lenses are thicker in the middle and refract light to a focal point.



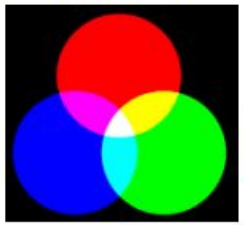
23. **Concave** lenses are thinner in the middle and scatter the light (there is no focal point).



24. In the eye, the cornea and lens are both convex lenses and help to focus light onto the retina.

Colour

25. Prisms cause light to be dispersed.
26. **Dispersion** causes the white light to split into seven **component** colours called a **spectrum.**
27. **Spectrum:** A band of colours produced by separation of the components of light because they are each refracted differently.
28. The order of the colours is always the same ROYGBIV: red, orange, yellow, green, blue, indigo, violet.
29. **Red** light is **refracted** the least and **violet** is refracted the most.
30. Red, green and blue are called the **primary colours** of light.
31. Yellow, magenta and cyan are the **secondary colours** of light, made from combinations of the primary colours.
32. **White light** is produced from the **combination** of **all the colours**.



33. Objects appear the colour that they reflect, e.g. a red apple appears red because it reflects red light and absorbs all other colours

34. White objects appear white because they reflect all colours
35. Black objects appear black because they absorb all colours

Spain and Spanish-speaking countries: Holidays and tourism

Talking about a past holiday

me bañé	I bathed, swam
me bronceé	I got a tan
comí bien	I ate well
conocí la cultura del país	I got to know the culture of the country
probé platos nuevos	I tried new dishes
me senté en la playa/al lado de la piscina/bajo una sombrilla	I sat on the beach/next to the pool/under a sunshade
tomé el sol	I sunbathed
visité los monumentos	I visited monuments
compré recuerdos	I bought souvenirs
me alojé en un hotel	I stayed in a hotel
lo malo fue ...	the bad thing was that...
lo bueno fue que ...	the good thing was that ...

El hotel era (The hotel was)...
- *...estupendo* (great)
- *...un hotel de lujo* (a luxury hotel)

Tenía (It had)...
- *...buenas instalaciones* (good facilities)
- *...vistas al mar* (sea views)
- *...aire acondicionado* (air-conditioning)

Hizo (It was)...
- *...muy buen tiempo* (very good weather)
- *...un tiempo fatal* (terrible weather)

Me gustó (I liked)...
- *...la comida* (the food)
- *...la vida nocturna* (the nightlife)

Las vacaciones fueron... (The holidays were...)
- *...un fracaso total* (a total failure)
- *...fenomenales* (fantastic)

¿Qué tipo de vacaciones te gusta?	En general prefiero las vacaciones activas/de sol y playa porque soy una persona deportista/me encanta tomar el sol ...
¿Qué haces normalmente durante las vacaciones?	Normalmente voy de vacaciones con ... y nos alojamos en ... viajamos en ... hacemos muchas actividades, por ejemplo ...
¿Qué hiciste el verano pasado?	El verano pasado hice muchas cosas distintas. Primero fui ... hice ... visité ... también viajé a ... y lo pasé bien/mal ...
¿Crees que las vacaciones son importantes?	Creo que las vacaciones son esenciales porque ayudan a reducir el estrés y salir de la rutina. Además ...
¿Cómo serían tus vacaciones ideales?	Si tuviera muchísimo dinero, iría a una isla tropical ... viajaríamos en primera clase y nos alojaríamos en un hotel de cinco estrellas.

Types of holiday

el ecoturismo	ecotourism
el crucero	cruise
el turismo de bienestar/ aventura	wellbeing/adventure tourism
el turismo cultural	cultural tourism
el turismo de sol y playa	beach holidays
las vacaciones activas	active holidays
el paquete con todo incluido	all-inclusive package
las vacaciones de invierno/ nieve	winter/snow holidays

Accommodation

el alojamiento (de lujo)	(luxury) accommodation
alojarse	to stay, lodge
un albergue juvenil	youth hostel
un camping	a campsite, camping
una tienda	tent
un hotel (de tres estrellas)	a (three-star) hotel
una pensión	boarding house, B&B
el balcón	balcony
las instalaciones	facilities
la terraza	terrace
la cama	bed
la piscina	swimming pool

Booking a room

Quiero (I want)
Quisiera (I would like)
- *...pensión completa* (full board)
- *...media pensión* (half board)
- *...una habitación doble* (a double room)
- *...una habitación individual* (a single room)
- *...una habitación para dos noches* (a room for two nights)
- *...una habitación con vistas al mar* (a room with a sea view)

Advantages and disadvantages of tourism

Ventajas	Desventajas
Genera muchos empleos.	Está destruyendo la cultura y las tradiciones.
Crea experiencias positivas.	Algunos turistas se comportan mal y no respetan las costumbres regionales.
Tiene un efecto positivo en la economía.	La construcción de hoteles destruye el entorno natural.
Se han construido más carreteras y aeropuertos.	Tiene un efecto negativo en el medio ambiente.
Es una importante fuente de ingresos para el país.	

Spanish

Home and Locality: Transport

¿Cuál es tu medio de transporte preferido?	Prefiero viajar en ... porque en mi opinión es ...
¿Cómo vas al colegio cada día?	Normalmente voy al colegio a pie/en coche/en autobús, pero a veces voy ...
¿Te gusta hacer ciclismo?	Sí, me encanta hacer ciclismo porque es sano y práctico/ No, porque creo que es peligroso hacer ciclismo por las carreteras ... además ...
¿Cómo fuiste al colegio ayer?	Ayer fui al colegio a pie/en coche etc ... el trayecto fue rápido/corto etc. ...
¿Prefieres ir en coche o en autobús?	Prefiero el coche/el autobús porque ofrece muchas ventajas, por ejemplo ...
¿Cómo viajarás de vacaciones el año que viene?	El año que viene iré a España y viajaré en ... sería ...
¿Cómo mejorarías el transporte en tu región?	Primero, reduciría los precios de los billetes de tren, luego mejoraría ...

Useful vocabulary

el abono	season ticket	*el puerto*	port
la aduana	customs	*la gasolina*	petrol
el andén	platform	*el horario*	timetable
el asiento	seat	*el pasajero*	passenger
el atasco	traffic jam	*la parada (de auto-bús)*	(bus) stop
la autopista	motorway	*la estación*	station
el billete de ida/ de ida y vuelta	single/ return ticket	*el retraso*	delay
el conductor	driver	*la sala de espera*	waiting room
el destino	destination	*la tarifa*	fare
el equipaje	luggage		

Useful adjectives

a tiempo	on time	*moderno*	modern
barato	cheap	*puntual*	punctual
caro	expensive	*práctico*	practical
cómodo	comfortable	*rápido*	fast
eficaz	efficient	*retrasado*	delayed
gratuito	free	*ruidoso*	noisy
lento	slow	*tranquilo*	quiet
lleno	full	*vacío*	empty
incómodo	uncomfortable	*viejo*	old
ineficaz	inefficient		

Remember to make your adjectives agree!

Transport

el AVE	Spanish high-speed train
el avión	plane
el barco	boat, ship
la bicicleta	bike
el coche	car
el camión	lorry
el ferry	ferry
RENFE	Spanish rail
el tranvía	tram
el tren	train

Useful verbs

andar/caminar	to walk	*hacer cola*	to queue
aterizar	to land	*ir en bici*	to cycle
bajar	to get off	*llegar (a)*	to arrive
coger	to catch	*llevar*	to carry
conducir	to drive	*pagar*	to pay for
despegar	to take off	*salir (de)*	to leave
estar en huelga	to be on strike	*subir*	to get on
estar retrasado	to be delayed	*viajar*	to travel
esperar	to wait	*volar*	to fly

Quiero (I want) ...	Quisiera (I would like) ...
un billete de ida	a single ticket
un billete de ida y vuelta	a return ticket
reservar un asiento	to reserve a seat
reservar una excursión	to reserve a trip

Word families

Sometimes it can be helpful to remember words in 'families', e.g.

llegar (a) – to arrive /**la llegada** – arrival

salir (de) – to leave /**la salida** – departure

volar – to fly /**el vuelo** – flight

viajar – to travel /**el viaje** – journey/**el viajero** – traveller, passenger

Advantages and disadvantages of public transport

Ventajas	Desventajas
Reduce el número de vehículos en las carreteras.	Es incómodo y sucio.
Es beneficioso para el medio ambiente.	Siempre hay retrasos.
Es más barato que un vehículo privado.	Nunca queda un asiento libre en las horas punta.
Puede transportar a cientos de pasajeros.	El precio de los billetes es demasiado caro.
	Es menos eficaz que el transporte privado

Spanish

Uso internet Uso mi móvil	para	descargar / escuchar música sacar / subir fotos / selfis leer libros ver vídeos en YouTube ver series en Netflix chatear mandar mensajes hacer mis deberes	llamar a mis amigos por videollamada hacer la compra por internet jugar a videojuegos leer y escribir correos electrónicos buscar información usar internet navegar por internet usar mi móvil
Me encanta Me gusta Me mola No me gusta			

Uso internet / mi móvil Descargo / Escucho música Saco / Subo fotos / selfis Leo libros Veo vídeos en YouTube Veo series en Netflix Chateo por internet Mando mensajes Llamo a mis amigos por videollamada Hago la compra por internet Juego a videojuegos Leo y escribo correos electrónicos Hago mis deberes Busco información Navego por internet	raras veces a veces a menudo por la mañana por la tarde el fin de semana todos los días todo el tiempo	pero aunque sin embargo	no nunca	[another activity from column 1]
		y también		

Spanish

Mi aplicación favorita	es	...	porque ya que	es	divertida emocionante informativa sociable
				puedo	hablar con mis amigos mantenerme en contacto mirar las fotos de mis amigos relajarme
Mis aplicaciones favoritas son	son	...		son	divertidas emocionantes informativas sociables
Lo bueno es que				puedo	hablar con mis amigos mantenerme en contacto mirar las fotos de mis amigos relajarme
Una aplicación que no uso es	...	porque		es	aburrida adictiva
				me aburre	