

Knowledge Organisers



LYTTELTON
HIGH SCHOOL

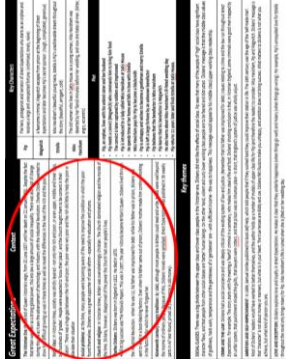
Year 9

Self Quizzing: How to study independently using Knowledge Organisers:



1) Before you begin, use a blank piece of paper to write out a list of up to 9 things that are on your KO. Most people find that about 5 is a sensible amount of topics to work with.

These are the things you are going to focus on moving to your Long Term memory. You should decide on this by choosing a section of your KO, like this:



Your list should be names, headings or titles of the things on the KO that you are remembering, like this:

The Victorian Era:	
Social class:	
Social problems:	
Church and religion:	

2) Now, you are going to begin to work at remembering by using the Read, Cover, Write, Check, Correct (RCWCC) strategy that you have been trained to use.

READ

Method 1: Find the **most important bits**, highlight, and **mentally verbalise** (this means that you should say them over and over again in your head).

Method 2: Make **links** between similar things, highlight, and **mentally verbalise** (this means that you should say them over and over again in your head).

HANDY HINT:
Many people find this easier to do if they close their eyes.

COVER

Cover up your KO, and keep mentally verbalising (saying it to yourself inside your head).

HANDY HINT:
If you are struggling here, it is because you didn't do enough mental verbalising when reading. Start the RCWCC again.

WRITE

Write as many things as you can remember in your table.

CHECK

Check how did by comparing your work to that section of your KO. Read very slowly and carefully, looking at the vocabulary that you used. How similar is it to what is on there? Remember – there can be subtle differences between words that can affect meaning.

CORRECT

Correcting your work is really important, but people often skip this bit. If you don't do it properly, the chances of it moving to your Long Term Memory are much less.

Remember that it is important to be really strict with yourself; if you have not quite been accurate, you must edit your work.

people were becoming aware of the need to improve the condition in which the poor found themselves. Dickens was a great supporter of social reform – especially in education and prisons.

Social problems:
were becoming aware
People ~~there~~ that there were poor people who needed help.
Dickens supported ~~which~~ to improve social reform, especially in education and prisons

Recording from

Observation

Primary source

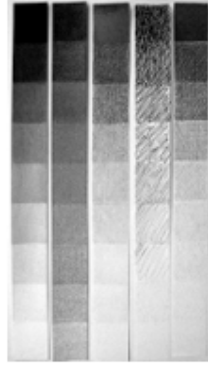
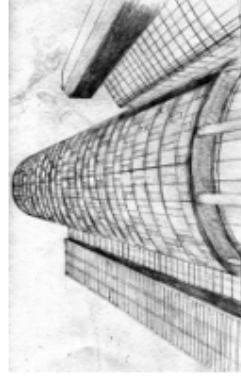
observational drawing:

drawing something real in front of you.

Secondary source

observational drawing:

drawing something from a picture.



Grades of Pencils

Pencils come in different grades. The softer the Pencil, the darker the tone.

H = hard, B = black (soft)

In Art, the most useful

pencils are B, 2B and 4B.

If your pencil has no

grade

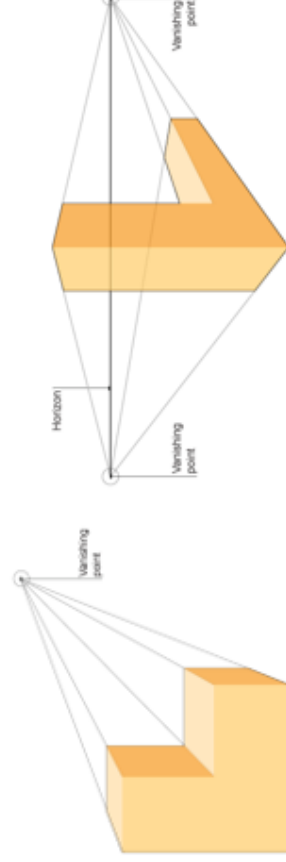
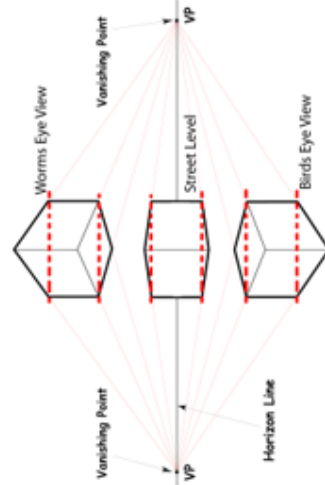
it is likely to be an HB

(hard black in the

middle

of the scale)

Tone	A tone is produced either by the mixture of a colour with grey, or by both tinting and shading.
Shade	The mixture of a colour with black, which increases darkness.
Tint	The mixture of a colour with white, which increases lightness.
Mark making	Different lines, patterns, and textures we create in a piece of art. It applies to any art material on any surface, not only paint on canvas or pencil on paper.
Composition	The position and layout of shapes on the paper.
One point perspective	A drawing has one point perspective when it contains only one vanishing point on the horizon line. This type of perspective is typically used for images of roads, railway tracks, hallways, or buildings viewed so that the front is directly facing the viewer.
Two point perspective	A drawing has two vanishing points placed on the horizon line. This type of perspective is typically used for images of streets so you can see different angles.
Vanishing point	A point on the horizon line where the parallel lines converge.
Horizon line	The line that separates the sky from the land.
Bird's eye view	An elevated view of an object from above, with a perspective as though the observer were a bird.
Worm's eye view	A view of an object from below, as though the observer were a worm - the opposite of a bird's-eye view.



Annotation	A note by way of explanation or comment added to a text or diagram.
Artistic Independence	Be able to comment on a piece of artwork and understand how that piece of art work has been created. Identifying what materials have been used and the stages of creation.

			
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Andy Peutherer • Scottish artist • Uses street art and graphic techniques to create his work. • His love of skateboarding in urban areas when he was younger allowed him to appreciate different angles and viewpoints of architecture.	Marc Allante • Born in Hong Kong (China). • Has lived in Hong Kong, Sydney (Australia) and London – his work has been inspired by merging both eastern and western influences. • Drips are part of his signature style.	Antoni Gaudi • Born: 25th June 1852, Spain • Died: 10th June 1926 – Buried in Sagrada Familia. • He was a Spanish architect. • He was predominantly inspired by natural forms. • Barcelona (Spain) is the best place to visit to see his work (buildings).	John Piper • Born: 13th December 1903. • Died: 28th June 1992 • Famous for painting and printmaking • Was an official war artist in WW2. The bombed and damaged architecture is what he is most famous for.
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When designing a piece of artwork you must: • Use primary research (drawings/photographs) as starting points. • Use artists' styles to inspire you. • Be creative with composition. • Try to test every section of your piece before you create it.		
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What makes a successful artist research page? You must include: • Artist's name (title) • Imagery of the artist's work • Annotation and your own opinion (facts about the artist as well as analysing the artist's work) • Your own drawings or 'mini studies' of the artist's work. • Consider presentation of your page. Try to make your page reflect the artist's style (through use of colour or even media you choose to use).	What makes a successful artist research page? You must include: • Artist's name (title) • Imagery of the artist's work • Annotation and your own opinion (facts about the artist as well as analysing the artist's work) • Your own drawings or 'mini studies' of the artist's work. • Consider presentation of your page. Try to make your page reflect the artist's style (through use of colour or even media you choose to use).
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What are the Core Technical Principles?		
1	New & Emerging Technologies	These include information technology, educational technology, nanotechnology, biotechnology, robotics, artificial intelligence.
2	Energy generation and Storage	Fossil fuels, nuclear power, renewable energy (hydroelectricity, solar power, wind power, wave power etc), batteries.
3	Developments in New Materials	Smart materials (eg Shape Memory Alloys), nanomaterials (eg graphene), metal foams, composites (eg GRP & CFRP).
4	Systems Approach to Designing	Inputs (eg sensors, switches), processes (eg timers, microcontrollers, counters) and outputs (eg buzzers, led's, lcd displays etc).
5	Mechanical Devices	Changing type and direction of motion using levers, linkages, gear trains, pulleys & belts, cams etc
6	Characteristics and Working Properties of Materials	Paper & card, wood (hard, soft, manufactured board) metals & alloys (ferrous & non-ferrous), polymers/plastics (thermoplastics & thermosets), composites (concrete, fibreglass), textiles etc.



Electric cars are becoming more common as batteries have become smaller and lighter yet more powerful. Advances in robotics and artificial intelligence (AI) mean that driverless vehicles are no longer a distant dream.

More and more energy is being generated from renewables sources like the wind, the sun, rivers and the oceans.



Modern composites such as carbon fibre are extremely strong and very lightweight. They are increasingly being used to make products traditionally made from steel and aluminium.



Nanomaterials are so thin (just an atom or so thick) that they are considered two dimensional. They exhibit a range of unusual properties due to their huge surface area.

There is now more computer power in an average smartphone than there was in the first mission to the moon.



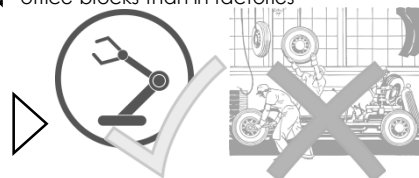
GCSE Design & Technology/KO/Core Technical Principles

1 New & Emerging Technologies and their effects on;	
Industry	Design & organisation of workplace, tools & equipment, automation, robotics
Enterprise	Crowd funding, virtual marketing & retailing, co-operatives, fair trade.
Sustainability	Finite & non-finite resources, waste disposal etc.
People	Changing job roles and the way we work, technology push & market pull.
Culture	Respect for people of other faiths & beliefs, changes in fashion trends etc.
Society	Designing products which have no negative impact on others, design for the elderly & disabled.
Environment	Continuous improvement, efficient working, pollution, global warming.
Production Techniques & Systems	Automation (CAD/CAM, robotics, AI), flexible & lean manufacturing systems, just in time (JIT)
How the critical evaluation of new and emerging technologies informs design decisions	Planned obsolescence, design for maintenance, ethics, environmental concerns.



Today, particularly in the developed world, more people are likely to work in office blocks than in factories

Robots have largely replaced humans in the manufacturing industry. With the advance of artificial intelligence (AI) robots can almost think like humans too!



Computer aided design and computer aided manufacturing (CAD/CAM) has been a major factor in the automation of the workplace. CAD/CAM allows products to be designed and modelled in 3D before final manufacture.



Today's designers are designing for increasingly diverse societies made up of different nationalities, cultures, beliefs, ages and abilities.

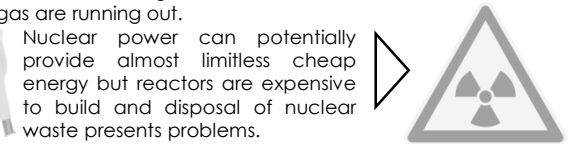
Greater awareness of environmental issues such as global warming has led to greater control over pollution and a continued drive toward more efficient ways of working. We have begun to appreciate many of the earth's resources are finite and that there is a need to reduce, re-use and recycle.



2 Energy Generation & Storage	
Fossil Fuels	How is electricity generated from coal, oil, gas? Fossil fuels burnt to heat water, steam drives turbine which produces electricity, arguments for & against
Nuclear Power	How is electricity generated from nuclear power, nuclear reactors generate heat to heat water, steam drives turbines which produce electricity, arguments for & against
Hydroelectricity	How is hydroelectricity generated? Harnessing power of fast flowing rivers or potential energy stored in mountain lakes, arguments for & against
Solar Power	How is electricity generated from solar energy? Direct solar power using photovoltaic (PV) panels to convert sunlight into electricity or indirect using concentrated solar power to heat water, arguments for & against
Wind Energy	How is electricity generated from wind energy? Wind driven turbines, wind farms, arguments for & against
Wave Energy	How is electricity generated from wave energy? Waves movement forces air through turbines which then produce electricity, arguments for & against
Tide Energy	How is electricity generated from tides? Ebb and flow of tide harnessed in similar way to hydro-electricity, seawater passes through turbines which then produce electricity, arguments for & against
Energy Storage	Kinetic pumped water systems, batteries (eg alkaline, zinc carbon, lithium, rechargeable), choosing appropriate energy sources



Fossil fuels still provide us with the bulk of our energy but there is increasing awareness that reserves of coal, oil and gas are running out.



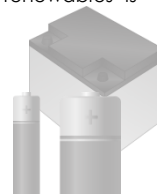
Nuclear power can potentially provide almost limitless cheap energy but reactors are expensive to build and disposal of nuclear waste presents problems.



Hydroelectricity is a 'renewable' energy source. It is generated from the power of water falling from a height like from behind a dam to drive a turbine.



More and more of our energy is being generated from other 'renewables' such as the wind, the sun and the oceans. The technology behind harnessing energy from renewables is continuously improving.



One of the difficulties associated with renewables is how to store surplus energy for use later. Recent advances in 'battery technology' have largely addressed this issue and batteries continue to get better, last longer and for less money.

GCSE Design & Technology/KO/Core Technical Principles	
3 Developments in Modern Materials	
Smart Materials	Materials that can have one or more properties changed by external stimuli such as stress/pressure, temperature, light. These include ; Shape Memory Alloys (SMA's), thermochromic & photochromic pigments , LCD's etc
Nanomaterials	Materials with at least one dimension less than 100 nanometres, where 1 nanometre is one millionth of a millimetre. Nanomaterials are just one atom or molecule thick and usually found as surface coatings applied to other materials. These include graphene, carbon nanotubes etc
Metal Foams	Metals with gas introduced in the molten stage then allowed to cool. These are strong, stiff yet extremely lightweight. Aluminium, copper and titanium are 'foamed' in this way. Titanium foam is used to replace bone.
Modern Composites	Glass Reinforced Plastic (GRP) and Carbon Fibre Reinforced Plastic (CFRP) use woven material (typically glass or carbon strands) as a reinforcement with polyester or epoxy resin matrix
Technical Textiles	Breathable waterproof fabrics, flame retardant/fire & heat resistant, conductive, synthetic & semi-synthetic (blended)
Properties & Characteristics	Classify a range of materials by type and properties. Extract information about materials from technical specification, select suitable materials. Properties; tensile & compressive strength, stiffness, hardness, ductility, conductive, semi-conductive, shape memory, heat resistant etc



Modern composites are used extensively in today's aircraft like this Airbus A380. They are even used in high stress areas and for structural components traditionally made from aluminium alloys.



Liquid crystals are 'smart materials' which change colour or opacity when an electric current is applied. Liquid Crystal Displays (LCD's) are now used in most electronic devices from watches to televisions.



Technical textiles include breathable waterproof fabrics such as Goretex, flame resistant fabrics like Nomex as well as various geotextiles, agrotextiles etc



Metal foams are extremely lightweight whilst retaining many of the properties of the base metal.



Graphene is a nanomaterial. It is a hexagonal lattice of graphite (carbon) atoms just one atom thick. Like all nanomaterials it has unusual properties. Graphene is transparent, flexible, highly conductive and up to 200 times stronger than the strongest steel. It has found numerous applications, particularly in electronics (transistors, supercapacitors LED,s, touch screens etc).



touch me

4 Systems Approach to Designing	
Inputs	Light sensors eg) light dependent resistors (LDR's), photo diodes, temperature sensitive resistors (thermistors), infra red beam, push switch, tilt switch, reed switch, micro-switch etc. Name a range of input components, understand how they interact & operate. Select by extracting information from technical specification
Processes	Microcontrollers, programmable integrated circuits (PIC's), timers, amplifiers, counters and other 'decision making' components which process signals from inputs and send new signals to outputs. These provide functionality to products or parts of products. Name a range of process components, understand how they interact & operate. Select by extracting information from technical specification
Outputs	Light bulbs, LED's, buzzers, bells, speakers, LCD displays, motors etc. Outputs provide a visual, audible or other response to given inputs. Name a range of output components, understand how they interact & operate. Select components by extracting information from technical specification

A light dependent resistor (LDR) is an analogue sensor whose resistance changes in response to a change in the level of light.

A thermistor is an analogue sensor whose resistance changes with temperature.

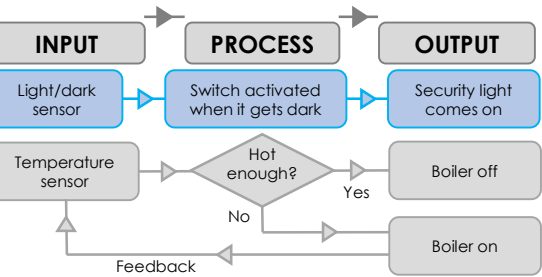
A tactile switch is a digital sensor which detects a light touch

Analogue components recognise an infinite number of values within a particular range whereas digital components recognise only two values, 'high' and 'low' (or 'on' and 'off').

Output devices include lamps, speakers, buzzers, light emitting diodes (LED's) and motors.

Microcontrollers, logic gates, integrated circuits (IC's) and programmable integrated circuits (PIC's) give functionality to a circuit or product.

System diagrams are types of flow charts used by designers to plan out the stages of a system.

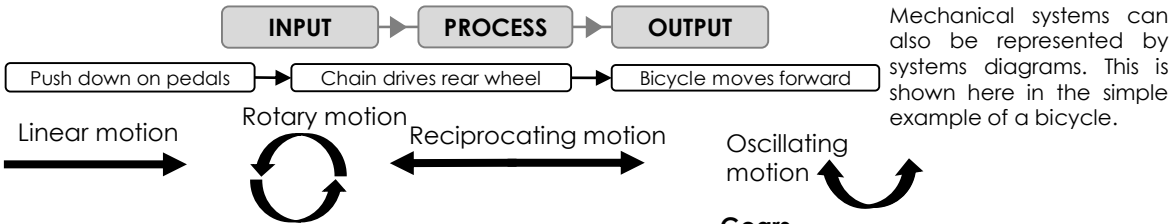


Actual systems may have more than one input, process or output.

This is an 'open loop' system.

This is a 'closed loop' system. It includes an extra element called 'feedback'.

GCSE Design & Technology/KO/Core Technical Principles	
5 Mechanical Devices	
Types of Movement	Know the function/operation of mechanisms/mechanical devices to produce linear, rotary, reciprocating & oscillating motion/movement. Visualise and represent 2D & 3D mechanisms and mechanical movement
Changing size & direction of force	Levers (1 st , 2 nd , 3 rd order), linkages (cranks, push/pull), rotary systems (gears, pulleys & belts, cams & followers). Know the function/operation of mechanical devices to change magnitude & direction of forces. Visualise and represent 2D & 3D mechanisms and mechanical movement

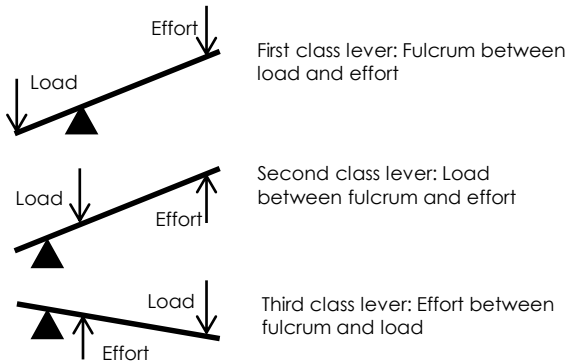


Mechanical systems can also be represented by systems diagrams. This is shown here in the simple example of a bicycle.

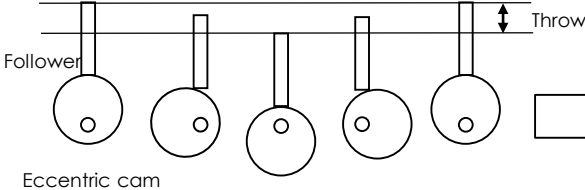
Mechanisms are used to;

- Change from one type of motion to another
- Change the direction of motion
- Change a force into a bigger or smaller force

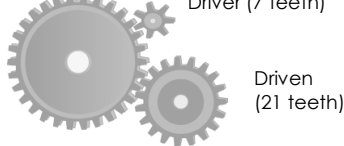
Levers



Cams

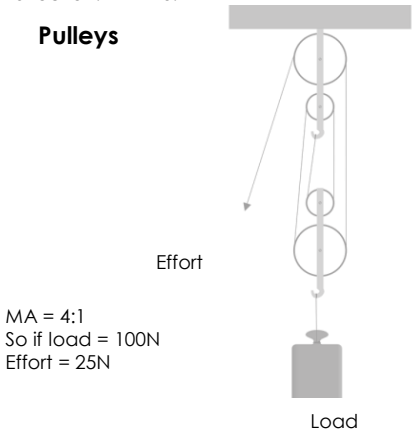


Gears



For every revolution of the driver the driven gear makes 1/3 of a revolution in the same direction. MA = 3:1

Pulleys



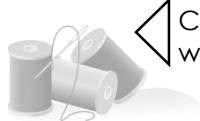
Mechanical Advantage (MA) = Load/Effort

6 Materials & Properties

Paper & Card	Papers & its properties/characteristics: Bleedproof, layout, cartridge, grid, layout, tracing, inkjet paper etc. Card & it's properties/characteristics: Corrugated cardboard, greyboard, duplex board, foamboard, solid white board, foil lined card, inkjet card. Graded by weight in grammes per square metre (gsm), surface texture.
Natural & Manufactured Timber	Hardwoods & their properties/characteristics: eg) Ash, beech, mahogany, oak, balsa. Softwoods & their properties/characteristics: eg) Larch, pine, spruce. Manufactured boards & their properties/characteristics: eg) Plywood, medium density fibreboard (MDF), chipboard, blockboard, oriented splinter board (OSB) etc.
Metals & Alloys	Ferrous metals & their properties/characteristics: eg) Cast iron, low carbon steel, high carbon steel. Non-ferrous metals & their properties/characteristics: eg) Aluminium, copper, tin, zinc. Alloys & their properties/characteristics: eg) Brass, bronze, stainless steel, high speed steel, solder.
Polymers (Plastics)	Thermoforming plastics (thermoplastics) & their properties/characteristics: eg) Acrylic (PMMA), polystyrene (PS), high impact polystyrene (HIPS), high density polythene (HDPE), polypropylene (PP), polyvinyl chloride (PVC), polyethylene terephthalate (PET). Thermosetting plastics (thermosets) & their properties/characteristics: eg) Epoxy resin, polyester resin, melamine formaldehyde, urea formaldehyde.
Textiles	Natural fibres & their properties/characteristics: eg) cotton, wool, silk. Synthetic fibres & their properties/characteristics: eg) Polyester, polyamide (nylon), elastane (lycra). Blended/mixed fibres & their properties/characteristics: eg) cotton and polyester (polycotton). Fabrics & their properties/characteristics: eg) Woven (plain weave), non-woven (felt, bonded fabrics), knitted fabrics
Properties	Physical properties: eg) Density, absorbency, fusibility, conductivity. Durability. Working properties: eg) Strength (tensile, compressive), hardness, stiffness, ductility, malleability, toughness, machinability.



Hardwoods are generally heavier, harder, stronger & more durable than softwoods with the notable exception of balsa, which is softer and lighter than most softwoods.



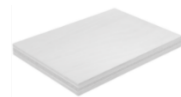
Cotton is often blended with polyester to make it harder wearing and quicker to dry.

Thermoplastics can be heated and formed over and over again whereas thermosets can not.



Most plastics are still made from fossil fuels and are not biodegradable. They therefore need to be re-used or recycled.

Manufactured board has a more uniform, homogenous nature than natural wood and can be produced in larger pieces.



Most ferrous metals are magnetic while most non-ferrous metals are not. This is useful when it comes to recycling.



Softwoods.

Coniferous trees with needle like leaves and cones.

Seasoning

Before we can use it we have to season timber to reduce the water content. If we don't it may warp, twist or bow.

HARDWOODS

Oak	Strong, durable attractive grain Expensive	Garden furniture, gateposts
Mahogany	A stable timber. Polishes well. Strong and fairly durable	High quality furniture
Beech	Tough and hard Not suitable outdoors	Work benches, toys
Balsa	Very lightweight and easy to cut Very soft	Model making
Jelutong	Light colour and straight grain	Model making and moulds for casting
Birch	Straight grain, easy to work Open to insect attack	Used as a veneer for plywood
Ash	Strong, tough, flexible Used as a veneer	Tool handles, sport equipment

Properties of timber

Hardness	Timber is generally softer than other resistant materials
Toughness	Timber is generally tough. When hit it will dent but not easily break
Durability	Properly seasoned timber lasts a long time. Some timber has natural oils
Elasticity	Timber is not generally elastic and will splinter when thin
Strength	Timber is stronger when pulled. Some timbers are denser so withstand crushing

Stock forms

PAR—Planned all round

PSE—Planned square edge

Mouldings

Dowel

Sheets:

2440x1200

Sources of timber

Cold climate: **Alpine**, softwoods

Temperate climate: **European**, soft & temperate hardwood

Tropical climate: **Tropical** hardwood

SOFTWOODS

Larch	Tough, durable and resists water	Cladding, yachts
Cedar	Very durable and easy to work Contains natural oils	Fences, sheds
Pine	Lightweight and easy to work but splinters	House construction, indoor furniture

Manufactured boards

Plywood	Veneers of timber glued together with the grain running at 90 degrees to the last Very structurally strong.	Laminate floors, furniture panels
MDF	Wood fibres compressed with glue to give large, smooth, flat sheets	Flat pack, curved furniture, building construction
Chipboard	Wood chippings compressed with glue into sheets Uses waste material	Kitchen and bedroom furniture, Shelving

Questions

- State 2 stock forms of timber
- Give 2 reasons why oak is suitable for outdoor use
- I want to make a rounders bat, what timber could I use? Why?
- Discuss the advantages and disadvantages of making a log store from pine

Find the meaning of: Veneer, grain, evergreen, warp, deciduous.

Also revise the meanings of: Hardness, toughness, durability, elasticity, tensile and compressive strength.

WOODS

WOODS

PLASTICS

PAPER & CARDS

Softwoods

Softwoods come from coniferous trees which are evergreen, needle-leaved, cone-bearing trees, such as cedar, spruce, fir and pine.

Name	Properties	Principal Uses
Pine	•Very light brown colour •Straight grained and sometimes knotty, fairly tough	•Cheap quality furniture, simple joinery
Spruce	•Creamy white colour •Not very tough	•Indoor work including bedroom and bathroom furniture

Hardwood

Hardwoods come from broad-leaved, deciduous trees. The main hardwood timbers include ash, beech, birch, cherry, elm, mahogany, oak and teak.

Name	Properties	Principal Uses
Ash	•Light brown colour •Slight grain, tough and flexible	•Tool handles, some sports equipment
Beech	•White to pinkish brown colour •Close grained, hard, tough but children's toys, warps easily	•Tool handles, furniture
Elm	•Light to medium brown colour •Interlocking grain, durable in water, tough, resists splitting	•Outdoor and indoor furniture
Mahogany	•Pink to reddish brown colour •Fine, straight, durable, some interlocking grain	•High end furniture
Oak	•Light brown colour, strong, hard, tough, open grained, corrodes steel screws and fittings	•High end furniture, interior wood work

Manmade Boards

Name	Properties	Principal Uses
Ply	Plywood is a composite material. Composed of individual plies / veneers of wood. The plies are glued together with synthetic resin.	•Cheap quality furniture, simple joinery. Plywood tends to be used in the construction industry for walls, roofs and floors.
Blockboard	Plywood is less likely to warp or split, due to this construction. Supplied in a range of sizes and thicknesses.	•Hardwood ply often used for quality flooring, kitchen and bathroom work and some furniture.
Chipboard	•It is made up of small chips of wood bonded together with resin and formed into sheets by compression.	•Used as a building material and for furniture manufacture including fitted kitchens / bedrooms.
Chipboard	•It is made up of small chips of wood bonded together with resin and formed into sheets by compression.	A strong and heavy board, unlikely to warp and twist. The plywood faces are normally beech or other natural woods.
MDF	•A quality board, mainly cheap. Composed of fine wood dust and resin pressed into a board.	•It is not as strong as plywood or block board, but it is not expensive. Chipboard is often covered with a plastic laminate or wood veneer and used in cheap furniture.
MDF	•A quality board, mainly cheap. Composed of fine wood dust and resin pressed into a board.	•Used widely in the building, shop fitting and furniture trades.
MDF	•A quality board, mainly cheap. Composed of fine wood dust and resin pressed into a board.	Can be worked, shaped and machined easily. Paint can be applied to it, without the need for an undercoat or primer (although finishes better with an MDF primer)

Thermoplastics

Can be heated and reshaped many times.

Name	Properties	Principal Uses
Polyamide (Nylon)	•Tough, fairly hard, self-lubricating resists wear, good resistance to chemicals and machines	•Gearing for power tools, curtain rail fittings and clothing
Poly(methyl methacrylate) (Acrylic)	•Gloss, hard but scratches easily, durable, brittle in small sections, good electrical insulator, machines and polishes well	•Signs, aircraft windows, covers for car lights, wash basins and baths
High impact polystyrene (HIPS)	•Light but hard plastic •Available in sheets but softens at high temperatures	•Common for school projects which include products of other castings or packaging
Polypropylene (PP)	•Light plastic, hard but can scratch easily, tough, resistance to chemicals, resists work fatigue	•Used for medical and laboratory equipment, seating, rope, some kitchen equipment
Polythene (LDPE)	•High resistance to chemicals, flexible, fairly soft, good electrical insulator	•Plastic bottles, toys, packaging film and bags
Polythene (HDPE)	•Gloss, hard, able to be sterilised	•Plastic bottles, toys, packaging film and bags
PVC	•Gloss, hard and hard wearing	•Used for car bodies and boats, fittings and good electrical insulator

Thermoset Plastics

Can be heated and shaped once, cannot be reshaped.

Name	Properties	Principal Uses
Epoxy resin (Epoxy, EI)	•Good electrical insulator, hard, brittle unless reinforced, resists chemicals	•Used for printed circuit boards (PCBs) and surface coatings
Polyester resin (FR)	•Gloss, hard, brittle unless laminated, good electrical insulator, resists chemicals	•Used for car bodies and boats
Urea formaldehyde (UF)	•Gloss, hard, strong, brittle, good electrical insulator	•Used for electrical fittings and adhesives
Phenol formaldehyde (PF, Bakelite)	•Hard and brittle	•Board and table top games and billiard ball

Paper

Paper weight and thickness is measured in grams per square metre (gsm).

Most paper is now manufactured from recycled paper sources. Virgin paper is made from 100% wood pulp and contains no recycled material.

Different types of paper and board have different uses, as shown in the table below:

Type	Description and Usage
Layout Paper	•Lightweight, inexpensive, thin white paper •Used for sketches and initial design, takes colour well
Tracing Paper	•Thin and translucent, expensive •Used for making manual copies of drawings
Cartridge Paper	•Quality white paper, available in multiple weights •Can be used for simple model work
Blotting Paper	•Smooth and hard, medium cost •Used for water or spirit based ink top pens
Coloured Paper	•Available in multiple colours and thicknesses •Used for mounting finished work and to apply colour surfaces to models
Grid Paper	•Printed square and geometric grids in multiple sizes, low cost •Used as a guide for model making

Card & Board

The thickness of cardstock (sometimes called just Board or Card) is measured in microns: one micron is one thousandth of one millimetre. Sometimes the thickness of cardboard is given in sheets. This refers to the numbers of sheets of paper that have been glued together to

Type	Description and Usage
Board	•Thickness (between 200 and 850 microns) •Range of colours •Use to create models •Thickness depends on usage
Corrugated Card	•Strong and lightweight •Used for packaging protection •Available in different thicknesses
Mounting Board	•High quality thick card •Used for final models and mounting work
Spiral Mount Tubing	•Strong •Good printable surface •Used for packaging
Duplicate	•Foam based board •Multiple finishes available •Used for food packaging

Topic: Factors affecting food choice

Religious Beliefs - A number of religions are associated with vegetarianism.
Nutritional Concerns - Many believe that a vegetarian diet is healthier than one that includes meat, and many studies have confirmed the benefits of vegetarianism.
Food Safety - Many food safety scares have been publicized over the past few decades, and the majority of these have involved meat.
Animal Rights Concerns - Animal rights is a primary concern of many vegetarians.
Unwanted Food Additives - Factory farms often dose their poultry and livestock with antibiotics and hormones.
Environmental Concerns - The production of meat and animal products often has adverse effects on the environment.
Concern for Labourers - Labour conditions in the meat industry often meet with scrutiny. Human rights are often disregarded, and worker safety often falls by the wayside.
Economic Concerns - Some believe that supporting the meat industry promotes world hunger. The amount of land required to raise one head of cattle, for example, could produce enough grain or vegetables to feed many times the number of people that the animal would.
Medical Conditions - People with certain medical conditions may benefit from a vegetarian diet. Prescription of such a diet is particularly common from doctors of alternative medicine.
Disease Scares- The Avian flu, hoof and mouth disease, and mad cow disease are examples of some of the disease scares that have been associated with the consumption of meat.

Religious special diets

Many religions include guidance on what is appropriate to eat in order to demonstrate faith. Below is a summary of what the main world religions advocate in terms of what their followers should or should not be consuming.

Religious-based Diets						
						
Judaism	Kosher	X	Kosher	X	Kosher	Not with meat
Buddhism	X	X		some	✓	✓
Hinduism	X	X	Restricted/ Avoided		?	X
Islam	Halal	X	Halal	X		X
Rastafarianism	X	X		no fish over 12"		X
Seventh Day Adventist	X	X		X	?	
Sikh	in some sects Halal or Kosher					X

In addition to this some religions advocate fasting at certain times of the year. For example, fasting is obligatory for every Muslim one month in the year, during Ramadhan. Each day, the fast begins at sun-rise and ends at sunset. During this time Muslims are asked to remember those who are less fortunate than themselves as well as bringing them closer to God. This also helps to give the digestive system a break. In contrast, when Catholics fast they restrict their meals to once a day. They may also abstain from one or more types of food such as during the period of Lent.

Religious-based Diets						
						
Protestants	Few Restrictions					
Roman Catholicism	Restricted on certain days					
Eastern Orthodox	Restrictions			Restrictions		
Jainism	X	X	X	X	X	X
Mormonism						X
Baha'i	some are vegetarians					X

Ethical special diets

Below is a summary of the different types of vegetarian diets people choose to follow and some of the main reasons why people choose a form of vegetarian diet.

Type of vegetarian	Animal foods excluded	Animal foods included
Lacto-ovo vegetarian	Meat, fish/ seafood, poultry	Dairy, eggs
Lacto vegetarian	Meat, fish/seafood, poultry, eggs	Dairy
Ovo vegetarian	Meat, fish/seafood, poultry, dairy	Eggs
Pesco/pesca vegetarian	Meat, poultry	Fish/seafood, eggs, dairy
Pollo vegetarian	Meat, fish/seafood	Poultry, eggs, dairy
Semi vegetarian (Flexitarian)	Meat, fish/seafood, and poultry most of the time	Dairy, eggs; on occasion meat, fish/seafood, poultry
Vegan	Meat, fish/seafood, poultry, eggs, dairy, honey, etc.	None
Fruitarian	Meat, fish/seafood, poultry, eggs, dairy	None; typically unprocessed and uncooked foods only

Medical special diets

Some people have to avoid certain foods due to allergies, intolerances or medical conditional they have. Medical conditions are not directly caused by one food but a healthy diet can improve the condition.

Anaemia: a deficiency of red cells in the blood, resulting in paleness and fatigue. Need to include foods rich in iron and vitamin C which the body needs to utilise iron.
Crohn's disease: a long-term condition; causes inflammation of the lining of the digestive system. Foods to avoid: alcohol and carbonated beverages; butter, margarine, oils; coffee, tea, chocolate; fatty foods and dairy products.
Diabetes: A condition where the body can't produce insulin which processes sugar. Foods to avoid include: sugar, pasta, white bread.
Gout: a disease in which defective metabolism of uric acid causes arthritis and episodes of acute pain. Foods to avoid include: red meat and offal, shellfish, sugary beverages, excessive alcohol.
High cholesterol: cholesterol is a fatty substance found in your blood. If you have too much cholesterol in your blood, it can increase your risk of heart disease. Foods to avoid: processed vegetable oils, crisps and other packaged foods, sugary treats.
Irritable bowel syndrome: a common disorder that affects the large intestine. Symptoms include cramping, abdominal pain, bloating, gas, and diarrhoea or constipation. Foods to avoid: too much fibre, chocolate, alcohol, caffeine or fructose, carbonated drinks, fried and fatty foods.



Peer Pressure

Peers are friends or people who influence your behaviour and choices directly or indirectly.

Food scares

The response to a food incident (real or perceived) that causes a sudden disruption to the food supply chain and to food consumption patterns.

Lifestyle

How active someone is on a daily basis affects their nutrient requirements.

Food trends

Food trends are widespread changes in food preferences.

Your skills

Some dishes require a range of techniques to prepare and cook; some people may avoid certain foods at home because they believe they cannot make it themselves.

Availability

This can refer to seasonal foods. It can also refer to meat which is at its best at certain times of year.

Food allergies

90% food related allergic reactions are caused by these 8 foods;

- Peanuts
- Tree nuts
- Milk
- Egg
- Fish
- Shellfish
- Soy
- Wheat



Food intolerances

Common food allergens

- Dairy products, including milk, cheese and yoghurt.
- Chocolate.
- Eggs, particularly egg white.
- Flavour enhancers such as MSG (monosodium glutamate)
- Food additives.
- Strawberries, citrus fruits and tomatoes.
- Wine, particularly red wine.



Topic: Food waste
As a country we generate a large amount of food wastage. According to the 'Love Food Hate Waste' website we throw away 7 million tonnes of food and drink from our homes every year in the UK, and more than half of this is food and drink we could have eaten.

The main types of foods that are thrown away as waste include fresh vegetables and salad, fresh fruit, bread, cakes, prepared foods such as pasta and rice, as well as meat-based meals and takeaways. On many occasions whole, unopened packs of these items are disposed of.

There are many reasons why we waste so much food. These include:

- The food has gone past its date for using.
- The food has an unpleasant smell, look or taste.
- The food has gone mouldy.
- Too much food was cooked leaving waste.
- Food has been left on the plate – this could be due to large portion size, dislike of food, or not feeling hungry.

Effect on the environment

To try to reduce the impact on the environment that food wastage can have, many areas of the UK have, as part of their recycling schemes, introduced food waste bins. Households are encouraged to place waste or leftover foods into the bins; the waste is then turned into compost or used to help generate energy.

When food is thrown away through the normal rubbish disposal system, it is taken to a landfill site where it will rot and as a result produces methane, a greenhouse gas which is much more harmful than carbon dioxide.

Financial implications of waste

When we waste food, not only are we throwing away food that could have been eaten, we are also throwing away money. 'Love Food Hate Waste' states that wasting food costs the average household £470 a year, rising to £700 for a family with children (the equivalent of around £60 a month).

Costs are also incurred by local authorities as they have to employ people to remove household waste and take it to landfill sites.

Ways to reduce food waste

- **Composting**
 - Vegetable peelings
 - Fruit peelings and waste
- **Leftovers**
 - Eaten the next day
- **Recycling**
 - Leftover cake to make a trifle
 - Leftover meat in a shepherd's pie
 - Leftover chicken in a curry
- **Only buying what you need**
 - Smaller size loaves of bread
 - Fridge packs for beans
- **Labelling**
 - Clearer Use By and Best Before Dates
- **Packaging**
 - Re-closable packs
 - Portion size guidelines on packaging
- **Cook the right amount of food**
 - Use a recipe and weigh and measure accurately.
- Teabags
- Light cardboard
- Eggshells
- Leftover potato in fish cakes
- Stale bread to make bread crumbs
- Not purchasing Buy One Get One Free offers
- Storage advice
- Modified atmosphere packaging for salad
- Plan your portion sizes

Topic: How food is caught

Many different types of fish are caught for food. Some of these include:

- Oily fish – mackerel, herring, salmon, trout tuna
- White fish – cod, plaice, haddock, sole, halibut, sea bass
- Shellfish – lobster, crab, prawns, mussels, scallops



Hook-and-line is a general term used for a range of fishing methods that employ short fishing lines with hooks in one form or another (as opposed to long-lines).

It includes hand-lines, hand-reels, powered reels, rod/pole-and-line, drop lines, and troll lines, all using bait or lures in various ways to attract target species.

Hand-lines use lines and baited hooks from a stationary or moving boat. Because hauling is slow, mechanised systems have been developed to allow more lines to be worked by a smaller crew. Hook and line fishing is more selective than other types of fishing in terms of species and size, and provides high quality fish. The method can be used on spawning fish as they normally only bite after completion of spawning. Lines are set for a relatively short time so that any unwanted species can often be returned live to the sea.

Method	Photo	Description	Used to catch	Advantages	Disadvantages
Trawling ; • pelagic • otter • beam • pair		Uses nets to catch the fish	• Anchovies • Tuna • Mackerel • Cod • Halibut	You can catch vast amounts of fish in one go.	The nets catch all kinds of fish, even the ones that they may not be trying to catch.
Purse-seining		Drawing a huge net around a school of fish	• Tuna • Herring • Mackerel	This method can be highly specific, with little bycatch, when targeting adult schools of one species.	Some tuna purse seine fishers set their nets on floating debris or on man-made 'fish aggregating devices' (FADs). These attract a range of fish. When nets are set on these FADs, the resulting bycatch of juvenile tuna and other marine life is high.
Dredging		Towing metal cages across the shellfish beds	• Scallops • Oysters • Clams • Crabs	It is fast and efficient. You are able to keep up with demand. So fishermen can also make more money.	The dredges stir up and disturb all the bottom dwelling fishes' habitat. In other words, all the living plants that grow on the lakes floor would be damaged.
Farmed fish		There are many species of fish that are raised in fish farms, due to the reduced amount of wild fish available	• Salmon • Trout • Cod • Sea bass	Cost effective for both the farmer and the customer.	Fish are reared in large numbers in rivers or in tanks, enclosures, lakes or at sea in sea cages, which can be overcrowded due to the amount of fish they contain
Lobster and cra		The pots are placed on the seabed using ropes. Dead fish are used as bait, which encourages crabs and lobsters to enter the pot where they are trapped and collected.	• Shellfish	It is regarded as being more friendly, as any other fish caught in pots can be put back to sea.	Buoy lines are known to entangle marine mammals. A few fisheries have problems with young seals getting their heads stuck in traps and drowning, but there are measures available to prevent this.

Topic: How food is grown

Main crops grown in the UK:

- Wheat
- Barley
- Oats
- Potatoes
- Sugar beet
- Vegetables (carrots, cabbage runner beans etc)
- Oilseed rape
- Fruits (apples, pears, plums, damsons, strawberries, raspberries blackberries etc)

When growing crops such as wheat and barley, a number of points must be considered by the farmer.

- General weather conditions for the area
- Which crops will grow well together?
- The nutrients the crops will need
- The resources the farmer has, including natural resources (land air sunlight), tools and equipment as well as manpower.

The process of growing crops includes stages such as:

- Preparing the soil
- Sowing seeds or plant seedlings
- Watering
- Controlling crop pests, fertilising, as well as weed control
- harvesting



- The UK doesn't produce all the food that is required to feed everybody due to population size and the climate, so some food is imported from other countries.
- E.g. some fruits and vegetables (exotic fruits) that are available in the supermarkets.

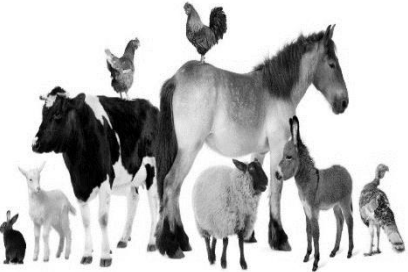
	Examples grown in the UK	Where it is grown	Additional information
Vegetables	 Artichoke, asparagus, aubergine, beetroot, brussels sprouts, cabbage, carrots, new potatoes, turnips, watercress.	Many of the staple vegetables we eat are grown in fields on large farms.	Some farms specialise in producing large quantities of one vegetable (e.g. carrots) but provide a number of different varieties providing supplies for many supermarkets and shops
Soft fruits	 Strawberries, raspberries, blackberries, gooseberries, blackcurrants, blueberries, red currants.	Most fruits are grown in polytunnels, a large polythene tunnel that is designed to protect the fruit from poor conditions. This will also guarantee a better quality product and reduce the need for pesticides.	Soft fruits are popular during the summer months – in season. Many fruits are grown by privately owned family-run farms Using this method of growing the fruits and other foods such as lettuces, cucumbers and peppers means the growing time for crops is extended.
Stone fruits	 Peaches, apricots, plums, nectarines, cherries, damsons, greengages.	Many stoned fruits are grown in the UK. Kent, Worcestershire and Herefordshire are popular areas for growing fruit trees due to the correct combination of soil and sunlight.	Stone fruit will continue to ripen after it is picked. If you're not going to eat it within a few days, keep it chilled in the top of the fridge for up to five days otherwise keep it in a fruit bowl. For maximum flavour, eat stone fruit at room temperature.
Hard fruits	 Apples, pears, medlar and quinces	Many hard fruits and stoned fruits are grown in the UK. They can be produced on a small, large or commercial scale.	Hard fruit such as apples can come in many different varieties and colours. Many apples are grown in orchards that are designed to make the most of the space available and maximise production.

Topic: How food is reared

Many animals reared on a large scale in factory farms to provide food to be sold in shops and supermarkets. Some animals are reared on smaller scale, in family-owned farms or one-animal specialist farms
It is estimated that each year approximately one million animals are killed to provide food.

Some examples of animals reared for food include:

- Cows and calves
- Deer
- Chicken
- Pigs
- Turkeys
- Sheep and lambs
- Ducks
- Geese
- Deer



Which British beef is in season when?

<u>Spring</u> Beef steaks Chicken Sausages Spring lamb	<u>Summer</u> Beef steaks Burgers Chicken Ham Lamb Pork spare ribs Saltmarsh lamb Sausages Venison
<u>Autumn</u> Chicken Grouse Ham Pork Sausages Venison	<u>Winter</u> Chicken Gammon Goose Partridge Pheasant Sausages Turkey Venison Wild duck

What is reared food?

Reared food means an animal has been brought up for the purpose of providing food in one way or another.
This could be through their meat or providing food sources such as eggs, milk or honey.

Topic: Organic farming

Pastoral farming

- The aim is to maximise the number of animals that can be reared.
- Focuses on profit and efficiency rather than animal welfare
- Conditions can often be described as basic or poor
- Animals have minimal space to move in, they are not allowed to roam around and are fattened up quickly: this can be through the use of drugs
- Many animals are reared in factory style farms and kept to produce foods. E.g. dairy cows will produce milk to be sold in supermarkets as well as producing milk to be used in the manufacturing of other dairy foods such as cheese.
- The cows live in large sheds, have limited space and limited or no access to sunshine or pasture.

Arable and horticultural farming

- Intensive farming is a method used by many farmers to increase food production.
- In intensive farming, fertilisers and pesticides are used to grow high-yield crops such as wheat.

Intensive farming

Action	Treatment	Explanation	Side effect
Remove competing plants from the crop growing area	Herbicide spray	Allows more energy to be transferred to the crop	Reduces biodiversity. May have harmful effect on health.
Remove animals that feed on the crop	Pesticide spray	Prevents energy being transferred from the crop to consumers	Reduces biodiversity. May poison helpful organisms.
Keep animals indoors	'Battery' farming	Reduces energy transferred to environment so more energy available for growth	Increased risk of disease. Lower quality product. Ethical concerns.

The effects of insecticides

Insecticides like **DDT** don't break down quickly. It's been responsible for a large reduction in bird numbers since intensive farming became widespread. DDT **accumulates** in food chains - as consumers eat large numbers of prey containing the insecticide. High levels of DDT have been found in birds of prey.

Pastoral farming

- The welfare of animals is always put first
- There are organic standards to meet;
- Animals are to be free-range and must have access to fields
- The living conditions have to meet high welfare standards and the animals must have a certain amount of space
- The diet has to be as natural as possible
- The animals must only be given drugs to treat an illness
- The animals cannot be given hormones which make them grow more quickly

Arable and horticultural farming

- Food is produced and grown as naturally as it can be under strict standards.
- There is a strong emphasis on farmers ensuring the protection of wildlife and the environment.
- Artificial and chemical fertilisers are not used
- Farmers use organic matter to help develop a healthier, fertile soil, and encourage wildlife to help to control pests and disease
- Crop rotation is encouraged. A farmer will plant a crop in a field one year and the next year animals are allowed to graze on the same field, adding manure to the soil and improving the fertility. The next year the field could be left empty (fallow) allowing the soil to recover.

Organic farming techniques

Technique	Replaces	Advantage	Disadvantage
Manure	Fertiliser	Recycles waste, improves soil structure	Difficult to apply and cannot control mineral content
Crop rotation	Single crop	Reduces disease and damage to soil composition	Less productivity. Less efficient to grow different crops.
Weeding	Herbicides	Less environmental damage, or health risk	Labour intensive
Nitrogen-fixing plants	Nitrogen fertilisers	Cheaper, longer lasting	Reduces area available for growing crops if part of a crop rotation

Alternatives to pesticides

Biological control is an alternative to using pesticides. By releasing a natural predator into the crop growing area, the number of pests can be reduced. This can have unforeseen consequences as the numbers of different organisms in the food web are changed. There have been examples of the predator becoming a more serious pest than the original problem.



Topic: Primary production

One of the first or primary stages of processing foods is to grow or rear a food so that it can be changed or transformed into a suitable state to either be eaten or used in the production of other products.

A **primary food** is not edible in its original state; it has to be changed or have some form of preparation before it can be eaten. An example would be a raw potato. Sometimes, the **primary processing** can be quite basic, for example peeling vegetables or washing salad leaves.

- Other examples of primary foods could include:
- wheat
 - maize
 - soya beans
 - sugar beet
 - milk.

Wheat is an example of a primary food. It is processed into flour, which is a secondary source of food. The stages of processing for wheat are shown in figure 9.6.

Cleaning and sorting of raw foods

Primary stages of processing and production also include the cleaning and sorting of the raw materials. This may be carried out to remove any unwanted debris, to clean off mud or dirt, or to remove any damaged goods. Figure 9.7 identifies stages of this process for potatoes.



Figure 9.5 Primary processed carrots

KEY POINTS: PRIMARY STAGES OF PROCESSING AND PRODUCTION

- Examples of primary foods include potatoes, wheat, maize, sugar beet and milk.
- Primary processing involves changing or transforming primary foods that are grown or reared into a suitable state to either be eaten or used in the production of other products.
- Once grown or reared, primary foods are transported from their point of origin (e.g. the field, farm or allotment) to a processing plant or factory.
- Primary stages of processing and production also include the cleaning and sorting of raw materials.

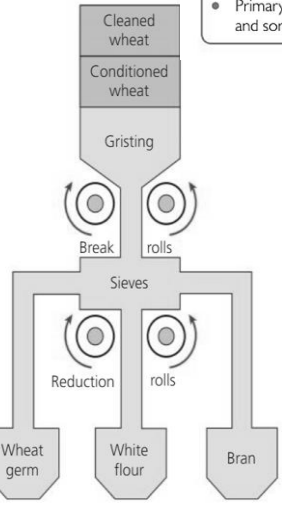


Figure 9.6 The stages of processing wheat

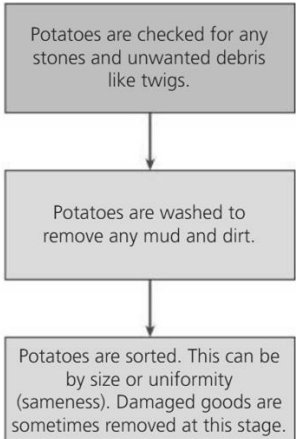


Figure 9.7 Potatoes being sorted

Topic: Secondary production

Secondary processing is when you change or convert the primary food into an ingredient which can then be used to make a food product.

Secondary processing can provide an opportunity to create a wide variety of foods. Flour processed from wheat is a secondary product; it has been changed or converted into an ingredient that can be used to make many different food products. An example product would be bread.

To end up as a finished final food product there would be many different stages of processing involved.

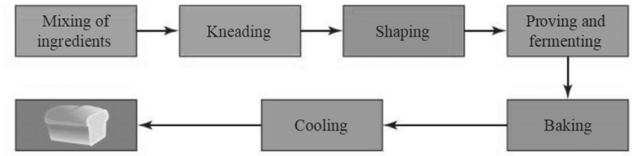


Figure 9.8 The process of making bread

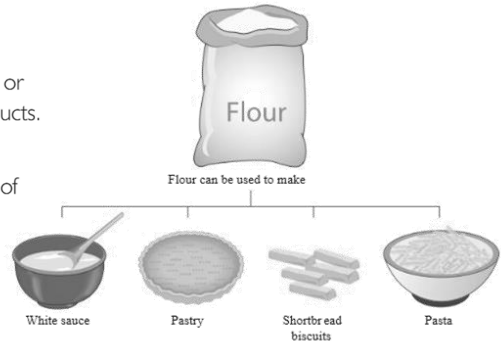


Figure 9.9 Flour can be used to make these products

There are many other examples of primary foods that are processed into secondary foods and then used to produce other products. Two examples of these are included in the table below.

Primary Food	Secondary process	The products after secondary processing
Milk Taken from the cow during the milking process	Cheese Made by separating the curds which is then pressed to remove water	Pizza Cheese is grated and sprinkled onto the pizza before baking Lasagne Cheese is grated and stirred into béchamel sauce.
Fruit Picked from trees/ bushes/ plants. Cleaned and could be sliced or cored.	Jam The fruit is boiled with sugar then sieved to remove seeds and skin	Swiss roll Jam is spread onto a whisked sponge then rolled up. Bake well tart Jam is spread on the pastry before the frangipani mixture is poured over the top and baked.

AN INSPECTOR CALLS	Context
1912 – when the play was set. Just before WW1 (1914-18) and the sinking of the Titanic. JBP wanted to make sure audiences in 1945 recognised the problems of society in 1912 before the wars (class system, capitalism, sexism) and weren't tempted to go back to living like that. He wrote the play to highlight the dangers of the capitalist lifestyle.	
1945 – when the play was written and performed. After WW2, society changed for the better. The benefit system started to be introduced, and we had more equality for women and less of a class divide because of different classes and different genders mixing in the war effort. JBP supported and encouraged these changes and wanted to make sure he promoted them in his play by making capitalists like the older Birlings appear ignorant and selfish.	
Socialism – JBP was a keen Socialist. This meant that he wanted everyone to look after each other rather than just caring about themselves. He was trying to promote this with the play, by making the Socialist characters like the Inspector much more respectable than the capitalist ones.	
Capitalism – JBP hated capitalists – those who thought that everyone should only care about themselves and that making money was more important than human rights. He created Mr and Mrs Birling as capitalists, in order to make capitalism seem out-dated and selfish. Mr and Mrs B are portrayed in a negative way by JBP for this reason.	
Outdated ideas – In 1912, the social classes were segregated, women got paid less than men for the same work, there was no benefit system or help with unemployment or housing. Society was patriarchal (men ruled).	
Priestley – was a broadcaster and playwright, he also served in the army in WW1. Priestley saw, firsthand, during WW1, men from different paths in life/ classes coming together and working for the common, greater good. He believed that this mantra should be taken forward in a broader context to make society more responsible for one another. When working for the BBC as a broadcaster during WW2, Priestley broadcast a series of short propaganda radio shows which were credited for strengthening civilian morale. His left wing beliefs brought him into conflict with the government and influenced the birth of the welfare state. The programme was eventually cancelled by the BBC for being too critical of the government.	

Plot	
ACT 1	The family are celebrating Sheila and Gerald's engagement. Birling makes speeches saying there will be no war, and the Titanic is unsinkable. An Inspector arrives and tells them Eva Smith has committed suicide. He gets Mr B to admit sacking her. He doesn't take blame. Inspector gets Sheila to admit getting her sacked for laughing. She feels guilty and ashamed of herself.
ACT 2	Inspector gets Gerald to admit having an affair with Eva Smith (now called Daisy Renton after a name change). Sheila is upset and questions her relationship with Gerald. Inspector gets Mrs B to admit not helping Eva when she came to Mrs B's charity for help when she became pregnant. Mrs B says it should be the father's responsibility. At the end of the Act, we realise that the father of Eva's baby was Eric.
ACT 3	Eric's involvement with Eva is revealed and a possible rape is hinted at, as he says he forced Eva. The Inspector gives his final speech about fire, blood and anguish. He is warning the family that if they don't start to take responsibility for others, they will live to regret it. Inspector then leaves. Gerald finds out that the Inspector wasn't a real inspector. Mr B rings to check and there is no Inspector Goole. Also, there is no dead girl! Mr and Mrs B (and Gerald) celebrate and act like nothing has happened. Sheila and Eric still feel guilty and can't go back to how they were before. Right at the end, the telephone rings and they are told that a girl has just committed suicide and an inspector is on his way over to ask some questions.

Characters	
Mr Birling	Arrogant and capitalist businessman who hates social equality and loves money. Sacks Eva from his factory when she asks for equal pay for women and threatens a strike.
Mrs Birling	Snobbish and cold-hearted capitalist who believes everyone is responsible for themselves. Doesn't help Eva when she comes to the charity for help.
Inspector	Priestley's mouthpiece (represents JBP's ideals), keen Socialist who fights for community responsibility and gets the Birlings to face up to what they have done.
Sheila	The daughter. Gets Eva sacked from the shop for smirking at her. Starts off as a spoilt rich girl but quickly changes her views, feels sorry for Eva Smith and starts to become Socialist as the play progresses. Is ashamed of her parents at the end.
Eric	The son. Typical young man – drinks too much and has a one-night stand with Eva. Ends up getting her pregnant and steals from his dad to give Eva money. Regrets his actions and changes his ways. Ashamed of his parents at the end.
Gerald	Sheila's fiancé. Businessman who has capitalist ideals and is similar to Mr Birling politically. Shows some regret for his affair with Eva, but happy to act like nothing has happened when it suits him.

Why is the fact it is Morality Play significant?
Morality plays were first performed in the late middle ages. They are a type of allegory (a story which can be interpreted to reveal a hidden meaning, typically a moral or political one). In these types of plays, the main characters are met by supporting characters who are personifications of good and evil. They are used to prompt the main character to choose a good life over one of evil. The point of a morality play then, was to educate the audience and get them to lead a better life so that they would determine a better fate for themselves in the "after-life". The supporting characters sometimes represented the Seven Deadly Sins. The Seven Deadly Sins were vices that people believed if you committed, could lead to the eternal damnation of your soul- i.e. you would go to hell forever. Morality plays were popular during the 15th and 16th-centuries. Historically they sought to teach the audience lessons that focused on the seven deadly sins: lust, gluttony, greed, sloth, wrath, envy and pride. Whilst characters who committed these sins were punished, morality plays showed that if a character repented then they could redeem themselves. An <i>Inspector Calls</i> is a morality play because all of the Birlings and Gerald Croft commit crimes which are similar to the seven deadly sins. Mr Birling is greedy because he wants more money. Sheila is guilty of wrath and envy when she spitefully complains about Eva Smith and so on. Not all of the characters manage to redeem themselves. Priestley uses the morality play structure to teach a 20th-century audience a series of lessons that relate to his beliefs about social responsibility, age, gender and class. The audience is invited to enjoy judging these characters - they are also forced to question their own behaviour. Priestley would have hoped that people watching the play would have left the theatre as better people.

Key themes
GENERATIONAL DIFFERENCES The older generation (Mr and Mrs Birling) are a symbol of capitalism, so they do not change their ways and they are reluctant to accept blame for their role in Eva's demise. The younger generation, on the other hand (Sheila and Eric) become a symbol of Socialism as the play progresses. They accept blame and want to change; they change throughout the play, for the better.
RESPONSIBILITY / JUSTICE The Inspector, as Priestley's mouthpiece, is a symbol of Socialism – he wants everyone to look after each other and to view community as very important. He is sent to uncover the family's wrongdoings and to make them see that they should take responsibility for others. Sheila and Eric realise this, but Mr and Mrs B do not.
GENDER INEQUALITY Priestley wanted to show his audience that there was a lot of inequality back in 1912 when it came to how women were treated. By making certain characters out to be sexist, he highlighted this problem and tried to shame audiences into changing their own views about gender equality too. This is perhaps why the victim of their actions is a woman, and why she is working class (working class women were at the bottom of the pile in those times).

Subject Terminology	
Dramatic Irony	When the audience knows something that the characters don't. Used usually to create tension or humour.
Real Time	When the stage time is real time; this makes the play more naturalistic.
Tension	A dramatic device used to create a sense of suspense or to make the audience feel on edge; tension is often created through the use of cliff-hangers
Monologue	A speech of some length which is usually directed to a second person, without them interrupting,
Act	The division of a play
Interruptions	When characters cut into the speech of other characters and stop them from speaking.
Metaphor	A descriptive technique that names a person, thing or action as something else.
Contrast	When two things are strikingly different to one another, serving to heighten their differences further.
Direct Address	When a speaker communicated directly to the person that they are speaking to usually by addressing them as 'you'.
Repetition	When a word or phrase is noticeably repeated throughout a sentence/ paragraph/ whole text
Cyclical structure	When the opening of the story is mirrored, or is repeated at the end of the story – usually in order to convey a message about change (or lack thereof)
Religious allusion	When a line references or reflects something to do with religion or the Bible
Foreshadowing	When the writer hints that something is going to happen later in the play
Setting	The writer's choice of location/scenery for a play.
Symbolism	When an object/character represents an idea that is much deeper and more significant.

Key Quotes	
The Inspector	(massively) Public men, Mr Birling, have responsibilities as well as privileges. (Act 2) (very deliberately) I think you did something terribly wrong – and that you're going to spend the rest of your life regretting it. (Act 2) Each of you helped to kill her. Remember that. Never forget it. (<i>He looks from one to the other of them carefully.</i>) But then I don't think you ever will. (Act 3) One Eva Smith has gone – but there are millions and millions and millions of Eva Smiths and John Smiths still left with us, with their lives, their hopes and fears, their suffering and chance of happiness, all intertwined with our lives, and what we think and say and do. We don't live alone. We are members of one body. We are responsible for each other. And I tell you that the time will soon come when, if men will not learn that lesson, then they will be taught it in fire and bloody and anguish. Good night. (Act 3)
Sheila	But these girls aren't cheap labour- they're people. (Act 1) Oh – Gerald – you've got it – is it the one you wanted me to have? (Act 1) (bitterly) I suppose we're all nice people now.(Act 3) (flaring up) Well, he inspected us all right. And don't let's start dodging and pretending now. Between us we drove that girl to commit suicide. (Act 3) (tensely) I want to get out of this. It frightens me the way you talk. (Act 3) I tell you – whoever that Inspector was, it was anything but a joke. You knew it then. You began to learn something. And now you've stopped. You're ready to go on in the same old way. (Act 3)
Mrs Birling	I didn't see any reason to believe that one story should be any truer than the other. Therefore, you're quite wrong to suppose I shall regret what I did. (Act 2) I'm sorry she should have come to such a horrible end. But I accept no blame for it at all. (Act 2)
Mr Birling	Still, I can't accept any responsibility. If we were all responsible for everything that happened to everybody we'd had anything to do with, it would be very awkward, wouldn't it? (Act 1) This girl. Eva Smith, was one of them, she'd had a lot to say – far too much – so she had to go. (Act 1) Rubbish! If you don't come down sharply on some of these people, they'd soon be asking for the earth. (Act 1) (pointing to Eric and Sheila) Now look at the pair of them – the famous younger generation who know it all. And they can't even take a joke- (Act 3)
Eric	Well, I don't blame you. But don't forget I'm ashamed of you as well – yes both of you. (Act 3) (bursting out) What's the use of talking about behaving sensibly. You're beginning to pretend now that nothing's really happened at all. And I can't see it like that. This girl's still dead, isn't she? Nobody's brought her to life, have they? (Act 3) The money's not the important thing. It's what happened to the girl and what we all did to her that matters. And I still feel the same about it, and that's why I don't feel like sitting down and having a nice cosy talk. (Act 3)

Why is the structure important - the Well-Made play?

A well-made play is a popular dramatic genre from the 19th-century. In a well-made play **the plot is intricate and complex** and the action builds to a climax. This is often concerned with events that happened before the events of the play. A well-made play usually ends with a return to order but Priestley moves away from this genre with the revelation at the end. *An Inspector Calls* is a well-made play because the events are all influenced by what happened to Eva Smith before the play takes place This structure allows J B Priestley to manipulate the audience. They do not know what happened to Eva Smith and so each revelation about her treatment by the Birlings and Gerald Croft adds to the drama. Each revelation is more shocking than the last and so Priestley cleverly builds to the climax. In *An Inspector Calls* there is a twist at the end of the plot - the characters are unsure if the Inspector existed at all. This gives the audience time to reflect on the events of the play. When it is revealed that another inspector is on their way and the curtain falls, the audience would be stunned.

Poem	Content and Meaning
<i>Ozymandias</i> - 1819	A traveler tells the poet that two huge stone legs stand in the desert. Near them on the sand lies a damaged stone head. The face is distinguished by a frown and a sneer which the sculptor carved on the features. On the pedestal are inscribed the words "My name is Ozymandias, king of kings: / Look on my works, ye Mighty, and despair!" Around the huge fragments stretches the empty desert.
<i>London</i> -1792	The speaker wanders through the streets of London and comments on his observations. He sees despair in the faces of the people he meets and hears fears and repression in their voices. The woeful cry of the chimney-sweeper stands as a criticism to the Church, and the blood of a soldier is seen to be staining the walls of a palace. The night time is just as harrowing; the cursing of prostitutes corrupts the babies and tarnishes marriage and death.
<i>The Prelude</i> - 1799	The poet describes how as a youth he stole a boat and rowed one night across a lake. At the climax of this experience, he imagined that a mountain peak beyond the lake became a presence which reared up and menaced him because of his misdeed in taking the boat. He confides that for some time thereafter he struggled with the idea that nature has the capacity to torment mankind in such a way. The experience gives him a new respect for nature.
<i>My Last Duchess</i> - 1842	The poem is based on Alfonso, the Duke of Ferrara, from the 16 th century. The Duke is the speaker of the poem and tells us he is entertaining a messenger who has come to negotiate the Duke's marriage to the daughter of another powerful family (he has recently been widowed). As he shows the visitor through his palace, he stops before a portrait of his late Duchess. The Duke begins reminiscing about the painting sessions and then about the Duchess herself. He then talks about her disgraceful behaviour as he claims she flirted with everyone and did not appreciate him. As the monologue continues, the Duke reveals that he is the one responsible for the Duchess' death, after this, he returns to the business of arranging another marriage.
<i>Charge of the Light Brigade</i> -1854	The poem tells the story of the failed charge of the British cavalry in the Battle of Balaklava in October 1854. Britain was fighting against Russian forces in the Crimean War. A cavalry group (soldiers on horses) , the Light Brigade, was ordered to charge down a narrow valley straight into the fire of Russian cannons. It was a huge catastrophe and 150 soldiers died. The men were respected for following orders, even though they knew they may be wrong but the disaster caused public outrage as the British public began to question the politicians and generals who led them.
<i>Exposure</i> - 1917	The poem focuses on the misery felt by World War One soldiers waiting overnight in the trenches. Although nothing is happening and there is no fighting, there is still danger because they are exposed to the extreme cold and their wait through the night is terrifying. The speaker describes the trauma of living and struggling in such poor conditions; there is a sense of despair and of lost hope. If being 'exposed' to gunfire does not kill them, then exposure to the brutal weather conditions might do. Alongside the more obvious meanings of the title, there is also the idea that Owen has set out to expose the conditions the soldiers have experienced to the world and in doing so expose the government's negligence of the soldiers' situation.
<i>Storm on the Island</i>	Storm On The Island is a poem that can be taken literally, as a dramatic monologue on the life and attitude of island people facing a storm, or it can be understood as an extended metaphor of political struggle on the island of Ireland.
<i>Bayonet Charge</i> -1957	The poem depicts the thoughts and feelings of an inexperienced soldier as he makes his way across no-man's land in pursuit of attacking the enemy. On his journey, he sees how not only is humanity destroyed by war, but also nature – suggesting that the effects of war are universal and impacts both far and wide.
<i>Remains</i> - 2008	The poem focuses on a soldier who is haunted by a violent memory of being at war. He tells how he and his comrades opened fire on a looter who may or may not have been armed, and they shot him dead. Later the soldier thinks about the shooting every time he walks down the street. Then later again, when he returns home he is still haunted by the thought of what he has done. He tries drink and drugs to drown out the memory, but they do not work. The final lines show that the memory was not left behind in the place of war in a distant land, but is with the speaker all the time.
<i>Poppies</i> - 2009	The poem is about the grief a mother experiences, particularly when her son goes to fight at war. The mother expresses her feelings at different moments of her son's life: when he is young, when the son leaves to go to war and finally the death of her son.
<i>War Photographer</i> - 1985	Duffy's poem is about how we deal with the suffering of others, who might be faraway. It takes the character of a war photographer to represent someone more involved and committed than we in the western world are. The photographer finds it difficult to have to record the harrowing events of war, without actually being able to help those who he takes the photograph of. Duffy provokes us to consider our own response when confronted with the photographs that we regularly see in our newspaper supplements, and why so many of us have become desensitised to these images.
<i>Tissue</i> - 2006	The poem explores the conflicts and troubles of the modern world; destruction, religion, war and politics, money and wealth. The poem remarks on how nothing is meant to last, that it would be better not to hold too tightly to ideas/ buildings/ societal structures that have not been questioned for a long time, and instead we should be willing to let go and pass things on in their time to be remade.
<i>The Emigree</i>	A displaced person pictures the country and the city where he or she was born. However, Rumens suggests it may now be war-torn, or under the control of a dictatorial government that has banned the language the speaker once knew. Despite this, nothing shakes the light-filled impression of a perfect place that the their childhood memories have left. This shows the power that places can have, even over people who have left them long ago and who have never revisited since.
<i>Checking Out Me History</i>	This poem is an expression of the anger and the frustration that Agard feels about the British education system and the way he feels as though he has not been taught nor exposed to the history of his own culture. He suggests that he feels ignorant of his own background and identity as white history is prioritised in the history teaching of schools.
<i>Kamikaze</i>	The poem is set around the events of a kamikaze pilot flying to war and then turning back before it was too late. Kamikaze pilots were expected to use up all their weapons and then suicide by flying into their targets as a final act of destruction. It was considered a great honour in Japan to die for your country.

Language Techniques	Definition	Example
Symbolism	When an object represents an idea that is much deeper and more significant.	'Later a single dove flew from the pear tree'
Personification	Describing an inanimate object as having human feelings.	'My city takes me dancing through the city of walls'
Metaphor	A descriptive technique that names a person, thing or action as something else.	'The mind-forged manacles I hear'
Simile	A descriptive technique that compares one thing with another, usually using 'as' or 'like'.	'my boat Went heaving through the water like a swan'
Superlative	An adjective/ adverb that indicates the most of something.	'But most thro' midnight streets I hear'
Intensifier	A word, especially an adverb or adjective, that has little meaning itself but is used to add emphasis to another adjective, verb, or adverb.	'In every cry of every Man'
Minimiser	A word that is used to make another adjective, verb or adverb sound lesser.	'he's there on the ground, sort of inside out'
Imperative	A sentence that is a command.	'Honour the charge they made!'
Exclamatory	A sentence that expresses a heightened emotion. They end with an exclamation mark	'She thanked men—good!'
Listing	When the writer includes several words/ phrases/ ideas, one after the other.	'All my words flattened, rolled, turned into felt'
Repetition	When a word/ phrase is noticeably repeated throughout a sentence/ paragraph/ whole text.	'His bloody life in my bloody hands'
Imagery	A technique in which the author appeals to the senses i.e. seeing, hearing, touching.	'Stumbling across a field of clods towards a green hedge That dazzled with rifle fire'
Oxymoron	A phrase in which contradictory/ opposing terms appear in conjunction with one another.	'the black'ning church appals'
Semantic field	A group of words which are related in theme.	'pummels...exploding...flung...spits ...dives...bombaraded'

Themes	Ideas
Identity	Identity is something that is heavily shaped by painful experiences. Identity can be determined by others. Identity is influenced by your place of birth and cultural underpinnings.
Memory	Memory is something that is deeply unreliable. Memories can cause tremendous suffering. The memory of an event can become more painful that the event itself. Memories encourage regret.
Nature	Nature is all powerful and should be respected. The power of nature transcends the power of humans. Nature is destructive and vengeful.
Impact of war	War favours the collective over the individual. War encourages erratic behaviour. As wars develop, patriotism is replaced with fear and a need to survive.
Power	Power can be used by individuals to manipulate and control others. Power can be used to limit the opportunities of groups within society. The power of humans is always fleeting.

Word class	Definition	Example
Verb	A verb is a word or set of words that shows action (<i>runs, is going, has been painting</i>); feeling (<i>loves, envies</i>); or state of being (<i>am, are, is, have been, was, seem</i>)..	'We <u>are</u> prepared: we <u>build</u> our houses squat, <u>Sink</u> walls in rock and <u>roof</u> them with good slate.'
Adverb	An adverb labels how, when or where something happens (and they often end in '–ly').	' <u>Suddenly</u> , he awoke and was running.'
Noun	Nouns are names, places and things; they also signify imagined things like 'a ghost'; and ideas or concepts, such as 'love', 'guilt' or 'fate'.	'How the youthful <u>harlots</u> curse'
Pronoun	Words used instead of a noun i.e. 'he', 'she', 'they', 'it'.	' <u>She</u> looked on and <u>her</u> looks went everywhere.'
Adjective	An adjective is a describing word or phrase that adds qualities to a noun. It normally comes before a noun, or after verbs like 'am', 'is', 'was', 'appears' or 'seems'.	'The bough of cherries some <u>officious</u> fool broke.'
Preposition	Prepositions are short words and phrases that give information about place, time and manner	'Eyeballs prick with tears <u>between</u> the bath and pre-lunch beers.'

Structural Features	Definition
Opening	The first mood/ image of the poem.
Cyclical	When end of the poem repeats an idea/character/setting from the opening.
Stanza	A 'paragraph'/verse in a poem.
Enjambment	A sentence or phrase that runs onto the next line.
Anaphora	When the first word of a stanza is the same across different stanzas.
Volta	A turning point in a poem.
Juxtaposition	Two ideas/ images placed together for contrasting effect.
Foreshadowing	A warning/ hint about what is going to happen next.
Iambic pentameter	A rhythm in a poem containing 10 syllables per line.
Speaker	The narrator, or person in the poem.
Change of mood/ tone	When the writer alters the overall feeling of the poem.
Refrain	A phrase, line or group of lines which is repeated throughout a poem.
Ending	The final mood/image of the poem.

Plot summary

1 **The Sound of the Shell** – During WW2, a plane carrying evacuees crashes on an island. Piggy (P) meets Ralph(R) and they find a conch shell. R made leader; Jack (J) is made leader of the hunters.
2 **Fire on the Mountain** – One of the littluns mentions seeing a 'beastie'. They use P's glasses to make a signal fire but it rages out of control and kills one of the littluns.
3 **Huts on the Beach** – P focuses on building the shelter; J and choir prefer hunting. J becomes fixated on hunting pigs. Simon (S) disappears and finds peaceful, aromatic part of island.
4 **Painted Faces and Long Hair** –Roger and Maurice bully the littluns on the beach. J and others paint their faces. A ship passes and R realises that the hunters have let the fire go out. J and the hunters return with a pig and they argue with R. J punches P. They cook the pig and have a feast.
5 **Beast from Water** – The beast is discussed. J starts to rebel against the rules/democracy and leaves the discussion with the hunters. P longs for adult intervention.

6 **Beast from Air** – Sam + Eric (S+E) mistake the parachutist for the beast. **They hunt for the beast but cannot find it. R notices that the fire has gone out but none of the others, especially J, seem concerned.**
7. **Shadows and Tall Trees** – The hunt for the beast continues. The boys come across a pig run and R sticks a boar in the nose with a spear. The boar escapes. The boys act out a pig hunt with Robert playing the part of the pig. J, R and Robert see the dead parachutist.
8 **Gift for the Darkness** – J suggests that R should no longer be leader but no one agrees. The boys separate. The hunters track down a pig and kill it. They chop off its head and offer it to the beast as a sacrifice. Flies swarm. S imagines the pig head is speaking to him and telling him that he cannot escape.
9. **A View to a Death** – The boys leave the camp to join J and the hunters. S is killed by the boys.
10 **The Shell and the Glasses** – P, R and Sam 'n Eric are the only ones left in the original tribe. P and R are horrified by S's murder. J and the hunters become increasingly savage and steal P's glasses.
11 **Castle Rock** – P+R take the conch and go to get P's glasses. P killed by Roger. J and the hunters throw spurs at R as he runs away.
12 **Cry of the Hunters** – R runs for his life. Fire engulfs the island and a naval officer comes to investigate. The boys are rescued.

Key Characters	Key Themes	Historical Context	Symbolism and Allegory
Ralph –dominant, immature, naïve. Piggy – nickname only (never learn his real name): vulnerable, intelligent, mature. Jack – assertive, intimidating, violent. Simon – attentive, imaginative spiritual. Roger – secretive, sadistic, uncommunicative. Sam 'n Eric – (twins) co-dependent, separate. The biguns - collective name for the older boys. The littluns – collective name for the younger boys.	Power: Golding examines the way that political power is a driving force for some humans. Golding explores how power can corrupt (dictatorship) and also how power can be shared (democracy). Civilisation vs savagery: Golding suggests that civilisations only exist because of authority figures. In the absence of these, people cannot live within civilisations. Civilisation forces people to act responsibly but this is only temporary as people are, according to Golding, innately savage. The loss of innocence: Golding suggests that people lose their innocence when they believe there are no consequences for their actions. Golding also suggests that people lose their innocence when their realise the human capacity for savagery. Spirituality: Golding suggests that to be spiritual is to find answers and peace from within and to consider the world through quiet contemplation. Individual vs community: Golding explores the dilemma between contributing and working as part a community whilst also recognising the desire to pursue individual goals. Human nature: the innate desires we have in us to be selfish, savage and immoral.	• The people of Britain had just been through WW2. It was feared that there might be a nuclear war between Western countries and the Soviet Union. References to bombs and fighting are made throughout the novel. • In Golding's opinion, both sides of WW2 were just as bad - both bombing civilians and mistreating prisoners. • During the 20th Century, many nations were ruled by dictators: Spain, Italy, Germany, Russia, Uganda, Cambodia and China were all ruled at times by cruel and tyrannous despots. Mao in China, Hitler in Germany and Stalin in Russia were the most infamous. • Food was still being rationed in Britain. Desire for food is a major part and motivation of LOTF. • Golding served in the Navy during WW2. He fought in World War 2 and witnessed the inhumanity that happens when society breaks down. • Public schools (where most of the boys on the island went to) still produced most of Britain's leaders and top professionals. They were very elitist and this is reflected in the attitudes of some of the boys. • The class system was very much existent in Britain. Piggy stands out for being lower class; the others are upper class. • Nazi Germany had adopted a system of rewarding the strong and attacking the weak. The same system appears to happen in the novel. • The adults the boys wish could help them are the same ones who are fighting the war that has led to the boys being stranded.	Symbolism and Allegory Symbolism: events/ objects/ places that represent a bigger, more important idea Conch – civilization and democracy Piggy's glasses – science and technology Fire – hope of salvation Pigs – hunting and savagery The beast – human nature (the desire to be a savage) The Lord of the Flies (pig's head) – physical manifestation of the beast Adults – civilisation and social order The ocean – the unconscious mind; the desires and thoughts we have within ourselves Allegory: story that relates to another context Religious allegory The island -Garden of Eden The scar -how man destroys paradise (the Fall of Man) Simon -Jesus Christ War allegory Piggy -the Jews; victimized, vulnerable Jack -Nazi leader; manipulates and bullies

	Definition & Example	Example
Simile	A descriptive technique that compares one thing with another, usually using 'as' or 'like'.	'Jack was bent double. He was down like a sprinter, his nose only a few inches from the humid earth.'
Personification	Describing an inanimate object as having human feelings.	'Small flames stirred at the trunk of a tree and crawled away through leaves and brushwood, dividing and increasing.'
Pathetic fallacy	A device in which emotions are given to a setting, an object or the weather, usually to convey a particular mood.	'The sun slanted in and lay golden over half the platform.'
Zoomorphism	A technique in which animal attributes are imposed upon non-animal objects, humans, and events.	'Jack himself shrank at this cry with a hiss of indrawn breath and for a minute became less a hunter than a furtive thing'
Foreshadowing	A structural feature where the writer hints/indicates of a future event.	Piggy's death is foreshadowed when Jack breaks his glasses, this highlights his vulnerability in the early stages of the book.
Biblical illusions	Words/situations that make reference to the bible.	'Simon found for them the fruit they could not reach.'
Irony	Expressing meaning that usually signifies the opposite.	"We've got to have rules and obey them. After all, we're not savages.' (Jack)
Hyperbole	Exaggerated statements, usually not meant to be taken literally.	"When the war's over they'll be travelling to Mars and back."

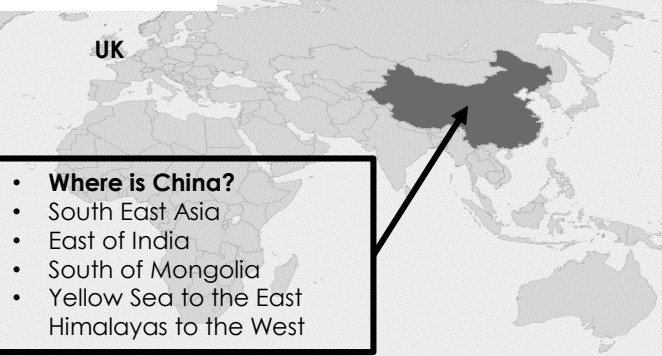
Language Techniques	Definition	Example
Oxymoron	When a phrase is put together by two ideas which contradict one another.	'If in some smothering dreams'
Personification	Describing an inanimate object as having human feelings.	'the sun surfacing defiantly'
Metaphor	A descriptive technique that names a person, thing or action as something else.	'Sirens ripped open the warm silk of sleep'
Simile	A descriptive technique that compares one thing with another, usually using 'as' or 'like'.	'Bent double, like old beggars under sacks'
Superlative	An adjective/ adverb that indicates the most of something.	'Sweetest Love! I do not go For weariness of thee.'
Intensifier	A word, especially an adverb or adjective, that has little meaning itself but is used to add emphasis to another adjective, verb, or adverb.	'My friend, you would not tell with <u>such high</u> zest'
Minimiser	A word that is used to make another adjective, verb or adverb sound lesser.	'To children ardent for <u>some</u> desperate glory'
Imperative	A sentence that is a command.	'Let faxes butter-curl on dusty shelves.'
Exclamatory	A sentence that expresses a heightened emotion. They end with an exclamation mark	'Gas! GAS! Quick, boys!'
Listing	When the writer includes several words/ phrases/ ideas, one after the other.	'And then I must scrub, and bake, and sweep.'
Repetition	When a word/ phrase is noticeably repeated throughout a sentence/ paragraph/ whole text.	'Rage, rage against the dying of the light.'
Imagery	A technique in which the author appeals to the senses i.e. seeing, hearing, touching.	'My thoughts hissed and spat on my scalp. My bride's breath soured, stank in the grey bags of my lungs.'
Extended Metaphor	A metaphor which is continued over several lines or throughout a whole poem	But then, unexpectedly, something wonderful happens: Someone, a man or a woman, walks into the room and holds their arms up to the ceiling beside you.

Comparison Connectives (Question 2)			
Similarities		Differences	
Similarly Likewise	In a similar way	On the other hand Contrastingly	Conversely In contrast

Word class	Definition	Example
Verb	A verb is a word or set of words that shows action (<i>runs, is going, has been painting</i>); feeling (<i>loves, envies</i>); or state of being (<i>am, are, is, have been, was, seem</i>)..	'He <u>plunges</u> at me, <u>guttering</u> , <u>choking</u> , <u>drowning</u> .'
Adverb	An adverb labels how, when or where something happens (and they often end in '-ly').	'Then <u>cunningly</u> covering his tracks'
Noun	Nouns are names, places and things; they also signify imagined things like 'a ghost'; and ideas or concepts, such as 'love', 'guilt' or 'fate'.	'Your <u>words</u> cut into <u>me</u> , sharp as a <u>knife</u>
Pronoun	Words used instead of a noun i.e. 'he', 'she', 'they', 'it'.	The <u>pain</u> that <u>you</u> cause always goes unseen'
Adjective	An adjective is a describing word or phrase that adds qualities to a noun. It normally comes before a noun, or after verbs like 'am', 'is', 'was', 'appears' or 'seems'.	'With a <u>deep</u> multitude Of <u>colourful</u> distractions.'
Preposition	Prepositions are short words and phrases that give information about place, time and manner	'They dropped <u>into</u> the dust even before the hunter strung his bow.'

Structural Features	Definition	Essay structure: Question 1 (24 marks)
Opening	The first mood/ image of the poem.	Introduction: directly answer the question using the poet's name and using the key words from the question. What is the poet's point of view on the particular theme? Main paragraph (x3): • Big idea • Juicy quotation • Zoom in on key words/ techniques • Embed shorter quotations to support • Link back to your big idea
Cyclical	When end of the poem repeats an idea/ character/ setting from the opening.	
Stanza	A 'paragraph' in a poem.	
Enjambment	A sentence or phrase that runs onto the next line.	
Anaphora	The repetition of a word or phrase at the beginning of successive lines.	
Volta	A turning point in a poem.	Conclusion: summarise your findings about how the poet has presented the theme. What is their point of view/ attitude towards it?
Juxtaposition	Two ideas/ images placed together for contrasting effect.	
Speaker	The narrator, or person in the poem.	Essay structure: Question 2 (8 marks) Paragraph (x2) • Identify techniques/ word class and explain effect • Select quotations • Comparative connectives
Change of mood/ tone	When the writer alters the overall feeling of the poem.	
Refrain	A phrase, line or group of lines which is repeated throughout a poem.	
Ending	The final mood/image of the poem.	

Year 9: China



What is China like?

China has gone through massive economic, social and cultural change since it opened its trading borders in 1978. China is also the world's largest exporter and second-largest importer of goods. They are now an economic super power. The government has invested heavily in transport systems in order to allow trade to take place easily and quickly. This wealth is filtering down to the population and today only 10% of the Chinese population lives below the poverty line of US\$1 per day, down from 64% in 1978. This economic growth has seen an huge rise in urbanisation and rural to urban migration. Mandarin is the most widely spoken of 292 Chinese dialects. China's climate is mainly dominated by dry seasons and wet monsoons, which lead to pronounced temperature differences between winter and summer.

How is China developing?

China has the worlds fastest growing economy. This economic growth is being powered by massive fossil fuel consumption and a large workforce. The government is spending money on improving Quality of Life in China and there is a growing, wealthy middle class. There are still large areas of the country which are poor; these tend to be in the rural areas.

Development Indicators - Trend

GNI per capita	\$15 500	Growing
HDI	0.74	Growing
Infant mortality	9 (per 1000 live births)	Falling
Literacy rate	96.4%	Growing

China is classed as a NEE Country – Newly Emerging Economy .

Population

China was the first country in the world to record a population in excess of 1 billion; it is now over 1.3 billion. This was largely due to past governments encouraging large families. In the 1960s the growth spiralled out of control and the country experienced widespread famine. In 1979 the government introduced the controversial One Child Policy.

- Couples had to be married to have a child
- Couples had to apply to the government to have a child
- Those who had one child received benefits and free health care
- Forced abortions were administered to anyone found to be pregnant with a second child

It led to a number of unplanned side effects:

- Baby boys were favoured over girls; this led to a gender imbalance.
- The poorest became reliant upon the benefits, this led to babies being dumped
- The policy was so successful that the government is now actively encouraging larger families in some areas of the country. There are concerns that some areas will be underpopulated and industry will suffer in the future.

The policy was formally phased out in 2015.

The Three Gorges Dam Project

What is it? Rising from the waters of the Yangtze River, the Three Gorges Dam stands more than 40 storeys high. The dam stretches for over 2km (1.25 miles), took tens of thousands of workers over a decade to build and cost more than \$40bn (£25bn)

Why was it needed? If China is to sustain its economic growth into the future then they need a reliable source of energy. They government knows that they are going to have to reduce the amount of fossil fuels they currently consume (namely coal).

Positives

- ✓ Reduced risk of flooding for homes, farms and factories along the Yangtze River.
- ✓ Water stored behind the dam is available for irrigation
- ✓ Hydroelectric power (HEP) is generated by turbines in the dam. It is the world's largest capacity HEP station.
- ✓ The electricity it produces means that China saves 31 million tonnes of coal each year, and their overall gas emissions have reduced.
- ✓ The river is deeper and more navigable for ships so it has improved transport and trade for China.

Negatives

- ✓ Good farmland has been lost because of the dam.
- ✓ Over 1.3 million people were forced to move their homes as towns and villages disappeared under water.
- ✓ Important cultural and archaeological sites were lost.
- ✓ There is an increased risk of landslides in some places/the project was very expensive (\$22.5 billion, though some estimate the actual cost to be closer to the \$50bn mark).
- ✓ Sediment is building up behind the dam. There is no sediment to maintain river banks, resulting in downstream areas becoming at more risk of flooding.
- ✓ Important wetland areas have been destroyed.

TNCs in China – Apple and Foxconn

What are they?	Positives	Negatives
TNCs are also known as Multi National Companies. They are companies that operate in a number of different countries. They often locate their factories in NEE/LIC countries and have their headquarters in HICs. They have helped to increase globalisation.	•Employment is provided for local people. •Roads and infrastructure are built by the TNCs. •Increased taxes for the government can be spent on improving education/health/sanitation. • Other local businesses benefit as people have more money to spend.	•Very long working hours. •Wages are low. •There is no job security. •Health and safety regulations are not as stringent as in HICs •Most of the profit goes back to HICs. •Suicide rates amongst workers are very high. •Poor quality of live amongst workers. •Workers often live away from families.

Why are TNCs located in China?
There are a number of reasons why so many TNCs are choosing to locate factories in China (secondary Industry).

1. Low Wages – reduced costs and increased profits.
2. Cheap land – cheaper to buy land here than in HICs.
3. Resources – lots of energy resources means reliable power.
4. Big population – means plenty of workers for factories.
5. No Health and safety – factories can be up and running quickly.
6. Roads – products can be transported and exported easily and quickly.
7. Flat land- suitable and cheaper for construction.
8. Cities specialise
9. SEZ – financial incentives offered by the government in certain areas of the country.

Environmental Issues

Air pollution – In 2010 over 250 000 people died due to air pollution. 1/3 of global lung cancer cases were recorded in China in 2012. Acid rain triggered by combustion of fossil fuels (which releases sulphur dioxide and nitrous oxides) has devastated forests and ecosystems throughout China. Smog warnings have become familiar in numerous cities including Beijing.

Water pollution - Coastal pollution is widespread, leading to declines in habitat quality and increasing harmful algal blooms. This algae is poisonous to all life, and it uses all the oxygen in the water so fish die.Tests on tap water have found Benzene present at 200 micrograms of per litre of water. The national safety standard is 10 micrograms. Benzene is a petroleum product, from coal that is used as a component in numerous industrial products and is known to cause cancer.

Measuring Development	
Development measures how economically, socially, culturally or technologically advanced a country is. It suggests: advancement, evolution, expansion, growth, improvement, increase, maturity, progress, changes for the better.	
Development Indicators	
GNI	Gross National Income (Money earned by residents of a country including money earned abroad).
HDI	Human Development Index. Calculated using life expectancy, education, and per capita income.
Infant mortality	How many children per 1000 die before they are 1.
Literacy rate	The % of adults that read and write acceptably.
Some development indicators are more useful than others. GNI is an average economic measure so may not show the economic inequality within a country. It also doesn't include any social measures such as life expectancy. GNI Per Capita is more useful as it considers the population. The most useful one is HDI as this is a mixture of social and economic indicators.	

Why are some places richer than others?	
Physical Environment	Health
- Hot dry climates mean food cannot be grown so it has to be bought from other countries. - Areas without fertile land, natural resources, water and energy suffer. - Natural hazards make little progress with development e.g. Haiti.	- Diseases can make people too weak to work or go to school. - Lack of fresh water leads to illness. - LIC's haven't got enough money to invest in good quality health care
Trade	History
- Primary products sold by LICs are sold for cheap prices. HICs make more expensive products so earn more. - Poor infrastructure (roads/internet/power) or conflict means some people cannot sell their goods at all.	- Many countries in Asia, South America and Africa have spent a lot of time and money on conflicts since they became independent from LICs. - Many LICs haven't had time to develop fully as they were colonised and exploited by HICs.

Fair Trade Bananas – Community Tax Case Study: The Windward Islands		
What is it?	Positives	Negatives
Fair trade is a movement which aims to help producers in LICs improve their trading, working conditions and quality of life QOL. Fair trade typically includes primary products such as bananas that are exported from LICs to HICs.	- Improved wages paid to the producers. - Community taxes on products can be used to build schools and help improve QOL. - Improved working conditions for employees. - Small scale farmer have more control over prices.	- Can be expensive to get Fair Trade certification. - The poorest farmers can suffer as they don't have certification. - Fair trade products are more expensive to buy.

Fair Trade Footballs – Micro Finance Case Study: Pakistan		
What is it?	Positives	Negatives
Microfinance loans are when money is lent to LICs to help them to develop. These are often small loans with reasonable interest rates. They are available to people and businesses who may normally struggle to get credit	* Prevents people becoming over-reliant on fair trade. * Allows them to set their own business up. * New businesses can provide jobs for people outside of fair trade. * It is a loan so people feel they are not being given handouts.	* It is a loan so they have to pay the money back. * If the business fails then fair trade loses the money. * There are only a limited amount of microcredit schemes available.

Development Relationships		
Development indicators are linked and show different relationships. They will change as a country develops. The table below shows how indicators change as countries become wealthier.		
Indicator	Change	Why?
Birth Rate	Decrease	Government spends more money on family planning, access to contraception increases.
Death Rate	Decrease	Improved health care and access to clean water reduces disease.
HDI	Increase	Increase in life expectancy, literacy and GNI per capita
Literacy Rate	Increase	More schools are built
Sanitation	Increase	More toilets and sewage systems are built

Year 9: Development	
What is Aid and how can it help?	
Type	What it means
Short term/ Emergency	Immediate relief in emergencies such as famines, earthquakes, floods and droughts. This includes money, food, blankets, tents and medical supplies.
Long Term	For economic and social development. Its aim is to improve the quality of life for people in LICs/NEEs
Key terms	
Standard of living : the economic level of a person's daily life. Quality of life :is a social measure of well being e.g. Life expectancy or Literacy Rates. HIC : High Income Country (rich) NEE : Newly Emerging Economies e.g. India/China. LIC : Low Income Country (poor) AID : Help given from country to another, typically from a richer country to a less developed country. It can also be from a charity or organisation. GNI Per Capita: Total money earned by a country divided by its total population. Sustainable Tourism: Sustainable tourism aims to support local communities socially and economically whilst causing no harm to the environment. Sustainable ecotourism is expanding in more isolated regions of Jamaica, with people running small-scale lodges or acting as guides.	

Tourism in Jamaica	
Background: Jamaica is one of the largest islands in the West Indies. It has a population of 2.7 million. Its economy is based upon minerals, agricultural products, manufacturing and tourism. Tourism is growing in Jamaica.	Attractions: Beach holidays with beautiful sandy beaches and clear seas in places like Montego Bay. It has a rich cultural heritage. Jamaica is a hub for cruises. Money spent in a hotel helps to create jobs in the hotel, but it also creates jobs indirectly elsewhere in the economy. The hotel, for example, has to buy food from local farmers, who may spend some of this money on fertiliser or clothes. The demand for local products increases.
Positive Impacts	Negative Impacts
- Tourism counts for 24% of Jamaica's GDP; expected to be 32% by 2024. -Income from tourism is US\$2 billion per year. - The industry provides 200,000 jobs. - Investment in infrastructure has occurred in the North of the island.	- Economic: jobs in tourism are often poorly paid. Many hotels are owned by TNCs and much of the profit goes to HICs. - Social: Investment in water supplies and sanitation are focussed on tourist areas, not local areas. - Environmental: Tourism generates waste and causes footpath erosion.

How developed is India?

"*Development*" measures how economically, socially, culturally or technologically advanced a country is. It suggests: advancement, evolution, expansion, growth, improvement, increase, maturity, progress, changes for the better.

Development Indicators - Trend

GNI per capita	\$6500	Growing
HDI	0.6	Growing
Infant mortality	35 (per 1000 live births)	Falling
Literacy rate	75%	Growing

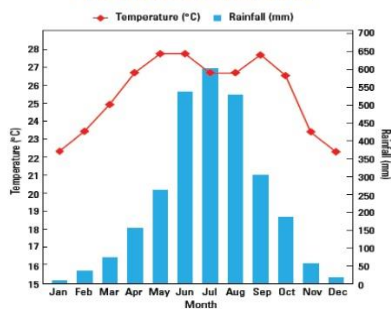
India is classed as a **NEE Country – Newly Emerging Economy**

Contrasting Climates

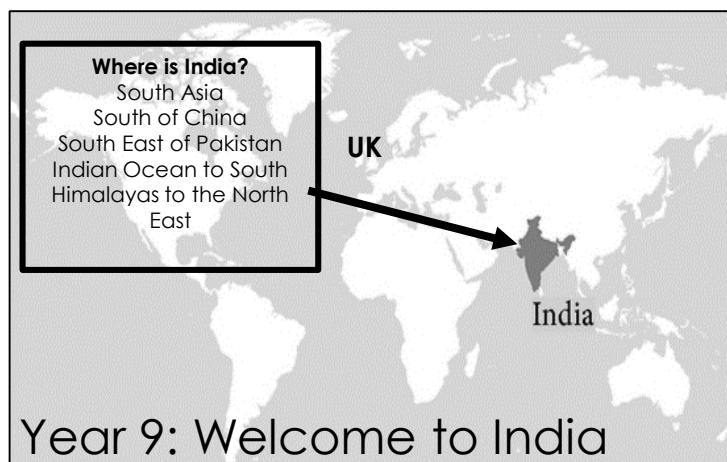
India has **6 different climatic zones**. They range from the arid in the north west to warm wet tropical climates in the south and west. Near the foothills of the Himalayas, in the north of India, temperatures drop as the altitude increases.

It has a monsoon season where areas of the country receive huge amounts of precipitation. These are known as **monsoon rains** and are triggered by warm, humid winds travelling towards the Himalayas in the north. Farmers have to adapt by growing water tolerant crops such as rice and jute.

Monsoon climate



- Temperature range **Moderate: 6°C**
- Rainfall pattern **Distinct wet (May– Sep) and dry (Oct–Apr) seasons**
- Rainfall and temperature values **High amount of rainfall of more than 2,000mm a year, high annual temperatures of around 22.2–27.8°C**



The Sundarbans Mangrove Swamps

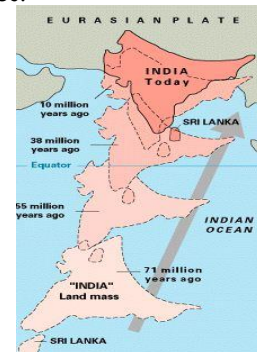
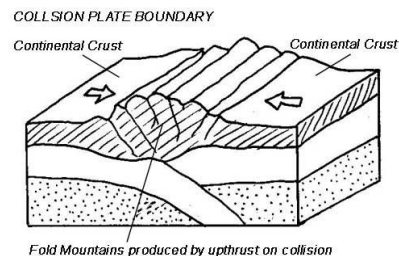
The Sundarbans is a network of marine streams, mud shores and mangrove forests. It is located in the Bay of Bengal and is part of the delta region of the Meghna and Brahmaputra rivers. It is home to the worlds largest coastal mangrove forest and extends east into Bangladesh.

The region is also known to contain numerous wildlife species, birds and reptiles, including Bengal tiger, chital, crocodile and snakes; many of which are considered endangered. The forest is a National Park and is under threat from rising sea levels and industrial developments.

Local people travel around by boat to access different areas of the forest. The fertile soils are very good for agriculture. Each year poor local fisherman risk being killed by tigers, crocodiles and snakes in order to collect honey. At least 80 people are killed by tigers each year in the Sundarbans.

The formation on the Himalayas

India lies south of the Himalayas. Home to Mt Everest, these are fold mountains formed by plate movements along a Collision Zone. Here, two continental plates collide and the land is forced the upwards and trigger huge earthquakes. The Indian Plate is moving north into the Eurasian Plate.



Rural to Urban Migration – Mumbai

Urbanisation is the increase in number of people living in urban areas. In India this happening very quickly as lots of people move from the countryside (rural) to towns and cities (urban). They move due to different **Push** and **Pull** factors.

Push (deter people from staying in an area)	Pull (attract people to an area)
Poverty Few jobs available Lack of schools Lack of healthcare Harsh climate Lack of services	Chance of employment Healthcare Education Family links Entertainment and Better transport links

Life in Mumbai

Mumbai is on the west coast of India. It was once seven islands and the main industry was fishing. It is now a mega city with a population of over 21million. It is India's most important trading port. It has trading and transport links with countries all over the world. There are more billionaires live in Mumbai than in all of the UK; there are huge inequalities in the city. Street kids often get involved in crime and drug use whilst kids from affluent areas live luxurious lives. It's home to a number of huge Trans National Companies (TNCs) such as Tata. Almost 1 million people live in Dharavi, the second largest slum in Asia. Informal employment is very important in Dharavi.

Redevelopment in Mumbai

Authorities in Mumbai are trying to redevelop areas of the slums in order to improve peoples lives. People living in urban slums often suffer from overcrowding, inadequate housing, limited access to basic services and poor environmental quality. The **slum sanitation project** aims to improve sanitation facilities for up to a million slum dwellers across the city. So far over 300 community toilet blocks have been built, housing more than 5100 individual toilets, with separate facilities for men and women.

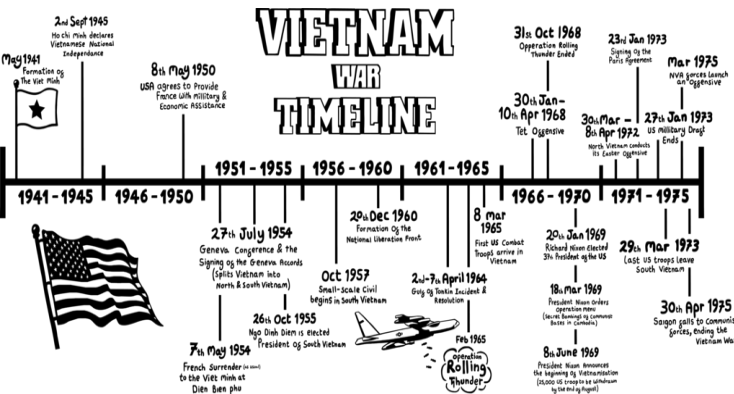
Mumbai Electrification Project: slum areas do not have access to electricity and rely on bottled gas for cooking and heating. This is expensive and dangerous. Also the fumes created can cause health problems. The Global Partnership on Output Based Aid (GPOBA) have recently completed a project which is providing 10 000 slum dwellers with new or upgraded electricity connections. Plans to improve peoples homes have been controversial. Developers want to knock down areas of the Dharavi and replace it with high rise apartment blocks. Many local people are against this as they feel they will loose their sense of community and their homes which many have lived in for generations.

America: Boom, Bust and Recovery timeline	
April 1917	America enters WW1
Nov 1918	WW1 ends with the Armistice
1919	Congress refuses to join the League of Nations
Jan 1920	Prohibition comes into force under the 18 th Amendment and the Volstead Act
April 1920	Two Italian-Americans, Sacco and Vanzetti, arrested on suspicion of armed robbery and murder
Aug 1920	19 th Amendment gives women the right to vote
Nov 1920	Republican Warren Harding is elected as President
1922	Fordney-McCumber tariff makes imported food expensive
1924	Peak year for production of Ford's Model T
1924	Immigration Quota Act severely restricts immigration
1925	KKK membership reaches its peak – 5 million members
1927	Sacco and Vanzetti are executed
1927	First 'talkie' is made and called 'The Jazz Singer'
1929	St Valentine's Day Massacre. Al Capone's men murder 7 of Bugsy Moran's gang
Oct 1929	Wall Street Crash
1933	14 million people unemployed.
Nov 1933	Franklin D Roosevelt is elected, promising a 'New Deal' for the American people.
Dec 1933	Prohibition is repealed

Reasons why Prohibition failed	DETAILS
The American people	- Most enjoyed alcohol and were unwilling to obey the law. - Visited speakeasies to drink illegal alcohol. - By 1925 there were more speakeasies in American cities than there had been saloons in 1919. - Some Americans made their own whisky in illegal stills - moonshine
Corruption	- Prohibition agents were underpaid and were easily bribed by bootleggers. - Big breweries remained open by bribing government officials, prohibition agents and the police to leave them alone. - One in twelve prohibition agents was dismissed for corruption.
Bootlegging	- Bootleggers supplied illegal alcohol to the speakeasies. - About two-thirds of illegal alcohol came from Canada. - Al Capone made around \$60 million a year from his speakeasies.
Gangsters	- Gang violence common in the fight to control the liquor trade. E.g. 130 gangland murders in Chicago in 1926 and 1927. - Powerful gangsters like Al Capone in Chicago built up powerful networks of corrupt officials, including politicians, the police, judges and even the Mayor of Chicago. - Violence such as the St Valentine's Day massacre made America appear lawless and led to arguments to get rid of Prohibition.

KEY TERMS/PHRASES	
Isolationism	America's policy towards world affairs after World War One. They stayed out of European affairs in order to concentrate on domestic issues within America.
Cycle of prosperity	Mass production -> more sales -> more jobs -> more customers -> more demand -> mass production
Hire purchase	Paying in regular instalments for a product e.g. over 12 months
Assembly line	A line of workers and machines where each worker does one specific task in the design of a product.
Flappers	1920s fashionable young women who enjoyed themselves without following the traditional expectations of female behaviour.
Anarchist	Someone who rejects authority and believes in self-will without the need for government.
lynched	To be killed, usually by hanging, without a legal trial.
'wets' and 'dries'	Wets opposed Prohibition as they wanted to drink. Dries supported the ban on alcohol.
bootlegger	A person who made, sold or transported alcohol illegally during Prohibition.

Event	Outcome
Why was there a boom?	- Industrial strength – the USA was rich in natural resources such as oil and coal. It was the world's leading oil producer and at the forefront of technology innovation, e.g. cars and telephones. Most of its 123 million population worked in industry which paid higher than farming. Most of these people became a market to target their new consumer products at. - Republican policies – Republican Presidents throughout the 1920s believed in 'laissez-faire'; that the government should interfere as little as possible in people's everyday lives. They introduced tariffs on imported goods and kept American taxes as low as possible. - Ford's assembly line – Set up to mass produce motor cars. Each worker on the production line had small jobs to do as the skeleton of the car moved past them. The Model T was the most famous car to be mass produced this way and, as a result, was affordable for American families. - America's economic position after WW1 – America sold arms, munitions and food to the Allies during WW1. By the end of the war America was one of the world's leading exporters.
America: a consumer society?	- Radio and jazz music – Most households owned a radio in the 1920s. By the end of 1922 there were 508 radio stations across America. This gave access to new music such as jazz, which captured the imagination of young white and African Americans. The 1920s became known as the Jazz Age and led to dance crazes such as the Charleston. - Sport – Baseball became a big money sport as people had more money and leisure time. Teams like the Boston Red Sox became legendary. Boxing was also very popular, with famous names like Jack Dempsey winning the world heavyweight title. - Cinema – A major film industry developed in Hollywood, Los Angeles. All movies were silent until 1927 but starred Charlie Chaplin and Buster Keaton (comedy) and Douglas Fairbanks (adventure). An estimated 100 million cinema tickets were being sold per week by the end of the decade. - The car – Cars opened up the suburbs which gave Americans opportunities to spend their money on the cinema, sport, beach holidays, shopping trips, picnics in the country or to visit family or friends.
Changing role of women in 1920s USA	- Impact of WW1 – Some women were employed by the war industries during WW1, giving them a first taste of skilled work. This changed many people's traditional expectations and attitudes towards women and their capabilities and led to all women being given the vote in 1920. - Flappers – Some women wore short dresses and make-up and smoked in public. One writer said the ideal flapper was 'expensive and about nineteen'. - Influence of films – women were more exposed to a wider range of role models. E.g. sexy or daring heroines or in a more traditional role. - Attitudes of men – women were still paid less than men and were still seen as 'unelectable' as political candidates.
Prejudice and intolerance	- The Red Scare – A fear of communism led to discrimination against immigrants from eastern Europe and Russia. E.g. 400,000 American workers went on strike, with authorities fearing Communist interference. A number of bombing attacks were linked to immigrants with radical political beliefs. - Sacco and Vanzetti – Italian Americans arrested on suspicion of armed robbery and murder. Their trial was well publicised as they were self-confessed anarchists. They were found guilty despite dubious evidence and executed in 1927. - The Ku Klux Klan – used violence to intimidate African Americans. It became more powerful in the 1920s and murdered thousands of African Americans by lynching.
Causes of Prohibition	- Anti-Saloon League and Women's Christian Temperance Union – gained support particularly in rural areas and persuaded their state governments to prohibit the sale of alcohol in their state. It was backed by leading industrialists and developed into a national campaign. - Impact of WW1 – workers were seen as more reliable if they did not drink. Many breweries had been set up by German immigrants and so created anti-German hysteria. Beer and spirits were seen as counter-productive to the 'moral' society America claimed to possess. 'dries' – Used powerful arguments to win support for their case. E.g. they claimed that 3000 infants are smothered yearly in bed, by drunken parents.
Wall Street Crash	- Causes – A large increase in the general public and the banks speculated on the stock market by buying shares or by borrowing money to buy shares. Share prices hit a high but, as people lost confidence, came crashing down in 1929. American industries had produced more than they could sell during the boom period. By 1929 most of the people who could afford these goods had already bought them. - Unemployment – Businesses were forced to cut production and lay off workers as more and more banks failed and people stopped spending money. By 1933 there were 14 million unemployed in America. - Poverty – High unemployment hit agricultural areas worst of all. People resorted to queuing for cheap meals, using soup kitchens, setting up shanty towns (Hoovervilles) while they searched for work and searching rubbish tips.



Keywords and definitions

Capitalism—an economic and political system in which a country's trade and industry are controlled by private owners for profit, rather than by the state.
Communism—an economic and political system which owns all major productive resources in a society. Wealth is divided among citizens equally or according to individual need.

Vietcong — nickname given to the NVA (North Vietnamese Army). They infiltrated South Vietnam to try to convert people to Communism.

Containment – America's policy to stop the spread of Communism.

Domino Theory – the theory that if one country becomes Communist, it will spread to others around it.

Hearts and Minds – American tactic used to befriend the South Vietnamese people to stop them from becoming Communist. This involved supplying medical supplies, educational resources and farming tools.

Napalm – a highly flammable petroleum jelly used to blanket bomb areas of North Vietnam.

Agent Orange – a chemical defoliant used on dense areas of jungle. America used this to try to locate the Ho Chi Minh trail. Dioxin in Agent Orange caused birth defects and cancer.

The draft—conscription into the army using a lottery system. 2.2 million men were drafted into the army during the Vietnam War.

Vietnamisation – used by President Nixon as part of the withdrawal from Vietnam. As American troops left Vietnam they would be replaced by South Vietnamese soldiers.

American presidents

John F Kennedy (1961-63)— provided aid, advisors and machinery to South Vietnam but not troop. Kennedy was a believer in the policy of containment.

Lyndon B Johnson (1963—69) - escalated the war by ordering Operation Rolling Thunder (blanket bombing of North Vietnam). He brought in the draft. Protests against the war grew under his presidency—'Hey LBJ how many kids did you kill today?'

Richard Nixon (1969-74) —introduced the policy of Vietnamisation to try to bring the war to an end. He negotiated the Paris Peace Accords which brought American involvement in the war to an end.

Gerald Ford (1974-77) —cut the amount of aid sent to Vietnam leading to the fall of Saigon in 1975. The Communists took over Vietnam and united the North and South.

Leader of North Vietnam

Ho Chi Minh (1954-69) — he was determined to reunite Vietnam under communist rule. By the early 1960s, Ho Chi Minh led North Vietnamese-backed guerrillas, the Vietcong, who were attacking the South Vietnamese government. Fearing the spread of communism, the United States provided increasing levels of support to South Vietnam. By 1965, large numbers of American troops were arriving and the fighting escalated into a major conflict.

Leader of South Vietnam

Diem - prime minister of South Vietnam from 1954 until his assassination in 1963. He refused to hold elections to allow the people to decide if Vietnam should be reunited. He was corrupt and oppressed the South Vietnamese people. He persecuted Buddhists and was hated by many South Vietnamese people.

USA tactics	Vietcong tactics
Napalm/blanket bombing—used to try to cut off supplies moving along the Ho Chi Minh trail.	Tunnels—a network of tunnels were dug underground to provide a hiding place, shelter and stores for supplies and weapons. All entrances were concealed.
Search and destroy—ransacking towns and villages that were suspected of Vietcong activity. Helicopters would be used to drop in US soldiers.	Traps—Punji traps were made from bamboo and caused injury and infection. The fear of traps caused psychological damage to US soldiers.
Hearts and Minds—attempts to befriend the South Vietnamese people and turn them against Communism	Ho Chi Minh trail—a secret jungle trail used to move supplies from North to South Vietnam
Agent Orange—a defoliant used to provide better views of the jungle floor to try to locate the Ho Chi Minh trail.	No uniform—this made it impossible for American soldiers to tell who was the enemy.

Major events during the Vietnam War

The Gulf of Tonkin Incident, 1964—North Vietnamese warships supposedly attacked United States warships, the U.S.S. Maddox and the U.S.S. C. Turner Joy, on two separate occasions in the Gulf of Tonkin, a body of water off the coast of Vietnam. President Lyndon Baines Johnson claimed that the United States did nothing to provoke these two attacks and that North Vietnam was the aggressor. This was a turning point as it brought America into the Vietnam War.

The Tet Offensive, 1968—a ceasefire was agreed by both sides to allow people to celebrate Tet (Vietnamese new year). However, North Vietnam broke their promise and carried out surprise attacks on over 100 cities in South Vietnam. For the first time in the war the Vietcong engaged in face to face fighting. Due to the unexpected attack, the Vietcong were able to takeover strategic areas and buildings e.g radio stations and the American embassy in Saigon. Although the Tet Offensive was halted by US soldiers within 48 hours, it was viewed by many as another reason why America should withdraw from Vietnam.

The Peace Moratorium, 1969— protest against the war had started in the early 1960s but the march on Washington was the largest protest demonstration in US history with an estimated two million people involved. In towns and cities throughout the US, students, working men and women, school children, the young and the old, took part in religious services, school seminars, street rallies and meetings. In Washington DC 250,000 people marched with many wearing black armbands to signify their disgust at the war and to pay tribute to American personnel killed in the war since 1961.

Paris Peace Conference, 1973— this peace treaty was signed to end the Vietnam War.. It ended direct U.S. military combat, and temporarily stopped the fighting between North and South Vietnam.

The fall of Saigon, 1975— On April 30, 1975, Communist North Vietnamese and Viet Cong forces captured the South Vietnamese capital of Saigon, forcing South Vietnam to surrender and bringing about an end to the Vietnam War.

THE EVENTS THAT LED TO WAR

March 1936	Germany sends troops into the <u>Rhineland</u> (area on the French-German border) going against the treaty of Versailles. Britain and France do nothing.
March 1938	Germany joins with <u>Austria</u> , again against the treaty of Versailles. Britain and France do nothing.
September 1938	Hitler puts pressure on Czechoslovakia. Britain and France finally decide to get involved. A deal is made at <u>Munich</u> . • Hitler agrees not to take over any more land • Britain & France agree that Germany may take over part of Czechoslovakia
March 1939	Hitler ignores the deal he made at Munich, and takes over the rest of Czechoslovakia. Britain & France humiliated.
August 1939	To avoid the possibility of a war on two fronts, Hitler makes a non-aggression pact with the Soviet Union. The <u>Nazi-Soviet Pact</u> .
September 1st 1939	Germany invades Poland
September 3rd 1939	Britain and France declare war on Germany
April 1940	German troops invade Denmark and Norway
May 1940	Germany invades the Netherlands and France. German blitzkrieg (lightning-war) has enormous success. France taken over in 6 weeks!

WORLD WAR II TIMELINE

September 1939 •Germany invades •Great Britain and France declare war on Germany	April 1941 •Greece and Yugoslavia are captured December 1941 •Japan attacks Pearl Harbor, Philippines, and Dutch East Indies •United States enter war	February 1943 •Germans surrender at Stalingrad May 1943 •German and Italian troops surrender in French North Africa July 1943 •Soviets defeat Germans at Battle of Kursk	March 1945 •Germany is invaded April 1945 •Soviets enter Berlin •Hitler and Mussolini die May 1945 •Germany surrenders
April 1940 •Blitzkrieg against Denmark and Norway May 1940 •Attacks against Netherlands, Belgium, France June 1940 •France surrenders	June 1941 •Hitler invades Soviet Union August 1940 •Air attack against Britain	Spring 1942 •Japan controls most of Southeast Asia •United States wins battles of the Coral Sea and Midway Fall 1942 •Germans attack Stalingrad •Britain and United States invade North Africa	June 1944 •Rome falls to Allies •D-Day, June 6 th August 1944 •Paris is liberated August 1945 •United States drops atomic bombs on Japan •Japan surrenders

World leaders

British prime ministers

Neville Chamberlain - served as British prime minister from 1937 to 1940, and is best known for his policy of "appeasement" toward Adolf Hitler's Germany. He signed the Munich Agreement in 1938, relinquishing a region of Czechoslovakia to the Nazis.

Winston Churchill—served as British prime minister from 1940 to 1945. He is best remembered for successfully leading Britain through World War Two. He was famous for his inspiring speeches, and for his refusal to give in, even when things were going badly.

Keywords and definitions

Treaty of Versailles—a list of terms that Germany had to adhere to after World War One. The included a reduced military, loss of land and reparation repayments of £6.6 million.

Rearmament – building up military forces. Hitler defied the Treaty of Versailles and began to rearm Germany in 1935.

The German army had 78 divisions by 1939.

Lebensraum – living space. Hitler described his aims to take the USSR for living space in his book Mein Kampf.

Anschluss – the union of Germany and Austria.

Appeasement – British foreign policy followed by Neville Chamberlain. Appeasement gave Hitler what he wanted to avoid war.

Blitzkrieg – Nazi tactic involving air strikes to take out strategic points e.g bridges, communication lines. This was followed by troops on the ground moving in on foot to secure the area.

Operation Barbarossa – the Nazi invasion of the Soviet Union in 1941.

Facism—a form of government that is based on a one party dictatorship. Facist leaders put the needs of the country over the needs of the individual.

Communism—a form of government which owns all major productive resources in a society. Wealth is divided among citizens equally or according to individual need.

Major events of World War Two

Nazi-Soviet Pact, September 1939 - Hitler and Stalin sign an agreement to both invade Poland and split the country between them. This came as a surprise due to their differing ideologies—Hitler was a Facist and Stalin was a Communist. Stalin knew that Hitler would betray him, by signing the pact it gave him time to build up his army in preparation for a Nazi invasion.

Evacuation of Dunkirk, June 1940 – British troops are pushed back to Dunkirk by the Nazis. The British government order a full evacuation from the beaches using any available boats. 68,000 deaths or casualties but 345,000 men rescued. Churchill uses 'the spirit of Dunkirk' to boost morale in Britain.

The Blitz, September 1940 to May 1941 – after Nazi failure in the Battle of Britain, Hitler orders aerial bombing of major cities and ports in Britain. The raids lasted for eight months and killed 43,000 civilians.

Operation Barbarossa, June 1941 – the Nazi invasion of the USSR. Hitler broke the terms of the Nazi-Soviet Pact to achieve 'Lebensraum'. Stalin responded by using the scorched earth policy and hand to hand combat. The Battle of Stalingrad and Leningrad were based on siege warfare.

Pearl Harbour, December 1941 – surprise Japanese attack on Pearl Harbour in Hawaii. Approximately 2,400 Americans were killed and eight battleships were damaged. This brought America into World War Two and started the war in the Far East.

D-Day, June 1944 – the Allies campaign to liberate Western Europe. Three million service personnel were involved in 'Operation Overlord'. Soldiers landed on five beaches in Normandy and were successful in pushing the Nazis back to Germany by May 1945. Deception was key in making the operation a success.

Atomic bomb, August 1945 – due to Japan's refusal to accept an unconditional surrender, American drops the atomic bomb to bring World War Two to an end. The first was dropped on Hiroshima on 6th August 1945 followed by a second on Nagasaki on 9th August 1945.

American presidents

Franklin Roosevelt— served as American president from 1933 to his death in 1945. He built powerful wartime friendships with Britain and the USSR. He declared war on Japan and Germany following the bombing of Pearl Harbour and led America to gain victory over the Nazis in Europe. His wartime efforts prepared the path for his successor, Harry Truman, to win the war in the Far East.

Harry Truman—ended World War Two by dropping atomic bombs on Japan after their refusal to accept an unconditional surrender. He described the dropping of the bomb on Nagasaki as 'the greatest day in history'.

Leader of USSR

Stalin (1924-1953) — signed the Nazi-Soviet Pact with Nazi Germany in 1939 but was betrayed by Hitler in 1941. Stalin encouraged everyone in the USSR to fight in the 'great patriotic war' against Nazi Germany. Stalin claimed victory in the Battle of Stalingrad.

Leader of Germany

Hitler (1933-45) - rose to power as leader of the Nazi Party, Chancellor and then Fuhrer. Vowed to seek revenge for the Treaty of Versailles and became more confident due to the Appeasement policy. Hitler started World War Two by invading Poland in September 1939.

Causes of World War One

The direct cause of WWI was the assassination of Archduke Franz Ferdinand at Sarajevo on 28 June 1914. However historians feel that a number of factors contributed to the rivalry between the Great powers that allowed war on such a wide-scale to break out. One way to remember the FOUR main causes of World War I is to remember the acronym M – A – I – N. (M = Militarism, A = Alliances, I = Imperialism, and N = Nationalism.)

Militarism

All these powerful countries started spending a lot of money on their Defense Forces, including increasing their military technology, number of weapons and trained soldiers. As each country increased their spending on their armies, their enemies would too. This resulted in a cycle of major growth of power as well as continuing to worsen the relationship between the countries. The Anglo-German Naval Arms Race was a race to build ships in Britain and Germany, and added to the tensions within Europe. In the late 1800s, the United Kingdom had the largest navy in the world. After the British threatened to stop shipping along the German coastline in 1897, Germany increased its navy. Britain saw Germany's expansion as a threat, and in turn started to build more ships, and make them more powerful. The public supported their country, and both countries continued to spend more and build faster. In 1912, Germany decided to spend more on their army instead, because it saw the size of Russia's army as more of a threat than the British navy.

Alliances

Before 1914, there were a few strong and powerful countries within Europe. They had divided into two groups, who agreed they would help defend one another if one of them did go to war with a country from the other group. None of the countries planned to be the one to declare war. • The Triple Alliance

This was an alliance formed in 1882 between Germany, Austria-Hungary and Italy • The Triple Entente – this was an alliance formed in 1907 between Britain, Russia and France. There were many reasons why the countries chose to form these alliances, although much of it came down to power. Powerful countries had empires, which made them wealthy. To control other countries for their empires, they needed strong armies.

Imperialism and Nationalism

Before the war, many of the powerful nations were full of nationalism and imperialism. The governments and the media celebrated how great their nations were, and making fun of enemy countries they saw as weak. The growth of their militaries made the countries feel stronger and more important than countries around them. It also meant that they supported going to war, because they did not believe they could lose. Most countries even had war plans for their militaries if war did break out.

Assassination of Archduke Franz Ferdinand

Slavic nations are a group of people sharing similar cultures and histories. They also speak similar Slavic languages. Austria-Hungary included land in which Slavs close to the Serbian border lived. A terrorist group in Serbia called the Black Hand Gang wanted to free those Slavs. They felt Austria-Hungary's declaration of Bosnia-Herzegovina's independence justified their action. Serbia had become aware of the assassination plan and tried to warn Austria-Hungary. Their warning was too vague and so was not taken seriously. It is only after the war that the warning was publicly discussed. Archduke Franz Ferdinand and his wife were shot during a visit to Bosnia on 28 June 1914. Austria-Hungary was angry that Serbia did not think it was a Serbian responsibility to investigate the shooting. Although Serbia agreed to some of the demands for action sent to them by Austria-Hungary, it was not enough.

Pals Battalions:

In September 1914, Lord Kitchener, British war secretary, was put in charge of recruiting more volunteer soldiers to help fight in the trenches. By the end of September, 175,000 men between the ages of 19 and 38 were recruited and were grouped together depending on where they lived or worked. Therefore most of the men in these 'Pals Battalions' were close friends.

Military Service Act: (Conscription)

By the start of 1916, the British Government needed to take more forceful action in order to recruit enough soldiers to win the First World War. In January 1916, the government passed the first Military Service Act and in doing so, began the recruitment policy of conscription. The first act stated that all single men between the ages of 18 and 41 could be called up to the British Army by the government without warning. Only people in war related jobs such as munitions and conscientious objectors could refuse. A second Military Service Act passed in May 1916 stated that married men were now being made available for conscription.

Conscientious Objectors:

A significant number of men resisted the propaganda posters and recruitment sergeants, not because they were cowards, as was often asserted by their opponents, but because they had genuine moral or religious objections. These men became known as the conscientious objectors, or "Conchies". The conscientious objectors faced a great deal of opposition from the public and the Press. However, the British Government wasn't entirely unsympathetic and did allow men to state their objection to military service on grounds of their consciences. Unfortunately, sympathy at local level was sometimes in short supply and many conscientious objectors found that their requests for exemption fell on deaf ears. These men often faced harsh treatment, prison and, in a few cases, death.

The Battle of the Somme:

This campaign began on 1st July 1916. General Haig the leader of the British armed forces believed this would be a highly successful attack. For 7 days the artillery bombarded the German trenches before British soldiers left the trenches to march across no man's land. On the first day approximately 60,000 British soldiers were killed or wounded. After 5 months of fighting, more than a million casualties had been suffered by both sides and only 5 miles had been gained by Britain and her allies. The British and French troops made only a small advance into the German-held areas. Because of this, many people saw it as a failure and thought that General Haig, who was in charge of the British Army, had not done a good job. Most people who study this part of history do agree that the Battle of the Somme drained the German Army and this was an important first step towards the Allied victory in 1918.

Women during WW1:

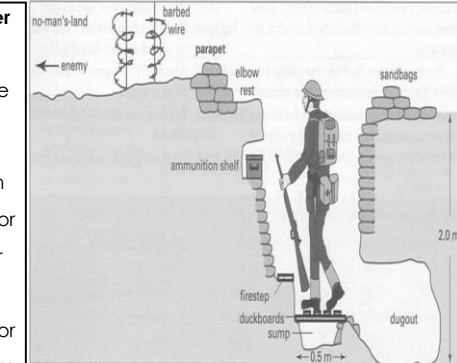
Traditional family structure was completely changed by the First World War. Many married women were forced into the workplace by the death of their husbands. Other women were drafted into industries that had been depleted by military conscription. Over the course of the war: 200,000 women took up jobs in governmental departments. 500,000 took up clerical positions in private offices. 250,000 worked on in agricultural positions. 700,000 women took up posts in the munitions industry, which was dangerous work. Many more women did hard heavy work, including ship building and furnace stoking. These types of jobs had excluded women prior to the war. In July 1914, before the war broke out there were 3.2 million women in employment. This had risen to 5 million by January 1918. This helped a number of women to gain the vote in 1918.

Recruitment and propaganda:

When war broke out, Britain had a small army of around 250,000 professional soldiers. Lord Kitchener, Secretary of State for War told the government that Britain needed at least one million men. The government began a massive recruitment drive. It set up recruitment offices in every town and city, it commissioned posters and pamphlets urging young men to join up. The campaign was hugely successful. There was a frenzy of enthusiasm. Football teams and bus depots joined up together entering the army in 'Pals Battalions'. No one, it seemed, wanted to be left out. In the first month over 500,000 men had signed up. By March 1916 over 2.5 million men had volunteered to join 'Kitchener's Army'.

Why did men volunteer to fight?

- To fight alongside friends and family
- Duty to defend the King and Country
- To avenge the deeds of the enemy
- Fear of being seen as a coward
- For better money or wages
- To learn a trade or skill
- To fight for their families
- For an adventure or holiday
- It would be over by Christmas



Trenches:

Trenches were long, narrow ditches dug into the ground where soldiers lived all day and night. In the middle, was No Man's Land. Soldiers crossed No Man's Land when they wanted to attack the other side.

Life in the trenches:

Soldiers in the trenches did not get much sleep. When they did, it was in the afternoon during daylight and at night only for an hour at a time. They were woken up at different times, either to complete one of their daily chores or to fight. During rest time, they wrote letters and sometimes played card games.

The trenches could be very muddy and smelly. There were many dead bodies buried nearby and the latrines (toilets) sometimes overflowed into the trenches. Millions of rats infested the trenches and some grew as big as cats. There was also a big problem with lice that tormented the soldiers on a daily basis.

Why did the war end?

Germany and her allies realised it was no longer possible to win the war. The Triple Alliance had been damaged. Some reasons for this included the fact that the Schlieffen Plan had failed in 1914 and the Verdun Offensive had failed in 1916. Germany was now losing the Great Battle in France and the German Navy had gone on strike and refused to carry on fighting. Furthermore, the United States joined the war in April 1917, which gave the Triple Entente greater power. Germany was not strong enough to continue fighting, especially as the USA had joined the war and hundreds of thousands of fresh American soldiers were arriving in France. This added greater military strength to the Triple Entente forces. The leaders of the German army told the German government to end the fighting. Kaiser Wilhelm, Germany's leader, abdicated (left his job) on 9 November 1918. Two days later, Germany signed the armistice and the guns fell silent. People in Britain, France and all of the countries that supported them, celebrated the end of war - a war that had lasted four years and four months. In London, a huge crowd gathered in Trafalgar Square.

Events	
28 th June 1914	Assassination of Archduke Franz Ferdinand (heir to the throne of the Austro-Hungarian Empire) by Gavrilo Princip.
23rd July 1914	Austria-Hungary demands Serbia pay for the assassination of Franz Ferdinand, Serbia does not meet the demands.
28th July 1914	Austria-Hungary declares war on Serbia, Russia begins mobilising its troops.
1st August 1914	Germany declares war on Russia, it also moves its army towards France .
3rd August 1914	Germany declares war on France as part of the Schlieffen Plan.
4th August 1914	Germany invades Belgium, Britain declares war on Germany .
September 1914	The advancing German army is stopped before Paris by the British and French at the First Battle of the Marne. The Germans dig in and four years of trench warfare begins.
7 th May 1915	An American passenger liner called the Lusitania, which had many American passengers aboard, was sank by a German U-boat
January 1916	Conscription (men being forced to sign up to fight in the war) was introduced. Targeting single men aged 18-41. Within a few months World War I conscription was rolled out for married men.
1st July- November 1916	The Battle of the Somme - The battle was preceded by a week-long artillery bombardment of the German line which was supposed to destroy the barbed wire defences placed along the German line but only actually succeeded in making No Man's Land a mess of mud and craters. The five month long battle saw the deaths of 420,000 British soldiers (60,000 on the first day), 200,000 French soldiers and 500,000 German soldiers all for a total land gain of just 25 miles.
7 th December 1916	David Lloyd George becomes the new Prime Minister of Britain.
6 th April 1917	USA declared war on Germany
9 th November 1918	Kaiser William II of Germany abdicates and Germany is declared a republic.
11 th November 1918	At 11 am, the Armistice (agreement to stop fighting) was signed bringing the war to an end.
June 1919	Treaty of Versailles signed

Keywords	
Empire	One country ruling over other nationalities either neighbouring countries eg Austria Hungary, or overseas eg British Empire in Africa.
Imperialism	The desire to conquer colonies (other countries), especially in Africa. This brought the major powers into conflict in the late 1800s-early 1900s.
Naval Race	A race between Germany and Britain to develop the best and strongest navy. A cause of rivalry and tension between them.
Nationalism	To believe in the strength and power of your own country. The belief that your country is better than others.
Assassination	A politically motivated murder.
Arms Race/Militarism	Competition between countries to see who could have the best armed forces.
Schlieffen Plan	German war plan designed to stop them having to fight a war on two fronts against France and Russia, it failed.
Alliances	A group of countries who promise to support and protect each other.
Triple Entente	Britain, France, Russia
Triple Alliance	Germany, Austria-Hungary and Italy
Trench foot	This was an infection of the feet caused by cold, wet and insanitary conditions in the trenches.
Conscientious Objectors	Men who refused to join the army for religious or moral reasons.
No Man's Land	The strip of land in-between the 2 sets of trenches. This was filled with mines, barbed wire, craters, shells. Most men who entered did not survive.
Over the Top	The phrase "over the top" referred to leaping out of a trench in order to charge into battle across No Man's Land.
Canaries	Nickname given to women working in munitions factories due to the chemicals from weaponry making their skin turn yellow.
Munitions	military weapons, ammunition and equipment
Armistice	An agreement to stop fighting
Conscription	Being forced to sign up to join the army
Recruitment	Enlisting new people into the armed forces
Propaganda	A number of posters were designed to play on the emotions of the British people and persuade men to sign up to fight
Censorship	A number of information from the front line was banned/censored and altered in the British newspapers to keep the morale high in Britain
Conscientious objector	Men who refused to fight in the war for moral or religious reasons.
Abdicated	To give up the throne of a country. The Kaiser (Emperor of Germany) resigned and fled the country at the end of the war.

Key People	
Archduke Franz Ferdinand	Member of the Austrian Royal family, the heir to the throne (next in line to be the Emperor/ruler of Austria-Hungary). Married to Sophie and took her with him on a royal tour to Sarajevo, the capital of Bosnia. He was assassinated on June 28, 1914 by Gavrilo Princip.
Gavrilo Princip	Born in Bosnia, Princip was a member of the Black Hand Gang. The gang planned to assassinate Franz Ferdinand and Princip fired the bullet that killed Franz Ferdinand and his wife.
Alfred von Schlieffen	Germany army chief of staff who devised the Schlieffen Plan, Germany's only war plan. It imagined a huge hammer blow at Paris, defeating the French quickly before moving the forces to fight Russia. The plan failed because the Germans were slowed down by the French and British.
Black Hand Gang	A terrorist group who wanted to see the end of Austro Hungarian rule over Bosnia. They planned the assassination of Archduke Franz Ferdinand.
Field Marshall Douglas Haig	Field Marshall Douglas Haig is most associated with the Battle of the Somme in World War One. Douglas Haig was Britain's commander-in-chief during the Somme battle and took much criticism for the sheer loss of life in this battle. Many debate whether he was a hero or a butcher.
Tactics used in Trench Warfare: Heavy guns bombard an enemy trench for hours on end to try to weaken their defences. At zero hour men would go 'over the top' into no man's land. The aim would be for soldiers to attack the enemy's front line trench. All soldiers were armed with a rifle and bayonet (knife). Other weapons used were machine guns, poison gas, and later, tanks. Weapons: Rifle - Each man who joined the British army was issued with a rifle and a 40cm steel bayonet to attach to the end. These rifles were slow, firing approximately 20 bullets per minute, but very accurate. Snipers used this to 'pick off' an enemy soldier who lifted his head out of the trench. Gas - Gas was first used by the Germans in 1915. It soon proved its worth as a weapon of war used by both sides. There were two types. Chlorine Gas suffocated the lungs so the victim could not breathe. Mustard Gas blistered the skin and caused eyes to bulge. A victim would cough up the lining of his lungs. An early gas mask consisted of a handkerchief dipped in urine and tied to the face! Gas caused 15% of all casualties in the war, but by 1918, effective gas masks had been developed. Machine Gun - The machine gun was an untested weapon of war in 1914 but it soon became recognised as one of the world's deadliest weapons. Some could fire up to 10 bullets per second. In the first 12 days of fighting, the French army reported 20,000 losses – mostly through machine gun fire. About 40% of the wounds suffered by British soldiers in the war were caused by machine guns. Artillery - These were large, heavy guns that could shoot bombs (or shells as they were called) over long distances. They were used to bombard the enemy trenches for several hours before an attack. Some big guns could fire shells over 13 miles. When they exploded, the red hot 'shrapnel' could cut an enemy to pieces. The noise also caused soldiers to suffer 'shell-shock' – a condition similar to a nervous breakdown. Artillery caused about 60% of all injuries during the war. Tanks - Tanks were first used by the British in 1916. Although they frightened the Germans, they were slow - moving at around 4 miles per hour - and broke down easily. In 1917, over 400 British tanks crossed 'No Man's Land' and forced the Germans to retreat at the Battle of Cambrai.	

TOPIC	KEY INFORMATION	Knowledge Organiser— English Civil War
1. What were the main events that led to the English Civil War?	Parliament- The Magna Carta established that the King was not above the law and he had to ask his barons for advice . In the 13th century, the first parliament was held. It became custom for the monarch to regularly consult with the most important people in England. When Charles I came to the throne, parliament had evolved to a point where MP's expected to be regularly consulted. King- James I comes to power in 1603. 1604-11- James argues with parliament over finances and whether the monarch has the right to raise money without parliament, James dismisses parliament for three years. 1614- James recalls parliament but after eight weeks dissolves it again as parliament wanted to discuss James raising money without consent. This happens a few times until James dies and his son Charles I came to power in 1625. Charles I marries French princess Henrietta Maria, a devout Catholic, which causes alarm amongst many in England. 1626-29- Charles argues with parliament over religious and financial issues, he dissolves parliament and does not call for them for another 11 years, the period is known as 'Personal Rule' . 1633- Charles appoints William Laud as Archbishop of Canterbury, Laud offends many as he introduced reforms similar to Catholicism. 1634- Charles expands a tax known as 'Ship money' to raise funds without consulting parliament, many MP's aren't happy. 1637- Three Puritans are publicly mutilated for criticizing Laud's reforms, there is widespread sympathy. 1637-39- Charles wants to introduce new English prayer book into Scotland, sparking a rebellion and subsequent war. Charles's army is defeated by the Scots. 1640- Charles forced to recall parliament to pay for the war with Scotland, parliament unleashes 11 years of complaints on him, he dissolves parliament but forced to recall again after situation with Scotland worsens, the period is known as 'Long parliament'. 1641- Parliament passed the Triennial Act, requiring the King to call parliament more frequently. Violence breaks out between Protestant and Catholics in Ireland, Charles tries to raise money to pay for army to deal with the situation but parliament issues the 'Grand Remonstrance' - a list of complaints against Charles. January 1642- Charles demanded the arrest of 5 MP's, the House of Commons refused, so the king arrived. The king is not supposed to enter the Commons, and he had brought soldiers with him. Charles apologized for his intrusion but announced 5 MP's were guilty of treason and demanded their arrest, the Commons refused to help and Charles left. Charles faced such hostile back-lash from the people of London that he fled to Hampton Court Palace and did not return to London for another seven years.	
2. The role of religion	In the 16th century the Reformation had resulted in Catholicism being replaced as the official state religion by the Church of England (Protestantism). The rise of the Puritans in the 17th century: deeply religious Protestants who saw that the Church of England was still too catholic and believed Catholicism was an evil conspiracy intent of destroying Protestantism. Puritans believed that: individuals should be able to have a private relationship with God, without the need of priests, the role of the clergy should be limited to conducting sermons and reading scripture, decorations such as stain glass were distractions and churches should be plain looking, and people should avoid alcohol, rich foods and other worldly things. Charles and religion- Charles came to the throne as the Protestant head of the Church of England, however, Charles belonged to the High Church, a branch of Protestantism which was closer to Catholicism. He reinforced his closeness to Catholicism by marrying a French catholic Princess. Charles appointed William Laud as Archbishop of Canterbury, laud was a leading Arminian with the belief that the Church should roll back many of the changes of the Reformation. Charles favored the return of colorful stained glass windows and images. These moves infuriated the Puritans and the King and Church faced growing criticism. Three critics- henry burton, William Prynne and John Bastwick published pamphlets criticising the King's marriage and Lauds reforms. They were arrested in 1637 and sentenced to have their ears cut off in public. Charles did not realized his religious views and punishments of those who disagreed with them were driving a wedge between himself and his subjects.	
3. Why couldn't Charles get on with parliament?	In 1629 he argued with parliament about his religious views and dismissed them, ruling without for 11 years, a period of time known as the 'Personal Rule'. Court of Star Chamber: Charles attempted to exercise what he believed was his God-given right to rule. The court became a substitute government, allowing him to rule without parliament. Ship money: Charles soon needed bigger sources of income. Ship money was a tax usually paid by coastal areas for protection against foreign navies. Charles expanded it to areas inland. Those who refused to pay were imprisoned. The tax was very unpopular as it hadn't been agreed by parliament. The Short Parliament: Charles faced a storm of criticism when he recalled parliament after 11 years. MP John Pym criticized Charles in a 2 hour long speech. Furious, Charles dissolved parliament after 3 weeks. Charles was then forced to recall parliament after he failed to defeat the Scots. Irish Rebellion: In 1641, Irish Catholics rose up against English rule. The Reformation had forced Irish Catholics to become protestants and they were furious. Charles wanted to recall parliament to ask for money to send an army to Ireland. Parliament refused and instead passed 'the Grand Remonstrance'. It was a summary of parliament's criticisms of the King. Charles ordered the MPs responsible be handed over on the 4th January 1642—they refused. Charles arrived at the House of Commons with 300 troops and tried to seize them but John Pym had fled. Charles travelled to Nottingham and raised his royal standard to start the Civil War.	
4. Roundhead or Cavalier	Not everyone chose who they were going to fight for. It depended on which army got to their village first. The rich lords usually fought for the King. His support was strongest in the north of England, Wales, Devon, Cornwall and Somerset. Parliament was most popular in the South, especially London and other large towns and ports. The decision divided families. Both Parliament and Charles issued orders that the army support him. This put officers in a terrible dilemma. Puritans also fought for Parliament. The Parliamentarians were nicknamed 'roundheads'. The Royalists were known as Cavaliers. This meant soldier on horseback. They wore steel breastplates over their leather coats. They tried to break through enemy lines by firing their pistols and cutting down men with their swords. Ordinary people on each side joined the pikemen or musketeers. Soldiers without horses were known as infantry. You couldn't easily tell one side from an-other so the soldiers wore bright strips of cloth. The Royalists wore red and the Parliamentarians wore yellow. Pikemen: Their job was to stand at the front of the whole army with a five metre long pole, a pike. As the enemy approached, they would dug one end into the ground and pointed the other at the charging enemy. The Musketeers: A musket was a big clumsy gun. It was so heavy that the musketeers needed a stick to rest it on. The gun was fired by using a match to light the gunpowder. A ball or shot could travel up to 400 metres. It was a slow and dangerous job.	
5. What was new about the New Model Army?	The first great battle of the civil war, Edgehill in 1642, ended in a draw. The leaders of the Parliamentarians were shocked at how poorly equipped the men were. In order to improve their army, they turned to an MP called Oliver Cromwell. They gave him the job of training a new set of troops. This was England's first professional army and it was called 'The New Model Army'. Cromwell made his troops live according to a very strict set of rules. Officer positions were filled with men who had shown their talent on the Battlefield. Laws of the army: Criticism of Cromwell or Parliament carried the death penalty, no man was to swear against God, if any man fled, he would be killed. Soldiers: Cavalry: attacked the weak points of the enemy, wore light armour and carried swords with pistols. Infantry: These included pikemen and musketeers. Pikeman's pikes were very effective against cavalry. Muskets were devastating at close range. Artillery: They were the heavy guns and used canons. They could demoralize the enemy and punch holes in the infantry.	
6. The Battle of Naseby	The New Model Army had its chance to enter battle on 14th June 1645 near the village of Naseby. On one side, stood Charles I with the royalist army, under the command of his nephew, Rupert. The parliamentarians were under the command of Oliver Cromwell. The Royalists began well when the cavalry, under the command of Prince Rupert, successfully charged the cavalry at the Roundheads. However, their mistake was to charge for the Roundhead's baggage train which contained their supplies and treasure. Meanwhile, the Royalist cavalry attacked the right flank of the Roundheads but Cromwell's highly trained and well-disciplined army stood their ground. Cromwell seized his opportunity and launched an attack on the Royalist infantry. The panicked Royalists collapsed and surrendered. Charles's army was almost entirely destroyed. 1000 Royalist soldiers were killed and 4500 taken prisoner. The Battle marked the end of the Royalists.	
7. Why was Charles sentenced to death?	Charles was imprisoned on the Isle of Wight and refused to cooperate with Cromwell. Later is emerged that he had been conspiring with the Scots who invaded England, to put Charles back on the throne. The plan failed but many argued Charles should be put on trial for treason. There was lots of disagreement about how to treat Charles. Many expressed horror at the idea of killing someone supposedly appointed by God and favored his return with limited powers. However, Cromwell and the New Model Army prevented all MP's who had sympathy for Charles from entering Parliament. The remaining 145 MP's (the Rump Parliament) issued an order calling for the trial of Charles I. The House of Commons declared it had the right to rule without a King. The trial did not go smoothly as 50 of the 135 commissioners appointed to sit on the trial, refused to take part. Charles also regularly interrupted the charges being read out. Charles refused to plead either guilty or innocent and so was barred from the remainder of the trial. He was accused of war crimes and charged with treason. Charles was sentenced to death on the 27th January 1649. On the day of his execution, he wore two shirts as it was bitterly cold and he didn't want people to think he was shivering from fear.	
8. Was the world turned upside down?	For the next 11 years, for the first and only time in England's history, it became a republic. There was no King or Queen. Oliver Cromwell took control of the situation. Cromwell ruled England in a strictly Puritan way: he banned swearing, dueling, horse racing and all kinds of sport; encouraged trade by making peace with France, Holland Spain; abolished the celebration of Christmas, reformed the Poor Laws, closed theatres and many pubs, allowed Jews to return to England; reformed with the support of the army. Cromwell was titled 'Lord Protector' and ruled without parliament, passing laws when they were not meeting. Cromwell refused to become King when parliament offered him crown, but behaved like a monarch. He was called 'your highness' and lived in Palaces. England prospered but many people did not like him. A decision was made, after Cromwell's death, to invite Charles I son, Charles II to return to England and become King.	

Topic	Knowledge
Life & Consciousness	To create human life the sperm cell from a male and an egg cell from a female are needed. When the sperm and egg cell meet this is known as conception. The fertilised egg then implants into the lining of the mother's womb where it continues to develop. At around 6 weeks the foetus has a heartbeat, and after 9 weeks it starts to develop limbs. Between 10 and 19 weeks the brain develops rapidly creating new neurons and heightening the senses. At 24 weeks it can survive outside of the womb. After 9 months (40 weeks) the baby is born. There is great debate over when life actually begins, Christians would argue that life begins at conception however many people consider a heartbeat to be a key point of development. According to UK law a woman cannot terminate her pregnancy after 24 weeks – this is the point at which the foetus could survive independently outside the womb with medical intervention. There is also much debate over when consciousness begins as this marks humans from all other living things as we have the ability to understand ourselves, our place in society and interact with others.
The Sanctity of Life	Christians believe in the sanctity of life, that all life is holy and made by God. This is backed up by many references in the Bible which show God created all humans equally in his image. Christians believe that humans are unique creations of God that are sacred from the moment of conception, God knows us all individually. Life should be treated with respect and love and not be abused or killed. Our bodies are special and contain the essence of God within our souls, it is not for humans to make life or death decisions, this judgement can only be made by God, who first gave us life. These views are evident in the case of Jodie and Mary the conjoined twins, if they remained joined they would both die, if they were separated Mary would die. The parents refused treatment on the grounds that life is sacred and should not be taken – they wanted to leave the decision to God. The case went to the courts and a judge ruled that they should be separated. Jodie went on to live a happy life.
Genetic Engineering	All living organisms have DNA this contains information about the living thing and determines things such as colour, shape and size. Scientists are able to alter DNA by adding or removing information. This alters the traits of the living thing and allows scientist to get the desired end result. The organism will pass these new features onto its offspring. There is great debate around the ethics and safety of genetic engineering, some positives include: + We can alter human being to make them resistant to disease + We can make animals healthier and more productive for food consumption + We can change the DNA in crops to make them resistant to cold/ heat and need less water + We can create new medicines to beat cancer and cure diseases However negatives include: - Changing human DNA could result in a race of superhumans – conception would no longer be natural - Animals suffer due to genetic changes such as chickens so heavy they cannot stand and without feathers that causes injury - People have raised concerns about crops being dangerous for the environment and humans - Genetic engineering could be abused to create dangerous weapons that could kill millions
Organ Donation	Organ donation is the process of surgically removing an organ or tissue from one person (the organ donor) and placing it into another person (the recipient). There are 5 types of tissue and 6 types of organ you can donate. Donors can be living or dead (dependant on what is being donated), people can donate as a living donor, from brainstem death or circulatory death. Despite this technology 3 people every day in the UK die waiting for an organ. The main issue is either not signing up to the NHS organ register or relatives refusing donation after death. The UK has decided to introduce an 'Opt Out' system which will come into place in 2020. This means that everyone in the UK will be eligible for organ donation unless they contact the NHS and state otherwise. There is hope that this will dramatically increase the number of lives saved.
AI Technology	There is great debate surround the creation of AI technology. Already there have been advancements in science which have allowed robots to communicate effectively with humans and problem solve. However the issue remains – can AI really experience human consciousness? The Turing Test and The Global Workspace Theory both suggest that the key to real AI lies in intelligence and the ability of a machine to process information – as soon as we have the technology to do this AI consciousness will become a possibility. However others argue that consciousness is rooted in emotion, something AI could never understand. Descartes famously quoted 'I think therefore I am' suggesting that our consciousness is a gift from God – something non-physical. Therefore not something that could be detected and re-created in a laboratory.

Key Word	Meaning
Foetus	A foetus is an animal or human being in its later stages of development before it is born
Sperm	The male reproductive cell involved in sexual reproduction.
Egg	The female reproductive cell involved in sexual reproduction.
Conception	When the sperm meets the egg
Consciousness	The state of being aware of and responsive to one's surroundings
The Sanctity of Life	The belief that all life is holy and made by God
Genetic Engineering	When the DNA of an organism is altered to produce a desired trait
DNA	Material which is present in all living organisms which contains genetic information
Organ Donation	Is the process of surgically removing an organ or tissue from one person (the organ donor) and placing it into another person (the recipient).
Artificial Intelligence	The theory and development of computer systems able to perform tasks normally requiring human intelligence
The Turing Test	A test created by Allan Turing to test a machines ability to exhibit intelligent behaviour
Key Thinker	Ideas

Allan Turing	Alan Turing, an English mathematician who pioneered machine learning during the 1940s and 1950s. He created the 'Turing Test' which is a method of inquiry for determining whether or not a computer is capable of thinking like a human being. Turing proposed that a computer can be said to possess artificial intelligence if it can mimic human responses under specific conditions. The original Turing Test, requires three terminals -- each of which is physically separated from the other two. One terminal is operated by a computer, while the other two are operated by humans. During the test, one of the humans acts as the questioner, while the second human and the computer respond. The questioner interrogates the respondents within a certain subject area, after a length of time or number of questions, the questioner is then asked to decide which respondent was human and which was a computer. The test is repeated many times. If the questioner makes the correct determination in half of the test runs or less, the computer is considered to have artificial intelligence, because the questioner regards it as "just as human" as the human respondent
Rene Descartes	Rene Descartes a 17th century philosopher argued that nothing is more obvious and undeniable than the fact that you're conscious. In theory, everything else you think you know about the world could be a crazy illusion trying up to trick you – but your consciousness itself cannot be an illusion. He created the famous quote 'I think therefore I am' meaning the fact that he is aware of this own consciousness proves he must exist. This obeys none of the usual rules of science. It doesn't seem to be physical. It can't be observed, except from within, by the conscious person. It can't even really be described. The mind, Descartes concluded, must be made of some special, immaterial stuff that didn't abide by the laws of nature; it had been given to us by God.

Quotes	Topic
'God made man in his own image' Bible	The Sanctity of Life
'You knit me together in my mothers womb' Bible	The Sanctity of Life
'The technology itself has got enormous potential to correct other (medical) conditions' Prof Waseem Qasim	Genetic Engineering
'I think therefore I am' Rene Descartes	AI Technology
'Not until a machine can write a sonnet or compose a concerto because of thoughts and emotions felt, and not by the chance fall of symbols, could we agree that machine equals brain' Professor Jefferson Lister	AI Technology

Key Nouns

le réseau social	-social network
le lecteur MP3	-MP3 player
le smartphone	-smartphone
le texto	-text
l'ordinateur	-computer
le portable	-mobile
la tablette	-tablet
la technologie	-technology
les amis virtuels	-virtual friends
le forum	-forum
les photos	-photos
le documentaire	-documentary
l'émission	-programme
la série	-series
le jeu télévisé	-game show
le dessin anime	-cartoon
la comédie	-comedy

Adjectives

pratique	-practical
dépendant	-addicted
accro	-addicted
cher	-expensive
utile	-useful
rapide	-quick
dangereux	-dangerous
facile à utiliser	-easy to use
nouveau/ nouvelle	-new
passionnant	-exciting
effrayant	-scary
romantique	-romantic

Media and Technology

Key infinitives

partager	-to share
communiquer	-to communicate
se faire des amis	-to make friends
parler	-to speak
blogger	-to blog
lire	-to read
participer	-to participate
utiliser	-to use
contacter	-to contact
écouter	-to listen to
regarder	-to watch
tchatter	-to chat
télécharger	-to download
garder le contact	-to keep in touch
faire les devoirs	-to do homework
travailler	-to work



Times

chaque jour	-every day
par jour	-per day
tous les jours	-every day
le soir	-in the evening
avant	-before
après	-after
trois heures	-3 hours

Useful ER verb Past Participles avoir + Past Participle

écouté	-listened
joué	-played
téléchargé	-downloaded
parlé	-spoke
communiqué	-communicated
acheté	-bought
utilisé	-used
partagé	-shared

Using pouvoir (to be able to)

Je peux	-I can
Tu peux	-you can
Il/elle peut	-he/ she can
On peut	-you can

Nous pouvons	-we can
Vous pouvez	-you can
Ils (elles) peuvent	-they can

pouvoir + infinitive

e.g. On peut télécharger un film – you can download a film

Le corps – body parts

les dents - the teeth

le genou – the knee

le pied – the foot

le nez - the nose

le bras - the arm

le doigt -the finger

le ventre - the stomach

le dos - the back

le cou - the neck

l'épaule - the shoulder

la main - the hand

la jambe - the leg

la gorge - the throat

la joue – the cheek

la coude – the elbow

la bouche - the mouth

les yeux -the eyes

les oreilles - the ears

Les maladies - illnesses

Qu'est-ce qui ne va pas? - What's wrong?

Quel est le problème? - What's the problem?

Depuis quand? - Since when?

Depuis .. jours—for ...days

Depuis ...semaines—for ...weeks

J'ai mal—I am in pain..

Masc sing—au e.g. au bras

Fem sing - à la e.g à la main

Plural—aux e.g aux jambes

J'ai mal au ventre—I have a stomachache

J'ai mal au dos—I have a backache

j'ai faim - I am hungry

j'ai soif - I am thirsty

j'ai froid - I am cold

j'ai chaud - I am hot

j'ai la grippe - I have the flu

j'ai de la fièvre - I have a fever

j'ai de la température - I have temperature

je suis enrhumé - I have cold

je suis malade - I am ill

je suis fatigué - I am tired

je suis blessé - I am injured

je suis déprimé I am depressed

je tousse - I am coughing

Je me suis cassé (e)– I've broken

Je me suis coupé(e) – I've cut

Je me suis tordu(e) – I've twisted

Je me suis blessé(e) – I have injured

Pour rester en bonne forme - to stay in good shape

Je dois + infinitive - I have to

Il faut + infinitive - you must / have to bien manger -

eat well manger plus/moins de – eat more/less of

boire beaucoup d'eau -drink a lot of water

faire de l'exercice -exercise

éviter - avoid

les boissons gazeuses – fizzy drinks

le fast food – fast food

se coucher tôt – go to bed early

se réveiller tard – to wake up late

dormir bien – sleep well

il ne faut pas + infinitive -you must not

fumer - smoke

prendre des drogues - take drugs

boire de l'alcool -drink alcohol

Les remèdes – remedies

allez chez le docteur - go to the doctor

allez chez le dentiste - go to the dentist

allez à l'hôpital - go to the hospital

allez à la pharmacie go to the chemist

buvez beaucoup d'eau - drink a lot of water

prenez des comprimés - take tablets

prenez de l'aspirine – take aspirin

prenez du sirop—take syrup

restez au chaud –stay warm

restez au lit -stay in bed

Year 9 French
La santé — Health

Key Nouns (Education)

la matière	-subject
le lycée	-high school
la journée scolaire	-school day
les élèves	-the pupils
les profs	-the teachers
la cantine	-canteen
l'uniforme scolaire	-school uniform
les règles	-rules
les examens	-exams
les devoirs	-homework
le travail	-work
le stage	-course

French Half term 2 – Life after school Year 9



Jobs

le/la médecin	-doctor
le professeur/ la professeure	-teacher
le pompier	-firefighter
le boulanger/ la boulangère	-baker
le vendeur/ la vendeuse	-shop assistant
le/la comptable	-accountant
l'infirmier /l'infirmière	-nurse
le /la collègue	-colleague
le patron/ la patronne	-boss
le / la vétérinaire	-vet
le chanteur/ la chanteuse	-singer
au chômage	-unemployed

Key Verbs

travailler	-to work
être	-to be
devenir	-to become
voyager	-to travel
trouver	-to find
chercher	-to look for
étudier	-to study
gagner	-to earn
aider	-to help
parler	-to speak
recevoir	-to receive
s'intéresser à	-to be interested in
se passionner pour	- to be passionate about

Adjectives

bien payé	well paid
mal payé	badly paid
stressant	stressful
fatigant	tiring
gratifiant	satisfying
utile	useful
varié	varied
difficile	difficult
facile	easy
intéressant	interesting
ennuyeux	boring

Future Tense

aller + infinitive

je vais	I'm going to
tu vas	you're going to
il / elle va	he/ she is going to
nous allons	we are going to
vous allez	you are going to (polite)
ils (elles) vont	they are going to

Key words –jobs around the house

faire mon lit	- to make the bed
faire la vaisselle	-to wash up
préparer le repas	-to make a meal
laver la voiture	-to wash the car
faire promener le chien	-walk the dog
sortir la poubelle	-to take the bin out
passer l'aspirateur	-to Hoover
ranger ma chambre	-to tidy my room
l'argent de poche	-pocket money

Key vocab Future plans

aller en fac	-to go to university
faire un apprentissage	- to do an apprenticeship
aller à l'université	-to go to university
le boulot	-job
le métier	-job

My family and Characteristics- Key Vocab

Je m'entends bien avec... I get on well with
Je ne m'entends pas bien avec ...I don't get on with
ma mère—my mum
ma soeur—my sister
ma tante—my aunt
ma grand-mère—my grandmother
mon père—my dad
mon frère—my brother
mon oncle—my uncle
mon grand-père—my grandad
Il/Elle est—He/she is
assez/un peu/ très – quite/a little/very
vraiment - really
amusant(e)—funny
sportif/sportive—sporty
stricte—strict
paresseux/paresseuse—lazy
intéressante/ennuyeuse– interesting/boring
penible—embarrassing
agaçant / énervant - annoying

Describing your family

Dans ma famille il y a—in my family there is
Dans ma famille il y a huit personnes—in my family there are 8 people
Je n'habite pas avec - I don't live with

Mes parents se sont séparés -my parents are separated

Mes parents sont divorcés - my parents are divorced

Il y a cinq ans je me suis démenagé avec ma mère -
five years ago I moved in with my mum

Il/elle n'habite plus avec nous = he/she doesn't live with us anymore

Je me dispute mes parents - I argue with my parents.

On passe beaucoup de temps ensemble = We spend a lot of time together

Key verbs:

Comprendre = to understand
Partager = to share
Écouter = to listen
s'entendre avec... = to get on with
Aider = to help

Plans for the future: conditional tense

Je voudrais + infinitive—I would like to

me marier—get married
habiter seule—live alone
habiter avec des amis—live with friends
avoir une famille—have a family
avoir (3) enfants—have (3) children
avoir une bonne carrière—have a good career
être riche—be rich
voyager partout dans le monde—travel around the world

Views on marriage

A mon avis—in my opinion
Je voudrais me marier—I would like to get married
Il faut se marier—We must/should get married
Je ne veux pas me marier—I don't want to get married
Je pense que le mariage, c'est démodé - I think marriage is old-fashioned
Je trouve que.... I think that...

Où j'habite – Where I live

J'habite—I live

une ville – town

un village – a village

à la campagne – in the countryside

à la côte – on the coast

au bord de la mer – by the seaside

dans le nord/sud/est/ouest – in the north/south/east/west

C'est .. – It is

Ma ville idéale **serait**—My ideal town **would be**

assez/un peu/ très – quite/a little/very

tranquil/bruyant – peaceful/noisy

propre/sale – clean/dirty

joli/laid – pretty/ugly

intéressant/ennuyeux – interesting/boring

animé/barbant—lively/dull

vieux/moderne – old/modern

L'avantage, c'est que – One advantage is that..

L'inconvénient, c'est que – One disadvantage is that..

pourtant/cependant – however

par contre – on the other hand

Environnement - Environment

Il faut/Il ne faut pas + **infinitive verb** – We must/must not

recycler la verre/le papier – recycle glass/paper

utiliser les transports en commun – use public transport

aller à pied – walk

faire du vélo – bike

prendre une douche/un bain – take a shower/bath

éteindre la lumière/ la télé – switch off the lights

gaspiller l'eau – waste water

économiser l'énergie – save energy

Le passé composé—The perfect tense

Je suis allé(e)- I went

J'ai joué—I played

J'ai fait—I did

J'ai visité—I visited

J'ai mangé—I ate

J'ai bu—I drank

Half term 4—Year 9 French
Où j'habite et l'environnement

En ville – In town

Dans ma ville, il y a un/une – In my town there is a

Il n'y a pas **de + no article** e.g Il n'y a pas **de gare**

Ma ville idéale **aurait**—My ideal town **would have**

beaucoup de – lots of

trop de – too many/much

plein de – full of

Une gare – a train station

Un commissariat – police station

Un aéroport– airport

Des magasins –shops

Un château – a castle

Une église – a church

Un supermarché – a supermarket

Un cinéma – a cinema

Une patinoire – an ice rink

Une piscine – a swimming pool

Un musée – museum

Un collège – a school

Une école – a primary school

Les activités – Activities

On peut + **infinitive verb** – One/we can...

faire une promenade – go for a walk

aller au centre sportif – go to the sports centre

visiter un musée – visit a museum

faire du vélo – go for a bike ride

aller à la piscine – go to the swimming pool

acheter des vêtements – buy clothes

danser – dance

jouer aux sports – play sports

GENERAL "TRANSFERABLE" VOCABULARY
 YOU WILL MEET THESE WORDS AND PHRASES VERY OFTEN!)

und = and	oft = often
aber = but	manchmal = sometimes
oder = or	nie = never
heute = today	selten = rarely
gestern = yesterday	ab und zu = now and then
immer = always	jetzt = now

im Frühling = in the Spring	es ist/es war = it is/it was
im Sommer = in the Summer	toll (great)
im Herbst = in the Autumn	langweilig (boring)
im Winter = in the Winter	spitze (superb)
	furchtbar (awful)

Das Wetter = the weather	
es regnet = it is raining	schön = nice
es schneit = it is snowing	kalt = cold
sonnig = sunny	es hat geregnet = it rained
warm = warm	wolkig = cloudy
windig = windy	es hat geschneit = it snowed

Key verbs
 You must know the verbs HABEN and SEIN

	HABEN	SEIN
Ich (I)	habe	bin
Du (you)	hast	bist
Er / sie (he / she)	hat	ist
Wir (we)	haben	sind
Ihr (you)	habt	seid
sie / Sie (they / you)	haben	sind

Remember – learn the words and HOW to use them!

Auf einem Campingplatz = on a campsite
 in einem Hotel = in a hotel
 in einer Jugendherberge = in a youth hostel

KNOWLEDGE ORGANISER - YEAR 9 GERMAN – HALF TERM 1 (SEPT – OCT HALF TERM)

Topic specific vocabulary

- Das Hotel = hotel
- Die Jugendherberge = youth hostel
- Der Campingplatz = the campsite
- Bei Freunden = with friends
- Das Ferienhaus = holiday home
- Die Ferienwohnung = holiday flat
- Für wie lange? (For how long)
- einen Tag / zwei Tage = one/two days
- eine Nacht / zwei Nächte = one/two nights
- eine Woche / zwei Wochen = a week/two weeks
- ein Wochenende – a weekend
- ein Monat/zwei Monate – a month/two months

Die Länder = the countries

- Deutschland = Germany
- Frankreich = France
- Spanien = Spain
- Griechenland = Greece
- Italien = Italy
- Schottland = Scotland
- Österreich = Austria
- England - England
- Amerika = USA
- Australien = Australia
- Die Türkei = Turkey

Grammar

Main grammar point: THE PERFECT TENSE – used to tell someone what YOU HAVE DONE IN THE PAST!

Learn and practise the following rules:

- **You always need 3 parts** – the PERSON DOING THE VERB; THE HELPING VERB (HABEN OR SEIN) AND THE PAST PARTICIPLE (THE BIT YOU SEND TO THE END!)
- **Regular verbs with HABEN** – to make the past participle, take the INFINITIVE, chope of the EN, add a GE to the beginning and a "T" at the end
 Eg. kaufen = gekauft ; wohnen – gewohnt; machen gemacht
- **Irregular verbs with HABEN** – you need to learn the main irregulars including:

sehen	gesehen
lesen	gelesen
trinken	getrunken
essen	gegessen
finden	gefunden
übernachtet	übernachtet
- **Verbs which use SEIN** – any verbs which are linked with movement / travelling – the most common ones are:

gehen	gegangen
fahren	gefahren
fliegen	geflogen
bleiben	geblieben
schwimmen	geschwommen

Some examples to help:

Ich habe die Hausaufgaben gemacht = I have done the homework

Er hat eine CD gekauft = he has bought a CD

Wir haben Pasta gegessen und Wasser getrunken = we have eaten pasta and drunk water

Ich bin nach Deutschland gefahren = I went to Germany

Wir sind schwimmen gegangen = we went swimming

GENERAL "TRANSFERABLE" VOCABULARY

YOU WILL MEET THESE WORDS AND PHRASES VERY OFTEN!

und = and	oft = often
aber = but	manchmal = sometimes
oder = or	nie = never
heute = today	selten = rarely
gestern = yesterday	ab und zu = now and then
jetzt = now	immer = always
ziemlich = quite	toll = great
sehr = very	furchtbar = awful
wirklich = really	
zu = too	

eine Woche / zwei Wochen = a week / 2 weeks
 einen Tag / vier Tage = a day / 4 days
 ein Wochenende = a weekend

warm = warm	altmodisch = old-fashioned
heiss = hot	modern = modern
kalt = cold	sauber = clean
klein = small	schmutzig / dreckig = dirty
gross = big	laut = loud

Key phrases / questions:

Ich möchte = I would like

Haben Sie..? = Do you have..?

Was kostet das? = what does that cost?

Haben Sie etwas kleiner? = Do you have something smaller?

Um wieviel Uhr ist das Frühstück / das Abendessen? = What time is breakfast / the evening meal?

Gibt es hier...? = Is there.... Here?

KNOWLEDGE ORGANISER - YEAR 9 GERMAN – HALF TERM 2 (OCT – DEC)

Topic specific vocabulary

- Topic specific vocabulary
- ein Einzelzimmer = a single room
- ein Doppelzimmer = a double room
- frei = available
- kostenlos = free of charge
- pro Nacht = per night
- pro Woche = per week
- mit Frühstück = with breakfast
- mit Balkon = with a balcony
- mit Dusche = with a shower
- mit WLAN = with Wi-Fi
- ein Schwimmbad = a swimming pool
- ein Restaurant = a restaurant
- ein Fahrstuhl = a lift
- ein Kind / zwei Kinder = a child / 2 children
- die Erwachsene = adults
- ein Problem = a problem
- mein Zimmer ist / war... = my room is / was...
- ein Zelt = a tent
- ein Wohnwagen = a caravan
- ein Platz = a pitch

Grammar

The future tense – what will you do?

To form the future, use **the correct part** of the verb **WERDEN** and the **INFINITIVE** of the other verb:

Ich werde	wir werden
Du wirst	ihr werdet
Er / sie / es / man wird	sie / Sie werden

YOU MUST KNOW THIS VERB BY HEART!

Then add the **infinitive** AT THE END OF THE SENTENCE:

e.g.

I will go to town = Ich werde in die Stadt **gehen**

He will watch a film = Er wird einen Film **sehen**

Tomorrow **they will write** an email = Sie werden eine Email **schreiben**

There are NO Irregular verbs in the future tense – so just learn the rule!

Ich möchte (I would like) ALSO **sends any other verb to the end of the sentence:**

Ich möchte ein Doppelzimmer **reservieren** = I would like to reserve

Ich möchte mein Handy **benutzen** = I would like to use my mobile

Ich möchte im Restaurant **essen** = I would like to eat in the restaurant

Ich möchte um 8 Uhr **frühstücken** = I would like to eat breakfast at 8 o'clock

Ich möchte einen Tagesausflug **buchen** = I would like to book a day trip

Remember – learn the words and HOW to use them!

Auf einem Campingplatz = on a campsite / in einem Hotel = in a hotel / in einer Jugendherberge = in a youth hostel

Mit meiner Familie = with my family / mit meinen Freunden = with my friends / mit meiner Schule = with my school / mit meinen Eltern = with my parents

General vocabulary:

und = and	oft = often
aber = but	manchmal = sometimes
oder = or	nie = never
heute = today	selten = rarely
gestern = yesterday	ab und zu = now and then
jetzt = now	immer = always

weil = because (sends the verb to the end)
denn = because (doesn't move the verb)

Time phrases

jede Woche	every week
jedes Wochenende	every weekend
jeden Monat	every month
einmal / zweimal pro Monat	once / twice per month
zum Geburtstag for my birthday	

Die Geschäfte

the shops
der Musikladen the music shop
die Buchhandlung the book shop
das Modegeschäft the clothes shop
die Konditorei the cake shop
die Drogerie the chemist's
das Sportgeschäft the sportshop
die Metzgerei the butcher's
das Kaufhaus the department store
die Bäckerei the bakery

Grammar point - When we want to say "in" a shop, we use "in" in German too but the word for "the" changes:

der Musikladen BUT in DEM Musikladen (in the music shop)
die Konditorei BUT in DER Konditorei (in the cake shop)
das Kaufhaus BUT in DEM Kaufhaus (in the department store)

Note: **IN DEM** is often shortened to **IM**

YEAR 9 GERMAN – KNOWLEDGE ORGANISER HALF TERM 3 – POCKET MONEY AND SHOPPING

Vocabulary

das Taschengeld	pocket money
Sportschuhe	trainers
Computerspiele	computer games
ein Fahrrad	a bike
Make-up	make-up
CDs / Musik	CDs / music
Bücher	books
Kleidung	clothes
ein Handy	a mobile phone
ein MP3 Spieler	MP3 player
Schmuck	jewellery
die Sportausrüstung	sports equipment
Was trägst du?	What do you
wear?	
Ich trage...	I wear / I am
wearing...	
das / ein T-shirt	the / a t-shirt
das / ein Hemd	the / a shirt
der / ein Rock	the / a skirt
der / ein Pullover	the / a jumper
die / eine Hose	the trousers
die / eine Jacke	the jacket
das / ein Kleid	the dress
die / eine Mütze	the / a cap
der / ein Mantel	the / a coat
die Schuhe	shoes
die Socken	socks
die Stiefel	boots

bequem / modisch / altmodisch / gestreift
/ kariert / lang / schwarz / modern /
glitzernd / neu

comfortable / fashionable / old-fashioned
/ striped / checked / long / black /
modern / shiny / new

Wichtige Verben!

You need to learn these verbs and be able to use them in ALL 3 TENSES:

INFINITIVE

kaufen = to buy
sparen = to save

bekommen = to get (receive)

verdienen = to earn

ausgeben = to spend

tragen = to wear

kosten = to cost

helfen = to help

arbeiten = to work

gehen = to go

einkaufen gehen = to go shopping

PAST PARTICIPLE

gekauft

gespart

bekommen

verdient

ausgegeben

getragen

gekostet

geholfen

gearbeitet

gegangen*

einkaufen gegangen*

* These verbs use SEIN to form the past tense

Verbs in bold are IRREGULAR

Grammar point:

To say what you wear we use the ACCUSATIVE case. So, if you use a masculine noun (der), the word for "a" changes and the adjectives need to add an ending too:

Ich trage **einen** **bequemen** Mantel = I wear / I am wearing a comfortable coat

Ich trage **eine** **schwarze** Jacke = I am wearing a black jacket

Ich trage **ein** **modernes** Kleid = I am wearing / I wear a modern dress

KNOWLEDGE ORGANISER YEAR 9 – HALF TERM 4 SCHOOL AND STUDIES

GENERAL VOCABULARY

School subjects

Englisch - English
 Mathe - Maths
 Naturwissenschaften - Science
 Biologie - Biology
 Chemie - Chemistry
 Physik - Physics
 Deutsch - German
 Spanisch - Spanish
 Französisch - French
 Latein - Latin
 Geschichte - History
 Erdkunde - Geography
 Religion - RS
 Sport - PE
 Kunst – Art
 Werken – DT
 Hausaufgaben - homework
Opinions
 langweilig - boring
 interessant - interesting
 nützlich - useful
 nutzlos - useless
 schwierig/schwer - difficult
 einfach – easy
 doof/dumm/blöd - stupid
 streng – strict
 nett – nice
 lustig – funny

Uniform

Schuhe – shoes
 Socken – socks
 eine Strumpfhose – tights
 eine Hose – trousers
 einen Rock - skirt
 ein Hemd – shirt
 eine Krawatte – tie
 eine Jacke – blazer
 ich trage - I wear
 wir tragen – we wear
 man muss....tragen – we have to wear

Numbers – all numbers up to 1000 – see previous KO (especially 0-60 for telling the time)

Colours

See previous KO – for describing uniform
 Kleidung – clothes
 Sportschuhe – trainers
 Schmuck – jewellery
 Zeitschriften - magazines

More vocab...

Timetable and routine

In der ersten/zweiten/dritten/vierten/fünften Stunde habe ich...
 Ich wache um..... auf
 Ich stehe um..... auf
 Ich esse Frühstück um....
 Ich verlasse das Haus um...
 Ich gehe zu Fuß
 Ich fahre mit dem Bus/mit dem Rad

Grammar

Opinion phrases:

Mein Lieblingsfach ist...
 Ich liebe ...
 Ich mag...
 Ich mag_____nicht...
 Ich hasse...

Modal verbs:

man kann = you can }
 man muss = you must } + **the infinitive**
 man soll = you should } (this goes to the END of the sentence)

e.g. man kann Deutsch **lernen** = you can learn German

Verb second:

In den ersten Stunde **habe** ich...
 In der Schule **trage** ich...

Verb last after 'weil':

Ich mag Deutsch, weil es interessant **ist**
 Ich hasse Mathe, weil es schwierig **ist**

Conditional:

Meine ideale Schule hätte – my ideal school would have
 Meine ideale Schule wäre – my ideal school would be
 Mein idealer Schultage hätte – my ideal school day would have
 Mein idealer Schultag wäre – my ideal school day would be

Comparatives:

(Mostly) Adjective + er, e.g. länger, kürzer, länger etc

Key questions

Was ist dein Lieblingsfach? – what's your favourite subject?
 Wie findest du....? – what do you think of...?
 Was hast du in den Stunde? – what have you got period...?
 Kannst du deine Uniform beschreiben? – can you describe your uniform?
 Wie findest du deine Uniform? – what do you think of your uniform?
 Um viel viel Uhr...? – at what time do you....?

KNOWLEDGE ORGANISERYEAR 9 – HALF TERM 5 Food Shopping & Eating out

GENERAL VOCABULARY

Food and drink

Äpfel – apples
 Bananen – bananas
 Birnen – pears
 Champignons – mushrooms
 Erbeeren – strawberries
 Karotten – carrots
 Kartoffeln – potatoes
 Kirschen – cherries
 Orangen – oranges
 Tomaten – tomatoes
 (Wein)trauben – grapes
 Zwiebeln – onions
 Fisch – fish
 Salat – salad
 Pizza – pizza
 Tomatensuppe – tomato soup
 Torte – cake
 Eis – ice cream
 Hähnchen – chicken
 Mineralwasser – mineral water
 Orangensaft – OJ
 Brot – bread
 Brötchen – bread roll

Joghurt – yogurt
 Käse – cheese
 Kuchen – cake
 Marmelade – jam
 Schinken – ham
 Wurst – sausage
 Vorspeise – starter
 Hauptgericht – main meal
 Nachspeise – dessert
 Frühstück – breakfast
 Mittagessen – lunch
 Abendessen – dinner

Weights/measures

Gramm – g
 Kilogramm – kg
 100 Gramm
 500 Gramm
 5 Euro bitte = 5 euros please

Numbers – all numbers up to
 1000 – see previous KO

Key phrases

Bitte sehr? – can I help you?
 Haben Sie..? – do you have..
 Was möchten Sie? – what would you like?
 Ich möchte – I would like
 Sonst noch etwas? – anything else?
 Das ist alles – that's everything
 Das macht/kostet... – that comes to...

Ich habe.....gegessen/getrunken/gekauft/bekommen/gewählt
 Das war... - that/it was
 Das hat...gekostet – it cost...

Grammar

Present tense verbs (some examples)

Ich kaufe/gehe/esse/trinke (gern/nicht gern)
 Er/sie kauft/geht/isst/trinkt (gern/nicht gern)
 Es gibt – there is/are

Perfect tense verbs (some examples)

Ich habe....gekauft/gegessen/getrunken
 Sie hat...gekauft/gegessen/getrunken
 Ich bin....gegangen
 Er/sie ist...gegangen
 Es war...

Ich möchte...kaufen = I would like to buy....

Remember: when you use Ich möchte, the next verb is in the infinitive and must go to the END of the sentence!



More vocab...

Eating out

ein Café = a café
 ein Imbiss = a snack bar
 ein Restaurant = a restaurant
 die Karte = the menu
 Darf ich..? = may I...?
 Ich möchte... = I would like...
 als Vorspeise = as a starter
 als Hauptgericht = as a main meal
 als Nachtisch = as a dessert
 ein Getränk = a drink
 Ich möchte = I would like
 Entschuldigung = Excuse me
 Meine Speise ist...= My meal is...
 zu heiss = too hot
 zu kalt = too cold
 zu salzig = too salty
 der Kellner / die Kellnerin = the waiter / waitress

ein Tisch für... = a table for
 Vegetarier(in) = vegetarian



empfehlen = to recommend
 furchtbar = awful
 unfreundlich = unfriendly

Tiempo libre - Free Time

¿Qué haces en tu tiempo libre? -
What do you do in your free time?
Bailo - I dance
Chateo por internet - I chat online
Uso las redes sociales - I use social media
Escucho música - I listen to music
Hago deporte - I do sport
Juego con el ordenador - I play on my computer
Mando mensajes - I send messages
Salgo con mis amigos - I go out with friends
Voy de compras - I go shopping

Opiniones - Giving opinions

(no) Me gusta(n) - I like
(no) Me interesa(n) - I'm interested in
Me encanta(n) - I love
Odio - I hate
el fútbol - football
la música - music
la natación - swimming
Los videojuegos - videogames
Las hamburguesas - hamburgers

Preguntas - Questions

¿Qué te gusta - what do you like?
¿Qué no te gusta? What don't you like?
¿Adónde vas? - Where are you going?
¿Qué vas a hacer? - What are you going to do?
¿Cuándo? - When?
¿Cual es tu programa favorito? - What's your favourite TV programme?
¿Por qué? - Why?

Tiempo libre - Free time

Voy - I go/ I am going
Al centro comercial - to the shopping centre
Al cine - to the cinema
Al estadio - to the stadium
Al parque - to the park
Al salón recreativo - to the amusement arcade
A la bolero - to the bowling alley
A la discoteca - to the disco
A la playa - to the beach
A casa de mi amigo/a - to my friend's house

La tele

Programas de....
Música
Deporte sport
Tele-realidad reality tv
Un concurso game show
Un documental documentary
Una comedia comedy
Una telenovela soap opera
El telediario news
El tiempo weather

FUTURE TENSE

voy a - I am going
bailar - to dance
ir de compras - to go shopping
jugar al fútbol - to play football
tomar el sol - to sunbathe
ver un partido de fútbol - watch a football game
ver una película - watch a film
ver la tele - watch the tv

HT1 Year 9 Spanish Mi Vida

Las Películas - Films

Las películas de...
acción - action films
amor - love films
artes marciales - martial arts
ciencia-ficción - science fiction
guerra - war films
terror - horror films
del Oeste - Westerns
Las comedias - comedies
Los dibujos animados - cartoons

Adjetivos - Adjectives

aburrido - boring
divertido - fun
educativo - educational
emocionante - exciting
informativo - informative
interesante - interesting
malo - bad
tonto - silly

REMEMBER - Adjectives MUST agree with the noun

Useful Words

Nunca - never	Luego - then/later
Generalmente - generally	Primero - first
Normalmente - normally	Después - then

NACIONALIDADES

Argentino Argentinian
Chileno Chilean
Colombiano Colombian
Escoces Scottish
Espanol Spanish
Estadounidense US Citizen
Gales Welsh
Inglés English
Irlandés Irish
Mejicano Mexican

PAISES:

<u>ESCOCIA</u>	Scotland
<u>INGLATERRA</u>	England
<u>GALES</u>	Wales
<u>IRLANDA</u>	Ireland
<u>ESPANA</u>	Spain
<u>ALEMANIA</u>	Germany
<u>FRANCIA</u>	France
<u>ITALIA</u>	Italy
<u>PORTUGAL</u>	Portugal
<u>GRECIA</u>	Greece
<u>FRANCIA</u>	France
<u>CUBA</u>	Cuba
<u>MEJICO</u>	Mexico
<u>ARGENTINA</u>	Argentina
<u>CHILE</u>	Chile
<u>COLOMBIA</u>	Colombia
<u>India</u>	India
<u>Pakistan</u>	Pakistan

La tele

Programas de....
Música - music
Deporte - sport
Tele-realidad - reality tv
Un concurso - game show
Un documental - documentary
Una comedia - comedy
Una telenovela - soap opera
El telediario - news
El tiempo - weather

PAST TENSE:

Fui a Cuba I went to...
Escuché música I listened to..
Jugué al fútbol I played..
Mandé mensajes I sent...
Monté en bici I rode a bike
Tomé el sol I sunbathed
Visité monumentos I visited
OPINION:
Lo pasébien / fenomenal/bomba
Mal —I had a good/great ...time

Useful Words

Nunca never
Primero first
Después then
Luego “ “
Generalmente generally
Normalmente normally
Con with
Como ? How ?
Adonde? where ?
Que ? What ?
Quien? who ?

Preguntas

¿Cual es tu nacionalidad?
¿A dónde vas ?
¿A dónde fuiste?
¿Qué hiciste?
¿Cuánto tiempo pasaste ?
¿Qué tal lo pasaste ?

A dónde vas?
Al Centro commercial - shopping center
Al cine - cinema
Al estadio - stadium
Al parque - park
Al salón recreativo - youth centre
A la discoteca disco
A la playa beach

HT2 Year 9 Spanish
Holidays & travel

LA COMIDA Y BEBIDA:

Carne —meat
 un bocadillo- sandwich
 Verduras - veg
 Cereales - cereal
 Fruta - fruit
 Galletas - biscuits
 Magdalenas - muffin
 Pasta - pasta
 Patatas fritas - chips
 Pescado - fish
 Pizza - pizza
 zumo de naranja - orange juice
 Pollo - chicken
 tostadas - toast
 Ensalada - salad
 té - tea
 café - coffee
 cola cao— chocolate drink

Useful Words

Por favor - please
 Nada - nothing
 Nunca - never
 Algo - something
 Mucho - a lot
 Ayer - yesterday
 Anteayer—the day before yesterday
 El fin de semana pasado— last weekend
 Esta mañana—this morning

EN EL RESTAURANTE:

De primer plato.. starters
 De Segundo palto.. Main course
 De postre dessert
 Quiero I want
 Un helado de chocolate- chocolate ice cream
 Una paella - a paella
 Tengo hambre -I am hungry
 Tengo sed—I am thirsty
 La cuenta - the bill

NÚMEROS TO 1000

<u>Cien</u>	100
<u>Doscientos</u>	200
<u>Trecientos</u>	300
<u>Cuatrocientos</u>	400
<u>Quinientos</u>	500
<u>Seiscientos</u>	600
<u>Setecientos</u>	700
<u>Ochocientos</u>	800
<u>Novecientos</u>	900
<u>mil</u>	1000

Preguntas

Qué desayunas/almuerzas/cenas ?
 Qué quieres ?
 Para beber ?
 Algo más ?
 Qué vas a tomar?
 Qué comiste/bebiste?

MEALS

<u>El desayuno</u>	Breakfast
<u>La comida</u>	Lunch
<u>el almuerzo</u>	Lunch
<u>La merienda</u>	Afternoon snack
<u>La Cena</u>	dinner

PAST TENSE: (key verbs)

Comer —comí - to eat—I ate
 Beber—bebí - to drink—I drank
 Tomar—tomé to have* -I had
 Desayunar —desayuné I had breakfast
 Almorzar—almorcé I had lunch
 Cenar—cené - I had dinner
 Hacer— hice to do —I did
 Ir—Fui - to go—I went
 Ver—vi—to watch—I watched
 * to have food/drink

EN EL MERCADO:

Un kilo de.. A kilo of ...
 Un carton de leche - carton of milk
 quinientos gramos de.. 500 grams
 Jamón - ham
 un chorizo - chorizo
 Manzanas - apples
 una barra de pan - a loaf of bread
 Peras - pears
 una botella de agua - a bottle of water
 Queso - cheese
 una lechuga - a lettuce
 Tomates - tomatoes
 Uvas - grapes
 Zanahorias - carrots

La ropa:	Clothes
Qué llevas ?	What do you wear ?
Llevo	I wear
Un jerseys	a jumper
Un vestido	a dress
Una camisa	a shirt
Una camiseta	a t- shirt
Una falda	a skirt
Una gorra	a cap
Unos pantalalones	a trousers
Unos vaqueros	jeans
Unos zapatos	shoes
Unas botas	boots
Unas zapatillas de deporte	trainers
Una sudadera	hoody

Moda:	Fashion
A cuadros	- squared
A lunares	- spotty
A rayas	stripy
Estampado	check
De manga larga	—long sleeve
De manga corta	- short sleeve
Sin mangas	- sleeveless

Adjetivos:

Barato/a	Cheap
Bonito/a	Beautiful
Caro/a	Expensive
Comodo/a	Comfortable
Feo/a	Ugly
Incómodo/a	Uncomfortable
Corto/a	Short
Largo/a	Long
guay	Cool

Los colores

Amarillo	yellow	azul	blue
Blanco	white	gris	grey
Negro	brown	marron	brown
Rojo	red	naranja	orange
Rosa	pink	verde	green

Preguntas

Que/ Cual prefieres ...?
 Quéte gusta mas ?
 Dónde se puede comprar..?
 Dónde hay un/una.....?

TIPOS DE TIENDAS:

Un supermercado - supermarket
 Una cafetería -
 Una carnicería— butchers
 Una joyería - jewellers
 Una librería - book shop
 Una pastelería - cake shop
 Una tienda de música - music shop
 Una tienda de ropa— clothes shop
 Una zapatería - shoe shop

Useful Words

De vez en cuando –now again
A veces - sometimes
Siempre - always
Normalmente - normally

tengo I have
 necesito I need
 hay there is/ there are

PARTES DEL CUERPO:

Los ojos———eyes
 La cabeza——— head
 Los oídos———ears
 La garganta———throat
 El brazo——— arm
 La espalda———back
 La rodilla———knee
 El pie———foot
 La pierna———leg
 El estómago———stomach
 La mano———hand

SÍNTOMAS DE ENFERMEDADES:

Estoy enfermo - I am ill
 Estoy cansado - I am tired
 Tengo fiebre - I have a temperature
 Tengo una picadura- I have been stung
 Tengo una quemadura - burn
 Tengo diarrea - diarrhoea
 Tengo tos - I have a cough
 Tengo gripe - I have the flu
 Tengo catarro - I have a cold
 Tengo vómitos - sickness

REMEDIOS:

Usar esta crema	Use cream
Tomar pastillas	Take tablets
Tomar aspirinas	Take aspirins
Beber agua	Drink water

FRECUENCIA:

Una vez al día	Once a day
Dos veces al día	Twice a day
Tres veces al día	Three times
Por la mañana	In the morning
Por la tarde	In the afternoon
Por la noche	In the evening

(key verbs) present/past/future

Hacer— to do –.
 Ir - to go
 Ver—to watch
 Salir ——to go out

Deber—you must

Preguntas

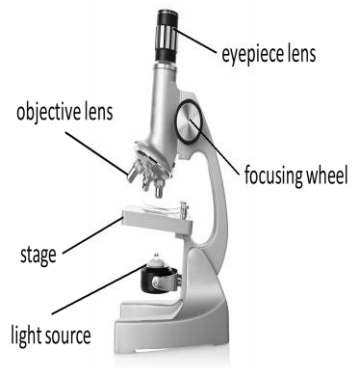
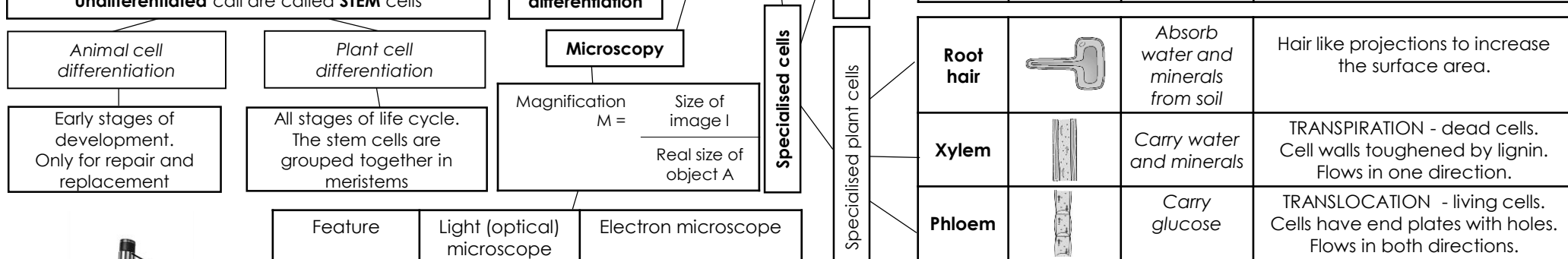
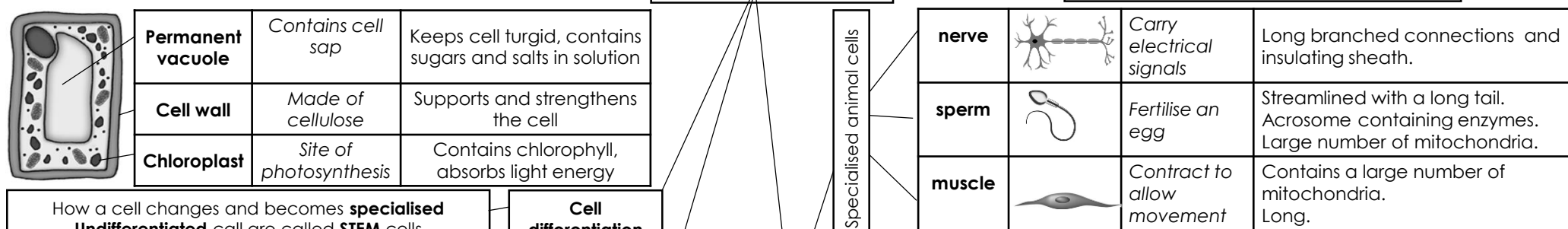
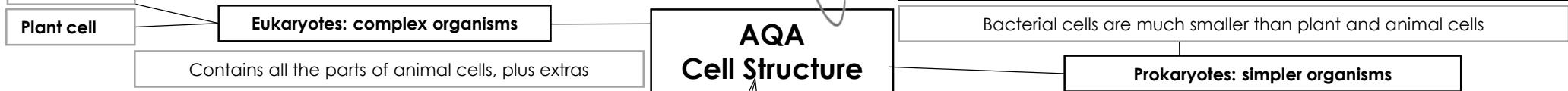
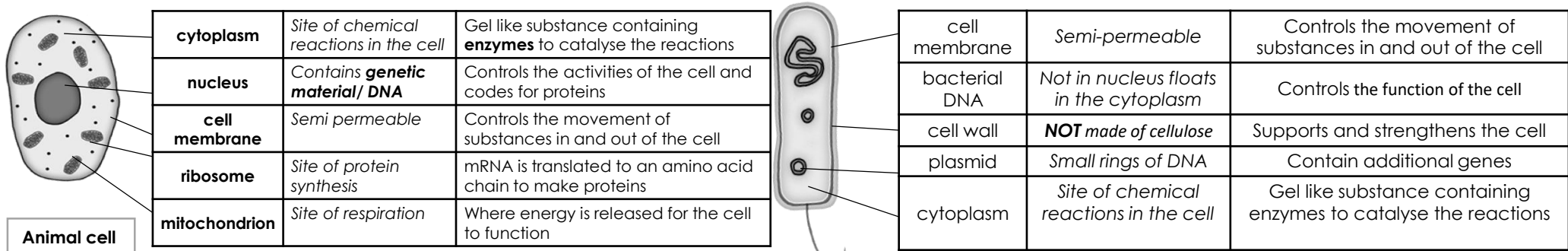
Qué te duele ?
 Desde hace cuanto tiempo?
 Qué te pasa?
 Se encuentra bien?
 Tienes una dieta sana ?

OPINION:

Sano —healthy
 Hacer deporte
 Dormir 8 horas..
 Comer mas fruta y verdura
 Comer comida basura
 Fumar cigarillos
 Tomar drogas
 Beber alcohol
 Beber muchos refrescos
 Comer menos caramelos

Useful Words

Por favor - please
 ME GUSTA
 ME GUSTA MUCHO
 ME ENCANTA
 PREFIERO
 NO ME GUSTA
 NO ME GUSTA NADA
 ODIO
 COMIDA SANA/MALSANA
 VIDA SANA / MALSANA



Feature	Light (optical) microscope	Electron microscope
Radiation used	Light rays	Electron beams
Max magnification	~ 1500 times	~ 2 000 000 times
Resolution	200nm	0.2nm
Size of microscope	Small and portable	Very large and not portable
Cost	~£100 for a school one	Several £100,000 to £1 million plus

PREFIXES		
Prefix	Multiple	Standard form
centi (cm)	1 cm = 0.01 m	$\times 10^{-2}$
milli (mm)	1 mm = 0.001 m	$\times 10^{-3}$
micro (µm)	1 µm = 0.000 001 m	$\times 10^{-6}$
nano (nm)	1 nm = 0.000 000 001 m	$\times 10^{-9}$

largest
↑
smallest

Cell	The smallest structural and functional unit of an organism.
Nucleus	A structure that contains genetic material/DNA and controls the activities of the cell.
Chromosome	A thread-like structure of coiled DNA found in the nucleus of eukaryotic cells.
DNA	A polymer made up of two strands forming a double helix.
Gene	A section of DNA that codes for a specific protein or characteristic.

Small intestines	Villi – increase surface area; good blood supply to maintain concentration gradient. Thin membranes – short diffusion distance.
Lungs	Alveoli – increase surface area; good blood supply to maintain concentration gradient. Thin membranes – short diffusion distance.
Gills in fish	Gill filaments and lamella - increase surface area; good blood supply to maintain concentration gradient. Thin membranes – short diffusion distance.
Roots	Root hair cells - increase surface area.
Leaves	Large surface area, thin leaves for short diffusion path, stomata on the lower surface to let O ₂ and CO ₂ in and out.

AQA Cell Biology 2

ADAPTATIONS FOR DIFFUSION

The greater the difference in concentrations, the faster the rate of diffusion.

Cells divide in a series of stages. The genetic material is doubled and then divided into two identical cells.

MITOSIS AND THE CELL CYCLE

Cell division

STEM CELLS

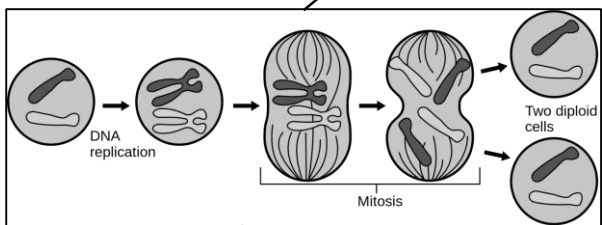
Undifferentiated cell of an organism

Divides to form more cells of the same type, and can differentiate to form many other cell types.

Transport in cells

Diffusion: no energy required	Movement of particles in a solution or gas from a higher to a lower concentration.	e.g.: O ₂ and CO ₂ in gas exchange, urea in kidneys. Factors that affect the rate are: concentration, temperature and surface area.
Osmosis: no energy required	Movement of water from a dilute solution to a more concentrated solution.	e.g.: plants absorb water from the soil by osmosis through their root hair cells. Plants use water for several vital processes, including photosynthesis and transporting minerals.
Active transport: energy required	Movement of particles from a dilute solution to a more concentrated solution.	e.g.: movement of mineral ions into roots of plants, and the movement of glucose into the small intestines.

Stage 1	Growth	Increase the number of sub-cellular structures e.g. ribosomes and mitochondria.
Stage 2	DNA Synthesis	DNA replicates to form two copies of each chromosome.
Stage 3	Mitosis	One set of chromosomes is pulled to each end of the cell and the nucleus divides. Then the cytoplasm and cell membranes divide to form two cells that are identical to the parent cell.

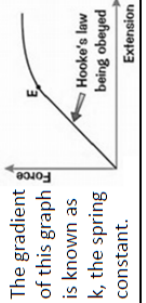


Mitosis occurs during growth, repair, replacement of cells. Asexual reproduction occurs by mitosis in both plants and simple animals.

Human Embryonic stem cells	Can be cloned and made to differentiate into most cell types	Therapeutic cloning uses the same DNA as the patient so the body does not reject the tissue. Can be a risk of infection
Adult bone marrow stem cells	Can form many types of human cells e.g. blood cells	Tissue is matched to avoid rejection, risk of infection. Only a few types of cells can be formed.
Meristems (plants)	Can differentiate into any plant cell type throughout the life of the plant.	Used to produce clones quickly and economically, e.g. rare species, crop plants with pest /disease resistance

Treatment with stem cells may be able to help conditions such as diabetes and paralysis. Some people object to the use of stem cells on ethical or religious grounds

1. Energy stores [J]	Chemical energy
2. Chemical energy [J]	Kinetic energy
3. Kinetic energy [J]	Gravitational potential energy
4. Gravitational potential energy [J]	Elastic potential energy
5. Elastic potential energy [J]	Transferred during chemical reactions eg fuels, foods, or in batteries
6. Energy can be transferred by...	All moving objects have it.
7. Useful energy [J]	$k.e = 0.5 \times \text{mass} \times (\text{speed})^2$ $E_k = \frac{1}{2} \times m \times v^2$ [J] [kg] [m/s]
8. Wasted energy [J]	Stored in an object lifted up. $g.p.e = \text{mass} \times g \times \text{height}$ $E_p = m \times g \times h$ [J] [kg] [N/kg] [m]
	Energy stored in a springy object $e.p.e = 0.5 \times \text{spring} \times (\text{extension})^2$ constant $E_e = \frac{1}{2} \times k \times x^2$ <i>(You are given this equation)</i> [J] [N/m] [m]
	Heating (thermal energy always flows from hot to cold objects)
	An electrical current flowing
	A force moving an object
	Energy transferred to the place and in the form we need it.
	Not useful. Eventually transferred to surroundings

9. Work done [J]	Equal to the energy transferred.
10. Energy flow diagram	When a force moves an object. $W = F \times s$ [J] [N] [m]
11. Conservation of energy	Show energy transfers eg for a torch lamp: Chemical $\rightarrow$ Light + Heat
12. Dissipated energy [J]	Energy cannot be created or destroyed. It can only be transferred usefully, stored or dissipated.
13. Hooke's Law and k the spring constant	Wasted energy, usually spread to the surroundings as heat. The extension of a spring is proportional to the force on it.
14. Efficiency	The gradient of this graph is known as k, the spring constant. 
15. Power [W]	Proportion of input energy transferred to useful energy. 100% means no wasted energy. Efficiency = $\text{useful} \div \text{total input energy}$
16. Wasted power [W]	Energy [J] transferred in 1 second. Power [W] = $\text{Energy [J]} \div \text{time [s]}$ Total power in – useful power out

Collins revision guide: Energy

Knowledge Organiser

Big picture (Physics Paper 1)

Energy and energy resources

Conservation and dissipation of energy

Energy transfer by heating

Energy resources

Particles at work

Electric circuits

Electricity in the home

Molecules and matter

Radioactivity

Background

Energy is the capacity of something to make something happen.

The Universe and everything in it is constantly changing energy from one form into another.

Maths skills

You should be able to recall, use and rearrange all the equations on this page except number 5. g is Earth's acceleration due to gravity. It has a constant value of approximately 9.8m/s^2

You need to remember the units for each quantity. They are in [] next to equations.

You should be able to calculate the gradient of a Force – extension graph.

1. States of matter	
2. Solid	Particles held together in fixed positions by strong forces. Least energetic state of matter.
3. Liquid	Particles move at random and are in contact with each other. More energy than solids, less than gas
4. Gas	Particles move randomly and are far apart. Weak forces of attraction. Most energetic.
5. Vacuum	No particles at all. Space is a vacuum
6. Metals	Have free electrons which makes them good conductors
7. Non-metals	Have fixed electrons which makes them good insulators
8. Conductor	Is good at carrying heat energy or electrical energy
9. Thermal conductivity	A measure of how good something is at conducting
10. Insulator	A poor conductor
11. Friction	Two surfaces rubbing together Causes energy to be transferred as heat Can be reduced by using a lubricant
12. Lubricant	Fluid (eg oil) that smooths contact points between surfaces

13. More energy loss from a building	If walls are thin If walls have high thermal conductivity
14. Reduce heat loss by	Big temperature difference between inside and outside Using material with low thermal conductivity ie an insulator Make insulator thicker
15. Specific heat capacity, c [J/kg°C]	Amount of energy needed to change temperature of 1kg by 1°C $E = mc\theta$ <i>(You are given this equation)</i> • E: Change in energy [J] • m: mass of object • c: specific heat capacity • θ : change in temperature [°C]
16. Loft insulation	Objects with high specific heat capacity take a long time to heat up and cool down. They are good at storing heat energy.
17. Cavity wall insulation	Fibreglass which traps air which is a good insulator.
18. Double glazing	Traps air pockets in gaps which is a good insulator
19. Foil behind radiator	Traps air in gaps between glass which is a good insulator Reflects heat away from wall back into room

Collins revision guide: Energy

Knowledge Organiser

Big picture (Physics Paper 1)

Energy and energy resources

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Background

Not wasting heat energy in your home is important for the environment and for your finances. This topic will help you make more informed decisions so that you can save even more.

Maths skills

You should be able to use the specific heat capacity equation to find energy change and the specific heat capacity when given all other variables. Rearranging to make c the subject:

$$c = \frac{E}{m \theta}$$

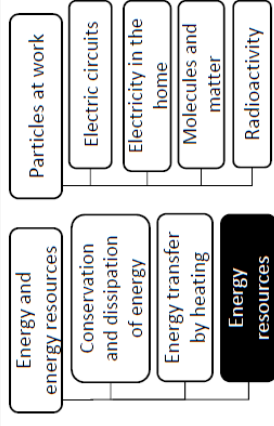
Key points to learn		Key points to learn	
1. Fuel	Substance that we burn to release heat energy	7. Decommission	Take apart and make safe at the end of its life
	Stores chemical energy	8. Wind and wave power	Kinetic energy of the air/water turns turbines
	Coal, oil and gas		Unreliable as both need wind
2. Fossil fuels	Remains of ancient organisms. Millions of years to form.		Renewable
	Are non-renewable	9. Geothermal power	Use heat energy from deep underground instead of fuel
	Release carbon dioxide when burnt		Not available everywhere
3. Non-renewable	Are used quicker than they are made. So will run out.		Renewable
	Made quicker than they are used. Will not run out	10. Hydroelectric and Tidal power	Water stored high up in dams then released to spin a turbine
4. Renewable fuels	These energy sources are renewable:		Very quick start-up time
	- Biofuel - Wind and Wave - Geothermal - Hydroelectric and Tidal - Solar		Can destroy habitats for animals
	Fuel made from living organisms eg vegetable oil, ethanol, wood	11. Solar power	Renewable
	Are considered carbon-neutral because CO ₂ released is balanced by amount taken in by photosynthesis		Use light or heat energy from the Sun
5. Biofuel	Reliable – can even be used fossil fuel power stations		Unreliable as needs sun
	Reduces land available for food growth		Renewable
	Renewable	12. Nuclear fuel	Energy stored in nucleus as nuclear energy. Uranium or Plutonium.
6. Burning fuels	Releases carbon dioxide which contributes to the greenhouse effect and global warming.		Heat release in reactor core
			High energy yield
			Very slow start-up time as potentially dangerous
			Fuel and waste is radioactive
			Very expensive to set up and decommission

Trilogy P3: Energy Resources

Collins revision guide: Energy Knowledge Organiser



Big picture (Physics Paper 1)



Background

It is hard to imagine a World without electricity. It reaches into every aspect of our lives. But where do we get the energy to make it from? Will they run out? Have we got a backup plan?

Additional

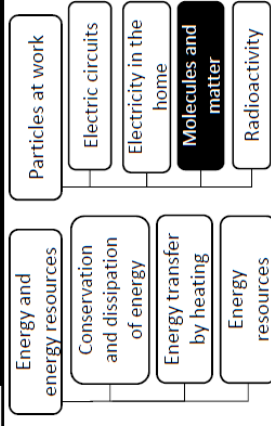
To make electricity, we usually spin a turbine which we then attach to a generator. Making that turbine spin, is the problem... The most common way is by burning fuels to the boil water, then shooting the steam at the turbine. But there are issues with this, as you will find out.

Trilogy: Molecules and matter

Collins rev guide: Particle model of matter Knowledge Organiser



Big picture (Physics Paper 1)



Background

The particle model is widely used to predict the behaviour of solids, liquids and gases. It helps us to design vehicles from submarines to spacecraft. It even explains why it is difficult to make a good cup of tea high up a mountain!

Maths skills

$$\text{density} = \frac{\text{mass}}{\text{Volume}}$$

$$[\text{kg/m}^3] \quad \rho = \frac{m}{V} \quad \frac{[\text{kg}]}{[\text{m}^3]}$$

(You need to remember this.)

Latent heat: $\text{Energy} = \text{mass} \times \text{specific latent heat}$

$$E = m \times L$$

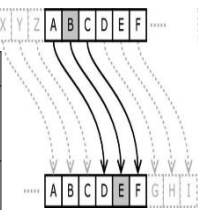
$$[J] \quad [kg] \quad [J/kg]$$

(You are given this)

Key points to learn		Key points to learn	
1. Mass, m	Amount of matter in something. Measured in kg	11. Melting point	Temperature when solid turns into liquid. Same as freezing point.
	Amount of space something takes up. Measured in m ³	12. Boiling point	Temperature when liquid turns into gas. Same as condensation point.
2. Volume, V	Volume of a cuboid = w x d x h	13. Condensation point	Temperature when gas turns into liquid. Same as boiling point.
	Volume of an irregular object can be found by dropping in a liquid and measuring displacement.	14. Freezing point	Temperature when liquid turns into solid. Same as melting point.
3. Density, ρ	Mass per unit volume. Measured in kg/m ³	15. Latent heat	Energy transferred when a substance changes state but temperature doesn't change
	$\text{density} = \frac{\text{mass}}{\text{volume}}$	16. Specific latent heat of fusion	Energy needed to melt 1kg of solid into liquid
4. Floating	An object that has a lower density than the fluid will float	17. Specific latent heat of vaporisation	Energy needed to boil 1kg of liquid into gas
5. Sinking	An object that has a higher density than the fluid will sink	18. At state changes...	Temperature and kinetic energy of particles stays constant.
6 Evaporation	Happens at any temperature		Internal energy increases due to an increase in potential energy as particles move further apart
7 Sublimation	Solid turns straight into gas	19. Heating and cooling curves	
8. Solid	Particles held together in fixed positions by strong forces. Least energetic state of matter.	20. Gas pressure	Caused by particles hitting surfaces. Increases when temperature increases
9. Liquid	Particles move at random and are in contact with each other. More energy than solids, less than gas		
10. Gas	Particles move randomly and are far apart. Weak forces of attraction. Most energetic.		

Component 2 computer science

Key terms	Definition
Encryption	Files that are encrypted have been altered using a secret code and are unreadable to unauthorised parties.
Caesar cipher	The Caesar cipher , also known as a shift cipher, is one of the oldest and simplest forms of encrypting a message.
Cryptography	The art of writing or solving codes.
Cipher	Put (a message) into secret writing; encode.
Plain text	Text that is not written in code.
Denary/decimal	Numbering system that uses base 10 (0-9) our normal numbers that we use every day.
Binary	Numbering system that uses base 2 (0s & 1s) this is the only language a computer understands.
Hexadecimal	Numbering system which uses base 16 (0-9 and A-F) these are used to represent colours and code.
Binary logic	Processing based on the binary numbering system.



Caesar Cipher

Named after Julius Caesar, it is one of the oldest types of ciphers. It is considered a weak method of cryptography, as it is easy to decode the message owing to its minimum **security** techniques.
Advantages of using a Caesar cipher include:

- Use of only a short key in the entire process
- Requires few computing resources

Disadvantages of using a Caesar cipher include:

- Simple structure
- Frequency of the letter pattern provides a big clue in deciphering the entire message

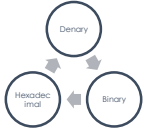
Common pseudocode notation

There is no strict set of standard notations for pseudocode, but some of the most widely recognised are:

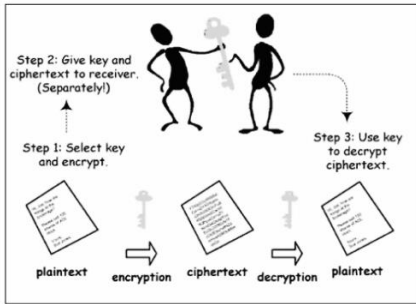
- **INPUT** – indicates a user will be inputting something
- **OUTPUT** – indicates that an output will appear on the screen
- **WHILE** – a loop (iteration that has a condition at the beginning)
- **FOR** – a counting loop (iteration)
- **REPEAT – UNTIL** – a loop (iteration) that has a condition at the end
- **IF – THEN – ELSE** – a decision (selection) in which a choice is made
- any instructions that occur inside a selection or iteration are usually indented

Decimal (Base 10)	Binary (Base 2)	Hexadecimal (Base 16)
0	0000	0
1	0001	1
2	0010	2
3	0011	3
4	0100	4
5	0101	5
6	0110	6
7	0111	7
8	1000	8
9	1001	9
10	1010	A
11	1011	B
12	1100	C
13	1101	D
14	1110	E
15	1111	F

Units of storage



Size	Equal to
4 bits	1 nibble
8 bits	1 byte
1024 bytes	1 kilobyte
1024 kilobytes	1 megabyte
1024 megabytes	1 gigabyte
1024 gigabytes	1 terabyte
1024 Terabytes	1 petabyte



Logic Gates

AND – Conjunction

Notation used: $\wedge$ e.g. $A \wedge B$

A	B	$A \wedge B$
T	T	T
T	F	F
F	T	F
F	F	F

OR – Disjunction

Notation used: $\vee$ e.g. $A \vee B$

A	B	$A \vee B$
T	T	T
T	F	T
F	T	T
F	F	F

NOT – Negation

Notation used: $\neg$ e.g. $\neg A$

A	$\neg A$
T	F
F	T

Binary conversions

128	64	32	16	8	4	2	1

Remember: to convert from denary to binary you would turn the switches on if the number fits into the column by placing a 1 if the numbers doesn't fit then it is a 0.

Hexadecimal to Binary

Convert A5 in hexadecimal to binary

A = 10 in denary
ten in binary is:

8	4	2	1
1	0	1	0

5 = 5 in denary
5 in binary is:

8	4	2	1
0	1	0	1

Joining them both together = **10100101**

Make sure you put them in the correct order!

Converting from hex to denary

- Put the first number into a binary nibble and then put the second number into a nibble.
- Put the two nibbles together
- Convert to denary/decimal

What is the denary value of hex value 2D?

- Find the number into a nibble:
2 = 0010 and D = 1101
- Put the two nibbles together:
00101101
- Convert to denary/decimal:
32+8+4+1 = 45

Binary to Hexadecimal

45 in binary is 32 + 8 + 4 + 1

128	64	32	16	8	4	2	1
0	0	1	0	1	1	0	1

Split this into two nibbles and treat each as a 4 bit binary number

8	4	2	1
0	0	1	0

2 denary = 2 hex

8	4	2	1
1	1	0	1

13 denary = D hex

Denary to Hexadecimal

235 denary number

- Step - convert to binary: 235 in binary is 128 + 64 + 32 + 8 + 2 + 1

128	64	32	16	8	4	2	1
1	1	1	0	1	0	1	1

- Step 2: Split this into two nibbles and treat each as a 4 bit binary number

8	4	2	1
1	1	1	0

13 denary = E hex

8	4	2	1
1	0	1	1

11 denary = B hex

Year 9 Multimedia

Visualisation diagrams

Purpose of a visualisation diagram:

- Plan the layout of a still image in a visual manner
- Show how the finished item may look

Content of a visualisation diagram:

- Multiple images and graphics showing size and position
- Colours and colour schemes
- Position and style of text
- Fonts to be used
- Annotation providing more detail

Work plans

Purpose of a work plan:

- Provide a timescale for the overall project to be completed
- To map out against time for all the different aspects of the project

Content of a work plan:

- Tasks
- Activities
- Durations – amount of time a task is expected to take
- Timescales – how long the project will take
- Milestones – key dates when a section is completed
- Deadlines – date when something has to be done by
- Resources – what is needed
- Contingencies – back up plan, extra time if needed

Target audience

Who is the final product intended for?

Categories:

- Age – need to be clear about the age group. (E.G. 6-12, 12-18, 18-40, 40+)
- Gender
- Location – local, national, international
- Ethnicity – background, culture, race, religion, language

Research

- Primary sources: the information is obtained first hand from an original source
- Secondary sources: the information is obtained second hand where somebody else has created the data

When you analyse two or more existing websites you have browsed, you can normally comment on:

- House style – How the website uses image, colour, etc. to portray their organisation.
- Audience – Who the website is aimed at.
- Size – How many pages there on the website (try to find something called a 'site map').
- Techniques – What design skills were used in producing the web pages.
- Search – You can look at search engine rankings when you search for a website and you can look at the accuracy of a search box on the website itself.

File formats

Video File Formats	• MPG - Compressed file formats • MOV – small file size • MP4 – fast loading online
Audio File Formats	• MP3 (compressed / small file sizes / good for devices) • AIFF (uncompressed / high quality / Mac only) • WAV (uncompressed / high quality / Windows only)
Image File Formats	• JPG (lossless compression; photography) • PNG (lossless compression; photography) • TIF (large file sizes / Posters / high quality printing) • PDF (un-editable/ Documents) • GIF (small file sizes/ Online / web buttons)

Client requirements

Whether you are creating something for yourself or for a client, your project will have a set of client requirements.

Purpose of client requirements:

- Provide the media developer with outline information and any constraints (timescale)
- Clear statement of what is to be produced

Content of client requirements:

- Statement of what media product is needed
- Purpose of the media product
- Target audience
- Content
- Timescale
- Restrictions
- House style

Storyboards

Purpose of a storyboard:

- Provide a visual representation of how a media project will look along a timeline
- Provide a graphical illustration of the sequence of movements
- Provide guidance on what scenes to film or create

Content of a storyboard:

- Images
- Locations
- Camera shot types and angles
- Camera movement
- Shot length and timings
- Lighting
- Sound

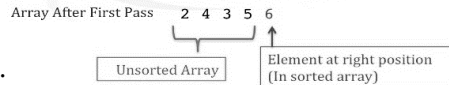
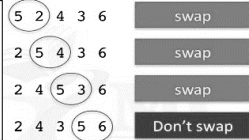
Year 9 Algorithms

Key Words

Algorithms
Sorting
Bubble Sort

Key Concept

Bubble Sort



Advantages

Simple to write the code for.
Simple to understand.

The data is sorted in the same memory location that it is held, so you don't need much extra memory to run the algorithm.

Disadvantages

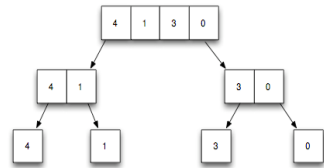
One of the slowest ways to sort a list. For example, if the list becomes ten times larger than before, it takes almost a hundred times longer to sort. So this method of sorting is very sensitive to the length of the list.

Key Words

Algorithms
Sorting
Merge Sort

Key Concept

Merge Sort



Merge sort – a list is split into individual lists, these are then combined (2 lists at a time).

To merge lists:

- Split all elements into individual lists.
- Compare the first element in both lists.
- Put the smallest into a new list.
- Compare the next element of 1 list with the second element of the 2nd list.
- Put the smallest into a new list.
- Repeat until merged.

To complete a merge sort:

- Split all elements into individual lists.
- Compare the first element in both lists.
- Put the smallest into a new list.
- Compare the next element of 1 list with the second element of the 2nd list.
- Put the smallest into a new list.
- Repeat until merged.

Advantages

It's the fastest of the three types of sort (bubble, insert, merge). It is the best option to use for long lists of data (more than 1000 long).

Disadvantages

More complicated to code compared to bubble and insert. It may use twice the memory size of the list – depending on the way it's coded. This becomes important if the list is millions of items long.

Key Words

Binary
Linear
Searching
Algorithms

Key Concept

Binary and
Linear
Searching

Linear search - Linear search looks for an item within a data set by starting with the first item in the set and comparing it to the search criteria.

If no match is found, then the next one is compared. This continues until a match is found or the end of the set is reached.

Advantages

Performs well with small and medium-sized lists.

The data set does not need to be in any particular order (some algorithms need an ordered list). It doesn't break if new items are inserted into the list.

Disadvantages

May be too slow to process large lists or data sets.

If the search criteria only matches the last item in the list, the search has to go through the entire list to find it.

Binary Search

Step 1 – count how many are in the list
Step 2 – add one and divide by 2 (always round up)
Step 3 – The algorithm checks that the value at that places matches the value we are looking for, if not it checks whether it is larger or smaller than the value – it discards the half that doesn't contain what it's looking for.

Advantages

Very good performance over large ordered lists.

Disadvantages

Binary search can only work on an ordered list. If it is a constantly updated list with items added or removed, the list will need re-ordering every time.

Binary search

steps: 0

Binary



Sequential search

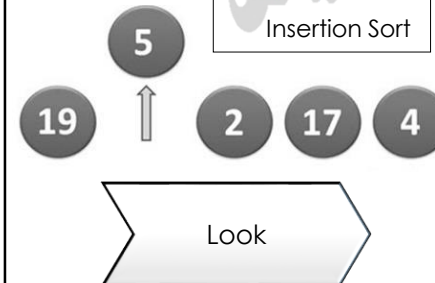
steps: 0

Linear



Key Concept

Insertion Sort



Look as the 2nd item in a list.

Compare all the items before it (in this case the 1st item) and insert the number into the right place.

Repeat step 2 for the third, fourth, fifth, etc. items until the last number in the list has been inserted to the correct place.

Advantages

Simpler to code than a merge sort.
Useful for small lists that only take a very short time to sort.
Faster to process a small list than using a bubble sort.

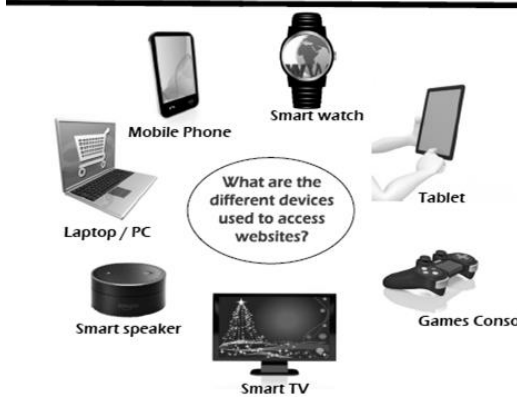
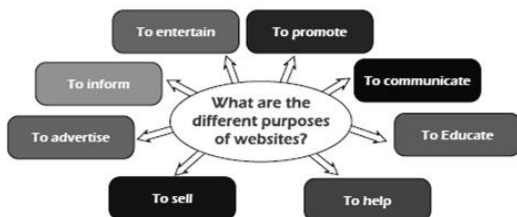
Disadvantages

Not efficient with large lists - merge sort would be a better choice.

Key term	Definition
Python	A programming language which is quite close to English!
Programming	The process of writing computer programs.
Code	The instructions that a program uses.
Sequence	Parts of the code that run in order.
Selection	Selects a pathways through the code based on whether a condition is true
Iteration	Code is repeated (looped), either while something is true or for a number of times
Algorithm	A set of rules/instructions to be followed by a computer system
Variable	A value that will change whilst the program is executed. (e.g.. temperature, speed)
Function	A collection of code that works outside the main program. These are created to speed up programming. They can be called from a single line of code at any time.
Comparative / relational operator	When comparing data, an operator is used to solve the equality such as <>, != or ==
Syntax	The punctuation/way that code has to be written so that the computer can understand it. Each programming language has its own syntax.
Data Type	This indicates how the data will be stored.

Data types and Maths	
Data type	What they mean
String	This means any combination of keyboard characters (letters, numbers symbols)
Integer	This means any whole number. If the computer knows the data is an integer it can do maths with the data
Real/ Float	This means any decimal (fractional) number
Character	This means any single character that you might find on a keyboard.
Boolean	This data type has just two values: True & False.

python		Relational Operators	How They Compare
Symbol	Explanation	= (or ==)	Is equal to
	Start or stop	<> (or !=)	Is not equal to
	Decision	<	Is less than
		>	Is greater than
	Process	<=	Is less than or equal to
	Input or output	>=	Is greater than or equal to



- Which different ways can be used to connect to the Internet?**
1. ADSL Broadband over existing phone lines.
 2. Cable Broadband - through cables shared by the TV service
 3. Fibre Broadband- High speed fibre optic cables
 4. Ethernet - a cable running from a router / network point
 5. Wi-fi - wireless signal from a wireless router
 6. Mobile Data 3G and 4G

Pseudocode command words

INPUT – indicates a user will be inputting something

PRINT – indicates that an output will appear on the screen

WHILE – a loop (iteration that has a condition at the beginning)

FOR – a counting loop (iteration)

REPEAT – UNTIL – a loop (iteration) that has a condition at the end

IF – THEN – ELSE – a decision (selection) in which a choice is made

Use of **KEYBOARD** and **DISPLAY** are suitable for input and output.

SEND - Sends output to the screen.

RECEIVE - Reads input of specified type.

Any instructions that occur inside a selection or iteration are usually indented

```
input("What is your name?")
```

Inputs and variables

So, it needs to equal a variable if we want to store what the user types in...

INPUT Displays a message and waits for a user input!

```

answer = input("What is your name?")
print(answer)
input()

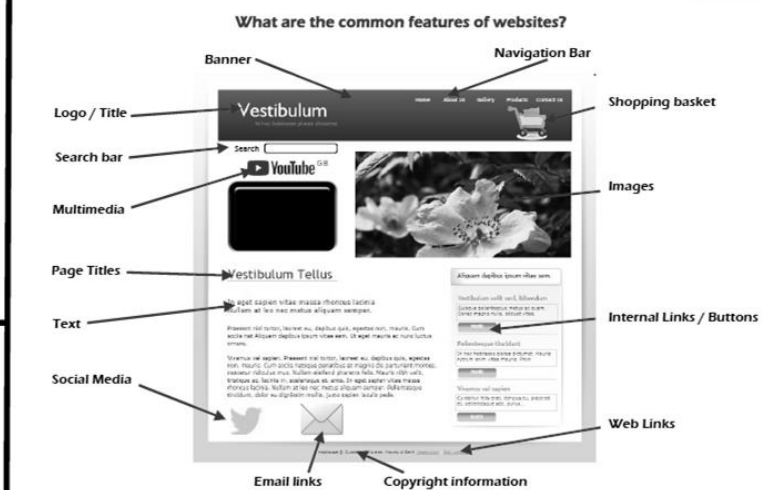
```

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



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