

# Haggerston School



Year 10 Knowledge Organiser Term 3

2024

Aspiration Creativity Character

# Knowledge Organiser - Guidance

- You must bring your Knowledge Planner to school every day in your school bag.
- You should place your Knowledge Planner on your desk at the start of every lesson so that you can refer to it when instructed by your teacher.
- If you lose your Knowledge Planner, you will need to purchase a replacement one from Student Services.
- **In the Study Centre**, you will use your Knowledge Planner to study the relevant subject's Knowledge Organiser and **learn** the information provided.
- Use your blue exercise book to make notes to help revise and learn the information provided in each Knowledge Organiser.

# KS4 Knowledge Organiser - Contents

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# Term 1

**Component 1 - Project 2 - Feast**

Food and feasting have been frequent subjects in art throughout history. After all, food isn't just vital to our livelihood, it also brings us great pleasure. Food and feasting are often an important part of our culture and society, and we have created various types of ritual and celebration around it. Food has also been the cause of wars and social unrest, and can be indicative of class and status.

**Jonas Bendiksen Belarus 2014**



**Martin Parr**



**Giuseppe Arcimboldo, Vegetables in a Bowl (The Gardener), 1587-1590**

**Andy Warhol, Coca Cola**



**Task:** Compare and contrast the different artworks showing 'Feast'. Answer the following questions:

- Which aspects of feasting are the different artists exploring with their artworks? How are they showing this with their artwork?
- Which different materials have been used? Describe how the artists have used these materials and comment on the use of the formal elements in their artworks.
- Which artworks do you like? Explain your answer.
- Which images are most effective at presenting the theme of Feast in your opinion?
- In your own project how do you want to present feasting? Which artist could you use for inspiration to carry out your ideas?

Practical task: Sketch out 4 different ideas that you have for creating an artwork about feast. Use these artists to inspire your ideas.

**Sarah Lucas**

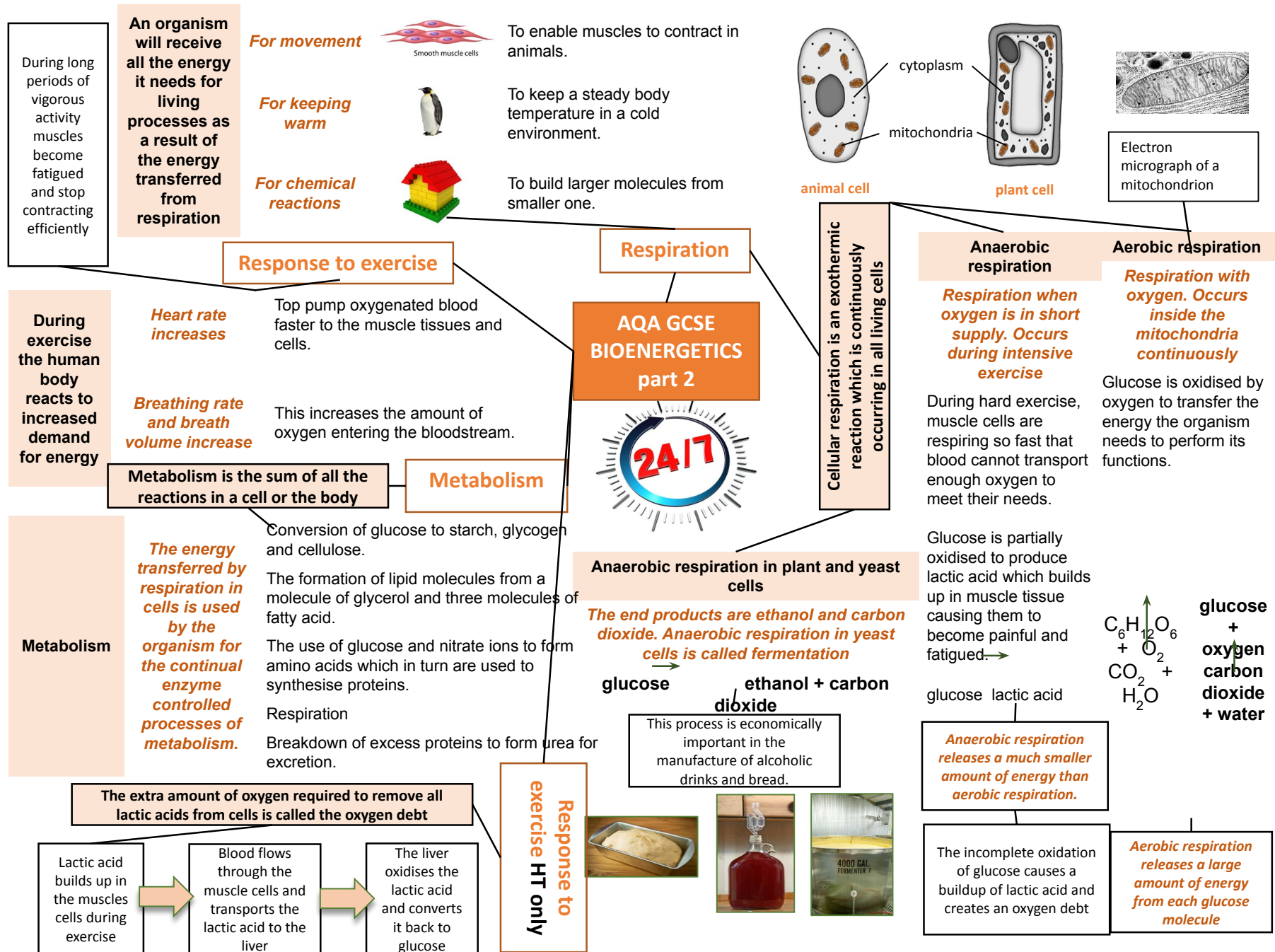


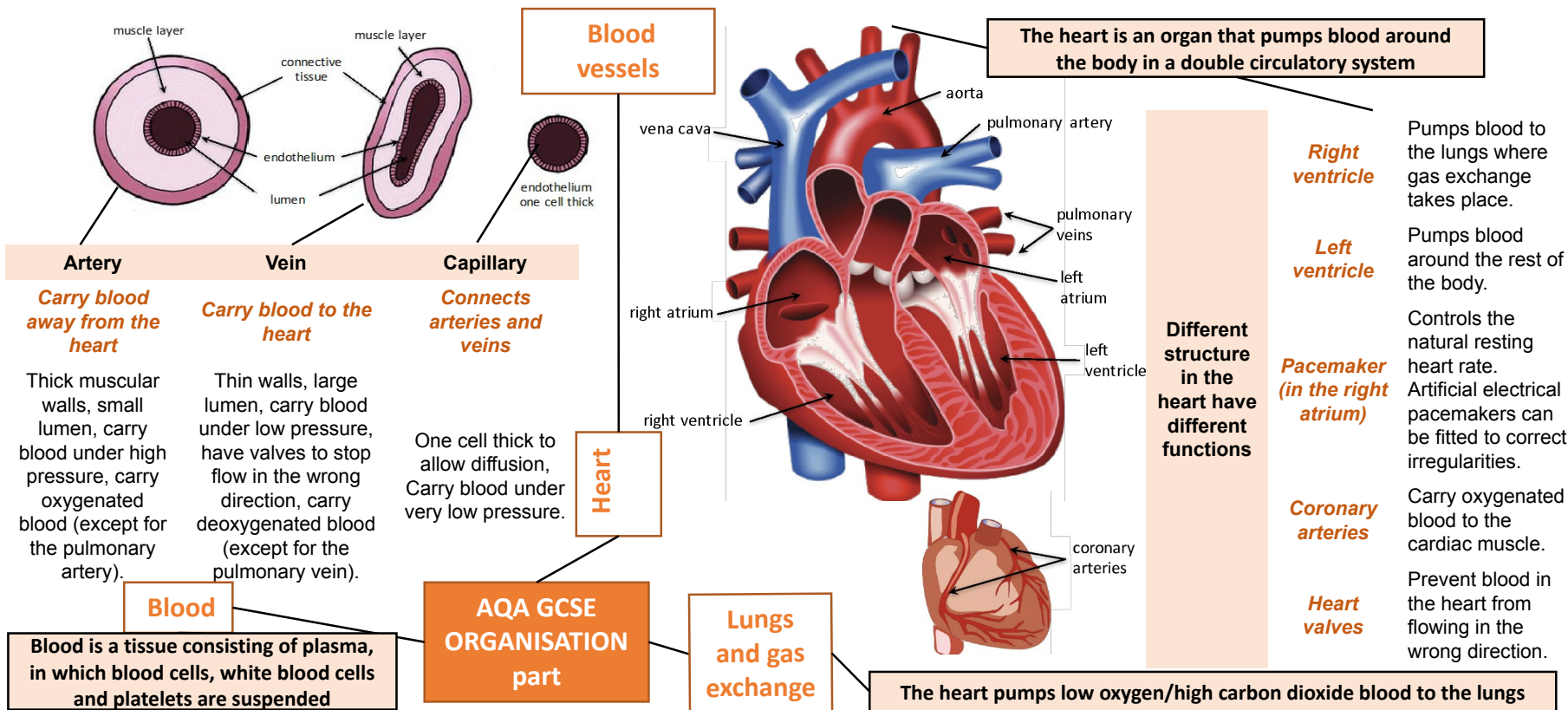
**Van Gogh**



**Formal elements:**  
Line, Tone, Texture,  
Form, Shape, Colour

ART





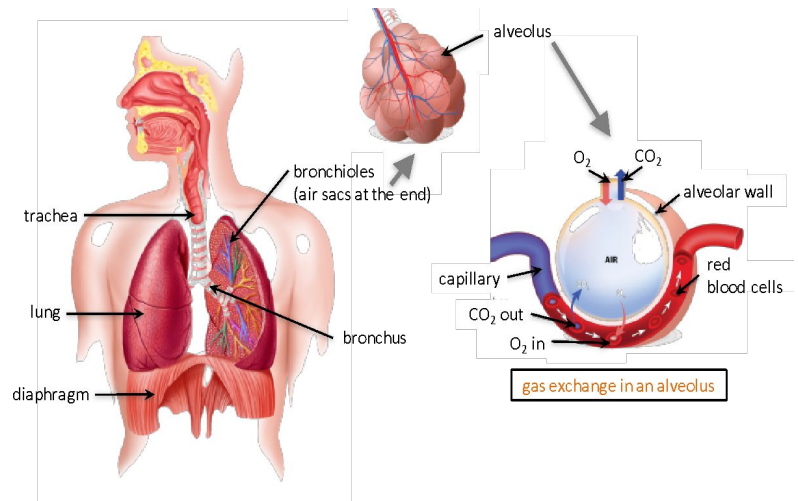
**Blood**  
Blood is a tissue consisting of plasma, in which blood cells, white blood cells and platelets are suspended

**AQA GCSE ORGANISATION part**

**Lungs and gas exchange**

<b>Plasma (55%)</b>	<b>Pale yellow fluid</b>	Transports CO <sub>2</sub> , hormones and waste.
<b>Red blood cells (45%)</b>	<b>Carries oxygen</b>	Large surface area, no nucleus, full of haemoglobin.
<b>White blood cells (&lt;1%)</b>	<b>Part of the immune system</b>	Some produce antibodies, others surround and engulf pathogens.
<b>Platelets (&lt;1%)</b>	<b>Fragments of cells</b>	Clump together to form blood clots.

<b>Trachea</b>	<b>Carries air to/from the lungs</b>	Rings of cartilage protect the airway.
<b>Bronchioles</b>	<b>Carries air to/from the air sacs (alveoli)</b>	Splits into multiple pathways to reach all the air sacs.
<b>Alveoli</b>	<b>Site of gas exchange in the lungs</b>	Maximises surface area for efficient gas exchange.
<b>Capillaries</b>	<b>Allows gas exchange between into/out of blood</b>	Oxygen diffuses into the blood and carbon dioxide diffuses out.



**BTEC Sport TECH Methods of training**

**Continuous training** - Involves a steady but regular pace at a moderate intensity (aerobic) which should last for at least 20 minutes. *i.e.* running, walking, swimming, rowing or cycling.  
Used by a **marathon runner**.



Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Ideal for beginners</li> <li>• Highly effective for long distance athletes</li> </ul>	<ul style="list-style-type: none"> <li>• Can be extremely boring as repetitive</li> </ul>

**Interval training** - Involves periods of work followed by periods of rest. *i.e.* *Sprint for 20 metre + walk back to start.*  
Used by a **200m sprinter**



Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Quick and easy to set up.</li> <li>• Can mix aerobic and anaerobic exercise which replicates team games.</li> </ul>	<ul style="list-style-type: none"> <li>• It can be hard to keep going when you start to fatigue (high motivation and self discipline needed)</li> <li>• Over training can occur if sufficient rest is not allowed between sessions (48 hours)</li> </ul>

**Fartlek training** – Referred to as ‘**speed play**’ This is a form interval training but without rest. Involves a variety of changing intensities over different distances and terrains.



*i.e.* 1 lap at 50% max, 1 lap walking, 1 lap at 80% (aerobic and anaerobic used)  
Used by **games players – Hockey players**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• More enjoyable than interval and continuous training</li> <li>• Good for sports which require changes in speed</li> <li>• Easily adapted to suit the individual's level of fitness and sport.</li> </ul>	<ul style="list-style-type: none"> <li>• Performer must be well motivated particularly when intensity is high</li> <li>• Difficult to assess whether performer is performing at the correct intensity</li> </ul>

**Plyometrics training**

Involves high-impact exercises that develop **power**. *i.e.* *bounding/hopping, squat jumps.* Used by **long jumpers, 100 m sprinters or basketball players.**

Advantages
<ul style="list-style-type: none"> <li>• Easy to set up requiring little or no equipment</li> <li>• Hugely effective in developing power</li> </ul>
Disadvantages
<ul style="list-style-type: none"> <li>• Can result in injury if not fully warmed up.</li> <li>• Can place a great stress on joints and muscles.</li> </ul>



**Weight/Resistance training** – A form of training that uses progressive resistance against a muscle group. Used by **cyclists**.

Muscular strength: **High weight x low repetitions**  
Muscular endurance: **Low weight x high repetitions**



Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Variety of equipment to prevent boredom</li> <li>• Strengthens the whole body or the muscle groups targeted.</li> <li>• Can be adapted easily to suit different sports</li> </ul>	<ul style="list-style-type: none"> <li>• Requires expensive equipment</li> <li>• If exercises are not completed with the correct technique it can cause injury to the performer</li> </ul>

**Circuit training** - A series of exercises completed one after another. Each exercise is called a station. Each station should work a different area of the body to avoid fatigue. *i.e.* *press ups, sit ups, squats, shuttle runs.*



Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Quick and easy to set up</li> <li>• Easy to complete with large groups</li> <li>• Can be adjusted to be made specific for certain sports. <i>i.e.</i> <i>netball specific circuit</i></li> </ul>	<ul style="list-style-type: none"> <li>• Technique can be affected by fatigue and can increase risk of injury</li> <li>• Must have motivation and drive to complete the set amount of repetitions and sets.</li> </ul>

**Fitness classes**

Body pump – Weight based exercise class  
Aerobics – Rhythmical dance movements set to music  
Pilates/Yoga – Series of movements completed to core muscle strength & posture  
Spinning – A high intensity workout on a stationary bike.



Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Variety avoids boredom</li> <li>• Instructor will challenge &amp; motivate</li> <li>• Great way to meet new people</li> </ul>	<ul style="list-style-type: none"> <li>• Gym membership can be expensive.</li> <li>• Group classes are not tailored to individual needs.</li> </ul>

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Subject Content	What students need to learn?
1.5.1 Business stakeholders	<p>Who business stakeholders are and their different objectives:</p> <ul style="list-style-type: none"> <li>shareholders (owners), employees, customers, managers, suppliers, local community, pressure groups, the government.</li> </ul> <p>Stakeholders and businesses:</p> <ul style="list-style-type: none"> <li>how stakeholders are affected by business activity</li> <li>how stakeholders impact business activity</li> <li>possible conflicts between stakeholder groups.</li> </ul>

**Stakeholders**  
 Individuals or groups of people who have an interest in a business  
 A stakeholder will be **affected** by the decisions and actions of a business.  
 Stakeholders are important to businesses as they can have a big **influence** on them.

**CONFLICT**  
 A disagreement or argument between people / groups.  
 As Stakeholders all have different objectives, businesses need to minimise the conflict between the groups.

Stakeholder	Objective
<b>Shareholders</b>	Private limited companies - long-term organic growth Public limited companies – high share price in short term, as much profit as possible for big dividends
<b>Employees</b>	Employment security, opportunities for promotion / career development, fair pay, good fringe benefits (e.g. pension, holiday, company car)
<b>Customers</b>	Consistently high quality, value for money, honesty, fairness, innovative products
<b>Managers</b>	Employment security, opportunities for promotion / career development, fair pay, good fringe benefits (e.g. pension, holiday, company car)
<b>Suppliers</b>	Honesty and fairness, especially on pricing and credit terms, good communication, regular orders, loyal customers
<b>Local community</b>	Honesty and fairness, especially on plans that affect local employment and the environment.
<b>Pressure groups</b>	Honesty and fairness, especially on plans that affect customers and the environment
<b>The government</b>	Honesty and fairness, especially on paying tax, high levels of employment

These stakeholders all have different objectives (expectations) of the organisation. It is important that organisations are aware of who their **KEY** stakeholders are, so they can meet their objectives.

Subject Content	What students need to learn?
1.5.2 Technology and business	<p>Different types of technology used by business:</p> <ul style="list-style-type: none"> <li>• e-commerce</li> <li>• social media</li> <li>• digital communication</li> <li>• payment systems.</li> </ul> <p>How technology influences business activity in terms of:</p> <ul style="list-style-type: none"> <li>• sales</li> <li>• costs</li> <li>• marketing mix.</li> </ul>

**Social Media**

Interactive channels of communication via words, photos or videos such as blogs, Facebook and Instagram.

**Digital Communication**

Messages conducted via email, text or social media.  
 This may revolve around social media but it is important to remember **email**. This is a cheap method of communication and is effective with one to one communication.

**Online payment systems**

Methods of paying electronically such as PayPal.  
 Payment systems such as PayPal are at the heart of all e-commerce. Before PayPal people were concerned about the online security of their money when using e-commerce.

- Electronic funds transfer – payments settled and bills paid online.

**E-commerce**  
 This means selling **online** rather than in a physical one to one transaction. This might be done through a PC/laptop via a website or more commonly through a smartphone via an app.  
 This mobile form of e-commerce is called **m-commerce**.

Technology affects every area of business management, but there are three areas of special focus: sales, costs and the marketing mix.

**Sales:**  
 Advances in technology allow a business to produce a more high tech product therefore demand is high and sales increase (e.g Games Consoles)  
 Ability for customers to order online e.g. Dominos therefore sales increase

**Costs:**  
 Impact on fixed costs such as advertising – able to be reduced as they can focus on target market more easily  
 Impact on variable costs – easier to research who is the cheapest supplier and thus get cheap raw materials

**Marketing Mix:**

- **Product** – improved technology can allow a product to gain high market share
- **Promotion** – improve effectiveness of marketing allowing costs to fall
- **Place** – Not only a physical shop but now online too
- **Price** – Now more competitive as customers more aware



Subject Content	What students need to learn?
1.5.3 Legislation and business	<p>The purpose of legislation:</p> <ul style="list-style-type: none"> <li>• principles of consumer law: quality and consumer rights</li> <li>• principles of employment law: recruitment, pay, discrimination and health and safety.</li> </ul> <p>The impact of legislation on businesses:</p> <ul style="list-style-type: none"> <li>• cost</li> <li>• consequences of meeting and not meeting these obligations.</li> </ul>

**Legislation:** Laws passed by acts of parliament; breaking these laws may result in a fine or even a prison sentence.

**Principles of employment law:** Parliament passes laws to protect employees from being exploited at work.

**Recruitment:** The main law involved in recruiting new staff is the Equality Act 2010. This brought together many other acts of parliament focused on preventing discrimination to certain characteristics.

**Pay:** Equal Pay Act 1970. Prevent pay differences between different groups of people e.g. men and women, age, race.

**Discrimination:** Prevent issues with regards to recruitment, promotion, men, women, race, religion.

**Health and Safety:** Health and safety at work act 1974. Employers must protect the 'health, safety and welfare' at work of all their employees, as well as others on their premises, including temps, casual workers, the self-employed, clients, visitors and the general public.

**Principles of consumer law:**

**Consumer law:** Acts of parliament that are intended to protect consumers from misleading or dangerous practices by companies.

There are two especially important pieces of consumer protection legislation:

**Consumer Rights Act 2015:**

This act states that:

- Goods must be fit for the purpose in which they are sold
- The buyer has their right to get their money back or could have it repaired at the seller's expense
- The person responsible for correcting any problems is the seller (shop) not the manufacturer

**Trade Descriptions Act 1968:**

This act states that:

- It is an offence for a trader to use false or misleading statements
- It is an offence to misleadingly label goods and services
- The act carries criminal penalties and can therefore lead to a jail sentence.

The impact of legislation on business	
Negatives	Positives
Lots of paper work that is not always relevant, time consuming and expensive	Helps a business to know what is acceptable and what is not
Rules can restrict creativity and initiative	Rules do take time and money, but not enough to ruin the business and their success
	Consumer protection law is too valuable to dismiss – stop people dying from unsafe cars, faulty food or drugs

Subject Content	What students need to learn?
1.5.4 The economy and business	The impact of the economic climate on businesses: <ul style="list-style-type: none"> <li>• unemployment, changing levels of consumer income, inflation, changes in interest rates, government taxation, changes in exchange rates.</li> </ul>

**The economy:** The Economy concerns the interactions between people and groups of people in a certain area.

**Here are the rules to follow when making an exchange rate calculation:**  
**Rule 1:** When exchanging from pounds to a foreign currency, multiply  
**Rule 2:** When exchanging from a foreign currency to pounds, divide

Definitions	Descriptions:
<b>Unemployment</b>	When someone of working age wants a job but cannot get one.
<b>Changing levels of consumer income</b>	Consumer incomes is the amount households have available to spend after income taxes have been deducted.
<b>Inflation</b>	Inflation is the sustained increase in prices over a period of time.
<b>Changes in interest rates</b>	Interest rates can take two forms: <ul style="list-style-type: none"> <li>• The additional <b>cost of borrowing</b> money from a bank that has to be paid each month</li> <li>• The <b>reward</b> received each month for <b>saving</b> your money in a bank</li> </ul>
<b>Government taxation</b>	Charges placed by the government on goods, imported products and incomes of both individuals and businesses
<b>Changes in exchange rates</b>	The value of one currency expressed as another. There is not just one exchange rate, it is between 2 currencies only


- S** trong
- P** ound
- I** mprts
- C** heaper
- E** xports
- D** earer

**Key terms:**  
**Recession:** A recession happens when there is a significant decline in economic activity. It is visible in areas such as production and employment.  
**Imports:** Bringing goods and services into a country from other countries in order to sell to consumers  
**Exports:** Exports are the goods and services produced in one country but sold overseas.



Subject Content	What students need to learn?
1.5.5 External influences	The importance of external influences on business: <ul style="list-style-type: none"> <li>possible responses by the business to changes in: technology, legislation, the economic climate.</li> </ul>

**External influences** occur in the external environment that the business operates in. the main influences are: technology, legislation and the economic climate. The business has no control over these influences and will need to respond effectively.

Technology	Legislation	Economic climate
<p>Businesses will need to adapt to keep up with advances in technology. For example, black cab drivers had to respond to Uber entering the taxi market. In order to compete, Black cab drivers now have free ultra-fast Wi-Fi, contactless card readers and zero emissions cabs.</p> 	<p>New laws can present opportunities or threats to new businesses.</p> <p>Most business people tend to focus on the threats, calling the new legislation 'red tape'. This means they may have to hire new staff to cope with the additional paper work which could be expensive for the business.</p> <p>However, it can create opportunities for some. For example, changes to the Food Safety Act in 2013 forced businesses to take further measures to protect consumers. This included keeping records about who supplied each batch of food (traceability).</p> <p>Various new small businesses set up to provide simple software programs for recording food origins, and suppliers started to help restaurants and cafes by texting the source of the food.</p>	<p>The economic climate is like the weather; the economy can run hot or cold. The economic climate measures the position the economy – positive or worrying.</p> <p>As the economy is constantly changing businesses need to be able to respond to economic ups and downs.</p> <p>When the economy is doing well they will:</p> <ul style="list-style-type: none"> <li>Hire more staff</li> <li>Invest in new equipment</li> <li>Spend more on developing new products</li> </ul> <p>In the long term bigger companies respond to the changing climate by spreading their risk. Jaguar and Land Rover used to produce only in England but that left the business vulnerable if a rising pound hit export profitability. Now they have factories in China, Brazil, Austria and Slovakia.</p>



Oxidation is Loss (of electrons) Reduction is Gain (of electrons)

**HT ONLY:** Reactions between metals and acids are redox reactions as the metal donates electrons to the hydrogen ions. This displaces hydrogen as a gas while the metal ions are left in the solution.



**Ionic half equations (HT only)**

For displacement reactions	<i>Ionic half equations show what happens to each of the reactants during reactions</i>	For example: The ionic equation for the reaction between iron and copper (II) ions is: $Fe + Cu^{2+} \rightarrow Fe^{2+} + Cu$
		The half-equation for iron (II) is: $Fe \rightarrow Fe^{2+} + 2e^{-}$
		The half-equation for copper (II) ions is: $Cu^{2+} + 2e^{-} \rightarrow Cu$

**Reactions with acids**

*metal + acid → metal salt + hydrogen*

magnesium + hydrochloric acid → magnesium chloride + hydrogen

zinc + sulfuric acid → zinc sulfate + hydrogen

Acids react with some metals to produce salts and hydrogen.

**Reactions of acids and metals**

**Extraction using carbon**

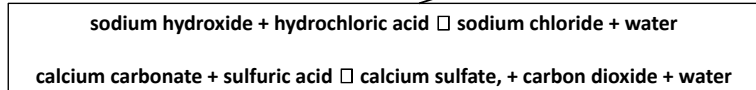
*Metals less reactive than carbon can be extracted from their oxides by reduction.*

For example:  
zinc oxide + carbon → zinc + carbon dioxide

Acid name	Salt name
Hydrochloric acid	Chloride
Sulfuric acid	Sulfate
Nitric acid	Nitrate

**Oxidation and reduction in terms of electrons (HT ONLY)**

**Neutralisation of acids and salt production**



**Neutralisation**

*Acids can be neutralised by alkalis and bases*

An **alkali** is a soluble base e.g. metal hydroxide.  
A **base** is a substance that neutralises an acid e.g. a soluble metal hydroxide or a metal oxide.

**Reactions of acids**

**AQA Chemical Changes 1**

**Reactivity of metals**

**The reactivity series**

**Extraction of metals and reduction**

Unreactive metals, such as gold, are found in the Earth as the metal itself. They can be mined from the ground.

	Reactions with water	Reactions with acid
Group 1 metals	<i>Reactions get more vigorous as you go down the group</i>	<i>Reactions get more vigorous as you go down the group</i>
Group 2 metals	<i>Do not react with water</i>	<i>Observable reactions include fizzing and temperature increases</i>
Zinc, iron and copper	<i>Do not react with water</i>	<i>Zinc and iron react slowly with acid. Copper does not react with acid.</i>

<b>Metals and oxygen</b>	<i>Metals react with oxygen to form metal oxides</i>	magnesium + oxygen → magnesium oxide $2Mg + O_2 \rightarrow 2MgO$
<b>Reduction</b>	<i>This is when oxygen is removed from a compound during a reaction</i>	e.g. metal oxides reacting with hydrogen, extracting low reactivity metals
<b>Oxidation</b>	<i>This is when oxygen is gained by a compound during a reaction</i>	e.g. metals reacting with oxygen, rusting of iron

**Metals form positive ions when they react**

*The reactivity of a metal is related to its tendency to form positive ions*

The reactivity series arranges metals in order of their reactivity (their tendency to form positive ions).

**Carbon and hydrogen**

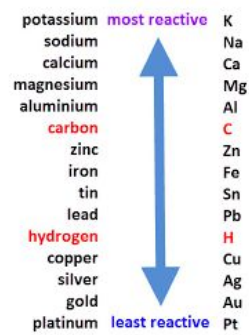
*Carbon and hydrogen are non-metals but are included in the reactivity series*

These two non-metals are included in the reactivity series as they can be used to extract some metals from their ores, depending on their reactivity.

**Displacement**

*A more reactive metal can displace a less reactive metal from a compound.*

Silver nitrate + Sodium chloride →  
Sodium nitrate + Silver chloride



CHEMISTRY



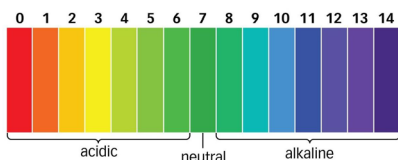
The ions discharged when an aqueous solution is electrolysed using inert electrodes depend on the relative reactivity of the elements involved.

<b>At the negative electrode</b>	Metal will be produced on the electrode if it is less reactive than hydrogen. Hydrogen will be produced if the metal is more reactive than hydrogen.
<b>At the positive electrode</b>	Oxygen is formed at positive electrode. If you have a halide ion (Cl <sup>-</sup> , I <sup>-</sup> , Br <sup>-</sup> ) then you will get chlorine, bromine or iodine formed at that electrode.

**Electrolysis of aqueous solutions**

<b>Strong acids</b>	<i>Completely ionised in aqueous solutions e.g. hydrochloric, nitric and sulfuric acids.</i>
<b>Weak acids</b>	<i>Only partially ionised in aqueous solutions e.g. ethanoic acid, citric acid.</i>
<b>Hydrogen ion concentration</b>	<i>As the pH decreases by one unit (becoming a stronger acid), the hydrogen ion concentration increases by a factor of 10.</i>

<b>Soluble salts</b>	<i>Soluble salts can be made from reacting acids with solid insoluble substances (e.g. metals, metal oxides, hydroxides and carbonates).</i>
<b>Production of soluble salts</b>	<i>Add the solid to the acid until no more dissolves. Filter off excess solid and then crystallise to produce solid salts.</i>



You can use universal indicator or a pH probe to measure the acidity or alkalinity of a solution against the pH scale.

In neutralisation reactions, hydrogen ions react with hydroxide ions to produce water:  
 $H^+ + OH^- \rightarrow H_2O$

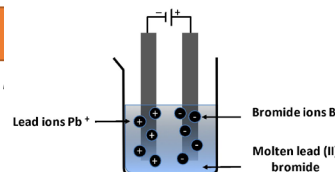
<b>Acids</b>	<i>Acids produce hydrogen ions (H<sup>+</sup>) in aqueous solutions.</i>
<b>Alkalis</b>	<i>Aqueous solutions of alkalis contain hydroxide ions (OH<sup>-</sup>).</i>

<b>Process of electrolysis</b>	<i>Splitting up using electricity</i>	When an ionic compound is melted or dissolved in water, the ions are free to move. These are then able to conduct electricity and are called electrolytes. Passing an electric current through electrolytes causes the ions to move to the electrodes.
<b>Electrode</b>	<i>Anode Cathode</i>	The positive electrode is called the anode. The negative electrode is called the cathode.
<b>Where do the ions go?</b>	<i>Cations Anions</i>	Cations are positive ions and they move to the negative cathode. Anions are negative ions and they move to the positive anode.

**Electrolysis**

**AQA Chemical Changes 2**

**Reactions of acids**

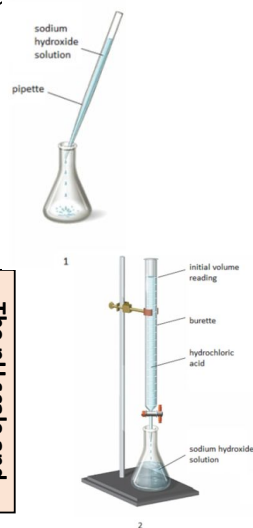


**Higher tier:** You can display what is happening at each electrode using half-equations:  
 At the cathode:  $Pb^{2+} + 2e^- \rightarrow Pb$   
 At the anode:  $2Br^- \rightarrow Br_2 + 2e^-$

**Strong and weak acids (HT ONLY)**

**Soluble salts**

**The pH scale and neutralisation**



<b>Extracting metals using electrolysis</b>	<i>Metals can be extracted from molten compounds using electrolysis.</i>
	<i>This process is used when the metal is too reactive to be extracted by reduction with carbon.</i>
	<i>The process is expensive due to large amounts of energy needed to produce the electrical current. Example: aluminium is extracted in this way.</i>

**CHEMISTRY**

# 1.3 COMPUTER NETWORKS, CONNECTIONS AND PROTOCOLS

## NETWORK TOPOLOGIES

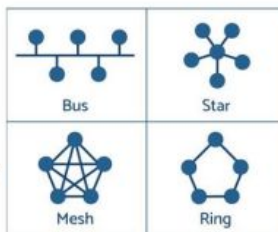
A topology is the layout of a network.

**Bus:** Slow network due to data collisions on the single backbone cable.

**Star:** If the central switch fails, the whole network fails. If one device fails, the network is fine.

**Ring:** Data moves in one direction which prevents collisions. Only one device can send data at once.

**Mesh:** Each device is connected to every other device so they can send data the fastest route. There is no single point where network can fail. Require lots of wire.



## LAYERS

Network protocols are divided into layers so that protocols with similar functions are grouped together.

Layer 4: Application	<ul style="list-style-type: none"> <li>•Turn data into applications or websites</li> <li>•HTTP, FTP, SMTP</li> </ul>
Layer 3: Transport	<ul style="list-style-type: none"> <li>•Control the flow of data</li> <li>•TCP</li> </ul>
Layer 2: Network	<ul style="list-style-type: none"> <li>•Direct data packets between networks</li> <li>•IP</li> </ul>
Layer 1: Data Link	<ul style="list-style-type: none"> <li>•Sending data over a physical network</li> <li>•Ethernet</li> </ul>

## PROTOCOLS

Protocols are the rules for how devices communicate and transmit data across a network.

Every device has a **MAC address** so that it can be identified on a network. Eg: 98-1C-B3-09-85-15

**IP addresses** are used when sending data between networks. They can be static (permanent) or dynamic (different each time the device connects).

**TCP/IP:** Used to send data between networks in packets.

**Transmission Control Protocol (TCP):** Splits the data into packets and re-assembles. Checks data is sent correctly.

**Internet Protocol (IP):** does the packet switching

**Hyper Text Transfer Protocol (HTTP):** for accessing websites

**HTTPS:** The secure version of HTTP

**File Transfer Protocol (FTP):** Moves files between devices

**Post Office Protocol (POP3):** Retrieves emails from server. Once you download the email the server copy is deleted.

**Internet Message Access Protocol (IMAP):** Retrieves email from server. Email is kept on server, you see a copy.

**Simple Mail Transfer Protocol (SMTP):** sends emails.

## PACKET SWITCHING

- Data is split into packets and numbered in order.
- Each packet is sent the fastest route across the internet by the routers. This means packets can take different routes and arrive out of order.
- The packet numbers are used to put them in order.
- If packets are missing a timeout message is sent
- Once all have arrived a receipt confirmation is sent to the device that sent them.

## EXAM QUESTIONS

1. Explain why protocols are used
2. Describe how packet switching works
3. Evaluate the benefits and drawbacks of a mesh network.
4. Draw topologies for bus, ring and star networks.
5. Explain the difference between HTTP and HTTPS
6. Explain the difference between POP3 and IMAP



## 1.4 NETWORK SECURITY

### Key Terms

A network is where devices have been connected together so that they can share data and resources. Networks can be wired (Ethernet) or wireless (WiFi).

Local Area Network (LAN)	Cover a small geographical area such as an office. Use their own infrastructure.
Wide Area Network (WAN)	WANs connect LANs together over a large geographical area and make use of infrastructure from telecommunications companies.
Bandwidth	The amount of data that can pass between network devices per second
Server	A device that provides services for other devices (eg file server or print server)
Client	A computer or workstation that receives information from a central server
Peer to peer Network	All of the computers in the network are equal. They connect directly to each other.
Standalone computers	A computer not connected to a network

### NETWORK HARDWARE

**Network Interface Controller (NIC):** built in hardware that allows a device to connect to a network.

**Switches:** connect devices on a LAN

**Router:** Transmits the data (packets) between the networks (eg: the internet and your LAN)

**Wireless Access Point (WAP):** a switch that allows devices to connect wirelessly.

**Cables:** the cables in a network can be twisted pair cables, coaxial cables or fibre optic cables.

### NETWORK PERFORMANCE

These factors can impact on network performance:

**Bandwidth:** The more bandwidth, the more data that can be transferred at a time.

**Number of Users:** Having a lot of people using a network means lots of data is being transmitted which can slow it down.

**Transmission Media:** Wired connections are faster than wireless. Fibre optic cables are faster than copper cables.

**Wireless Factors:** wireless can be affected by walls, distance, signal quality and interference from other devices.

**Topology:** The layout of a network can impact on its performance.

### VIRTUAL NETWORKS

A virtual network is part of a LAN or WAN where only certain devices can “see” and communicate with each other.

### EXAM QUESTIONS

1. Give 3 items of hardware needed for a network
2. Explain the difference between a peer-to-peer network and a client server network.
3. The school’s network has become very slow. Explain two different reasons why this might be.
4. Evaluate the benefits of using a wired connection rather than a wireless one.

## 1.4 NETWORK SECURITY CONTINUED

### TYPES OF ATTACK

Attack	How it works	How to prevent it
Passive	Network traffic is monitored and then data is intercepted	Encryption so that intercepted data cannot be understood
Active	Someone deliberately attacks a network with malware (eg: a virus)	A firewall and antivirus software
Insider	Someone with network access abuses this to steal information	User access levels to control how much data people can access.
Brute Force	Trial an error until a password is attacked	Making passwords difficult to guess. Locking accounts after failed attempts.
Denial of Service	The network is flooded with useless data so it is too slow to use	This attack is hard to prevent but a firewall can help.
SQL Injection	SQL commands are typed into the input boxes on a website to access data or alter the database	Having strong validation on all input boxes so that only expected data can be entered
Phishing	Emails with links that trick people into entering their personal information	Looking for signs that an email is not from a real company.
Social Engineering	When a person manipulates someone else into handing over sensitive information	Policies and rules for staff about handing over data. Staff training.

### NETWORK SECURITY KEY TERMS

**Malware:** malicious software intended to cause harm.  
**Penetration Testing:** Organisations employ professionals to try and hack their network so that they can find areas of weakness.

**User Access Levels:** Different employees have different levels of access to programs, websites and data.

**Encryption:** data is scrambled so that it cannot be understood if intercepted. It can only be decrypted with a key.

**Network Forensics:** Data packets are captured as they enter the network and analysed to find out the cause of a network attack.

#### Types of Malware

**Virus** - attach themselves to files and copy themselves when the user copies or opens a file.

**Worm** - copy themselves without the user doing anything.

**Trojan** - malicious software pretending to be a legitimate program.

### EXAM QUESTIONS

1. Describe what is meant by "Malware"
2. Describe how a brute force attack works and how to prevent it.
3. Explain how to keep a network secure.
4. Evaluate the benefits and drawbacks of a business using penetration testing

## 1.5 SYSTEMS SOFTWARE

**Operating Systems:** runs the computer, manages the hardware and applications.

**Device Drivers:** communicate with the peripherals and internal hardware.

**User Interface:** allows the user to interact with the device. This can be a Graphical User Interface (GUI) which are visual and easy for someone to use or a command line interface where the user needs to type in commands to make it work.

**Multitasking:** The operating system manages the programs so that you can run several at the same time.

**File and Disk Management:** The operating system manages the movement, editing and deletion of data.

**User Accounts:** The operating system manages the accounts of the different users.

### Utility Software

Utilities are the programs that help maintain and configure a program. Most utility software is installed with the Operating system.

**Defragmentation:** Defragging a magnetic hard drive groups all of the files for each program together and all of the free space together. This makes it read and write quicker.

**Back Up Utilities:** Schedules and manages back ups. Full back ups = all data is backed up. Incremental = only files since the last back up are copied.

**Compression:** reduces the size of large files so that they take up less space. Files then need to be extracted before they are used.

**Encryption:** scrambles the data to protect it so that if someone else gets hold of it they cannot access it.

### Open Source and Proprietary Software

Open Source	Proprietary
It's usually free and the source code is available so it can be adapted for individual needs Others can improve the code Strong online support communities	Usually has to be paid for Only the compiled code is released so it cannot be edited Good customer support May not fit the users exact needs

### EXAM QUESTIONS

1. Evaluate the benefits and drawbacks of releasing a piece of software as open source rather than proprietary.
2. Explain three functions of the operating system in a computer
3. Evaluate the difference between doing an incremental back up and a full back up.

# Beginner's Python Cheat Sheet

## Variables and Strings

Variables are used to store values. A string is a series of characters, surrounded by single or double quotes.

### Hello world

```
print("Hello world!")
```

### Hello world with a variable

```
msg = "Hello world!"
print(msg)
```

### Concatenation (combining strings)

```
first_name = 'albert'
last_name = 'einstein'
full_name = first_name + ' ' + last_name
print(full_name)
```

## Lists

A list stores a series of items in a particular order. You access items using an index, or within a loop.

### Make a list

```
bikes = ['trek', 'redline', 'giant']
```

### Get the first item in a list

```
first_bike = bikes[0]
```

### Get the last item in a list

```
last_bike = bikes[-1]
```

### Looping through a list

```
for bike in bikes:
    print(bike)
```

### Adding items to a list

```
bikes = []
bikes.append('trek')
bikes.append('redline')
bikes.append('giant')
```

### Making numerical lists

```
squares = []
for x in range(1, 11):
    squares.append(x**2)
```

## Lists (cont.)

### List comprehensions

```
squares = [x**2 for x in range(1, 11)]
```

### Slicing a list

```
finishers = ['sam', 'bob', 'ada', 'bea']
first_two = finishers[:2]
```

### Copying a list

```
copy_of_bikes = bikes[:]
```

## Tuples

Tuples are similar to lists, but the items in a tuple can't be modified.

### Making a tuple

```
dimensions = (1920, 1080)
```

## If statements

If statements are used to test for particular conditions and respond appropriately.

### Conditional tests

equals	x == 42
not equal	x != 42
greater than	x > 42
or equal to	x >= 42
less than	x < 42
or equal to	x <= 42

### Conditional test with lists

```
'trek' in bikes
'surly' not in bikes
```

### Assigning boolean values

```
game_active = True
can_edit = False
```

### A simple if test

```
if age >= 18:
    print("You can vote!")
```

### If-elif-else statements

```
if age < 4:
    ticket_price = 0
elif age < 18:
    ticket_price = 10
else:
    ticket_price = 15
```

## Dictionaries

Dictionaries store connections between pieces of information. Each item in a dictionary is a key-value pair.

### A simple dictionary

```
alien = {'color': 'green', 'points': 5}
```

### Accessing a value

```
print("The alien's color is " + alien['color'])
```

### Adding a new key-value pair

```
alien['x_position'] = 0
```

### Looping through all key-value pairs

```
fav_numbers = {'eric': 17, 'ever': 4}
for name, number in fav_numbers.items():
    print(name + ' loves ' + str(number))
```

### Looping through all keys

```
fav_numbers = {'eric': 17, 'ever': 4}
for name in fav_numbers.keys():
    print(name + ' loves a number')
```

### Looping through all the values

```
fav_numbers = {'eric': 17, 'ever': 4}
for number in fav_numbers.values():
    print(str(number) + ' is a favorite')
```

## User input

Your programs can prompt the user for input. All input is stored as a string.

### Prompting for a value

```
name = input("What's your name? ")
print("Hello, " + name + "!")
```

### Prompting for numerical input

```
age = input("How old are you? ")
age = int(age)
```

```
pi = input("What's the value of pi? ")
pi = float(pi)
```

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Covers Python 3 and Python 2

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# Beginner's Python Cheat Sheet - Lists

## What are lists?

A list stores a series of items in a particular order. Lists allow you to store sets of information in one place, whether you have just a few items or millions of items. Lists are one of Python's most powerful features readily accessible to new programmers, and they tie together many important concepts in programming.

## Defining a list

Use square brackets to define a list, and use commas to separate individual items in the list. Use plural names for lists, to make your code easier to read.

## Making a list

```
users = ['val', 'bob', 'mia', 'ron', 'ned']
```

## Accessing elements

Individual elements in a list are accessed according to their position, called the index. The index of the first element is 0, the index of the second element is 1, and so forth. Negative indices refer to items at the end of the list. To get a particular element, write the name of the list and then the index of the element in square brackets.

## Getting the first element

```
first_user = users[0]
```

## Getting the second element

```
second_user = users[1]
```

## Getting the last element

```
newest_user = users[-1]
```

## Modifying individual items

Once you've defined a list, you can change individual elements in the list. You do this by referring to the index of the item you want to modify.

## Changing an element

```
users[0] = 'valerie'
users[-2] = 'ronald'
```

## Adding elements

You can add elements to the end of a list, or you can insert them wherever you like in a list.

## Adding an element to the end of the list

```
users.append('amy')
```

## Starting with an empty list

```
users = []
users.append('val')
users.append('bob')
users.append('mia')
```

## Inserting elements at a particular position

```
users.insert(0, 'joe')
users.insert(3, 'bea')
```

## Removing elements

You can remove elements by their position in a list, or by the value of the item. If you remove an item by its value, Python removes only the first item that has that value.

## Deleting an element by its position

```
del users[-1]
```

## Removing an item by its value

```
users.remove('mia')
```

## Popping elements

If you want to work with an element that you're removing from the list, you can "pop" the element. If you think of the list as a stack of items, pop() takes an item off the top of the stack. By default pop() returns the last element in the list, but you can also pop elements from any position in the list.

## Pop the last item from a list

```
most_recent_user = users.pop()
print(most_recent_user)
```

## Pop the first item in a list

```
first_user = users.pop(0)
print(first_user)
```

## List length

The len() function returns the number of items in a list.

## Find the length of a list

```
num_users = len(users)
print("We have " + str(num_users) + " users.")
```

## Sorting a list

The sort() method changes the order of a list permanently. The sorted() function returns a copy of the list, leaving the original list unchanged. You can sort the items in a list in alphabetical order, or reverse alphabetical order. You can also reverse the original order of the list. Keep in mind that lowercase and uppercase letters may affect the sort order.

## Sorting a list permanently

```
users.sort()
```

## Sorting a list permanently in reverse alphabetical order

```
users.sort(reverse=True)
```

## Sorting a list temporarily

```
print(sorted(users))
print(sorted(users, reverse=True))
```

## Reversing the order of a list

```
users.reverse()
```

## Looping through a list

Lists can contain millions of items, so Python provides an efficient way to loop through all the items in a list. When you set up a loop, Python pulls each item from the list one at a time and stores it in a temporary variable, which you provide a name for. This name should be the singular version of the list name.

The indented block of code makes up the body of the loop, where you can work with each individual item. Any lines that are not indented run after the loop is completed.

## Printing all items in a list

```
for user in users:
    print(user)
```

## Printing a message for each item, and a separate message afterwards

```
for user in users:
    print("Welcome, " + user + "!")

print("Welcome, we're glad to see you all!")
```

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# Beginner's Python Cheat Sheet — If Statements and While Loops

## What are if statements? What are while loops?

If statements allow you to examine the current state of a program and respond appropriately to that state. You can write a simple if statement that checks one condition, or you can create a complex series of if statements that identify the exact conditions you're looking for.

While loops run as long as certain conditions remain true. You can use while loops to let your programs run as long as your users want them to.

## Conditional Tests

A conditional test is an expression that can be evaluated as True or False. Python uses the values True and False to decide whether the code in an if statement should be executed.

### Checking for equality

A single equal sign assigns a value to a variable. A double equal sign (==) checks whether two values are equal.

```
>>> car = 'bmw'
>>> car == 'bmw'
True
>>> car = 'audi'
>>> car == 'bmw'
False
```

### Ignoring case when making a comparison

```
>>> car = 'Audi'
>>> car.lower() == 'audi'
True
```

### Checking for inequality

```
>>> topping = 'mushrooms'
>>> topping != 'anchovies'
True
```

## Numerical comparisons

Testing numerical values is similar to testing string values.

### Testing equality and inequality

```
>>> age = 18
>>> age == 18
True
>>> age != 18
False
```

### Comparison operators

```
>>> age = 19
>>> age < 21
True
>>> age <= 21
True
>>> age > 21
False
>>> age >= 21
False
```

## Checking multiple conditions

You can check multiple conditions at the same time. The and operator returns True if all the conditions listed are True. The or operator returns True if any condition is True.

### Using and to check multiple conditions

```
>>> age_0 = 22
>>> age_1 = 18
>>> age_0 >= 21 and age_1 >= 21
False
>>> age_1 = 23
>>> age_0 >= 21 and age_1 >= 21
True
```

### Using or to check multiple conditions

```
>>> age_0 = 22
>>> age_1 = 18
>>> age_0 >= 21 or age_1 >= 21
True
>>> age_0 = 18
>>> age_0 >= 21 or age_1 >= 21
False
```

## Boolean values

A boolean value is either True or False. Variables with boolean values are often used to keep track of certain conditions within a program.

### Simple boolean values

```
game_active = True
can_edit = False
```

## If statements

Several kinds of if statements exist. Your choice of which to use depends on the number of conditions you need to test. You can have as many elif blocks as you need, and the else block is always optional.

### Simple if statement

```
age = 19

if age >= 18:
    print("You're old enough to vote!")
```

### If-else statements

```
age = 17

if age >= 18:
    print("You're old enough to vote!")
else:
    print("You can't vote yet.")
```

### The if-elif-else chain

```
age = 12

if age < 4:
    price = 0
elif age < 18:
    price = 5
else:
    price = 10

print("Your cost is $" + str(price) + ".")
```

## Conditional tests with lists

You can easily test whether a certain value is in a list. You can also test whether a list is empty before trying to loop through the list.

### Testing if a value is in a list

```
>>> players = ['al', 'bea', 'cyn', 'dale']
>>> 'al' in players
True
>>> 'eric' in players
False
```

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# Beginner's Python Cheat Sheet — Functions

## What are functions?

Functions are named blocks of code designed to do one specific job. Functions allow you to write code once that can then be run whenever you need to accomplish the same task. Functions can take in the information they need, and return the information they generate. Using functions effectively makes your programs easier to write, read, test, and fix.

## Defining a function

The first line of a function is its definition, marked by the keyword `def`. The name of the function is followed by a set of parentheses and a colon. A docstring, in triple quotes, describes what the function does. The body of a function is indented one level.

To call a function, give the name of the function followed by a set of parentheses.

## Making a function

```
def greet_user():
    """Display a simple greeting."""
    print("Hello!")

greet_user()
```

## Passing information to a function

Information that's passed to a function is called an *argument*; information that's received by a function is called a *parameter*. Arguments are included in parentheses after the function's name, and parameters are listed in parentheses in the function's definition.

## Passing a single argument

```
def greet_user(username):
    """Display a simple greeting."""
    print("Hello, " + username + "!")

greet_user('jesse')
greet_user('diana')
greet_user('brandon')
```

## Positional and keyword arguments

The two main kinds of arguments are *positional* and *keyword* arguments. When you use positional arguments Python matches the first argument in the function call with the first parameter in the function definition, and so forth.

With keyword arguments, you specify which parameter each argument should be assigned to in the function call. When you use keyword arguments, the order of the arguments doesn't matter.

### Using positional arguments

```
def describe_pet(animal, name):
    """Display information about a pet."""
    print("\nI have a " + animal + ".")
    print("Its name is " + name + ".")

describe_pet('hamster', 'harry')
describe_pet('dog', 'willie')
```

### Using keyword arguments

```
def describe_pet(animal, name):
    """Display information about a pet."""
    print("\nI have a " + animal + ".")
    print("Its name is " + name + ".")

describe_pet(animal='hamster', name='harry')
describe_pet(name='willie', animal='dog')
```

## Default values

You can provide a default value for a parameter. When function calls omit this argument the default value will be used. Parameters with default values must be listed after parameters without default values in the function's definition so positional arguments can still work correctly.

### Using a default value

```
def describe_pet(name, animal='dog'):
    """Display information about a pet."""
    print("\nI have a " + animal + ".")
    print("Its name is " + name + ".")

describe_pet('harry', 'hamster')
describe_pet('willie')
```

### Using None to make an argument optional

```
def describe_pet(animal, name=None):
    """Display information about a pet."""
    print("\nI have a " + animal + ".")
    if name:
        print("Its name is " + name + ".")

describe_pet('hamster', 'harry')
describe_pet('snake')
```

## Return values

A function can return a value or a set of values. When a function returns a value, the calling line must provide a variable in which to store the return value. A function stops running when it reaches a return statement.

### Returning a single value

```
def get_full_name(first, last):
    """Return a neatly formatted full name."""
    full_name = first + ' ' + last
    return full_name.title()
```

```
musician = get_full_name('jimi', 'hendrix')
print(musician)
```

### Returning a dictionary

```
def build_person(first, last):
    """Return a dictionary of information
    about a person.
    """
    person = {'first': first, 'last': last}
    return person
```

```
musician = build_person('jimi', 'hendrix')
print(musician)
```

### Returning a dictionary with optional values

```
def build_person(first, last, age=None):
    """Return a dictionary of information
    about a person.
    """
    person = {'first': first, 'last': last}
    if age:
        person['age'] = age
    return person
```

```
musician = build_person('jimi', 'hendrix', 27)
print(musician)
```

```
musician = build_person('janis', 'joplin')
print(musician)
```

## Visualizing functions

Try running some of these examples on [pythantutor.com](http://pythantutor.com).

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**Vocabulary of Voice**

**Monotone** – One tone

**Clarity** – All words are audible and enunciated (said fully and clearly)

**Volume** – Loud or quiet

**Accent** – Changes in way you say words depending on where you live and/ or social class

**Pace** (speed), **pause** (stopping for a moment) and **pitch** (high or low)

**Emphasis** – making certain words stand out

**Intonation** – The rise and fall of the voice

**Tone** – the feeling in your voice

**Component 1 Questions**

What was your initial response to the stimuli and what were the intentions of the piece?

What work did your group do in order to explore the stimuli and start to create ideas for performance?

What were some of the significant moments during the development process and when rehearsing and refining the work?

How did you consider genre, structure, character, form, style and language throughout the process?

How effective was your contribution to the final performance?

Were you successful in what you set out to achieve?

**Genre** - a category or 'type' given to plays based upon the conventions used e.g. tragedy, comedy, farce and melodrama.

**Structure** –The arrangement of, and relationship between, the parts of a play e.g. scenes, acts and cyclical.

**Character** - a person portrayed in a drama, novel, or other artistic piece.

**Form and style** – Drama techniques

**Language** - Words

**GCSE DRAMA – COMPONENT 1****Vocabulary of Physicality**

**Every** – Eye contact: Looking at the audience or another performer

**Friday** – Facial expressions: using your face to express feelings

**My** –Movement: moving your body/ body parts from one place to another

**Naughty** – Non-verbal communication: communicating meaning without using words

**Brother** – Body language: using your body to communicate meaning

**Puts** – Pace (speed) and pause (stopping for a moment)

**Grandma's** – Gesture – the way you move your hands

**Massive** – Mannerisms: something someone does with face or body repeatedly

**Slippers** – Stillness: no movement

**Sentence Stem**

As a performer,

As a director,

As a designer,

**Describe** – to use drama words to create a picture of what you did/ saw.

*When we/ I/ they* (link to "extract" and describe the drama).

**Analyse** – in depth understanding drawing out layers of meaning.

**Evaluate** – a well justified judgement.

*This effectively communicates* (explain/ analyse the drama with link to purpose/ intentions) to the audience.

**Challenge:** Vary evaluative word by identifying what it made the audience think and feel e.g. shocking.

**Self Quiz – LOOK, COVER, WRITE, CHECK & CORRECT**

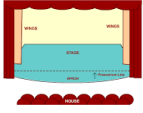



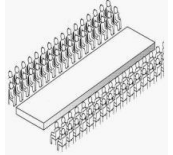

Use the acronym and mnemonic to help you remember key vocabulary and definitions.

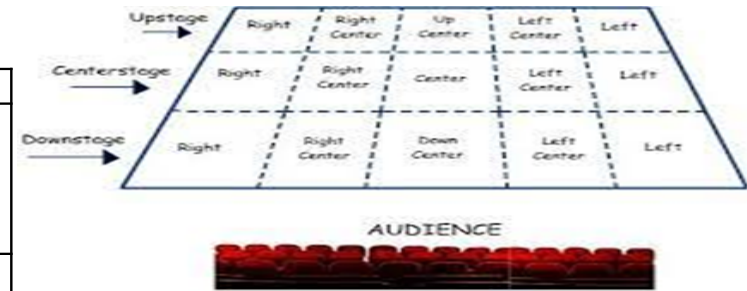
Use the definitions to ensure you understand the questions you will answer in your portfolio.

Think about recent practical work, use the sentence stems to describe, analyse and evaluate the process and performance.

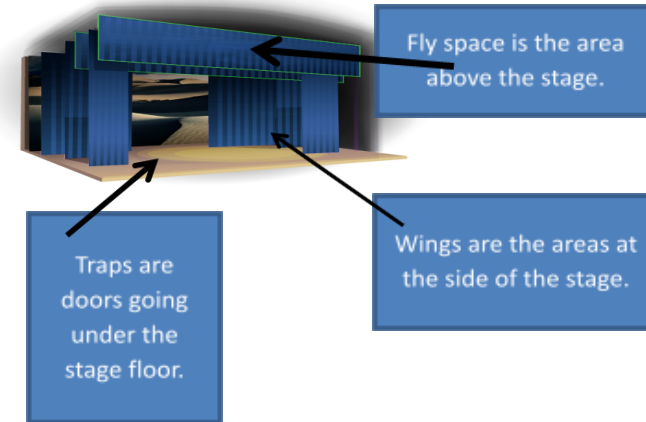


**GCSE Drama – Theatre**

Stage Type	What does it look like?	Advantages and disadvantages
Proscenium arch		Advantages: Excellent sight lines, excellent staging and set possibilities, traditional form of theatre. Disadvantages: Audience feel removed because of fourth wall, set can be limited to existing structure.
End on		Advantages: Excellent sight lines, more inclusive experience than PA for the audience. Disadvantages: Quite minimal so limits set
Thrust		Advantages: Audience have an immersive and inclusive experience, visually interesting. Disadvantages: sight lines and limited set and staging.
Theatre in the round		Advantages: Audience have an immersive and inclusive experience, visually interesting. Disadvantages: sight lines and limited set and staging.
Traverse		Advantages: Audience have an immersive and inclusive experience, visually interesting, audience can see each other Disadvantages: sight lines mean audience might see two different shows, limited set and staging.
Promenade		Advantages: Audience have an immersive and inclusive experience, locations can complement the work, an alternative theatre experience. Disadvantages: non-linear, fragmented plot, break intension.



Wooden flats create set walls.



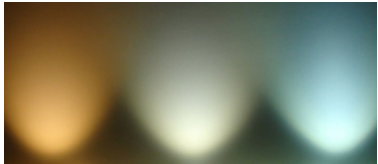










Self Quiz: **LOOK, COVER, WRITE, CHECK & CORRECT**  
 List the stage types and describe the audience position.  
 Identify advantages and disadvantages for both.  
 Draw and label a stage

D R A M A

**Theatre Lighting**

D R A M A

1. Lanterns and lighting states		2. Lighting and lighting angles	3. Colour and effects
<p><b>Fresnel</b> – A common lantern with soft edges. A series of fresnels can evenly cover the stage with light to create a ‘wash’. Coloured gels can be used. Barn doors can be used to focus the light.</p>		<p>Front light    Back light</p> 	 <p>Warm    Neutral    Cool</p>
<p><b>Profile</b> – This lantern is long and thin and can be used to create spotlights. A shutter and gate mechanism allow control over the beam of light to sharp or soft edge. Gobos can be used with profile lanterns.</p>		<p>Down light    Up light</p> 	<p>Coloured lighting gels</p> 
<p><b>Flood</b> – This lantern produces a clear wide-angled light, but there's little control over the spread of the light. Coloured filters can be used with this lamp.</p>		<p>Side light</p> 	<p>Gobos create patterns</p> 
<p><b>Par can</b> produces a strong beam of light that is suitable for creating bold colours on stage. Par cans can be identified by their rounded shape. Coloured filters can be used with this lantern.</p>		<p><b>Hand held lighting and pendant bulbs</b> hanging in fly space.</p> 	<p><b>Strobes</b> rapidly pulse to create a special effect (for example to make the actors appear like they are moving in slow motion).</p>
<p><b>Keywords:</b> lantern, lighting states, colour, intensity, soft focus, sharp focus, shadows, series, beam.</p>			
<p>Self Quiz – <b>LOOK, COVER, WRITE, CHECK, &amp; CORRECT</b> lanterns and lighting states table</p> <ol style="list-style-type: none"> <li>List the reasons lighting is used in theatre.</li> <li>Reflect on a theatre production you've seen. Can you identify the lighting used? What was the reason for this decision? What was the effect on the audience?</li> </ol>			

Context – what was happening at the time the play was written and set		Plot – the story		
<b>1912</b>	<b>1945</b>	<b>Act One</b>	The play opens with a celebratory dinner party. Sheila and Gerald are to be married and Birling and Company will work closer with Crofts Ltd.	
Edwardian era, or ‘Golden Age’, the time period in which the play is set.	Post WW1 (1914-1918) WW2 (1939-1945) Britain, the time in which the play was written and first performed.		Birling holds court and begins to make a series of statements we, as the audience, know to be fallacious.	
The British Empire – A military power.	Britain suffered the effects of two world wars.		The Inspector enters and informs the party of the suicide of Eva Smith. Starting with Birling, he begins to interrogate the family.	
Britain was a global economic power however high exploitation of working classes.	Two recessions since 1912 resulted in economic instability for all, declining industry and high unemployment.		The Inspector interrogates Sheila and the incident at Milward’s is outlined.	
Social Inequality Rigid social hierarchy benefitting upper classes. Little social mobility. No welfare state.	Increased power of working classes through trade unions (an organisation of workers who join forces and become an official organisation working to protect workers’ rights e.g. fair pay and better working conditions). Trade unions grew in power in the early 19th century particularly after WW2.		<b>Act Two</b>	The Inspector focuses his line of inquiry towards Gerald and the name Daisy Renton is first introduced. Gerald’s affair is exposed.
Conservative and liberal domination in politics for two centuries.	The Labour Party won the General Election in 1924, 1929 and, overwhelmingly, in 1945.			Mrs Birling recounts the request for financial assistance made by a pregnant ‘Mrs Birling’ and shows no remorse for the refusal that she herself orchestrated.
Support for working classes provided by charities.	Labour introduce the welfare state and the creation of the NHS (1945-48)			The Inspector, via a series of leading questions, induces Mrs Birling to say that the man responsible for the pregnancy should be punished and forced to take responsibility. Eric enters.
Gender inequality. Rigid, stereotypical gender roles. Men had more sexual freedom.	Increased gender equality. Gender roles are less distinct with more women in the workplace to take the roles previously filled by men before the war e.g. police officer. Women won the right to vote in 1928.		<b>Act Three</b>	Eric tells of a series of liaisons and how he has stolen money from Mr Birling to support the mother of an unborn child.
Deeply entrenched capitalist system.	More awareness of socialism.			The Inspector proportions the blame to each of the characters and performs his final speech.
Deeply entrenched inequality benefitting Tzars in Russia.	1917 – Russian revolution and the emergence of communist state.	The family squabbles and points fingers. Gerald re-enters to suggest the whole thing was a hoax. The old, and Gerald, take this as a cue to alleviate any responsibility whereas the young are repentant. The phone rings...		
Melodrama and musical comedies are popular for many.	AIC first performed in Russia in 1945 then London in 1946. British theatres bombed and damaged, relocated, opening and closing erratically. Musicals, detective thrillers, Shakespeare revivals and films are popular. Emergence of serious dramas exploring political and social issues. AIC had a mixed response from the audience.	<b>Dramatic techniques:</b> Tension – a feeling of nervousness, anxiety and excitement; climax – build up of tension; cliff hanger - a dramatic and exciting ending leaving the audience uncertain and creating suspense; dramatic irony – audience aware of something the characters are not; foreshadowing – subtle hints or predictions of later action; symbolism – one thing meaning, or representing, another; didactic – telling/ teaching; status – power or position of a character; coup de theatre (a dramatically sudden action or turn of events); well made play (genre) – popular in 19th century taking the audience and characters on a journey from ignorance to knowledge ending with a return to order; morality play (genre) – allegorical play presenting a lesson about good conduct and character; detective thrillers or ‘whodunnit’ play (genre) – a detective story in which the audience is given the opportunity to engage in the same process of deduction as the protagonist in the investigation of a crime.		

<b>Daldry's production – You are pretending as a director/ designer that YOU ARE HIM and these are YOUR IDEAS. Do NOT reference him.</b>			
<b>Set description– naturalistic and symbolic</b>	<b>Analysis</b>	<b>Lighting – real lighting and stage lighting</b>	<b>Analysis</b>
Doll's house on stilts.  House opens up at front, steps down to stage floor, house tips and falls, furniture breaks, crockery shatters, performed on/ through wreckage.	Cloistered, unrealistic life of Edwardian upper classes.  Reality and truth exposed; difficult, unsettling to face responsibility and a need for change; less distinct class and gender boundaries.	Priestley's lighting stage direction: "The lighting should be pink and intimate until the INSPECTOR arrives and then it should be brighter and harder." Fresnel lantern with soft pink gel, light from open fire, chandelier, table lamps, candelabra.  Series of Fresnel lanterns creating a wash of strong, cold white light.	Cloistered, celebratory, comfortable, warm.  Then harsh, difficult to hear, interrogation, exposing the truth and reality.
Cobblestones, rubble and debris on stage floor.	War time Britain - time written and first performed; the blitz.	Cyclorama projection: clouds moving, weather changing, night and day.	Creates atmosphere (pathetic fallacy) and sense of time passing.
Cyclorama projection: clouds moving, weather changing, night and day.	Creates atmosphere (pathetic fallacy) and sense of time passing.	Contrast between dimly lit, cool white light on stage with warm glow from doll's house	Contrast in social class, ignorant of the harsh reality of life for many in Edwardian Britain.
Telephone box tilted in stall box, street lamps and radio downstage.	All characteristics of 1940s Britain.	House lights in the auditorium come on for, 'Millions and millions of Eva Smiths...' speech.	Timeless message about equality and collective responsibility applicable for characters and audience.
<b>Costume description</b>	<b>Analysis</b>	<b>Props and stage furniture description</b>	<b>Analysis</b>
<b>Birling men:</b> typical Edwardian dinner dress for men, tail coats, dinner jacket, trousers, waistcoat, pristine white shirt and white bow tie.	Represents upper social class, wealth, privilege, cloistered, superior and detached.	Inspector's notebook, photograph of Eva.	Interrogation, control and omniscience.
<b>Birling women:</b> Typical Edwardian long evening gowns, satin, lace, beading, chiffon, burgundy, long white gloves, hair pinned up and jewellery (pearls, brooch).	Represents upper social class, wealth, privilege, colourised, superior and detached.	Glasses, cigar.	Represents upper class – social status, wealth, privilege.
<b>Inspector Goole:</b> Typical dress of 1940s, beige trench coat, modest 1940s brown suit and trilby.	From the future, generic class, 1940s a time of economic uncertainty after 2 world wars.	Mahogany dining furniture. Cut glass port glasses and decanter.	Represents upper class – social status, wealth, privilege.
<b>Edna:</b> Drab beige & brown, dress of 1940s, apron, scarf in hair.	A unique position, a servant of time but complicit with IG.	<b>Staging and stage space desc.</b> Doll's house centre stage. Family descends from doll's house for interrogation. Elements of 1940s downstage.	Self-importance, capitalism Hierarchy, facing reality, foreshadowing future. Moving forward, a need for change, audience in future.

**Self Quiz: LOOK, COVER, WRITE, CHECK & CORRECT design description and analysis**

1. Can you add another idea for set; lighting; costume; props and stage furniture; and, staging and stage furniture.

### ACCESS FM Analysing a Product

#### Aesthetics

Does the product look good?  
Does it make good use of colour and texture?  
What has inspired it's appearance? (E.g. is it organic? Is it industrial?)

#### Cost

What is the estimated cost of the product?  
What is the retail price?  
What is the relationship between the two?  
Is the product affordable?  
Does it offer value for money?  
What is the product's cost in relation to the income of potential buyers/users?

#### Safety

How has the designer considered safety issues in the products design?  
Think about the ways it is being used and how different parts have been joined together.  
Are there any risk assessment issues in relation to the use of the product?

#### Size

Are the product's proportions appropriate for its use?  
If you increased or decreased the products size, would it look or function better?

#### Customer

Who is the product designed for?  
How and where would they use it?  
What effect will it have on their lives and relationships?  
Will it add value?  
How is the product promoted to attract customers?  
Has the designer considered how people will interact with the product?  
Does the product target a particular age group or sector of people?  
What assumptions have been made about the potential buyers/users?

#### Environment

What is the product's impact on the environment?  
What happens to the product after use?  
How long will it last?  
What factors limit/lengthen its life span?  
Can it be repaired? Can parts be replaced?  
How easily can it be recycled?  
Who would pay for the cost of recycling?

#### Function

Does the product do the job it was intended to do?  
How does it work?  
How easy is it to use?  
What effects will using it have, including those beyond intended use and user?

#### Material

What materials are used to make the product and why?  
Would another type of material work better?  
What impact could the designers choice of material have on the environment?  
Where do the materials and other resources needed for production come from?  
Are they likely to run out?

### Annotating design ideas

What do you like / dislike about the appearance?	How do you think this design appeals to your target user?	How is this design environmentally friendly / sustainable?	Have you labelled the design with measurements?	Are there any safety issues you need to point out?
What could you do to make this design look better?	<p>How to annotate a design idea</p> <p>Your design idea drawings do not always give the reader all the details you have thought about, by adding annotation you can share your whole idea and give details about areas you can't see.</p>			What are the functions/features of this design idea?
What materials are you going to use to create this design?	What joints/fixings will be used to create this design?	What tools/machines/processes could be used to create this?	What finishes would you apply to this design to achieve its appearance?	What could you improve about the design?
What could you do to make this design more sustainable?	Why are you using the materials you have suggested?	How are you going to make sure it is accurate?	Why have you chosen these materials?	How could you make this design safer?
			Are there any functions / features you could add?	

### Evaluating and testing - Testing and evaluation should be continually carried out and used to modify a designer's ideas throughout the whole iterative design process

Client feedback - Have a clear idea of what the target users are looking for, initial ideas may have been misinterpreted

Target market feedback - Honest and critical feedback at the prototype stage can offer developments

Expert opinion - Professionals in industry can provide insightful and appropriate feedback

Analysing testing results - To record their findings, designers will take pictures and written notes from observations of users operating or wearing their product, as well as gathering users' opinions on this experience.

Qualitative data - is information that cannot be measured and is often based on opinion, for example favourite colour

Quantitative Data - is information that can be measured and written down with numbers, for example length

Face to face - **conversational interviews** give designers the chance to ask questions and help users form an opinion by offering options for new iterations

Against specification - This is where a specific list of **criteria** is written that a designer can follow as a set of rules. During the iterative design process, this specification should be referenced to and designs evaluated against it to ensure the final solution is the best fit.

#### What are you describing?

- Line
- Colour
- Shape
- Form
- Pattern
- Decoration
- Surface
- Texture
- Space
- Functional elements
- Prototype
- Features
- Motion

- harmony
- balance
- emphasis
- neutral
- integrated

#### Descriptive words

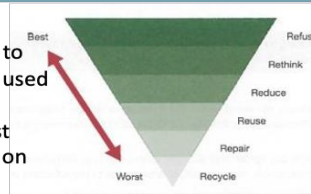
- feminine - masculine
- futuristic - nostalgic
- elegant - not elegant
- mature - immature
- dynamic - static
- simple - complex
- streamlined - rugged
- steady - unsteady
- contemporary - traditional
- avant-garde - conservative
- formal - casual
- delicate - rough
- dazzling - ordinary
- rational - emotional
- reliable - unreliable
- innovative - imitative
- heavy - light
- varied - monotonous
- truthful - exaggerated
- consistent - inconsistent
- aggressive - submissive
- old - young
- cold - warm
- comfortable - uncomfortable
- excited - calm
- strong - weak
- soft - hard
- organic - mechanical
- smooth - sharp
- flat - curved
- straight - fluid
- functional - ornamental
- detailed - plain
- volume/ bulbous/ bulging
- unified
- stylized
- peculiar
- rare
- innovative/novel/radical
- unity



## Sustainability and the 6 R's

### The 6 R's

The 6 Rs are an important checklist. They are used by designers to reduce the environmental impact of products. They can also be used to evaluate the environmental impact of other products. The hierarchy of sustainability places the strategies that are best for the planet about those that have a greater negative impact on the environment.



### 1. Refuse

The first stage in the process is to ask whether the proposed product, part, purchase or even journey is required at all. Asking the question 'Is it really necessary?' can play a major role in reducing the demand on materials. Simply not using something saves 100% of what you have chosen not to use. Example include:

- Using your own carrier bag rather than purchasing a new one.
- Walking or cycling to school instead of being driven.
- Not using products such as some pesticides that are known to be harmful to the environment.
- Not eating (or using) products that are over-farmed, over-fished or on the endangered list.

### 2. Rethink

Consumers have a growing number of choices to make about where and on what they spend their income. Greener and more sustainable options are not always the cheapest or the best, but making informed decision and rethinking ones spending power can play a huge part in conserving resources.

Deciding on the design of a product, e.g. the materials being used in its production, will directly affect its sustainability. The types of questions designers need to ask are:

- Are the materials locally sourced?
- Are they sustainably produced?
- Is it essential to use this material, of which there is a finite supply?

By rethinking how the product is likely to be made, the product can often be redesigned in a more responsible way.

### 3. Reduce

Reduction is often the result of having re-thought a design or action. Materials and energy are saved due to efficient manufacturing practices and the use of clever design, incorporating sustainable materials.

- Modern materials that are lighter and stronger than traditional ones have contributed to the miniaturisation of products, saving material and energy in manufacture and use.
- Reducing the complexity or number of parts a product uses and reducing the number of different materials in a product makes recycling easier.
- In factories, schools and hotels, fitting motion sensitive lighting and smart heating systems can significantly reduce energy usage.
- Many large companies employ staff to conduct 'energy walks' to turn off unused appliances and lights and to ensure windows and doors are shut to conserve heat.

### 4. Reuse

Reusing products multiple times for the same purpose is also known as **primary recycling**. Reusing a product in a different way from the one it was designed for is known as **secondary recycling**. The classic glass milk bottle is reused many times before it reaches the end of its useful life, as which point it is recycled. A plastic milk bottle, however, is intended to be used only one, although it can have many different subsequent uses.

Donating to and buying from charity shops extends the life of products and in recent years there has been a resurgence of in products having second lives, thanks to websites such as eBay, Freecycle or Gumtree.



It is also becoming popular for furniture and other household items to be **upcycled** with a coat of paint and some minor repairs or adaptations, extending their useful life by many years.

### 5. Repair

Being able to repair a product when it is broken or worn is a way of extending its life and delaying the purchase of a new one. Repairing is a positive option over replacement as it means that only some parts of the product are replaced. This creates jobs for skilled people who conduct repairs and stimulates a spare parts market.

Unfortunately, repairing products has become harder over years. Growing number of products are not design to be repaired. There are a number of reasons why items may be designed this way, but it is usually because they are cheaper to replace than repair. Some products, especially modern electronic products, are designed to last only a few years as technology dates quickly and older products will be superseded by newer, faster, more efficient models. This is called **planned obsolescence**.

### 6. Recycle

**Tertiary recycling**, although a very important stage, is lower down the hierarchy of preferred options because most materials that are recycled this way tend to be of lower quality than the original material. It takes a lot of energy to recycle materials.

This form of recycling requires the reprocessing of the material and in many cases involves chemicals and/or heat to recover the recycled materials. In an ideal world, tertiary recycling would remove all recyclable materials from our household waste so that only biodegradable materials would be left. Only very few parts of the world are set up to cope with this level of processing.

### 7. Sustainability

Our planet has to provide all of our basic human needs, such as food, shelter and warmth. Designers now have a much better understanding of which materials are sustainable and which are not. The general principle is that resources fall into two categories:

**Finite resources** – are ones which are in limited supply or cannot be reproduced.

**Non-finite resources** – are ones which are in abundant supply and are unlikely to be exhausted.

### 8. Recyclable materials

Once all useful and recyclable materials are removed, the majority of the remaining waste is organic matter and can be processed in one of two ways; '**Recover**' or '**Rot**'. Food waste and garden waste can be processed at a high temperature and turned into compost. The waste can also be buried in **landfill** sites where the resulting methane gas from the rotting matter is collected and burned and used to generate heat or electricity in the same way.

# Materials

## Metals

Metals come from ores in the ground. **Stock forms** are sheets, bars and rods

**Ferrous Metals** contain iron and are magnetic and rust

Material	Key info	Examples
<b>Low Carbon Steel</b>	Tough and ductile and easily machined and welded	Construction, screws, cars
<b>High Carbon Steel</b>	Hard and wears well	Tools, blades and knives
<b>Cast Iron</b>	Hard but brittle. Easily cast but hard to machine	Pots, pans, vices

**Non-Ferrous Metals** do not contain iron, aren't magnetic and don't rust

Material	Key info	Examples
<b>Aluminium</b>	Light, high strength to weight ratio and ductile	Pots, pans, cars, cans
<b>Copper</b>	Ductile, malleable and good conductor	Plumbing supplies and cables
<b>Tin</b>	Soft, malleable and good conductor	Used as a protective coating

## Alloys

**Alloys** are mixtures of 2 or more metals to get the best of their properties

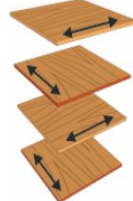
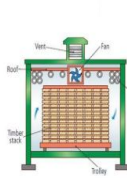
Material	Key info	Examples
<b>Brass</b>	Malleable and easy to cast	Musical instruments, plumbing
<b>Stainless Steel</b>	Doesn't rust, hard and smooth	Cutlery, medical tools, etc

## Primary processes of timbers and boards

Trees are cut then converted into planks by cut using saws  
It is then seasoned to reduce the moisture in the wood.  
This is done by either:

**Air-drying** – Planks are stacked and air allowed to circulate; causing evaporation

**Kiln-drying** – Where planks are put into a kiln and dried rapidly. This process is more costly than air-drying



Manufactured boards can be either be made by lamination or compression

**Lamination** – Layers of woods and adhesive are layered and compressed together. Usually with a more expensive wooden veneer on the top

**Compression** – Wood is shredded, heated and compressed with adhesive under extreme pressure

## Plastics

Plastics come from crude oil. **Stock forms** are sheets, powders, granules and rods

**Thermoplastics** can be reheated and reshaped and infinite amount of times

Material	Key info	Examples
<b>PET</b>	Easily <b>blow moulded</b> , food safe and easily recycled	Bottles, packaging, etc
<b>PVC</b>	Flexible, tough, easily <b>extruded</b>	Pipes, tape, hard hats
<b>HIPS</b>	Flexible, lightweight, food safe and easily <b>vacuum formed</b>	Containers and yoghurt pots
<b>Acrylic</b>	Tough, brittle, easily scratched	Car lights, baths, displays/ signs

**Thermosets** once heated and set **cannot** be reshaped

Material	Key info	Examples
<b>Melamine Formaldehyde</b>	Food safe, hygienic, hard and brittle	Kitchenware and work surfaces
<b>Urea Formaldehyde</b>	Good insulator, hard and brittle	Electrical casings, buttons and handles
<b>Polyester Resin</b>	Strong, heat resistant, can be transparent	Coatings, casings

## Primary Processing of Metals and Alloys

Metals are mined from the earth and then go through an extraction process  
Extraction happens by putting the ore in a blast furnace  
The metal is then separated from the waste material

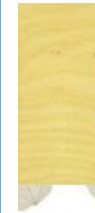
## Primary Processing of Plastics

Crude oil is extracted from the earth and then processes into different types of fuels, etc. This is called **Fractional Distillation**

A process called **Cracking** then converts the large hydrocarbon molecules into plastics



beech



ash



oak



mahogany



pine



Chipboard



MDF  
Medium Density Fibreboard



Plywood

## Natural Timbers

Softwoods are generally cheaper than hardwoods as they are more available, since they grow quicker.  
But because man-made boards are manufactured they are cheaper than timbers.  
Man-made boards also come in a better variety of sizes since they don't depend on tree growth.

**Stock forms** for both include; sheets, dowel, planks, etc

**Hardwoods** come from **Deciduous Trees**. These trees loose leaves in winter and grow fruit and flowers in spring

Material	Key info	Examples
<b>Ash</b>	Flexible, tough and shock resistant	Sports equipment Tool Handles
<b>Beech</b>	Fine finish, tough and durable	Toys, furniture and veneers
<b>Mahogany</b>	Easily worked, durable, high quality finish	High-end furniture
<b>Balsa</b>	Very soft and spongy. Light	Modelling
<b>Oak</b>	Tough, durable and hard	Flooring, furniture and veneers

**Softwoods** come from **Coniferous Trees**. These have thin, needle-like leaves and grow all year round. Often have pine cones and sometimes nuts and seeds

Material	Key info	Examples
<b>Larch</b>	Durable, tough, good water resistance and finishes well	Furniture, flooring and used outdoors
<b>Pine</b>	Light, easy to work with but can split	Cheap furniture, construction and decking
<b>Spruce</b>	Easy to work with, high stiffness but can decay quickly	Furniture, musical instruments and construction

## Man-Made Boards

**Manufactured boards** are made from wood chips/dust/ layers and glue.

Material	Key info	Examples
<b>Chipboard</b>	Prone to chipping but good compressive strength. Not-water resistant	Flooring, low-end furniture, flat-pack
<b>MDF</b>	Rigid and stable. Easy to finish. Absorbs liquid easily	Flat-pack furniture and kitchen unites
<b>Plywood</b>	Very stable. Exterior veneer can be used from more expensive woods	Shelving, furniture, toys

**Knowledge Organiser – Design Technology**  
**KS4 GCSE**

**1. Paper**

Type	Description and uses
Layout paper	<ul style="list-style-type: none"> <li>lightweight, thin white paper</li> <li>used for initial ideas</li> <li>takes colour media well</li> <li>low cost</li> </ul>
Tracing paper	<ul style="list-style-type: none"> <li>thin, translucent paper</li> <li>making copies of drawings</li> <li>high cost</li> </ul>
Cartridge paper	<ul style="list-style-type: none"> <li>good quality white paper</li> <li>available in different weights</li> <li>general purpose work</li> <li>can be used to make simple models</li> <li>medium cost</li> </ul>
Bleedproof paper	<ul style="list-style-type: none"> <li>smooth, hard paper</li> <li>used with water-based and spirit-based felt-tip pens</li> <li>medium cost</li> </ul>
Grid paper	<ul style="list-style-type: none"> <li>printed square and isometric grids in different sizes</li> <li>a guide for quick sketches and working drawings</li> <li>low cost</li> </ul>

**2. Selection of materials or components**

When selecting materials and components considering the factors listed below:

- **Functionality:** application of use, ease of working
- **Aesthetics:** surface finish, texture and colour.
- **Environmental factors:** recyclable or reused materials, product mileage.
- **Availability:** ease of sourcing and purchase.
- **Cost:** bulk buying.
- **Social factors:** social responsibility.
- **Cultural factors:** sensitive to cultural influences.
- **Ethical factors:** purchased from ethical sources such as FSC.

The **Forest Stewardship Council** is an international non-profit organization that promotes responsible management of the world's forests via timber certification.



**3. Boards**

Type	Description and uses
Corrugated card	<ul style="list-style-type: none"> <li>strong and lightweight</li> <li>used for packaging protection and point of sale stands</li> <li>available in different thicknesses</li> </ul>
Duplex board	<ul style="list-style-type: none"> <li>large foam-based board</li> <li>different finishes available including metallic and hologrammatic</li> <li>used for food packaging, e.g. take-away pizza boxes</li> </ul>
Foil lined board	<ul style="list-style-type: none"> <li>quality cardboard with a aluminium foil lining</li> <li>ideal for ready made meals or take away meal cartons</li> <li>The foil retains the heat and helps keep the food warm</li> </ul>
Foam core board	<ul style="list-style-type: none"> <li>very light, very stiff and very flat.</li> <li>It has a white, rigid polystyrene foam centre, with smooth white paper laminated onto both faces.</li> <li>It is easy to cut with a knife, a mount cutter or on a wall cutter</li> <li>great for modelling</li> </ul>
Ink jet card	<ul style="list-style-type: none"> <li>Has been treated so that it will give a high quality finish with inkjet ink</li> <li>available in matt and gloss</li> </ul>
Solid white board	<ul style="list-style-type: none"> <li>top quality cardboard made from quality bleached wood pulp.</li> <li>used for hard backed books and more expensive items</li> <li>excellent print finish</li> </ul>

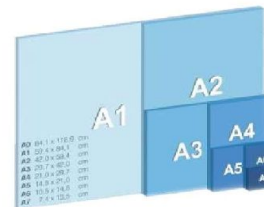
**4. Paper and Boards- Stock sizes and weights**

Paper and board is available in sizes from A0 (biggest) to A7 (smallest). The most common size is A4.

Each size is half the one before, eg A4 is half the size of A3.

They are also sold by weight: **GSM** – grams per square metre.

**Card** thickness or calliper is traditionally measured in **Microns**. 1000 **Microns** = 1mm, so the higher the value, the thicker the card or paper.



**5. Properties of paper and boards.**

Type	Weight or thickness	Uses	Relative cost (10= high)
Newsprint	50gsm	Newspapers	1
Layout Paper	60gsm	Sketches and tracing	3
Tracing Paper	70 gsm	Tracing	4
Sugar Paper	90gsm	Cheap mounting work	2
Inkjet/Photo paper	150-230gsm	Photos/Presentations	9
Board (Card)	230-750 microns	Model-making	5
Mount Board	230-1000 microns	Model-making, High picture quality mounting	9
Corrugated Card	3000-5000 microns	Packaging protection	5

**7: KEY WORD FOCUS**

You should be able to explain the meaning of each of these words by the end of this rotation.

<b>GSM</b>	Grams per Square Metre
<b>Microns</b>	Thickness of paper or card. 1000microns = 1mm thickness



# Textiles

## 1. Fabrics

### Natural Fabrics

Cotton	Soft, good absorbency, prints well, machine washable, strong breathable	Origins from the Cotton Plant.	Uses: Jeans, towels, Shirts, dresses, underwear
Wool	High UV protection, flameproof, breathable, durable insulating	Origins from Sheep.	Uses: Jumpers, Coat, blankets
Silk	Smooth, Soft, Strong	Origins from the silk worm.	Uses: Wedding dresses, lingerie.
Linen	Strong, cool in hot weather	Origins from the flax plant	Uses: Trousers, tops.
Leather/Suede	Strong, hardwearing, durable.	Origins from the skin of animals, mainly cows.	Uses: Jackets, Trousers, Shoes.

### Synthetic fabrics

Polyester	Durable, wrinkle resistant, stain resistant	Uses: Shirts, jackets. Also used in safety belts, conveyor belts and tyre reinforcement.
Polyamide (Nylon)	Durable, high abrasion resistance	Uses: Sportswear, carpets.
Elastane (Lycra)	Stretchy, durable, high stain resistance	Uses: Sportswear, Swimwear, tights.
Viscose	Soft, comfortable, absorbent, easily dyed.	Uses: Dresses, linings, shorts, shirts, coats, jackets and outerwear.
Acrylic	Absorbent, retains shape after washing, easily dyed, resistance to sunlight.	Uses: Jumpers, tracksuits, linings in boots.

## 1. Fabrics

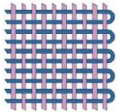
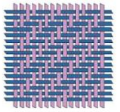
### Blended and mixed Fabrics

These fabrics take on the positive characteristics of their combinations


Cotton/Polyester	Easy care and crease resistant	Uses: School shirts.
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## 2. Fabric Construction


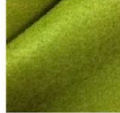
### Woven

Plain Weave	Extremely strong and hard wearing	
Twill Weave	Extremely high strength and abrasion resistant.	


### Knitted

Knitted fabrics	Stretchy, soft and comfortable.	
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### Non-Woven

Bonded Fabrics	These are webs of fibres held together by glue or stitches.	
Felted Fabrics	Felt is made by combining pressure, moisture and heat to interlock a mat of wool fibres.	


## 3. Care Labels


 Washing Label- will usually have a max. temp number included

 Hand Wash only

 Do not wring out

 Tumble Dry

 Iron on low heat. The more dots the higher the heat setting

 Do not bleach

## Smart and Modern materials

### 1. Modern materials

**1. Corn Starch Polymers** – plastics that are **biodegradable** and not toxic to the environment. They are easy to recycle.

Name	Uses	Characteristics
Poly(lactic acid) (PLA)	<ul style="list-style-type: none"> <li>Disposable food and drink containers</li> <li>3D Printed Items</li> </ul>	<ul style="list-style-type: none"> <li>Smooth or textured finish.</li> <li>Easy to Colour</li> <li>Easy to mould</li> <li>Fully biodegradable</li> </ul>
Poly(hydroxybutyrate) (PHB)	<ul style="list-style-type: none"> <li>Bottles</li> <li>Pots</li> <li>Disposable food containers</li> </ul>	<ul style="list-style-type: none"> <li>Smooth or textured finish.</li> <li>Easy to Colour</li> <li>Easy to mould</li> <li>Fully (but slowly) biodegradable.</li> </ul>
Biopol™		



**2. Flexible MDF** – Is made from wood pulp fibres in the same way as standard MDF, with the addition of grooves cut along the length of the board leaving about 2mm of the MDF intact which allows the MDF to become flexible.

**3. Titanium** – Pure titanium does not react with the human body and is used by the medical profession for artificial joints and dental implants. It has a high strength to weight ratio and has excellent corrosion resistance.

**4. Graphene** – thinnest material ever discovered, a million times thinner than a human hair, 200 times stronger than steel. It is transparent, impermeable and highly conductive.

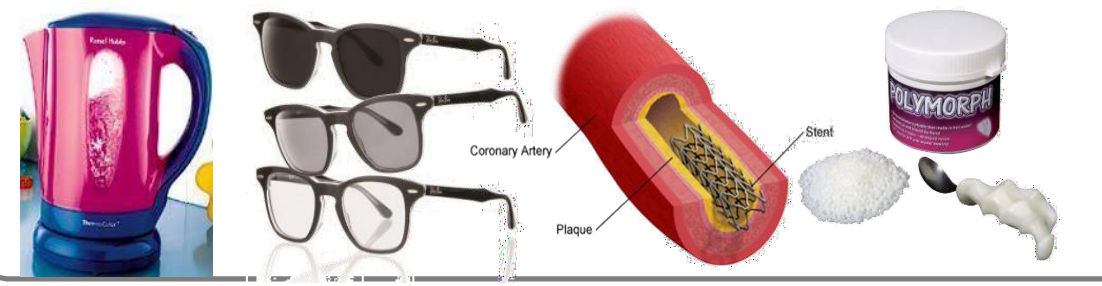
**5. Nanomaterials** - Their use in electronics has helped miniaturisation whilst improving conductivity. IN the textiles industry, they have been used as protective coatings to improve water resistance and give UV protection.

**6. Metal Foams** - Porous metal structures, often made from Titanium and Aluminium use as little as 25% of the mass. This makes them extremely lightweight but retaining most of the properties of the base material.

### 2. Smart Materials

A material that reacts to an external stimulus or input to alter its functional or aesthetic properties.. They can react to heat, light, pressure, moisture and electricity.

Name	Stimulus	What is does?	Uses
2.1 Thermochromic pigments	Heat	Changes colour when heat is applied.	<ul style="list-style-type: none"> <li>Flexible thermometers</li> <li>Temperature indicators</li> <li>Novelty goods</li> </ul>
2.2 Photochromic pigments & particles	UV Light (Natural Light)	Changes colour in sunlight/UV Light	<ul style="list-style-type: none"> <li>Transition Lens Sunglasses</li> <li>Nail varnish</li> <li>Clothing</li> <li>Novelty goods</li> </ul>
2.3 Shape memory alloy Nitinol	Heat or Electricity	Returns to original/pre set shape when heated to 70°C or electricity is applied.	<ul style="list-style-type: none"> <li>Glasses Frames</li> <li>Fire Sprinklers</li> <li>Dental Braces</li> <li>Surgical Stents</li> </ul>
2.4 Polymorph	Heat	Becomes mouldable by hand when heated to 62°C	<ul style="list-style-type: none"> <li>Personalisation of products</li> <li>Repairs</li> <li>Prototyping &amp; Modelling</li> </ul>
2.5 Quantum Tunnelling Composite	Pressure	Varies the amount of electrical current depending on pressure applied.	<ul style="list-style-type: none"> <li>Touch sensitive pads</li> <li>Wearable technology</li> <li>Variable speed controls</li> </ul>
2.6 Piezoelectric Material	Movement, stress or electricity	Stress or movement produces electrical signal or <i>vice versa</i> .	<ul style="list-style-type: none"> <li>Mobile phone speakers and microphones</li> <li>Gas Lighters ignition spark</li> </ul>
2.7 Litmus Paper	Levels of PH in substances.	Changes colour depending on chemical balance.	<ul style="list-style-type: none"> <li>Scientific experiments</li> <li>Soil testing for gardener/farmers</li> <li>Testing swimming pools and fish tanks</li> </ul>

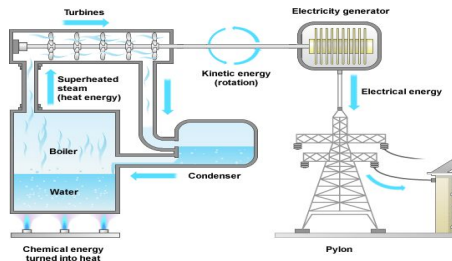


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# Energy systems

## Energy Types

### 1. Fossil Fuels – Non-renewable energy



In a thermal power station fuel such as coal, oil or gas is burned in a furnace to produce heat - chemical to heat energy.

- this heat is used to change water into steam in the boiler.
- the steam drives the turbine - heat to kinetic energy
- this drives the generator to produce electricity - kinetic to electrical energy.

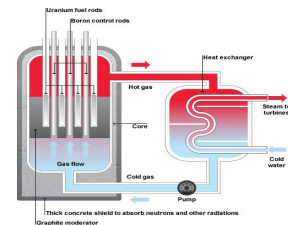
Some experts believe that fossil fuels will run out in our lifetime.

## Energy Types 2. Biomass Energy –Renewable



**Biomass** is an industry term for getting energy by burning wood, and other organic matter. Burning biomass releases carbon emissions, but has been classed as a renewable energy source in the EU and UN legal frameworks, because plant stocks can be replaced with new growth.

### 3. Nuclear Energy – Renewable energy Energy Types



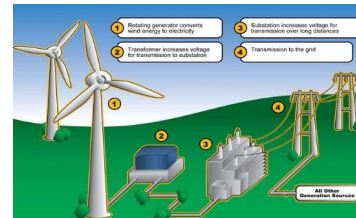
The main nuclear fuels are **uranium** and **plutonium**. In a nuclear power station nuclear fuel undergoes a controlled chain reaction in the reactor to produce heat - nuclear to heat energy.

- heat is used to change water into steam in the boiler.
- the steam drives the turbine (heat to kinetic energy)
- this drives the generator to produce electricity - kinetic to electrical energy.

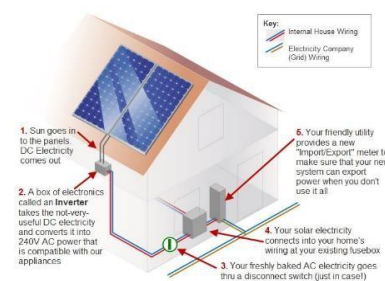
## Energy Types 8. Batteries

**Alkaline batteries** are the most common type of domestic batteries, they are disposable but contain chemicals that are bad for the environment. Fortunately more and more battery recycling banks are appearing now where most of the battery can be reused. **Rechargeable batteries** are better for the environment and more economical in the long run (High initial purchase price). Their lifespan decreases with every charge.

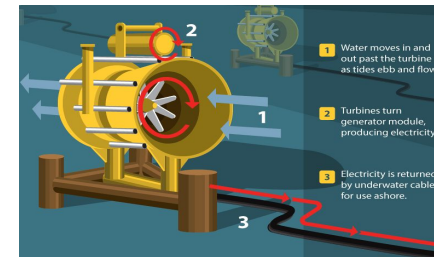
## Energy Types 4. Wind energy



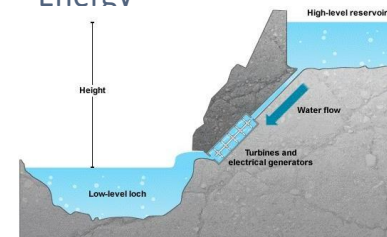
## 5. Solar Energy – Renewable Energy



## Tidal energy



## 7. Hydroelectricity – Renewable Energy











- In a hydroelectric power station water is stored behind a dam in a reservoir. This water has gravitational potential energy.
- The water runs down pipes (potential to kinetic energy) to turn the turbine
- The turbine is connected to a generator to produce electricity (kinetic to electrical energy).

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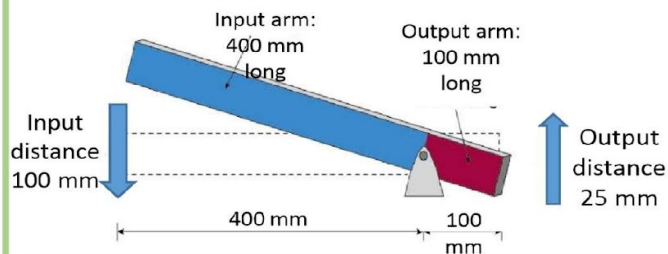
# Mechanical devices

## 1: Mechanical Devices - Motion

There are four types of motion:

<b>Linear Motion</b> is movement in one direction along a straight line.		
<b>Oscillating Motion</b> This motion is similar to reciprocating motion, but the constant movement is from side to side along a curved path.		
<b>Rotary Motion</b> Examples of circular motion include a ball tied to a rope and being swung round in a circle		
<b>Reciprocating Motion</b> , this is repetitive up-and-down or back-and-forth linear motion		

## 4: How to work out a levers distance of travel



$$\text{Output} \div \text{Input} \times \text{Input distance} = \text{Output distance}$$

$$100 \div 400 \times 100 = 25 \text{ mm}$$

## 2: Mechanical Devices – Levers

There are three classes of levers.

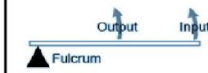
### Class One

A class one lever has its input on one side of the fulcrum and its output on the other.



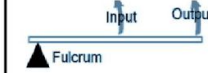
### Class Two

A class two lever has its input at one end of the lever, its output in the middle and fulcrum at the other end.



### Class Three

A class three lever has its output at one end of the lever, its fulcrum at the other with its input in the middle.

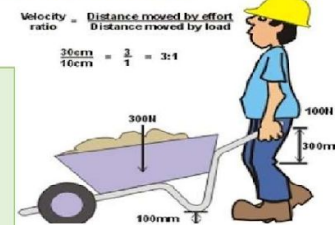


## 5: How to work out the Mechanical Advantage

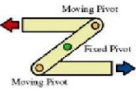
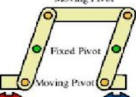

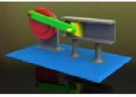

Or use the following formula:

$$MA = \frac{\text{Load}}{\text{Effort}} = \frac{300N}{100N} = 3$$

This is written as 3:1 or just MA of 3



## 3: Mechanical Devices – Linkages

<b>Reverse motion linkage</b>	The reverse motion linkage changes the direction of the input motion so that the output travels in the opposite direction. If the input is pulled the output pushes and vice versa. It uses a central bar held in position with a fixed pivot (fulcrum) that forces the change in direction and two moving pivots which are connected to the input and output bars.	
<b>Parallel motion or push/pull linkage</b>	The push/pull linkage maintains the direction of the input motion so that the output travels in the same direction. If the input is pulled the output is pulled and so on. It uses three linking bars, four moving pivots and two fixed pivots.	
<b>Bell crank linkage</b>	The bell crank linkage changes the direction of the input motion through 90 degrees. It can be used to change horizontal motion into vertical motion or vice versa. It uses a fixed pivot and two moving pivots.	
<b>Crank and slider</b>	The crank and slider linkage changes rotary motion into reciprocating motion or vice versa. It uses a crank which is held with a fixed pivot. A connecting rod uses two moving pivots to push and pull a slider along a set path.	
<b>Treadle linkage</b>	The treadle linkage changes rotary motion into oscillating motion or vice versa. It uses a crank which is held with a fixed pivot. A connecting rod uses two moving pivots and a further fixed pivot to create a windscreen wiper motion.	

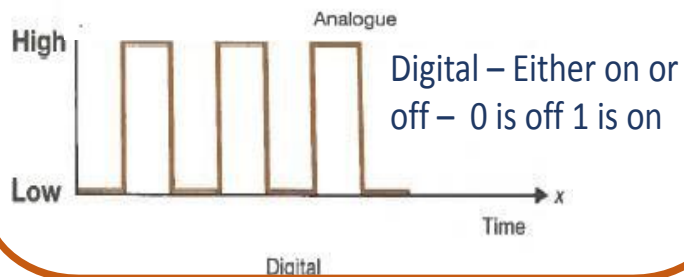
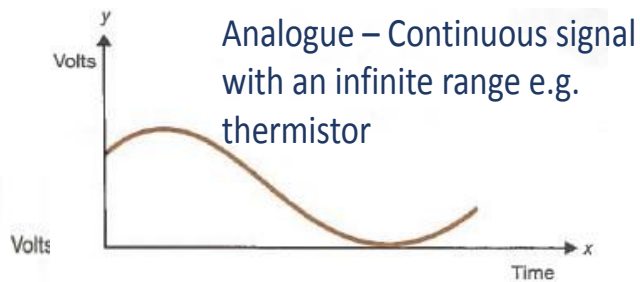
# Electronic systems and processing

## 1. Processes

Components that process electronic signals and enable output devices to perform tasks controlled by an integrated circuit (IC)  
e.g. A microcontroller



## 2. Digital and Analogue Signals



## 3. Counters

Counters – Keep count of how many times something occurs, output information to a seven segment display.



## 4. Programming

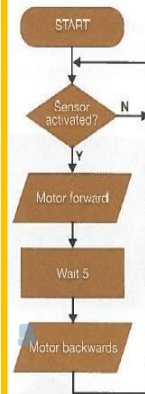
Micro controllers also called Peripheral interface controllers (PICs) can be programmed to perform differently by a computer.

### Timers

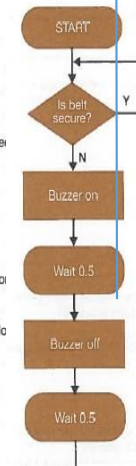
Devices used to perform specific tasks. 2 types monostable and astable.

**Monostable** – output turned on for a set period of time e.g. Automatic doors

**Astable** – fluctuates between on and off – oscillating output e.g. Seatbelt alarm in a car



**Start:**  
Decision: Has the motion sensor (PIR) connected to the input been activated?  
If NO, continue to wait for the PIR to be triggered by movement.  
If YES, continue with the program.  
Output: The motor turns on and opens the doors.  
Process: Delay for 5 seconds; the motor is on long enough to open the door and let people through.  
Output: The motor turns on again in reverse and the doors automatically close.  
The circuit loops back to the top awaiting the next trigger of the PIR.

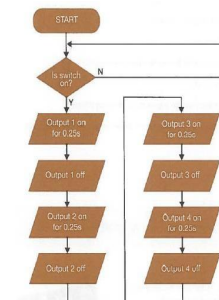
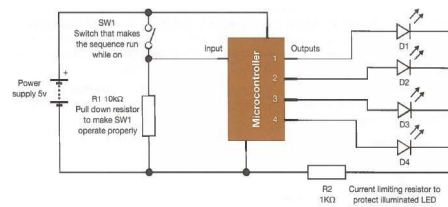


**Start:**  
Decision: Has the seatbelt been fixed into the seatbelt clip?  
If YES, loop back to the start of the program.  
If NO, continue with the program sequence.  
Output: The buzzer turns on.  
Process: Delay for 0.5 seconds; the buzzer stays on during this time.  
Output: The buzzer turns off.  
Process: Delay for 0.5 seconds; the buzzer stays off during this time.  
The circuit loops back to the top to check if the driver still has seatbelt unfastened.

## 5. Programming 2

Microcontrollers – How a microcontroller would control a bike light.

Program for the microcontroller to make LED's flash in sequence



**Start:**  
Decision: Has the lighting sequence start switch connected to the input been activated?  
If NO, continue to wait for the switch to be triggered by the user.  
If YES, continue.  
Output and process: The first LED connected to output 1 turns on for 0.25 seconds.  
Output: The first LED connected to output 1 turns off.  
These steps repeat for LEDs 2, 3 and 4.  
The circuit loops back to the top to check if the switch has been activated.

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## New and emerging Technologies

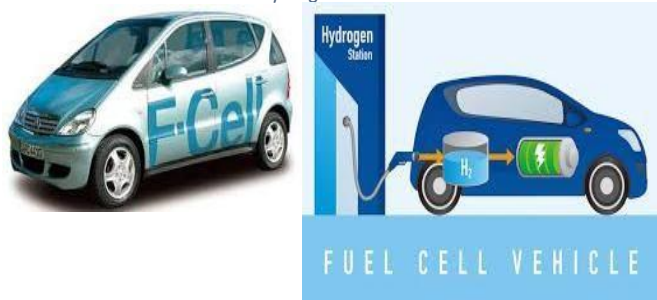
### New and emerging technologies

New technologies are those that are currently being developed or will be developed in the next 5 to 10 years, and which will alter the business and social environment.

Examples:

#### Fuel-cell vehicles

Zero-emission cars that run on hydrogen



#### Additive manufacturing

The future of making things, from printable organs to intelligent clothes



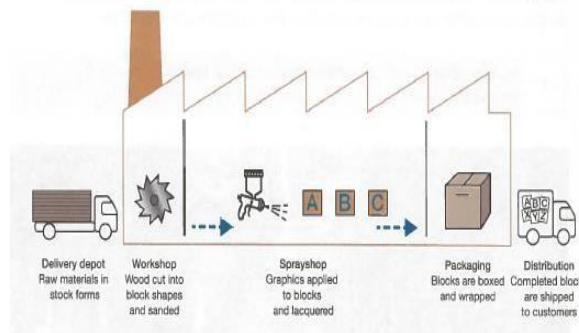
## Industry - Automation and the use of robotics

As industry has grown new and emerging technologies have changed the way designers, architects and engineers work. Intelligent machines and robotics have replaced machine operators and engineers. The development of work now almost always involves the use of **Computer Aided Design (CAD)**. This software can carry out complex tasks such as virtual stress testing this is called **Computer Aided Testing (CAT)**. Designs can be produced to look 3D so customers can give opinions before **prototyping** begins.

### Buildings and the place of work

The development of the internet has changed how data is transferred. This has led to people being able to work together remotely (from different buildings or countries). Projects can be sent to machines using **computer aided manufacturing (CAD)** techniques including **computer numerical control (CNC)** machines such as laser cutters and rapid prototyping (RPT) machines such as 3D printers. Physical layout of buildings for production should be logical to increase efficiency. This will reduce unproductive time, movement and waste materials.

Here is an example of a simplified production line that might produce wooden blocks.



### Enterprise

An idea that is developed into a business proposal for a product that has commercial viability. Products developed in this way require a patent to protect the idea so that other companies cannot use it without permission this is called a registered trademark.



### Co-operatives

A farm, business, or other organization which is owned and run jointly by its members, who share the profits or benefits.

### Crowdfunding

Funding a project or venture by raising money from a large number of people who each contribute a relatively small amount, typically via the Internet.

### Virtual marketing and retail

Virtual marketing the use of search engines positioning and ranking, banner advertising, e-mail marketing and social media in order to reach a wider audience to promote a product.



### Fairtrade

Trade between companies in developed countries and producers in developing countries in which fair prices are paid to the producers.



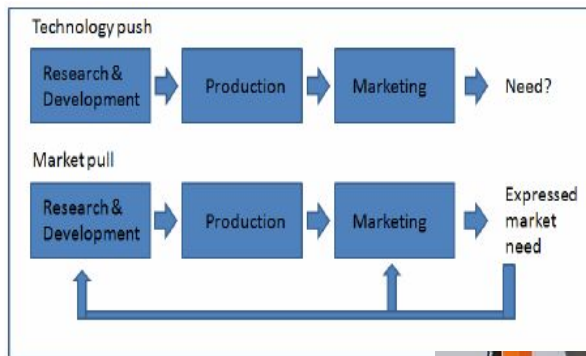
# People, Culture and Society

## New and emerging Technologies Impact on people

The development of technology is linked to people - people demand developments according to their needs and their wants also the development of technology allows for changes in lifestyle and behaviour.

**Technology push** - This is when developments in industry science and technology lead to new products or improvements with existing products, this happens before there is consumer demand so the developments push the innovation out to the consumer and is known as **Technology Push**. Developments in technology and valuable to industry because there is the possibility companies can be the first to develop new products and so profit from this. Smartphones are a good example of this.

**Market pull** - This is when products are developed in response to consumer want or need for example the development of biodegradable plastic carrier bags or the development of smaller cameras.



**Change in job roles** - With the impact of new technologies and innovation traditional jobs and skill have become redundant which has meant that some jobs are no longer needed and people have had to retrain for example a welder would have to retrain to learn how to operate the robotics machine that does the welding



## New and emerging technologies and their Impact on Society

Not all products are designed for the mass market, Inclusive designs are designs that are created as a one off product for a specific need or for some groups of people that have specific needs.

- Physical needs
- Elderly needs
- Religious needs



An awareness and observation of the nature of the need is developing with the more global and inclusive societies that we now live in and designers are becoming increasingly more aware and inclusive.

## New and emerging Technologies Impact on Culture

Culture is a powerful thing that influences much more than we often realise it is deep rooted. Culture influences what every culture sees as good design, bad design or just plain boring design. In our society part of our culture is the want to have the most recent designs and technology and we are influenced by modern media. Changing fashions are influenced by technology such as 3d printing, e textiles smart materials. Even trend forecasting will predict these trend and fashions and allow industry to plan ahead.


Many countries now have a diverse range of cultures, so it has become important for designers to consider a range of cultural beliefs when designing for the mass market. For instance, clothes designers might incorporate designs into their collections that allow customers from other cultures to dress more modestly, or cosmetics manufacturers may choose not to use animal ingredients in their products because of people's beliefs.

**Designers have a responsibility to design products that have a positive impact on society and are not inappropriate or offensive to different groups of people.**

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## Production techniques

### 1. CAD – Computer Aided Design

Advantages of CAD	Disadvantages of CAD
Designs can be created, saved and edited easily, saving time	CAD software is complex to learn
Designs or parts of designs can be easily copied or repeated	Software can be very expensive
Designs can be worked on by remote teams simultaneously	Compatibility issues with software
Designs can be rendered to look photo-realistic to gather public opinion in a range of finishes	Security issues - Risk of data being corrupted or hacked
CAD is very accurate	 <b>CAD Software</b>
CAD software can process complex stress testing	

### 2. CAM – Computer Aided Manufacturing

Advantages of CAM	Disadvantages of CAM
Quick – Speed of production can be increased.	Training is required to operate CAM.
Consistency – All parts manufactures are all the same.	High initial outlay for machines.
Accuracy – Accuracy can be greatly improved using CAM.	Production stoppage – If the machines break down, the production would stop.
Less Mistakes – There is no human error unless pre programmed.	Social issues . Areas can decline as human jobs are taken.
Cost Savings – Workforce can be reduced.	



Laser Cutter



Robots



Barcode Scanner



AGV – Automated Guided Vehicle

### 3: Production Techniques

**3.1 Flexible Manufacturing Systems (FMS) :** involves an assembly of automated machines commonly used on short-run batch production lines where the products frequently change.

**3.2 Lean Manufacturing:** It aims to manufacture products just before they are required to eliminate areas of waste including:

- Overproduction
- Waiting
- Transportation
- Inappropriate processing
- Excessive inventory
- Unnecessary motion
- Defects

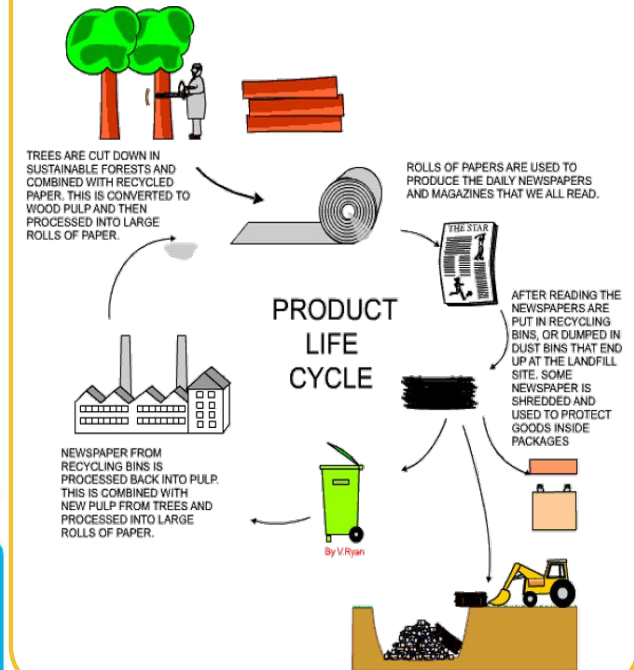
**3.3 Just In Time (JIT) :** Items are created as they are demanded. No surplus stock of raw material, component or finished parts are kept.

Advantages of JIT	Disadvantages of JIT
No warehousing costs	Reliant on a high quality supply chain
Ordered secured before outlay on parts is required	Stock is not available immediately off-the-shelf
Stock does not become obsolete, damaged or deteriorated	Fewer benefits from bulk purchasing

### 4. Scales of Production

- One off:** when you make a unique item
- Batch:** when you make a few/set amount
- Mass:** when you make thousands
- Continuous:** open ended production

- 1.Planned obsolescence -** Planned obsolescence is when a product is deliberately designed to have a specific life span. This is usually a shortened life span.
- 2.Design for maintenance -** Products are often designed to be thrown away when they fail... This can be achieved by designing products that can be repaired and maintained.
- 3.Disposability –** Some products are designed to be disposable.
- 4. Product Lifecycle -**





<b>Revenue, Costs and Profits</b>	<b>DPRO 16:</b> I can accurately calculate and explain total costs, average costs, total revenue, average revenue, profit and loss.	
<b>What I need to do:</b> <input type="checkbox"/> I can explain total cost, average cost, total revenue and average revenue. <input type="checkbox"/> I can calculate total cost, average cost, total revenue and average revenue. <input type="checkbox"/> I can explain profit and loss. <input type="checkbox"/> I can calculate profit and loss. <input type="checkbox"/> I can evaluate the importance of costs, revenue, profit and loss to producers.	<b>Words I need to say:</b>	
	<input type="checkbox"/> Total Revenue <input type="checkbox"/> Average Revenue <input type="checkbox"/> Total Cost <input type="checkbox"/> Average Cost	<input type="checkbox"/> Variable Costs <input type="checkbox"/> Fixed Costs <input type="checkbox"/> Profit <input type="checkbox"/> Loss

**Knowledge I need to learn:**

<p><b>Revenue, Costs and Profits:</b></p> <p><b>Total Revenue</b></p> <ul style="list-style-type: none"> <li>- The total income of a firm from sales of its goods and services.</li> <li>- <b>Total Revenue (TR) = Price (P) x Quantity (Q)</b></li> </ul> <p><b>Average Revenue</b></p> <ul style="list-style-type: none"> <li>- The revenue per unit sold.</li> <li>- <b>Average Revenue (AR) = Total Revenue (TR) / Quantity (Q)</b></li> </ul> <p><b>Total Cost</b></p> <ul style="list-style-type: none"> <li>- Consists of the cost of producing the good or service AND the costs that a firm has just by existing.</li> <li>- <b>Total Cost (TC) = Total Fixed Costs (TFC) + Total Variable Costs (TVC)</b></li> </ul> <p><b>Average Cost</b></p> <ul style="list-style-type: none"> <li>- The costs of producing a unit (unit cost of production)</li> <li>- <b>Average Cost (AC) = Total Cost (TC) / Quantity (Q)</b></li> </ul> <p><b>Profit/Loss</b></p> <ul style="list-style-type: none"> <li>- Profit is when a firm gains more revenue than it pays out in costs.</li> <li>- <b>Profit = Total Revenue (TR) - Total Costs (TC)</b></li> <li>- A loss is where a firm is losing money because its revenue is less than its costs.</li> </ul>	<p><b>Evaluating the the importance of cost, revenue, profit and loss for producers.</b></p> <p><b>Costs</b></p> <ul style="list-style-type: none"> <li>- All firms try to keep their costs under control in order to make or increase their profits</li> </ul> <p><b>Revenue</b></p> <ul style="list-style-type: none"> <li>- Revenue is important because without enough inflow of money from sales, a producer cannot remain in the market or earn a profit.</li> <li>- Revenue is also important because it encourages investors to invest more money into the firm.</li> </ul> <p><b>Profit</b></p> <ul style="list-style-type: none"> <li>- It generates finance for reinvestment</li> <li>- It acts as a signal and tells other producers that they too might be able to make a profit in the market.</li> <li>- Allows a producer to attract more resources to the firm or industry.</li> </ul> <p><b>Loss</b></p> <ul style="list-style-type: none"> <li>- In the long-run, a firm cannot continue to exist if it makes a loss. It will have to shut down because they would have run out of money and those who lent it money would demand repayment.</li> </ul>
	<p><b>Questions I need to answer:</b></p> <ul style="list-style-type: none"> <li>- What is the formula for Total Revenue?</li> <li>- What is the formula for Total Cost?</li> <li>- What is the formula for Profit?</li> <li>- Why is profit important to producers?</li> </ul>

**Production and Productivity**

**DPRO 14:** I can accurately explain the role of producers and evaluate the importance of production and productivity for the economy.

**What I need to do:**

- I can explain what production is.
- I can explain how a firm can increase production.
- I can explain what productivity is.
- I can calculate productivity.
- I can evaluate the importance of productivity to firms.

**Words I need to say:**

- |   |  |
|---|--|
| <input type="checkbox"/> Production         | <input type="checkbox"/> Factors of Production |
| <input type="checkbox"/> Productivity       | <input type="checkbox"/> Efficiency            |
| <input type="checkbox"/> Economies of Scale | <input type="checkbox"/> Output                |

**Knowledge I need to learn:**

**Evaluating the importance of production and productivity**

**Production**

- **Production refers to the total output of goods and services produced by a firm or industry in a period of time .**
- Using more factors of production or increasing the productivity of existing factors can increase production.

**An increase in production is likely to bring about:**

- An increase in employment, unless greater productivity causes it.
- An increase in profits for firms and the industry.
- Larger economies of scales.
- An increase in market share if the production of one firm increases as against that of other firms.
- Economic growth for the economy.
- A rise in the standard of living, as consumers have more goods and services to buy.

**Productivity**

- **Productivity is one measure of the degree of efficiency in the use of factors of production in the production process.**
- **Productivity is measured as: Total Output / Total Input**

**What does productivity depend on?**

- Productivity depends on improving the inputs to the production process.
- This could be achieved through investment in better equipment, for example improving the quality of the machines available.
- It could also be improved with better education and training for the workforce.

**Why is high productivity important?**

For firms, higher productivity will result in:

- Lower average costs and economies of scale → which makes the firm more competitive so that it can decrease prices and/or compete more effectively.
- Greater profits, allowing firms to pay higher wages to attract the best workers, and reinvest in new equipment and research.

Governments will benefit through economic growth as:

- Productivity will increase the total output of the economy.
- More competitive firms will lead to greater exports and thus further economic growth.

**How can producers increase productivity?**

- Workers specialising in part of the production process.
- Investment in new technology and more capital equipment
- Improving the skills of workers through training.

**Questions I need to answer:**

- What is productivity?
- How is productivity calculated?
- Why is high productivity important?
- How can producers increase productivity?

<b>Economies of Scale</b>	<b>DPRO 14:</b> I can accurately explain the role of producers and evaluate the importance of production and productivity for the economy.	
<b>What I need to do:</b> <input type="checkbox"/> I can explain what economies of scale are. <input type="checkbox"/> I can identify and explain the different types of internal economies of scale. <input type="checkbox"/> I can explain what external economies of scale are. <input type="checkbox"/> I analyse the impact on a firm and consumer of having economies of scale.	<b>Words I need to say:</b>	
	<input type="checkbox"/> Production <input type="checkbox"/> Productivity <input type="checkbox"/> Economies of Scale	<input type="checkbox"/> Factors of Production <input type="checkbox"/> Efficiency <input type="checkbox"/> Output

**Knowledge I need to learn:**

**Economies of Scale:**

- This occurs when a firm's average costs decrease as their output increases.

**What is the advantage of economies of scale to producers?**

- The lower average costs of production allow the firms to increase their profits.
- The lower average costs of production may also allow the firms to lower their prices and attract more consumers.

**What is the advantage of economies of scale to consumers?**

- Consumers could gain more spending power because firms may decide to lower their prices.

**Internal Economies of Scale:**  
Internal economies of scale are a result of growth of the firm itself, leading to a cost savings and resulting in a fall in average costs.

**External Economies of Scale:**  
External economies of scale are those that a firm benefits from as a member of an industry or because of its location, they are due to factors outside the direct control of the firm.

Examples of external economies of scale include the following:

- Improvements in transport links: better roads, faster rail travel etc.
- Education and training facilities
- Concentration of firms: Suppliers of parts may locate near the main producer, thus cutting costs.
- Location: Firms may locate near labour, such as Silicon Valley, California.

**Internal Economies of Scale:**

- **Technical Economies:** Larger firms are able to purchase expensive specialist equipment, and can spread the cost across a large output - small firms cannot do this.
- **Purchasing Economies:** Buying goods and services in bulk results in the purchaser being able to buy at a lower cost per unit.
- **Division of Labour:** Larger firms are able to divide work up into separate tasks so that their workers become specialised in a small part of the production process. This increases productivity, which leads to lower average costs.
- **Financial Economies:** Larger firms are able to borrow money from banks more easily and at lower rates of interest, as they are less risky to banks. This decreases their average costs.
- **Managerial Economies:** Larger firms can afford to employ specialist staff for functions such as finance, marketing, production, exporting etc.
- **Marketing Economies:** Larger firms are able to use more expensive marketing methods that reach more potential customers. Their marketing budget can be spread over a wider range of goods and services, which lowers the marketing costs per unit.
- **Economies of Increased Dimensions:** When a firm gets bigger it is able to use large warehouse and transport facilities. This allows them to store and transport more goods at a lower average cost.

**Questions I need to answer:**

- What are economies of scale?
- How do producers benefit from having economies of scale?
- How do consumers benefit when firms have economies of scale?
- Identify two internal economies of scale.

**Competition**

**DPRO 18:** I can accurately explain competition between producers in a market economy, including the reasons why producers compete and analyse competitions impact on price.

**What I need to do:**

- I can explain what competition is.
- I can explain why firms compete.

**Words I need to say:**

- |  |                                       |
|--|---------------------------------------|
| <input type="checkbox"/> Competition           | <input type="checkbox"/> Market Entry |
| <input type="checkbox"/> Price Competition     | <input type="checkbox"/> Survival     |
| <input type="checkbox"/> Non-price Competition | <input type="checkbox"/> Profit       |

**Knowledge I need to learn:**

**Competition:**

- Where different firms are trying to sell a similar product to a consumer.
- Competition takes the form of both **price** and **non-price** factors, such as marketing, quality and customer service.
- In a competitive market a large number of producers compete with each other to satisfy the wants and needs of a large number of consumers.
- In a competitive market no single producer, no group of producers, no individual consumer, or group of consumers, can decide how the market operates, or determine the price or quantity of goods and services in the market.

**What is meant by competition between producers in a market economy?**

- Competition between producers takes place because they are trying to sell similar goods and services to the same consumers, to achieve objectives such as profit maximisation or increased market share etc.

**Types of competition: Price Competition & Non-Price Competition:**

- **Price Competition:** Firms lower their prices to gain customers and market share as well.
- If a firm doesn't do this, they may lose customers and go out of business. However, if firms, cannot sell at a price lower the cost per unit, then they will also exit the market.
- **Non-Price Competition:** Methods of non-price competition include, marketing, customer service, improved quality and added convenience.
- Non-price competition often leads to consumer loyalty.

**Why do producers compete?**

- Producers compete initially for three basic reasons:
  - To enter a market
  - To survive in a market
  - To make a profit

**Market Entry:**

- If a producer wants to enter a market it has not previously been in, either because it is a new business or has a new product, must devise ways of persuading consumers to buy its product.
- A firm could do so by charging a lower price, advertising or increasing quality, this will then force existing producers to respond.

**Survival:**

- To survive in a market firms often find it necessary to compete for consumers and market share.
- Existing customers need to be persuaded to return while new consumers should be enticed to try the product.

**Profit:**

- Firms need to make a profit both to survive and to grow. Profits provide the means for investment, in order for the firm to expand the business and to innovate.
- Producers that are able to innovate successfully are then able to compete strongly in the market.

**Questions I need to answer:**

- What is competition?
- What is price competition?
- What is non-price competition?
- Why do firms compete?

<b>Competition</b>	<b>DPRO 19:</b> I can accurately evaluate the economic impact of competition on producers and consumers.	
<b>What I need to do:</b> <input type="checkbox"/> I can analyse how competition affects price. <input type="checkbox"/> I can evaluate the economic impact of competition on producers and consumers.	<b>Words I need to say:</b>	
	<input type="checkbox"/> Competition <input type="checkbox"/> Price	<input type="checkbox"/> Price Elasticity of Demand <input type="checkbox"/> Supply

**Knowledge I need to learn:**

**Analysing how competition affects price:**

- **Lower Prices:** Competition could potentially drive down prices so that firms produce at the point where total revenue = total cost.
- Increase in competition means that there are more firms in the market, this means that supply of the good increases, which causes the supply curve to shift to the right, which causes the price to fall.
- **Increased Price Elasticity of Demand:** Increased competition could also make the demand for the product to be more elastic, this is because consumers have more options to choose from so they will be less sensitive to price changes.
- **Higher Prices:** Higher marketing and research & development costs could lead to firms passing these costs onto consumers in the form of higher prices.
  - This is one reason why branded and heavily advertised goods often cost more than those that are not heavily advertised, for example Kellogg's breakfast cereals cost a lot more than supermarket own-brand cereals.

**Evaluating the economic impact of competition on producers and consumers:**

**What is the economic impact of competition on producers?**

**Positive Impact:**

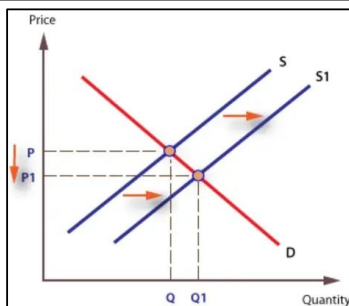
- Competition forces producers to improve their efficiency - this includes finding ways to reduce their costs.
- Competition has been the driving force behind technical innovation and the application of computerisation to production.
- This leads to increase in the productivity of the factors of production, which leads to growth of the economy and thus greater demand for goods and services.
- This demand will lead to greater profits for the more efficient producers, which will then expand output to meet demand.

**Negative Impact:**

- Firms who are slow to adapt to changing technology or demands of consumers will either go out of business or be forced out of that particular market.
- Firms that fail to adapt will lose their customers to rival firms that have been able to adapt, for example, BHS, IBM, Blockbuster, Nokia and Blackberry.

**What is the economic impact of competition on consumers?**

- **Positive impact:** Competition can lead to improved quality, increased choice, improved customer service and especially lower prices.
- **Negative impact:** Consumers may be convinced by advertising to buy goods and services that they do not need, additionally, if a firm is able to force its competitors out of the market, then it may increase prices in the long-run.



**Impact of Competition on price and quantity.**

**Questions I need to answer:**

- How does competition affect prices?
- What economic impact does competition have on producers?
- What economic impact does competition have on consumers?

**Monopoly & Oligopoly**

**What I need to do:**

- I can explain what is meant by monopoly.
- I can explain what is meant by oligopoly.
- I can explain how monopoly and oligopoly differ from competitive markets.

**DPRO 20:** I can accurately explain the meaning of monopoly and oligopoly and how they differ from competitive markets.

**Words I need to say:**

- |                                    |                                     |
|------------------------------------|-------------------------------------|
| <input type="checkbox"/> Monopoly  | <input type="checkbox"/> Collusion  |
| <input type="checkbox"/> Oligopoly | <input type="checkbox"/> Efficiency |

**Knowledge I need to learn:**

**What is meant by the terms 'monopoly' and 'oligopoly'?**

**Monopoly:**

- A monopoly is a firm that is a sole or dominant seller/producer of a good or service.
- By definition, a monopoly is characterised by an absence of competition.
- Unlike in competitive markets, Monopolies are capable of setting their own prices.
- Monopolies exist because they have barriers to entry, these may be:
  - Legal Monopolies: Only Royal Mail can deliver letters to your home.
  - Greater Efficiency than potential rivals.
  - Copyrights and Patents which prevent other firms copying them.
- Legally, a monopoly exists when one provider has at least 25% of the market. ]

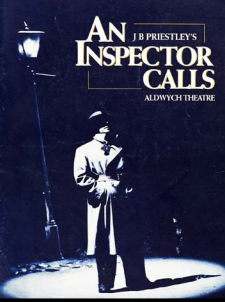
**Oligopoly:**

- Where a small number of firms control the large majority of market share. Technically, an oligopoly an oligopoly is said to exist if the five largest firms in the market share 50% or more of the market.
- Firms in an oligopoly have some monopoly power, and can set their own prices, but they make decisions about price based on what the other oligopoly firms would do.
- An oligopoly does have barriers to entry but these are not enough to keep firms entering the market, such as Alid and Lidl in the UK supermarket industry.
- Oligopolies often try to control the market through collusion: that is, they get together and agree to set the price so that they avoid price competition: This is illegal in the UK.






Difference	Monopoly	Oligopoly	Competitive Markets
Size	Usually very large	Can be very large but may also have smaller firms	Normally relatively small
Number of firms	One firm that dominates the market	A few	Many
Control of prices	Can set their own prices, but do not control the quantity	Can influence the price but is restrained by the reaction of rivals.	Price is set by the market forces of supply and demand.
Level of price and output	Higher price and lower quantity	Price and quantity depend on how strong competitors are and the ability to collude.	Price and quantity are both set by market forces. Lower price and higher quantity than monopoly or oligopoly.
Efficiency	Can achieve large economies of scale but are usually inefficient	Not usually economically efficient	Competitive markets normally lead to efficiency.

**Questions I need to answer:**

- What is a monopoly?
- What is an oligopoly?
- How does a monopoly different from an oligopoly?
- How does a monopoly and oligopoly differs from competitive markets?

Act	Plot	KS4 English Literature 2023-24	Character	Vocabulary	Context
One	<i>The play opens with a celebratory dinner party. Sheila and Gerald are engaged and Birling and Company will work closer with Crofts Ltd. On the surface, the atmosphere is happy and light-hearted.</i>		The Inspector	<b>Capitalist:</b> a business person	<b>John B Priestley</b> was born into a working class family in Yorkshire. Priestley was a <b>socialist</b> and concerned about social inequality in Britain. During WWII he broadcast a popular weekly radio programme which was cancelled by the BBC for being <b>too left wing</b> . Priestley supported the Labour Party.
	<i>The ladies leave the men to have a 'man to man' chat. Mr Birling lectures Gerald and Eric that a man needs to look after himself and his family and not worry about the wider community.</i>		Mr Arthur Birling	<b>Conservative:</b> traditional values	
	<i>Inspector Goole enters and informs the party that he has come to investigate the suicide of a young working-class girl called Eva Smith. Starting with Birling, he begins to interrogate the family.</i>		Mrs Sybil Birling	<b>Didactic:</b> teaching (a moral lesson)	
	<i>After seeing a photograph, Birling admits that he used to employ Eva Smith but discharged her when she became one of the ring-leaders of a strike asking for higher wages. Birling refuses to take any responsibility.</i>		Sheila Birling	<b>Dramatic irony:</b> when the audience know something that the characters do not	
	<i>Sheila enters and the Inspector moves on to question her. When she is shown a photograph of Eva, Sheila admits that it was her fault that Eva was sacked from Milwards. She feels terribly guilty and responsible for Eva's death. When the Inspector states that Eva, in despair, changed her name to Daisy Renton, Gerald reaction reveals that he knew her too.</i>		Eric Birling	<b>Elitist:</b> one who believes that society should be led by the upper classes	
Two	<i>Gerald's affair is exposed: he confesses that he met "Daisy Renton" at the local Variety Theatre bar and 'rescued' her from Alderman Meggarty. Gerald ended the affair when he had to go away on business. Sheila hands back her engagement ring but respects Gerald's honesty. In contrast to her daughter, Mrs Birling is scandalised. Gerald leaves to go for a walk.</i>		Gerald Croft	<b>Empathetic:</b> feeling / understanding for others	<b>The Edwardian era</b> – the play is <u>SET</u> in Britain in 1912. Thought of as a 'Golden Age' because it was a period of peace and prosperity when Britain was powerful. In reality, there was a rigid social hierarchy and the lower and upper classes were very divided. Only men who owned property could vote – no women were allowed to vote, and there was little help from government for people in poverty.  <b>Post-war values</b> – the play was <u>WRITTEN</u> in 1945. Britain had become a more equal society – by 1928 all men and women over 21 could vote. The country had been through two world wars and a global economic recession (1930s) which increased unemployment and poverty. People from different classes had fought together in the war – there was now a desire for change and a strong sense of collective social responsibility.  <b>Key historical dates</b> – 1912 – The sinking of the Titanic 1914-18 – WW1 in which Priestley served 1917 – The Russian Revolution 1918 – Women over thirty /owned property were given the right to vote. 1928 – All men and women over 21 given the vote 1936 – General Strike 1939-46 – WW2 1945 – <i>An Inspector Calls</i> first performed in the Soviet Union (it was performed in Britain in 1946 at the New Theatre in London) 1945 - <b>Clement Attlee</b> (Labour) wins a landslide victory against Winston Churchill (Conservative) in the General Election 19 – Welfare state culminates in creation of the National Health Service  <b>Morality Play</b> – religious plays written in the Middle Ages which teach the audience how to behave and warn against the dangers of sin. Priestley makes his morality play secular by having the moral judge be a police inspector rather than God.
	<i>Inspector Goole now shows a photograph to Mrs Birling. She grudgingly admits that Eva had come to ask for financial assistance from the Brumley Women's Charity Organisation because she was pregnant. Mrs Birling was the chairwoman and persuaded the committee to turn down the girl's appeal because she had the impudence to call herself Mrs Birling.</i>		Eva Smith / Daisy Renton	<b>Euphemism:</b> a soft word in place of a harsh one	
	<i>Mrs Birling shows no remorse for refusing to help Eva Smith. Mrs Birling denounces the father of the child, claiming it is his responsibility and that he needs to be made an example of. Sheila is horrified as she (and the audience) realises that Eric is involved. Eric enters.</i>		Edna	<b>Foreshadowing:</b> a warning of a future event	
			<b>Key Themes</b>		
Three	<i>Eric confesses his involvement with Eva Smith: he had met her in the same bar, had got drunk and had accompanied her back to her lodgings where he almost turned violent before she let him in. When she discovered that she was pregnant she refused to marry Eric because she knew he didn't love her, but she did accept gifts of money from him until she realised it was stolen - Eric admits that he stole the money from Mr Birling's office.</i>		Responsibility		
	<i>The Inspector delivers his message about responsibility then leaves. Mr and Mrs Birling are concerned about covering up their involvement, whereas Sheila and Eric are aware of the personal tragedy and feel guilty.</i>		Social Class		
	<i>The Birlings gradually begin to question whether the Inspector was real. Sybil and Arthur agree that it makes all the difference; Eric and Sheila disagree as even if he was a fake, what he's shown them is real.</i>		Age (the generation gap)		
	<i>Gerald re-enters. He has also had suspicions and found out that there is no Inspector Goole on the police force, which Birling confirms with a phone call. The older Birlings, and Gerald, take this as a cue to alleviate any responsibility whereas the young are repentant and continue to protest that they need to learn a lesson about their responsibility.</i>		Gender		
	<i>Then the telephone rings. Mr Birling answers it: an inspector is on his way to ask questions about the suicide of a young girl...</i>		Inequality		
			<b>Dramatic devices and terminology</b>		
			Cyclical structure		Lighting
			Stage directions		Dramatic irony
		Props and costume	Cliffhanger		
		Symbolism	Entrances and exits		
			<b>Socialist:</b> one who believes in sharing of wealth in society		
			<b>Social conscience:</b> feeling responsible for others in society		
			<b>Status quo:</b> the existing state of things		





## An Inspector Calls Fundamentals

Quote	When	What to say?
<p>Act 1: Stage Direction: The general effect is substantial and heavily comfortable</p> 	<p>The opening of the play before the audience has been introduced to the Birling family.</p>	<ul style="list-style-type: none"> <li>● <b>Adjective</b> 'substantial' and <b>adverb</b> 'heavily' suggest the excessiveness of the Birling family—they have more than they need.</li> <li>● This establishes the Birling family as members of the bourgeoisie which contrasts the character of Eva Smith and the reduced circumstances of the 1945 audience members in post-war Britain</li> </ul>
<p>Act 1: Stage Direction: Before the Inspector's arrival: <i>lighting is "pink and intimate"</i> After the Inspector's arrival: <i>lighting is "brighter and harder"</i></p>	<p>Act 1 stage directions before and when the Inspector enters.</p>	<ul style="list-style-type: none"> <li>● Adjective 'pink' connotes a soft, flattering atmosphere; 'intimate' connotes privacy - the Birlings do not see their own flaws and isolate themselves from the poor of society.</li> <li>● The change in lighting is <b>symbolic</b> of the Inspector exposing the family's behaviour. It symbolises how the Birlings, and audience alike, facing up to the problems of social injustice and inequality in their society.</li> </ul>
<p>Act 1: Stage Directions Half shy, half assertive (Eric) Half playful, half serious (Sheila)</p> 	<p>Descriptions given of Eric and Sheila in the stage directions</p>	<ul style="list-style-type: none"> <li>● <b>Contrasts</b> of 'shy' and 'assertive', and 'playful' and 'serious' show that Eric and Sheila do not have fully-formed characters - the younger generation they have potential to change.</li> <li>● For Eric, his assertiveness could be how he challenges the capitalist mindset of his father and his ignorant views on the world.</li> <li>● For Sheila, her seriousness could challenge the view on the role of women in marriage and society more generally.</li> </ul>
<p>Act 1: Mr Birling: As if we're all mixed up like bees in a hive - community and all that nonsense</p> 	<p>Towards the beginning of act 1 when Mr Birling is delivering sanctimonious lectures to Eric and Gerald.</p>	<ul style="list-style-type: none"> <li>● <b>Dramatic irony</b> shows Mr Birling to be a fool as in 1945, the election of a Labour prime minister helps Britain to value the concept of "community"</li> <li>● <b>Simile</b> 'like bees in a hive' conveys Birling's derogatory attitude towards society and the idea of working together. The noun 'nonsense' reinforces his dismissive tone.</li> </ul>
<p>Act 1: Mr Birling: If you don't come down sharply on some of these people, they'd soon be asking for the earth.</p> 	<p>When the Inspector is interrogating Mr Birling about his attitude towards worker strikes.</p>	<ul style="list-style-type: none"> <li>● <b>Adverb</b> 'sharply' conveys Birling's/ upper classes' lack of empathy for the hardships of the working classes. It also reflects his selfish capitalist mindset.</li> <li>● Birling's use of <b>hyperbole</b> that workers would be 'asking for the earth' further demonstrates his ignorance in understanding the importance of workers' rights and equal pay.</li> </ul>
<p>Act 1: Sheila: But these girls aren't just cheap labour, they're people.</p> 	<p>When Sheila first hears about the suicide and Mr Birling is unsympathetic</p>	<ul style="list-style-type: none"> <li>● <b>Adjective</b> 'cheap' demonstrates Sheila's acknowledgement that the working classes are exploited and shows she is starting to sympathise.</li> <li>● <b>Pronoun</b> 'they're' however shows that she still views the lower classes as the 'other' and something disconnected from her life.</li> </ul>







<p>Act 1: Sheila: (Hysterically) Why-you fool-he knows...You'll see. You'll see. (She looks at him almost in triumph. He looks crushed.)</p>	<p>When Sheila has realised Gerald has had an affair and he wants her to let it lie.</p>	<ul style="list-style-type: none"> <li>● Stage direction 'hysterically' shows Sheila has reached a moment of realisation which will allow her to challenge the world around her.</li> <li>● Repetition of 'you'll see' shows she understands something that Gerald doesn't and contrasts with her passiveness in her relationship with him at the beginning</li> <li>● The contrast between 'triumphant' and 'crushed' suggests her empowerment.</li> </ul>
<p>Act 2 Mrs Birling: I consider I did my duty... you have no power to make me change my mind</p>	<p>When the Inspector is interrogating Mrs Birling about her part in Eva's death.</p>	<ul style="list-style-type: none"> <li>● Assertive and pompous tone of Mrs Birling suggests that she is close minded and refuses to see the wrong in what she has done.</li> <li>● There is irony in the word 'duty' because she is suggesting that it was her duty to protect her pride rather than the wellbeing of a young woman and her unborn child</li> </ul>
<p>Act 3: Eric: I wasn't in love with her or anything-but I liked her-she was a good sport</p>	<p>When Eric is explaining his relationship with "Daisy Renton" and how he took advantage of her.</p>	<ul style="list-style-type: none"> <li>● Eric's tone is dismissive in saying 'he wasn't in love with her or anything'</li> <li>● His reference to Eva as a 'good sport' shows his disrespectful attitude towards women-Daisy serves as a form of entertainment for Eric, someone he used and 'played.' It contrasts the respect Eva shows for Eric in not revealing him to be the father of her baby.</li> </ul>
<p>Act 3: The Inspector: We don't live alone. We are members of one body.</p>	<p>During the Inspector's final exit speech which addresses the audience as well as the family.</p>	<ul style="list-style-type: none"> <li>● Short sentences reflect the Inspector's direct and clear tone in conveying his final message to the Birlings and audience.</li> <li>● The metaphor of society being a body communicates the idea that the Birlings and audience alike must take care of each organ (section of society) for it to be successful and prosper. All body parts are equally important.</li> </ul>
<p>Act 3: Sheila: 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</p>	<p>Towards the end of the play when the Inspector has exited</p>	<ul style="list-style-type: none"> <li>● Sheila's use of short sentences emphasise her abrupt and urgent tone in warning Mrs Birling that she has failed to learn from the Inspector's message. She has now fully taken on the beliefs of the Inspector about society.</li> <li>● Repetition of the pronoun 'you' is forcing Mrs Birling to realise her accountability for her own actions. It could also be used to show Priestley addressing conservative audience members or the older generation.</li> </ul>
<p>Act 3: Stage Direction:The telephone rings sharply. There is a moment's complete silence.... As they stare guiltily and dumbfounded the curtain falls</p>	<p>The very end of the play, just as the Birling family believe that the Inspector was a hoax.</p>	<ul style="list-style-type: none"> <li>● Repetition of the 'sharp' ringing noise echoes the Inspector's entrance and suggests to the audience that the Birling's celebrations will once again be cut short as they have failed to learn from their mistakes.</li> <li>● Cliffhanger ending of the 'guilty' stare and 'silence' implores the audience to consider what the consequences will be if they don't take responsibility for their actions and challenge the status quo.</li> </ul>






## Character Fundamentals: Sheila Birling

Quote	When?	What to say
<p>Act 1: Stage Directions Half playful, half serious (Sheila)</p> 	<p>Descriptions given of Eric and Sheila in the stage directions</p>	<ul style="list-style-type: none"> <li>• <b>Contrasts 'playful'</b> and <b>'serious'</b> and Sheila do not have fully-formed characters - the younger generation they have potential to change.</li> <li>• <b>'Half'</b> could foreshadow that she will change her views and become more progressive as she is not a whole yet.</li> <li>• For Sheila, her seriousness could challenge the view on the role of women in marriage and society more generally.</li> </ul>
<p>Act 1: "Yes go on mummy"</p> 	<p>Act 1 when Sheila is referring to her mother</p>	<ul style="list-style-type: none"> <li>• Sheila's language also reflects her increasing maturity as she begins the play saying <b>"mummy"</b> using a lot of personal pronouns to highlight her selfish, childlike attitude at the start of the play.</li> <li>• As the play progresses she refers to Mrs Birling as <b>"mother"</b> which reflects this change and perhaps she doesn't feel as intimate with her mother and has lost respect for her because of the way she is behaving.</li> </ul>
<p>Act 1: Sheila: But these girls aren't just cheap labour, they're people.</p> 	<p>When Sheila first hears about the suicide and Mr Birling is unsympathetic</p>	<ul style="list-style-type: none"> <li>• <b>Adjective 'cheap'</b> demonstrates Sheila's acknowledgement that the working classes are exploited and shows she is starting to sympathise.</li> <li>• <b>Pronoun 'they're'</b> however shows that she still views the lower classes as the 'other' and something disconnected from her life.</li> </ul>
<p>Act 1: Sheila: (Hysterically) Why-you fool-he knows...You'll see. You'll see. (She looks at him almost in triumph. He looks crushed.)</p>	<p>When Sheila has realised Gerald has had an affair and he wants her to let it lie.</p>	<ul style="list-style-type: none"> <li>• Stage direction 'hysterically' shows Sheila has reached a moment of realisation which will allow her to challenge the world around her.</li> <li>• <b>Repetition</b> of 'you'll see' shows she understands something that Gerald doesn't and contrasts with her passiveness in her relationship with him at the beginning</li> <li>• The contrast between 'triumphant' and 'crushed' suggests her empowerment.</li> </ul>
<p>Act 3: Sheila: 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</p> 	<p>Towards the end of the play when the Inspector has exited</p>	<ul style="list-style-type: none"> <li>• Sheila's use of <b>short sentences</b> emphasise her abrupt and urgent tone in warning Mrs Birling that she has failed to learn from the Inspector's message. She has now fully taken on the beliefs of the Inspector about society.</li> <li>• <b>Repetition</b> of the pronoun 'you' is forcing Mrs Birling to realise her accountability for her own actions. It could also be used to show Priestley addressing conservative audience members or the older generation.</li> </ul>





## Character Fundamentals: Eric Birling

Quote	When?	What to say
Act 1: <b>Stage Directions</b> Half shy, half assertive (Eric) 	Descriptions given of Eric in the stage directions	<ul style="list-style-type: none"> <li>• <b>Contrasts</b> of 'shy' and 'assertive', show that Eric is not yet a fully-formed character - the younger generation they have potential to change.</li> <li>• For Eric, his assertiveness could be how he challenges the capitalist mindset of his father and his ignorant views on the world.</li> </ul>
Act 1: "Why shouldn't they try for higher wages? We try for the highest possible prices" 	Eric questions his father in Act 1	<ul style="list-style-type: none"> <li>• Defending <b>socialist actions</b> - has the potential to change.</li> <li>• <b>Third person pronoun</b> "they" contrasts with "we" conveys the separation that exists.</li> <li>• Eric, fair, see's lower class as on the same level as his class, <b>contradicts</b> father, revealing hypocrisy of upper class</li> </ul>
Act 3: Eric: I wasn't in love with her or anything-but I liked her-she was a good sport 	When Eric is explaining his relationship with "Daisy Renton" and how he took advantage of her.	<ul style="list-style-type: none"> <li>• Eric's <b>tone</b> is dismissive in saying 'he wasn't in love with her or anything'</li> <li>• His reference to Eva as a 'good sport' shows his disrespectful attitude towards women-Daisy serves as a form of entertainment for Eric, someone he used and 'played.' It <b>contrasts</b> the respect Eva shows for Eric in not revealing him to be the father of her baby.</li> </ul>
Act 3: "Then- you killed her. She came to you to protect me- and you turned her away- Yes, and you killed her... damn you, damn you" 	Eric has found his assertiveness and is standing up to his mother.	<ul style="list-style-type: none"> <li>• Eric has changed and is standing up for himself.</li> <li>• <b>Repetition</b> of "you killed her" conveys Eric's anger and blame he has for his mother.</li> <li>• <b>Broken dialogue</b> and use of a <b>dash</b> show how Eric is overwhelmed with resentment for his family. This could symbolise resentment for capitalism and the upper classes.</li> </ul>




### Character Fundamentals: Mr Birling

Quote	When?	What to say
Act 1: Stage Direction: The general effect is substantial and heavily comfortable 	The opening of the play before the audience has been introduced to the Birling family.	<ul style="list-style-type: none"> <li>• <b>Adjective</b> 'substantial' and <b>adverb</b> 'heavily' suggest the excessiveness of the Birling family-they have more than they need.</li> <li>• This establishes the Birling family as members of the bourgeoisie which contrasts the character of Eva Smith and the reduced circumstances of the 1945 audience members in post-war Britain</li> </ul>
(explosively) (angrily) (sharply) (very sharply) (furious)	Stage directions to describe Mr Birling	<ul style="list-style-type: none"> <li>• Stage directions emphasise Mr Birling's pompous and arrogant attitude.</li> <li>• Adverbs "sharply" and "angrily" symbolise the arrogance of the upper classes and their belief that they are top of the <b>hierarchy</b>.</li> </ul>
Act 1: "unsinkable, absolutely unsinkable" 	During Mr Birling's speech in Ac1 where he declares there will be no wars and the Titanic will not sink.	<ul style="list-style-type: none"> <li>• The Titanic is a <b>microcosm</b> for Edwardian society as passengers were completely divided by class</li> <li>• <b>Dramatic irony</b> - the audience knows Mr Birling is wrong and so will not trust him.</li> <li>• The Titanic is a <b>metaphor</b> for the Birling family: they are going about their lives unaware the 'iceberg' (Inspector and his lessons) will hit.</li> </ul>
Act 1: Mr Birling: As if we're all mixed up like bees in a hive-community and all that nonsense 	Towards the beginning of act 1 when Mr Birling is delivering sanctimonious lectures to Eric and Gerald.	<ul style="list-style-type: none"> <li>• <b>Dramatic irony</b> shows Mr Birling to be a fool as in 1945, the election of a Labour prime minister helps Britain to value the concept of "community"</li> <li>• <b>Simile</b> 'like bees in a hive' conveys Birling's derogatory attitude towards society and the idea of working together. The noun 'nonsense' reinforces his dismissive tone.</li> </ul>
Act 1: Mr Birling: If you don't come down sharply on some of these people, they'd soon be asking for the earth. 	When the Inspector is interrogating Mr Birling about his attitude towards worker strikes.	<ul style="list-style-type: none"> <li>• <b>Adverb</b> 'sharply' conveys Birling's/ upper classes' lack of empathy for the hardships of the working classes. It also reflects his selfish capitalist mindset.</li> <li>• Birling's use of <b>hyperbole</b> that workers would be 'asking for the earth' further demonstrates his ignorance in understanding the importance of workers' rights and equal pay.</li> </ul>
Act 3: "Now look at the pair of them- the famous younger generation who know it all. And they can't even take a joke-" 	Near the end of the play when Mr Birling believes there is no Inspector.	<ul style="list-style-type: none"> <li>• Shows that the younger generation have taken responsibility and the older generation have not.</li> <li>• Highlights the <b>rigid</b> mindsets and <b>stubbornness</b> of the older generation.</li> <li>• <b>Pronoun</b> "them" further separates the two generations.</li> </ul>




## Character Fundamentals: Mrs Birling

Quote	When?	What to say
<p>Act 1: Stage Direction: The general effect is substantial and heavily comfortable</p> 	<p>The opening of the play before the audience has been introduced to the Birling family.</p>	<ul style="list-style-type: none"> <li>● <b>Adjective</b> 'substantial' and <b>adverb</b> 'heavily' suggest the excessiveness of the Birling family-they have more than they need.</li> <li>● This establishes the Birling family as members of the bourgeoisie which contrasts the character of Eva Smith and the reduced circumstances of the 1945 audience members in post-war Britain</li> </ul>
<p>(grandly) (bitterly) (with sudden anger) (alarmed) (severely)</p>	<p>Stage directions to describe Mrs Birling.</p>	<ul style="list-style-type: none"> <li>● Stage directions emphasise Mrs Birling's pompous and arrogant attitude.</li> <li>● Adverbs "grandly" and "severely" symbolise the arrogance of the upper classes and their belief that they are top of the <b>hierarchy</b>.</li> </ul>
<p>Mrs Birling: "as if a girl of that sort would ever refuse money."</p> 	<p>Act 2 When the Inspector is asking Mrs Birling about her part in Eva's death.</p>	<ul style="list-style-type: none"> <li>● The prejudiced and <b>pompous</b> tone of "of that sort" suggests that she refuses to see the wrong in what she has done and does not take <b>responsibility</b>.</li> <li>● The word "girl" shows that women can also be sexist. Mrs Birling is prejudiced against Eva because she is female and working class. Shows she is <b>elitist</b> and <b>hierarchical</b>.</li> </ul>
<p>Act 2: Mrs Birling: I consider I did my duty... you have no power to make me change my mind</p> 	<p>When the Inspector is interrogating Mrs Birling about her part in Eva's death.</p>	<ul style="list-style-type: none"> <li>● Assertive and pompous <b>tone</b> of Mrs Birling suggests that she is close minded and refuses to see the wrong in what she has done.</li> <li>● There is <b>irony</b> in the word 'duty' because she is suggesting that it was her duty to protect her pride rather than the wellbeing of a young woman and her unborn child</li> </ul>
<p>Act 3: 'he certainly didn't make me confess – I had done no more than my duty'</p> 	<p>Once the Inspector has left.</p>	<ul style="list-style-type: none"> <li>● <b>Adverb</b> "certainly" connotes a smug tone.</li> <li>● <b>Repetition</b> of 'my duty' from earlier in the play shows that the older generation have a rigid mindset.</li> </ul>





### Character Fundamentals: Gerald Croft

Quote	When?	What to say
<p>(easy well-bred young man-about-town) (produces a ring case) (giving the case to her)</p> 	<p>Stage directions to describe Gerald</p>	<ul style="list-style-type: none"> <li>Gerald clearly holds authority and appears at first to be the decision maker within his relationship with Sheila which symbolises the power held by the patriarchy. This is challenged when Sheila hands the ring back.</li> <li>“Man about town” could be a euphemism for male behaviour in the Edwardian era</li> </ul>
<p>Act 1: <i>GERALD [laughs]: You seem to be a nice well-behaved family -</i> <i>BIRLING: We think we are -</i></p> 	<p>The opening of the play when Priestley creates initial first impressions of the characters.</p>	<ul style="list-style-type: none"> <li>These lines exemplify Priestley's love of dramatic irony: the last thing the Birlings have been is well-behaved</li> <li>The conspiratorial tone suggests the alliance between Gerald and Birling, two men who share the same capitalist, individualistic values, whose bond will become stronger after the Inspector's exit.</li> </ul>
<p>Act 2: <i>“all right – I did for a time. Nearly any man would have done”</i></p>	<p>Said in response to Sheila saying that Gerald must have ‘adored’ the role he had as benefactor of ‘fairy prince’ to Eva.</p>	<ul style="list-style-type: none"> <li>He admits he did enjoy it and that he is human and thus of course frail. He uses ‘any man’ as an excuse.</li> <li>Priestley is stressing that common human weaknesses are shared by everyone despite supposed class differences.</li> </ul>
<p>Gerald’s character trajectory: Act 1: ‘I don’t come into this suicide business.’ Act 3: ‘Everything’s all right now Sheila.’ (Holds up the ring) How about this ring?</p> 	<p>The audience believes Gerald has or will change, however he does not.</p>	<ul style="list-style-type: none"> <li>Gerald lets the audience down; we had hoped that he would change his attitudes, but he doesn’t.</li> <li>Priestley conveys how ingrained self-centred attitudes and a desire to maintain the status quo were in the upper class, and how difficult it was to change them.</li> <li>Stage direction indicates that Gerald still believes he has control over Sheila.</li> </ul>

### Character Fundamentals: The Inspector

Quote	When?	What to say
Before the Inspector’s arrival: <i>lighting is “pink and intimate”</i> After the Inspector’s arrival: <i>lighting is “brighter and harder”</i>	Act 1 stage directions before and when the Inspector enters.	<ul style="list-style-type: none"> <li>Adjective ‘pink’ connotes a soft, flattering atmosphere; ‘intimate’ connotes privacy - the Birlings do not see their own flaws and isolate themselves from the poor of society.</li> <li>The change in lighting is <b>symbolic</b> of the Inspector exposing the family’s behaviour. It symbolises how the Birlings, and audience alike, facing up to the problems of social injustice and inequality in their society.</li> </ul>
Act 1: <i>“It is better to ask for the earth than to take it”</i> 	The Inspector’s response to Mr Birling	<ul style="list-style-type: none"> <li>The Inspector acts as a mouthpiece for Priestley’s <b>socialist views</b> and challenges the <b>capitalist</b> mindset of the Birling family.</li> </ul>
Act 3: The Inspector: <i>We don’t live alone. We are members of one body</i> 	During the Inspector’s final exit speech which addresses the audience as well as the family.	<ul style="list-style-type: none"> <li><b>Short sentences</b> reflect the Inspector’s direct and clear tone in conveying his final message to the Birlings and audience.</li> <li>The <b>metaphor</b> of society being a body communicates the idea that the Birlings and audience alike must take care of each organ (section of society) for it to be successful and prosper. All body parts are equally important.</li> </ul>
The Inspector’s entrances and exits For example at the end of act 1 when he walks in on Sheila and Gerald’s conversation and his initial arrival at the Birlings’ house	Throughout: the Inspector’s entrances and exits are well-timed and significant	<ul style="list-style-type: none"> <li>Priestley uses these to heighten the drama and tension and to interrupt and disrupt</li> <li>Goole is <b>assertive</b> throughout - he doesn’t change like some of the other characters</li> <li>He arrives at a critical time – ‘a man has to mind his own business and look after himself and his own’ (Mr Birling) – ‘We hear the sharp ring of a front doorbell.’ The Inspector’s role is to show that this is not the case.</li> </ul>
Act 1: <i>INSPECTOR: ... what happened to her then may have determined what happened to her afterwards, and what happened to her afterwards may have driven her to suicide. A chain of events.</i>	Act 1 when the Inspector first outlines the nature of the moral crimes the Birlings have committed.	<ul style="list-style-type: none"> <li>Each of the Birlings is responsible in part for Eva’s death, and together they are entirely responsible. This <b>construction</b> is itself a <b>metaphor</b> for socialist Priestley’s insistence that we are all bound up together and responsible communally for everyone’s survival.</li> <li>The <b>repetition</b> in the Inspector’s lines almost mirror the “chain” he is talking about.</li> </ul>
Act 3: “Fire, blood and anguish” linked to Priestley’s real life experience in the war 	The Inspector’s final, dramatic speech to the Birlings (and the audience) before he exits	<ul style="list-style-type: none"> <li>Priestley fought in the war so this was a relatively recent and very real memory for him. In an interview he said “the tradition of an <b>officer class</b>... [who] killed most of my friends...”</li> <li>The <b>righteous</b> anger of the inspector conveys his anger at the Birlings and the Crofts who represent the “officer class” who sent him and his friends over the top from positions of safety.</li> </ul>

Year 10 English Knowledge Organiser: Cycle 3 Worlds and Lives Poetry

Anchor Poems	
<p><b>Thirteen - Caleb Femi</b></p> <p>The speaker recounts his experience being questioned by police for the crime of a man when only 13 years old. The poem explores the structural racism specifically the police. Caleb Femi was born in Nigeria in 1990. He emigrated to the UK at the age of seven and lived in Peckham.</p> <p><i>“Supernovas” “little stars”</i> semantic field of lightness contrasted with darkness. </p> <p><i>“Fed”</i> colloquial language uses to encapsulate the poets strong tie to his identity</p>	<p><b>Like An Heiress - Grace Nichols</b></p> <p>Nichols returns to her home nation (Guyana) where she notices that she feels less immersed in her culture. Rather, she sees herself like a ‘tourist’ in her home country. Nichols also explores the damaging effects climate change has on the planet. Grace Nichols was born in Guyana in 1950. Nichols is known for inciting critical thinking and change on major social topics such as police brutality, gentrification and climate change.</p> <p><i>“Like an heiress”</i> simile highlights her pride in her identity but also her disconnect from her homeland. </p> <p><i>“Wave of rubbish”</i> metaphor emphasises the poets disdain for the treatment of the planet by humans.</p>
<p><b>The Jewellery Maker - Louisa Adjoa Parker</b></p> <p>Parker explores the day and life of a male jewellery maker who takes great pride in his world. The poem explores the beauty of his work using vivid imagery of the natural world. English-Ghanaian heritage who lives in South West England. Adjoa Parker gives voice to rural racism, black history, mental health and marginalisation.</p> <p><i>“flowers bloom; silvery moons wax and wane”</i> - vivid imagery of the natural world </p> <p><i>“the way a surgeon might – neat as soldiers.”</i> simile highlights the care and precision taken in his work.</p>	<p><b>England in 1819 - Percy Bysshe Shelley</b></p> <p>A political poem that criticises the condition of England in 1819. The monarchy and the government are criticised and the difficult living conditions of the poor are exposed. Shelley is a Romantic poet and refers to King George III, the ‘mad king’, Prime Minister Lord Liverpool and the Peterloo Massacre. If you published this poem in 1819, you were at risk of being imprisoned.</p> <p><i>‘Leechlike to their fainting country cling’</i> simile suggests that rulers are taking resources from the starving poor. </p> <p>Personification <i>‘fainting’</i> highlights the ill state of England.</p>

Contextual concepts

- Humans’ impact on the environment:** Humans impact the physical environment in many ways: overpopulation, pollution, burning fossil fuels, and deforestation. Changes like these have triggered climate change, soil erosion, poor air quality, and undrinkable water.
- Systemic Racism:** Policies that exist throughout a whole society or organization that result in and support a continued unfair advantage to some people and unfair or harmful treatment of others based on race or ethnic group.
- Identity and belonging:** National and cultural identity is explored as something that can create a sense of belonging, but can also alienate and exclude where diversity is not recognised and celebrated.
- Power and Oppression:** Many of the poems explore misuse of power and privilege by rulers, nations and individuals. We see the impact on both individuals and communities.
- Colonialism:** A practice or policy of control by one people or power over other people or areas, often by establishing colonies and generally with an economic aim. The British Museum holds many artefacts as a result of colonial exploitation of people and countries.
- Reform and Revolution:** Some people in society help lead societal reform (change) that challenges current government rules and societal norms. Malala Yousafazi speaks out about girls education and many climate justice and anti-racism groups, such as Black Lives Matter, speak up against current societal injustices.
- Prejudice:** A negative attitude toward an individual based solely on one’s membership in a particular social group. Many of our poets have faced prejudice because of their race, class, culture or gender.
- Migration:** People may have to negotiate loss and separation from country of origin, family members and familiar customs and traditions; exposure to a new physical environment; and the need to navigate unfamiliar cultural experiences.
- Romanticism:** Romanticism describes developments in literature, art and music in the late 18th and early 19th century. Some key Romantic ideas include a focus on the power of nature, imagination, revolution, the world of children and the lives of people marginalised in society.



Year 10 English Knowledge Organiser: Cycle 3 Worlds and Lives Poetry



# Worlds and Lives Poetry

Key vocabulary and definitions	
<b>Industrial Revolution</b>	Move to new methods of manufacturing (factories) in the period from about 1760 to sometime between 1820 and 1840.
<b>liberticide</b>	Destruction of freedom
<b>Punjabi</b>	The language spoken in the Punjab region of India
<b>Echo chamber</b>	An environment where people only encounter beliefs that reflect their own
<b>Rama &amp; Sita</b>	Hindu Gods
<b>exploit</b>	To take advantage of for own gain.
<b>artefacts</b>	An object of historical or cultural interest
<b>diaspora</b>	The scattering of people away from where they originally lived
<b>elocution</b>	Standard forms of pronunciation
<b>nostalgia</b>	A sentimental longing or affection for a period in the past.
<b>Heiress</b>	A women who inherits considerable wealth
<b>oppression</b>	Cruel or unjust treatment.
<b>perspectives</b>	Viewpoints or outlooks.
<b>supernova</b>	When a star's life ends in a bright explosion
<b>revolution</b>	An overthrow of government or power.
<b>tyrant</b>	A cruel and oppressive ruler.
<b>Quakers</b>	Followers of a religious movement that came from Christianity in 17th century England.

Poetic features, devices and suggested effects	
<b>1st person narrative voice</b>	We see from only one person's point of view - is it biased? Reliable? More personal?
<b>2nd person narrative voice</b>	Speaks directly to the reader - challenging? Pleading? Forceful?
<b>3rd person narrative voice</b>	Tells a story that happens to others. Can suggest the narrator is omniscient or god-like and all-knowing.
<b>Alliteration</b>	The repetition of identical consonant sounds at the beginning of words. Can help to create the mood or tone.
<b>Anaphora</b>	Repetition of the same word or phrase at the beginning of a line throughout a poem.
<b>Caesura</b>	A pause or stop in the middle of a line of poetry. This can be shown by a full stop, comma, dash or colon.
<b>Couplet</b>	Two successive rhyming lines. Couplets end the pattern of a Shakespearean sonnet.
<b>Enjambment</b>	<i>Sentences running over onto the next poetry line.</i> Can suggest spontaneous, unplanned thoughts.

Poetic features, devices and suggested effects	
<b>Imagery</b>	Language that creates a picture in our mind to help convey the ideas of attitudes of the poem.
<b>Metaphor</b>	A comparison between two unlike things, this describes one thing as if it were something else.
<b>Onomatopoeia</b>	Helps create a vivid image of something by appealing to the senses
<b>Opening and ending</b>	How does the poem begin: what impact does it try to create? How does it end? Does it link to the beginning?
<b>Oxymoron / juxtaposition</b>	Emphasises a contrast, highlights an idea, or creates a sense of confusion
<b>Personification</b>	Attributing human characteristics to nonhuman things.
<b>Powerful words</b>	What do you associate with them / what feeling do they create?
<b>Repetition</b>	Draws attention to a key word or phrase - why is that important to the poem?
<b>Rhyme</b>	Can emphasise a keyword - explain why that word is significant.
<b>Short sentences</b>	Creates and builds tension. If repeated can add excitement and build pace.
<b>Simile</b>	A direct comparison between two dissimilar things; uses "like" or "as".
<b>Sonnet</b>	A poem with fourteen lines of rhyming iambic pentameter.
<b>Speaker</b>	The voice / narrator of the poem.
<b>Stanza</b>	What we call paragraphs in poems. The meters and rhymes are usually repeating or systematic.

**English Language Paper 1:  
Explorations in Reading and Creative  
Writing Knowledge Organiser**

1 hour 45 minutes

**The absolute basics:**



Read the text – 5 mins

**Section A**

- Q1 – List 4 things (5 mins)
- Q2 – How does the writer use language to... (10 mins)
- Q3 – How does the writer structure the text to... (10 mins)
- Q4: [statement] To what extent do you agree? (30 mins)

**Section B**

Q5: Writing to describe or narrate (45 mins inc. planning time)

**Start of the exam (5 mins)**



1. Read the blurb given for the text. Highlight key words which given you a clue about what you will be reading e.g. character, setting, time.

2. Read the passage carefully. Take time to make sure you understand it and text mark (highlight) as you go.

Look out for:

1. Key quotes about character or setting
2. Pivotal moments
3. Sentences which build a particular tone or mood.

**Section A: Question 1 (5 mins, 4 marks)**

Question stem: Write down four things you learn...

**Planning**

1. Read the question and highlight the key words, including the lines it asks you to focus on.
2. Draw a box around the lines you need to focus on in the insert.

**Writing**

1. Write in full sentences.
2. One point per line.
3. Keep it simple i.e. explicit inferences

**Question 2 (10 mins, 8 marks)**

Question stem: How does the writer use language to...



**Planning**

1. Read the question and highlight the key words to ensure you understand what the focus of your answer will be.
2. Re-read the section of text the question asks you to focus on.
3. Highlight key quotations which will help you answer the focus of the question. Consider the use of different language devices.

Basic things to look out for: 5 senses, colour, adjectives and verbs.

Grade 7+ extended metaphors, semantic fields, assonance.

**Writing**

1. You are writing 3 clear PEAs to answer the question.
2. Each should focus on a different language device used.

Grade 7+ = Develop PEAs into PEAEAs to show how devices are used across the extract and an overall effect is created.

3. Your 'Points' should use the wording of the question.

**Useful sentence starters**

Possible intro if time:

Throughout the extract the writer creates a ... tone/atmosphere.

**Point:**

The writer has used a [language device] to suggest/imply/create...

**Evidence:**

For instance, '...' **ANALYSE**

**Analysis:**

The use of ... makes it sound like...  
The word/phrase/subject term '...' creates an impression of...  
We might realise/imagine/feel...

**Question 3 (10 mins, 8 marks)**

Question stem: How has the writer structured the text to interest you as a reader?

**structure**

**Planning**

1. Read the question and highlight the key words. This question is about how the text is put together and organised, rather than the language devices used.

2. At the top of the answer booklet write: **STOPSEC**

- Setting
- Time
- Opening
- Perspective
- Shift in focus
- Ending
- Character



3. Skim through the whole source again. Highlight and label where you see different STOPSEC features-particularly focus on how the opening and ending are effective.

Top tip: for a really clear response, think about what the writer focuses your attention on at the beginning, what they focus you on at the end-and whether this is similar or different. Then ask WHY?



**Writing**

1. Aim for 3 PEA paragraphs: beginning contrasted to the end-to give a general overview of the text first of all, then consider how your focus shifts in the middle of the extract and why -your analysis isn't focusing on the use of words and phrases, but on the atmosphere/tone created by the different structural (STOPSEC) features used at different points. A final PEA could be written about another interesting structural feature: repetition, juxtaposition, tone, sentences etc.

**Useful sentence starters:**

Possible intro if time:

Throughout the extract the reader carefully structures the text to interest the reader. They particularly consider [insert STOPSEC feature/s you will focus on.]

**Point:**

The writer opens the text by introducing/using [insert STOPSEC feature] in order to suggest/create... This links to/is contrasted with the ending of the text, where there is a shift in focus to...

**Evidence:**

For instance, this is seen when '...'

**Analysis:**

The use of ... creates a sense of... It tells us...  
We are shown that...  
The ... develops...  
This interests the reader because...

**Notice:** The analysis is NOT on words but on the effect of the structure and the impressions it creates for us.

**Question 4 (30 mins, 20 marks)**

Question stem: '[statement about the text]' To what extent do you agree?

**Planning**

1. Read the question and highlight the key words, including the section of the text if specified. Think carefully about how far you agree with the statement.

Top Tip: Usually it is best to AGREE with the statement. But consider how far you agree. Is there evidence to argue against this opinion? Create a debate in your answer.

2. Draw a box around the section of the text if specified.



3. Read through and highlight words/phrases/language devices you will use to argue FOR, and maybe against the statement.

**Writing**

1. Aim for 3 PEAELs in 20 mins. Pick out key words in each and explore their effect.

Useful sentence starters (see previous questions too – you can reuse these if appropriate!):

To some extent I agree with...  
I certainly agree that...  
However, it could also be argued that...  
Overall I agree that...



**PROOF READ YOUR WORK!**

(Allow 5 mins for this)  
-Spelling inc. homophones e.g. to/too/two or there/their/they're  
-Improve any dull words to make them more exciting!

**Section B: Question 5 (45 mins, 40 marks)**

Question focus: Writing to narrate (story) or describe.

**Planning (THIS IS REALLY IMPORTANT!)**

1. Decide which task you would like to do (narrate or describe). There might not be a choice! Reminder of the structure for each below:

Describe		Narrate
Panoramic	Consider STOPSEC to structure your writing in both tasks!	Rule of 1: 1 setting, 1 character, 1 event, 1 hour
Zoom		Hook → Character intro →
Zoom		Development → Turning point →
Panoramic		Resolution

2. Plan using the structures above. You should also consider:

-What good vocab could you use from the extract you have just read?  
Vary your sentence openers with verbs, adverbs, prepositions, adjectives. Use a semi-colon (instead of because)

**Remember these things →**

Use plenty of description, even in a narrative. Vary the length of your sentences (inc. at least 1 holophrastic phrase) and your paragraphs.  
Commas after subordinate clauses Variety of language devices

## Structure



### Drop

Set the scene and describe the setting or landscape.

### Zoom

Choose something that you will 'zoom in' on and describe in detail

### Flash

Change the time or place of your story

### Echo

Bring it back to where you were at the start. What has changed?

## Punctuation:

Full stop.  
Question mark?  
Exclamation mark!  
Comma,  
Semi-colon;  
Colon:  
(Brackets)  
Speech marks ""

## Adverbs:

Cautiously,  
Violently,  
Rapidly,  
Eagerly,

## Figurative Language Examples to Magpie:

**Suspense suffocated the air; it spread like a disease.**

**The moon glared down on them, illuminating the fearful city.**

**The moon watched intently as the last of the crowds made their way home.**

**As the wind increased rapidly, the trees stood like giants.**

**Up until this moment, his life had been an unbreakable prison.**

**Two choices flooded her mind: run or fight.**



## Vocabulary

Synonyms for Great	Synonyms for Dark	Synonyms for Scared
Majestic Tremendous Awe-inspiring Glorious	Dingy Gloomy Ghastly	Terror-struck Agitated Horried
Synonyms for Miserable	Synonyms for Kill	Synonyms for Beautiful
Sorrowful Despairing Downhearted	Slaughter Crucify Slay	Angelic Exquisite Radiant Dazzling
Synonyms for Watched	Synonyms for Anger	Synonyms for Red
Observed Glared	Wrath Fury Rage	Crimson Scarlet

## Sentence Types:

### Complex sentence with embedded clause:

*The sky, which had previously seemed so threatening, now smiled down upon the majestic fields.*

### Short, simple sentences. (Can you repeat the first word or phrase?)

***Fear** gripped him like a plague. **Fear** was suffocating the last drops of bravery he had in him. **Fear** was going to ensure his downfall.*

### Adverbial phrases

*As the trapdoor slammed shut, silence filled the air.*

**AQA English Language Paper 2 Section A**

**THE BASICS**

- In June of your Year 11.
- Paper 2 is worth 50% of your English Language GCSE.
- Section A Reading is worth 25% of your GCSE and takes 60 minutes.
- You will be given two nonfiction texts to read: one modern, one 19th century.
- They will be on a similar topic.
- Section B Writing is worth 25% of your GCSE and takes 45 minutes.
- You have four questions to answer in Section A Reading.
- You should use a highlighter to help you with this paper.

**QUESTION 1 - 4 MARKS**

**True or false?**

What will the question look like?

Read lines 1 to 12 of Source A. Choose four statements below which are **true**:

A	Pandas are dangerous.	<input type="radio"/>
B	Pandas eat human flesh.	<input type="radio"/>
C	The man loves a panda.	<input type="radio"/>
D	China is made of Pandas.	<input type="radio"/>
E	We should do more to educate pandas.	<input type="radio"/>
F	The panda was driving under the influence.	<input type="radio"/>

- Be quick: it's only worth four marks.
- Read the questions and answers carefully: have you chosen the right lines?
- Have you spotted any trick questions? Running out of time? Have a guess and move on. You've nothing to lose.

**QUESTION 2 - 8 MARKS**

**Summary of comparisons**

What will the question look like?

Read Source A and Source B. Write a summary of the differences in the pandas' habitats in zoos and in the wild.

- Highlight the key focus of the question: they do not just ask for a general comparison.
- This is basically a fact-based comparison— not attitudes or ideas. Look for quotations which allow you to show your intelligence, not the obvious.
- Show layers of interpretations but do not bother with technical terms.
- The question could ask you to compare differences or similarities.

How do I write it?

One difference is in Source A... while in Source B...

For example, in source A it tells us "quote". This implies... In Source B it tells us "quote". This implies... Another difference is...

(repeat).

**QUESTION 3 - 12 MARKS**

**Language focus**

What will the question look like?

Now look at Source B. Read lines 12 to 40. How does the writer use **language** to make the zoo sound unpleasant?

- Highlight the key focus of the question: they do not just say "write about language".
- Highlight the techniques you can find which allow you to be able to discuss impressions, impact and connotations.
- Try to begin with word/meaning based points.

How do I write it?

To describe the zoo as .... the writer uses...

powerful verbs adjectives adverbs a simile repetition a list metaphor onomatopoeia

For example it says, ".....quote ...."

(Zoom in on a single word) The word "...." suggests... implies.. makes the reader feel/think... because ...

(repeat)

**QUESTION 4 - 16 MARKS**

**Attitudes and methods comparisons**

What will the question look like?

Compare the different attitudes to the topic in Source A and Source B.

- compare their attitudes
- compare the methods they use to present these attitudes

- Note down pairs of differing attitudes/feelings between the two sources; eg impressed/ disgusted, approving/shocked. They do not need to be opposites, just differences.
- For each pair, find language techniques and quotations to show how the writer communicates their attitudes/thoughts/feelings.
- This is the answer with the most marks in the Reading Section: it should be longer.
- The question could ask you to compare differences or similarities.

How do I write it?

One difference is that Source A has the attitude that... whereas Source B has more the attitude that...

For example, Source A tells us "...quote..." This suggests... This implies ... because... (Repeat).

Examples of attitudes/ feelings impressed by.. concerned about... amused by... indignant about... shocked by... approving of... admiring of... critical of... frustrated by...

**AQA English Language Paper 2 Section B**

**Overview:** This task requires you to write an engaging article, speech or letter. The tasks are non fiction style but you can make up your facts and examples. You should make sure your tone and ideas are suitable for the audience you are writing for. The question will be on a similar theme to the texts you will look at in section A of the paper.

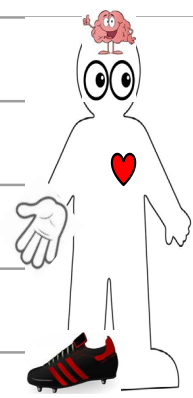
**Marks available:** 24 marks for content and organisation and 16 marks for SPaG accuracy.

<p><b>How to revise:</b></p> <p>1. Self quiz this knowledge organiser</p> <p>2. Self quiz and practise using the AFOREST techniques</p> <p>3. Plan and write your answers to these practice questions</p>	<p>'Cars are noisy, dirty, smelly and downright dangerous. They should be banned from all town and city centres, allowing people to walk and cycle in peace.'</p> <p>Write a letter to the Minister of Transport arguing your point of view on this statement.</p>
	<p>'We should all have to give at least 10% of the money we earn to charity.'</p> <p>Write a speech for school arguing your point of view on this statement.</p>






**Grade 8-9 tips:**

- Use a blend of persuasive devices and figurative devices.
- Try using humour and irony to create a convincing tone.
- Regularly read opinion pieces (or columns) in the news.
- Have one idea or image that you refer to throughout, or craft an extended metaphor.

Vocabulary	Meaning
unorthodox	Unusual
unquestionably	Definitely
ludicrous	Ridiculous
extraordinary	Unusual
nonetheless after all	In spite of
indisputably	without doubt
ideology	System of beliefs
status quo	The way things have always been
ethics	Rules about right and wrong
hypocrisy	Claiming to be one thing but doing the opposite (to be a hypocrite)
paradox	A contradictory statement
ambitious	Having desire to succeed
usurp	Take by force
treachery	Betrayal of trust



**How to Structure your Writing: The Body Plan**

Section	Techniques	Paragraph Starter
<p>The <b>handshake</b>: A powerful introduction</p> 	<p>Direct address Refer to the purpose of the piece: (readers / audience / name of the person if it's a letter')</p>	<p><i>Imagine a world where...</i></p>
<p>The <b>brains</b> of the matter: Sound knowledgeable</p> 	<p>Facts and statistics The opinion of an expert</p>	<p><i>Evidently, ...</i></p>
<p>Appeal to the <b>heart</b>: An emotive argument</p> 	<p>Emotive language Anecdote (personal or about a real/made up other person)</p>	<p><i>Take (me / name of person) ...</i></p>
<p><b>Kick</b> the opposing argument off the pitch</p> 	<p>Acknowledge the other side of the argument but state why your case is stronger</p>	<p><i>While some people may say...</i></p>
<p><b>Look</b> to the future: Finish with a call to action</p> 	<p>Imperative language Refer to the purpose of the piece: <i>Readers, as you put down this magazine I want you to...</i> <i>Audience members. As you leave this assembly hall today I want you to...</i> (Name of person) as you finish reading this letter I want you to...</p>	

## Food Preparation & Nutrition



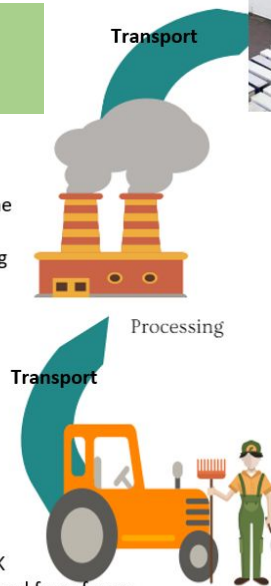
**Food Miles** refers to the distance food has travelled from farm to fork. Food that has travelled further has a higher **carbon footprint**

**Carbon Footprint** refers to the amount Carbon dioxide created and released into the atmosphere at each stage of processing a food.

Every time a light is turned on or a machine is used or car travels or a fridge is used, energy is used. The production of this energy creates pollution, causing CO2 to be released.

This diagram shows the stages of food production where CO2 is created.

- Powering of machines
- Transport of workers to the factory
- Transport of any packaging material



- Farm **might not** be in the UK
- Farmer will drive tractor to and from farm
- May need machinery to process crops
- If rearing livestock (animals), food will need to be transported and shelter may need to be provided



**Food provenance** refers to where the food comes from eg. if referring to meat it is where the animal was reared or crops were grown. To reduce food miles and therefore carbon footprint consumers should buy food from local supplier or within their country.

**Seasonal Foods** are foods that are ready to harvest and eat at certain times of the year eg. Strawberries in the UK in Summer. Seasonal foods are better in nutritional quality, taste and texture and cheaper. Buying seasonal foods reduces carbon footprint as you are using food that is naturally available within your country, rather than importing it from other countries. In the UK many foods are imported as they cannot grow in the UK climate and soil conditions.

**Farmer Markets** are markets that sell local goods from **local** farmers and suppliers. Produce is most likely to be organic, seasonal, sold/stored in less packaging but also fresher and better in quality and nutritional value. Shopping locally will reduce food miles/carbon footprint as it is using local suppliers.

### Warehouse/Distribution Centre



- Powering of machines
- Transport of workers to the warehouse
- Transport of any packaging material
- Storing of food (fridges)
- Machines that help organise or load food

### Transport

- Powering of machines
- Transport of workers to the supermarket
- Storing of food (fridges)
- Lighting the store
- The supermarket could be far away
- The food needs to be stored in correct packaging, meat is mostly packaged in plastic which is made using crude oil (a non renewable resource) and the extraction of this is destructive to the environment



### Retail

- The consumer might live far away from the supermarket
- They could drive to get their food
- They could regularly visit the supermarket rather than planning their shopping/meals
- They could eat unseasonal foods or foods that do not grow in the UK
- They could eat a meat based diet

**Butchers:** Consumers could limit the stages of processing and therefore Carbon Footprint by going to a local

butchers. This would also be supporting the local economy.

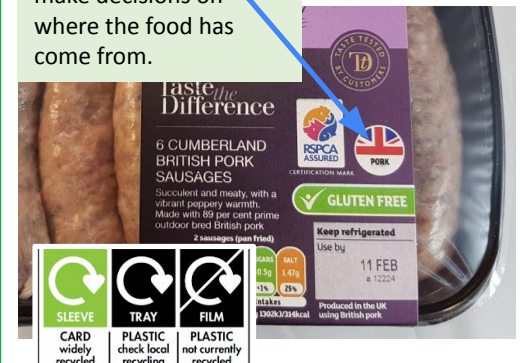


### Plate

Additionally shopping at a farmers market will support the local economy and you will be able to gain professional advice on the produce e.g best ways to prepare/cook or store the produce



**Looking at food labels:** Under EU and UK law all food must show its country of **origin**. This allows consumer to make decisions on where the food has come from.



Recycling logos on packaging also show consumers what parts can be recycled. The more different materials will make it more difficult to recycle, therefore increasing carbon footprint

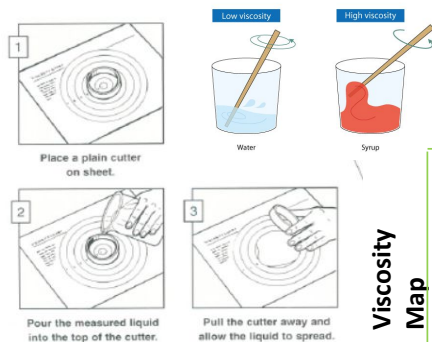
# Evaluating & Testing

Needed in  
NEA 1 & 2

During the **NEA 1** you will be asked to carry out tests relating to the investigation:

Food	Tests
Pastry	Taste, Texture, Appearance, Shortness (Snap and Crumbliness), Flakiness
Sauce	Taste Texture, Appearance, Viscosity, Thickness
Bread	Taste, Texture, Appearance, Height, Crumb Density, Smoothness of Outer surface, Number of Air Bubbles
Cake	Taste, Texture, Appearance, Height, Crumb Density, Smoothness
Biscuit	Taste, Texture, Appearance, Shortness (Snap and Crumbliness)
Cold Pudding*	Taste, Texture (Set), Appearance, Height, Speed of Setting

\*Panna Cotta



The **Viscosity** of a liquid refers to the thickness and the ability to flow. Water for instance has low viscosity whereas honey has a high viscosity. You can do this by using a **viscosity map**.



Testing a **biscuits shortness** could be done by **snapping it in half** and then rating it 1-5. 1 being the easiest to snap, 5 being the most difficult. You could also test how **crumbly** the biscuit is by apply the same weight at the same force and see the number of crumbs created



**Sight:**  
Stringy, firm, dry, heavy, flaky, crumbly, flat, crisp, lumpy, fizzy, fluffy, smooth, hard, mushy, dull, cuboid, sticky, fragile...



**Sound:**  
Crunch, plop, slurp, sizzle, crack, rustle, snap, crackle, pop



**Smell: Fresh**  
Aromatic, spicy, floral, bland, tainted, bitter perfumed, citrus savoury, rotten, sweet,, strong, mild, fragrant, musty, weak, scented



**Taste:** Sweet, cool, bitter, zesty, warm, hot, sour, sharp, rich, bland, rotten, tart, strong, citrus, mild, umami, tangy, salty, savoury, spicy



**Texture:**  
Brittle, rubbery, stodgy, bubbly, gritty, sandy, mushy, tender, soft, firm, flaky, crisp, fluffy, crumbly, lumpy, smooth, hard, sticky, grainy

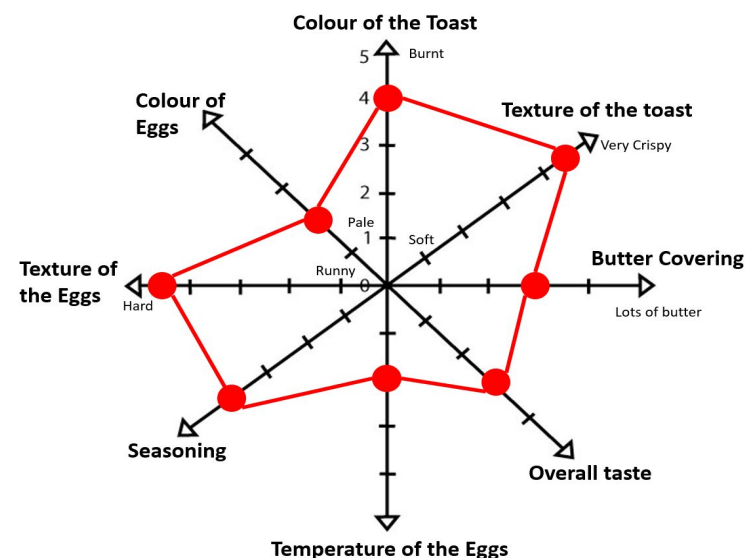
### Sensory Adjectives

Sensory adjectives describe the sensory qualities of a foods. Important during testing & evaluating food

### Evaluation using a Sensory Star Diagram:

After cooking a meal it is important to carry out a sensory evaluation, identifying what was a success and what needs improving. This can be recorded in a sensory star diagram.

To create a Sensory star diagram you can either just rate your food against the 5 senses: Taste, Texture, Smell, Sight and Sound. However to make the evaluation more meaningful it is better to identify what makes a dish successful or desirable. **The below sensory diagram has been completed for Scrambled Egg on Toast:**



The diagram suggests the following:

- The toast was cooked for too long and as a result was crispy and burnt
- The eggs were cooked for too long and as a result hard and possibly rubbery in texture.
- The eggs were very pale in colour, this could be because they were overcooked or milk was added (reducing the yellowy-ness).
- There was a good covering of butter across the toast
- There was a good level of seasoning (salt and pepper)
- The eggs were semi-cold. This may have happened as the eggs were cooked before the toast went in the grill.
- The overall taste was OK, this was most likely as a result of the seasoning and butter on the toast.

## The challenge of resource management - Energy

<p><b>Global distribution</b></p> <p>Energy is required for economic development. It powers factories, machinery, heats and powers our houses and provides fuel for transport. The world gets most of its energy from <b>fossil fuels of oil, coal and gas – 80%</b>. The rest comes from <b>renewables – 17%</b> and <b>nuclear – 3%</b>.</p> <p>Fossil fuels are <b>non-renewable</b> which means they will run out if current use continues. They were formed millions of years ago deep underground. Based on current use we will run out of <b>oil in 40 years, gas in 50 years</b> and finally <b>coal by 2090</b>.</p> <p>Currently the use of energy is unfairly distributed. Average consumption of energy per person in the USA is <b>7,100 kg of oil</b>, in the UK it is 3,000kg whereas in Bangladesh it is only 205 kg.</p> <p>The richest one billion actually consume 50% of the world’s energy, whilst the poorest one billion consume only 4 % of the world’s energy. Energy consumption is increasing as the world becomes developed and demand increases. As NEEs become more industrialised, the demand for energy will increase and patterns of energy trading will change.</p>	<p><b><u>Access to energy supplies is affected by:</u></b></p> <ul style="list-style-type: none"> <li>• Physical factors - <b>fossil fuels</b> were formed millions of years ago. New supplies of fossil fuels are sometimes found, but only in places that have the right <b>geology</b>.</li> <li>• Cost of exploitation and production - <b>wages</b> count towards the overall cost of energy production. This has led to some resources being unprofitable, e.g. the UK has coal supplies, but it is too expensive to exploit them. When the global price of oil increases, drilling becomes profitable in many harder to reach locations</li> <li>• Technology - improvements in technology can open up new opportunities for energy use. <b>Fracking</b> is the process of extracting shale gas. The USA now carries out fracking, which has increased their energy supplies. Wind turbines and solar panels are becoming more efficient and so these are being used in more countries.</li> <li>• Political factors - war can destroy energy resources or make them difficult to exploit. <b>Corruption</b> can mean that money is spent on things other than energy projects.</li> </ul>
<p><b>Food</b></p> <p>The average calorie consumption in a country such as the UK is 3,200 per person, while in a country like Somalia it is 1,580 per person.</p> <p>The need for food is obvious. ‘Calories in’ are needed to work and enjoy ourselves and affect our health. The World Health Organisation suggests that we need 2,000-2,400 calories per day to be healthy. Over 1 billion people in the world fall below this level and are described as malnourished. A further 2 billion people suffer from undernutrition (malnutrition) – a poorly balanced diet lacking in minerals and vitamins. In more developed countries, obesity is an increasing problem.</p>	<p><b><u>Water</u></b></p> <p>This is the fundamental resource for all life on Earth. <b>71%</b> of the Earth’s surface is covered in water, but most of it is unusable for human drinking. Only <b>2.5%</b> of it is freshwater in rivers and lakes, ice and deep in the ground and only <b>1%</b> of that is accessible to humans for all our uses. More than half of the world's water supply is contained in just <b>nine countries</b>.</p> <p>Currently, <b>780 million</b> people lack access to clean, safe drinking water. However, <b>consumption</b> is vastly different across the globe.</p> <p>Many countries may have water, but not the means to access it (economic water scarcity) whilst other countries may not have water due to physical conditions such as climate (physical water scarcity)</p>



### Issues associated with energy exploitation

There are economic and environmental issues that are associated with the **exploitation** of energy sources:

#### Economic

Generating electricity costs a lot of money. There are initial costs, such as building power stations, dams and wind farms. There are also maintenance and running costs, such as buying fuel, repairing damage to structures and disposing of **waste products**. The government must balance these costs with other important things that the country must buy. They must also decide whether to invest in **non-renewable** or renewable options.

#### Environmental

Generating electricity has many environmental issues:

- Fossil fuel powered stations create **emissions**, noise from trains transporting coal, and waste products like ash. They have also been linked to high levels of **radiation**.
- The uranium used in nuclear power plants is highly **radioactive** and the waste products have to be kept away from people indefinitely.
- Renewable energies like wind and solar power can be considered **visual pollution**. Tidal power and HEP dams may affect **marine** ecosystems.

Source BBC Bitesize

### Renewable Energy & Energy Conservation

The potential to generate **renewable energy** is determined by a country's location. Islands have the potential for **wave power** and **tidal power**, windy places can generate **wind power**, sunny countries can generate **solar power**, wet places with steep relief can generate **hydroelectric power** (HEP) and countries close to plate boundaries can generate **geothermal power**.

**Biomass** - this is recently-formed material derived from living things, e.g. chicken droppings. '**Energy from waste' plants** burn biomass and non-recyclable rubbish to generate electricity. The UK has many 'energy from waste' plants, e.g. Allington Quarry in Maidstone, Kent.

**Hydroelectric power** (HEP) - HEP is generated when river water is trapped behind a **dam** and used to turn **turbines**. The UK generates 1.5% of its electricity this way. Most suitable locations for dam building have already been used.

**Wave power** and **tidal power** - the UK is an island nation, yet it generates very little energy using the sea. Wave energy harnesses the power of small movements on the surface of the sea. The technology is new and currently expensive. Tidal energy harnesses larger movements of the tides. There are plans for **tidal lagoons** to be built in the UK.

**Geothermal power** - this uses heat within the Earth to generate electricity. This is easier where geothermal heat is more accessible, e.g. Iceland. There are few suitable locations so geothermal energy is rare in many countries. **Ground source heat pumps** are a similar idea, but they use the heat from the Sun that is stored within the surface of the Earth.

**Solar power** - **Solar panels** can be fitted onto buildings or within fields. They turn sunlight into electricity. New technology is making solar panels able to generate electricity on cloudy days, which would be good for the UK.

**Wind power** - wind turbines convert air movements into electricity. In the UK wind speeds are consistent and so this is a good way to generate electricity. The UK generates more wind energy using turbines on the land (onshore). As an island nation, the UK could build more turbines in the sea (offshore) though these are more expensive than onshore turbines.

## Fieldwork Stratford

<p><b><u>Why was this location chosen?</u></b></p> <ul style="list-style-type: none"> <li>• It was <b>safe</b> as the sites had safe crossing points and pavements were wide enough to stand on to complete field work.</li> <li>• It was <b>easily accessible</b> in the time frame, we were able to visit three different areas within the area.</li> <li>• There were a range of survey points in the area to get a bigger range of data.</li> </ul>	<p><b><u>Justify why a risk assessment was carried out</u></b></p> <ul style="list-style-type: none"> <li>• To mitigate and avoid the risks of danger for example wearing suitable clothing for the weather so that students did not get cold or ill.</li> <li>• To reduce the risks of accidents for example ensuring that we used road crossing to minimise the risk of being involved in a traffic accident.</li> </ul>	<p><b><u>Why the sampling techniques?</u></b></p> <ul style="list-style-type: none"> <li>• <b>Stratified sampling</b> was used to identify four contrasting areas within Stratford where the fieldwork techniques were carried out in each area. This was to compare how successful regeneration had been overall in Stratford.</li> <li>• <b>Random sampling</b> was used to carry out the Vox Pop (voice of the population) to reduce bias as was the location of the pedestrian count.</li> <li>• <b>Systematic sampling</b> was used to the number and type of buildings over a 100m transect.</li> </ul>
<p><b><u>Justify the data collection techniques</u></b></p> <ul style="list-style-type: none"> <li>• <b>Land Use Mapping</b> – every building over a 100m transect was recorded using RICPOTS. This was to see if regeneration had been successful there should be a variety of businesses and services to cater for the needs of the area along with a range of residential buildings, (rather than the derelict factories and polluted land after the industry closed).</li> <li>• <b>Vox Pop</b> – 5 people were asked at each location what they thought of Stratford now and 10 years ago. If the current view point was more positive it would show that regeneration was successful as the image of the area had changed and improved.</li> <li>• <b>EQA</b> – at each location the area was rated based on the environment and facilities on a scale of -3 to +3 where +3 is a positive opinion. Factors such as the amount of litter and street furniture were rated, this would show that the more positive the score the better the improvement of the area from regeneration so the more successful it is. If the environment is cleaner, regeneration has been successful.</li> <li>• <b>Secondary:</b> Open coding Newspaper articles. A range of newspaper articles was collected and the positive comments about regeneration highlighted in one colour and negative in another. The more positive in total the more successful the</li> </ul>		

**Evaluation of the data presentation**

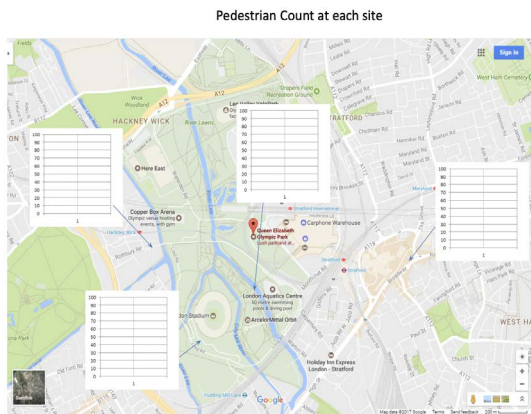
- A located bar graph was used to show the pedestrian count, this enabled clear patterns to be located and separate graphs were used as it was discrete data from different locations so a line graph was not suitable.
- The land use mapping was presented as a table which allowed data to be compared quickly, however it did not show the distribution, a better method would have been to use goad mapping showing the exact location and type of each building which would allow for easier interpretation as we could see clusters of the same types of buildings on a map.
- A word cloud was used to show the results of the Vox Pop which visually showed the more frequently used words, it was difficult to compare both questions easily due to the lack of data.

**To what extent did your results enable you to reach a valid conclusion?**

- To a **great extent** as all of the results from the 4 techniques supported the answer. The EQA, land use mapping and vox pop show that the urban area had undergone significant regeneration and that the area had improved both economically and environmentally.
- **However**, it was hard to identify all of the buildings/land uses and so the accuracy may have been limited. Also as we used stratified sampling to choose the locations we may not have a full picture of the regeneration of the area as a whole.
- **Ultimately**, however, there the enquiry was successful because the key question was answered with a valid conclusion using a large reliable data set.

**How might improvements to your data collection methods improve the accuracy of your conclusion?**

- A larger sample size for vox pop and land use mapping would have given more data and a bigger sample set to draw conclusions.
- Repeated the tests on different days and timings to see if the pedestrian count was different.
- Additional secondary data to show the changes in average wages will have shown if regeneration was successful.



**Data Collection Stratford: Has the regeneration had a positive impact on Stratford?**

**Site 1: Stratford high street**

General description of area:

Factor	+3	+2	+1	0	-1	-2	-3	Factor
No litter								Lots of litter
Well maintained space								Space is not maintained
Lots of street furniture								No street furniture

Total score for site:

## Fieldwork Overstrand

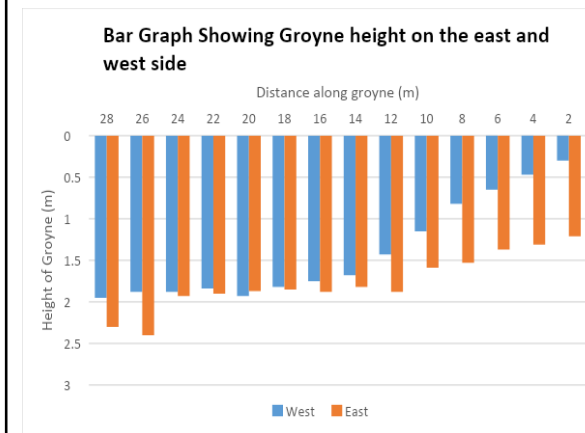
<p><b><u>Why was this location chosen?</u></b></p> <ul style="list-style-type: none"> <li>• It was safe as at the sites chosen we could survey the coastal management away from from the sea and any unstable cliffs and there were safe crossing point/toilet stops</li> <li>• It was easily accessible in the time frame, we were able to visit three different areas within the area.</li> </ul>	<p><b><u>Justify why a risk assessment was carried out</u></b></p> <ul style="list-style-type: none"> <li>• To mitigate and avoid the risks of danger for example checking the weather forecast and wearing suitable clothing for the weather so that students did not get cold or ill e.g. hat, gloves</li> <li>• To reduce the risks of accidents for example ensuring that we used road crossing to minimise the risk of being involved in a traffic accident.</li> </ul>	<p><b><u>Why the sampling techniques?</u></b></p> <ul style="list-style-type: none"> <li>• Stratified sampling was used to identify 2 contrasting areas within Overstrand . This was to compare how successful coastal management was in Overstrand.</li> <li>• Random sampling used to chose the groyne to sample</li> <li>• Systematic sampling was used to measure the groyne profile. One groyne was measured and along the groyne we took measurements every 2m</li> </ul>
<p><b><u>Justify the data collection techniques</u></b></p> <p><b><u>Primary:</u></b></p> <ul style="list-style-type: none"> <li>• <b>EQA</b> – at each location the area was rated based on different aspects of coastal management on a scale of -5 to +5 where +5 was a positive opinion. 8 factors such as aesthetics and cost were looked at and then a total score was calculated. The more positive the score the more successful the coastal management is.</li> <li>• <b>Field sketch</b> - Each location was sketched. Each sketch was annotated in detail about the processes, landforms and geography that was evident. This was used to analyse whether coastal management was effective. If, for example, sediment was evident on the area being assessed, deposition was clearly a process as work which shows that erosion was reduced and as a result coastal management is effective.</li> <li>• <b>Groyne Profile</b>– This is to see how much sand had built up on either side of the groyne. If there is more sediment on one side of the groyne this means that LSD is taking place but being reduced/slowed by the groyne showing it is effective.</li> <li>• <b>LSD test</b> - to see what speed &amp; direction &amp; LSD is occurring. If we can see that this process is occurring and sediment is still present we know the CM is effective.</li> </ul> <p><b><u>Secondary:</u></b></p> <ul style="list-style-type: none"> <li>• <b>Data collected by UEA</b> – they found that in before CM there was 80m lost to erosion and after CM over a 10yr period there was only 1cm lost</li> <li>• <b>News article</b> – News articles were found online and analysed. If the news article portrayed erosion as an issue coastal management was not effective.</li> </ul>		
<p><b><u>To what extent did your results enable you to reach a valid conclusion?</u></b></p> <ul style="list-style-type: none"> <li>• To a great extent most of the results from the techniques used supported the hypothesis. It was evident that processes were occurring on the coast - the LSD test showed that there was LSD occurring from East to West and the Wave count showed that there were destructive waves. This meant that as there were processes and still sediment present the coastal management was effective. This was supported by our field sketch showing that sediment was present on the beach all the way along the beach. The groyne profile also shows that there was a build up on the western side of the groyne showing that LSD was being slowed/reduced.</li> </ul>	<p><b><u>Evaluation of the data presentation</u></b></p> <ul style="list-style-type: none"> <li>• A radar graph was used to represent our EQA results, this enabled a clear visual comparison between the different CM techniques. It was used because different variables could be added to this rather than making separate graphs. This was discrete data so a line graph was not suitable.</li> </ul>	

- The secondary data shows that before the CM there was 80m of the cliff lost to erosion and weathering. However, when they put CM in place, over a 10yr period there was only 1cm lost.
- However**, we did only collect a small amount of data and only surveyed one groyne meaning that our results are not as reliable as we would have hoped.
- Ultimately, however, there the enquiry was successful because the key question was answered with a valid conclusion. This is known because all data collected supported each other and no data is contradictory.

**How might improvements to your data collection methods improve the accuracy of your conclusion?**

- Collect more data
- Go on multiple days
- Avoid human error
- Compare more areas this would mean more accurate and reliable and as a result the conclusions would be more valid.

- Located bar chart – good to compare locational data collected for bipolar as can see specific location. Can also present multiple variables. However sometimes it is unclear and you cannot see the location underneath.
- A pie chart was used to present the questionnaire results. This was appropriate because responses were manipulated into percentages and a pie chart can be made proportional to the total quantity it represents. It can also summarise a large data set in visual form. However actual data was not shown and if segments are of similar size it is hard to see the difference.



**KS4 History - Weimar and Nazi Germany**

**Summary:** From the fall of the Kaiser in 1918, the brutal outcome of World War One for Germany and the establishment of the Weimar Republic rose a new Germany that experienced unprecedented political and economic challenges from its first years. From the ruins of the Great Depression rose Adolf Hitler, utilising the instability of the country to manoeuvre his way into power. The next six years of the Nazi regime were a time of vast change in Germany, underpinned by propaganda, fear and a police state. This unit uses sources and interpretations to study the establishment and collapse of the Weimar and Hitler's rise to and maintenance of power.

**Key concepts - Key Topic One - The Weimar Republic 1918-29**

1	<p><b>Origins of the Republic</b> Near end of WWI G had lost 2m soldiers, 4m wounded, massive debt and facing food shortages. Kaiser Wilhelm (emperor) had lost control of country - strikes and riots. 9/11/18 Kaiser abdicates (stood down), country becomes a republic. Ebert (leader of the SDP) appointed head of govt until a new constitution (rules for the country) written. 11/11/18 armistice, G surrenders. Ebert tries to bring stability: make G people confident in the Republic, get support of army, trade unions and business. But extreme political parties not happy. January 1919 elections for National Assembly. Gather in city of Weimar to produce Constitution of the Weimar Republic. <u><b>The Weimar Constitution</b></u> <b>Strengths</b> - V democratic: over 21s and women allowed to vote Proportional Representation – small parties (with +600,000 votes) get represented in parliament Power divided so no individual or group could have too much power: voters elected President; President chose Chancellor; Chancellor proposed laws, which had to be agreed by Reichstag (Parliament) <b>Weaknesses</b> Proportional Representation meant lots of coalition govts (small parties agreeing to work together, but often arguments, so govt collapsed. 9 govts for 1919-23) Article 48: in case of a crisis, Chancellor could pass any law without the agreement of Reichstag Several larger parties elected to Reichstag (nationalist an</p>
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**Key developments**

1918	<b>Kaiser abdicates after losing support of the army. The new government agrees to the armistice and they become known as the November criminals.</b>
1919	<b>The Weimar Constitution established, the Spartacist Uprising and the signing of the Treaty of Versailles</b>
1920	The Kapp Putsch – a right-wing attempt to overthrow the government
1923	The occupation of the Ruhr causing <b>hyperinflation</b> . The Nazis organise the <b>Munich Putsch</b> . <b>Stresemann</b> becomes Chancellor of Germany
1924	Dawes Plan were agreed
1925	The Locarno Pact
1926	The Bamberg conference and Germany was admitted into the League of Nations
1928	<b>The Kellogg-Briand Pact</b>
1929	<b>The Young Plan was agreed.</b>  <b>The Wall Street Crash resulted in the Great Depression.</b>

**Key words**

1	<b>Kaiser</b>	Emperor (King) of Germany
2	<b>Abdicate</b>	Where a monarch gives up the throne.
4	<b>Republic</b>	A country that has a president
5	<b>Constitution</b>	A list of rules on how a country should be governed.
6	<b>Weimar</b>	A city in Germany where the republic was established as there was rebellion in Berlin.
7	<b>Armistice</b>	A truce to agree to stop fighting.
8	<b>Treaty</b>	A legal contract that is agreed between all countries to stop fighting.
9	<b>Putsch</b>	A rebellion or uprising against the government
10	<b>Hyperinflation</b>	The cost of living dramatically rises caused by the government printing additional banknotes.
12	<b>Proportional Representation</b>	A political party is awarded seats based on the percentage of the vote.
13	<b>Reichstag</b>	The German parliament building.
14	<b>Article 48</b>	The president could suspend the constitution in an emergency and rule the country directly.

HISTORY

Key concepts - Key Topic One - The Weimar Republic 1918-29	
2	<p><b>Challenges to the Republic 1919 - 23</b></p> <p><b><u>Early challenges (1919-23):</u></b>                      Weimar Republic always linked to surrender of WWI (this was unavoidable, but unpopular with German people)                      Forced to sign Treaty of Versailles (peace terms) in June 1919; imposed by GB, Fr and US. G had no say.                      War guilt: G had to accept blame for the war                      Reparations: G had to pay £6.6bn to allies                      Lost overseas colonies and pieces of land including Alsace Lorraine and Saar coalfields (to Fr), and Posen (to Poland). G lost 13% of land and 10% of population                      G forced to reduce army to 100,000 troops, weakened navy, no air force.                      Critics of the Treaty said that G had never actually lost the war – it was “stab in the back” of G by politicians who signed the Treaty. Reparations weakened G economy, and made politicians of seem weak.</p> <p><b><u>Spartacist Revolt 1919</u></b> Spartacists (communists led by Rosa Luxemburg) called a general strike: +100,000 workers took to the streets, seized govt newspaper and telegraph offices. Weakened army could not stop the revolt, so Ebert ordered the establishment of Freikorps (units of former soldiers, +250,000); Freikorps crushed Spartacists, Luxemburg killed.</p> <p><b><u>Kapp Putsch By 1920</u></b> Ebert struggling to control Freikorps. Led by Nationalist politician Wolfgang Kapp they took over Berlin. Govt fled to Weimar and encouraged people to go on strike, which stopped the uprising, but made the govt look weak</p> <p><b><u>French invasion of the Ruhr 1923:</u></b> G struggled to pay reparations, as punishment Fr sent troops to Ruhr (industrial region of G). This massively weakened G economy as Ruhr contained 80% of G iron, coal and steel. Resulted in more debt for G, higher unemployment, shortages of goods. Shortages meant that prices went up, so govt printed more money. This led to hyperinflation.  <i>Price of bread:</i> 1919 = 1 mark; 1923 200,000bn marks. Hyperinflation meant normal life became much more difficult: even worse shortages, people with savings lost everything (though it was good news for people who had loans)</p>
3	<p><b>Recovery 1924 – 29:</b></p> <p><b><u>Stresemann appointed Chancellor</u></b> (he soon resigned from this job) and Foreign Secretary. He bought stability to the Weimar Republic. By 1928 his policies meant that support for moderate parties increased, and extreme parties decreased.</p> <p><b><u>Economic</u></b> Set up the Rentenmark (Nov 1923), a new currency, which meant that the economy could begin working again (factories back in business, people back in work)                      Dawes Plan (1924): deal to help G pay reparations: loan of £25 bn from US to get G economy going, reparation bill temporarily reduced to £50m per year. As a result Fr left the Ruhr; G industry returned to pre-WWI levels, increased employment, trade, tax paid to govt. But meant G was reliant on US loans, and extreme parties angry that G agreed to continue paying reparations.                      Young Plan (1929) reduced total reparations to £2bn, paid over 59 years. Made G people more confident in stability of Weimar, allowed govt to lower taxes for working people.</p> <p><b><u>Foreign relations</u></b> Locarno Pact (1925) G agreed treaty with GB, Fr, Italy, Belgium (not imposed like Treaty of Versailles). Agreed peaceful border with Fr, Rhineland (region between G and Fr) demilitarised (no troops allowed there). 1926 G finally allowed to join the League of Nations (had been excluded since 1919)                      Kellogg-Briand Pact (1928): G + 61 other countries signed agreement that they would not resort to war to settle disputes. Showed that G was now included among the main world powers and Weimar Republic respected</p>
4	<p><b>Changes in society</b></p> <p><b><u>Living standards:</u></b> decreased during economic crises of 1918-23, but improved after 1923.</p> <p><b><u>Unemployment fell,</u></b> working hours reduced, wages increased; new homes built, war veterans given support.</p> <p><b><u>Women</u></b> given right to vote, more women in work, but with lower wages than men in lower status jobs. Young women more independent. Society divided, many thought these “new women” threatened traditional values and upset economy.</p> <p><b><u>Big cultural changes in Weimar.</u></b> New freedoms and economic recovery resulted in new styles of art, cinema and architecture.</p>

Key concepts - Key Topic Two - Hitler's rise to power, 1919-33	
1	<p><b>Early years of the Nazi Party 1919 – 22:</b>  <u><b>Nazi Party (1920-22)</b></u> Hitler recovering from gas poisoning 1919, sent to spy on tiny German Workers Party (DAP) led by Drexler. Hitler joined the party and within two years had taken over and changed it into the Nazi Party.</p> <p><u><b>1920</b></u> wrote the party's 25 Point Programme. Mainly because of Hitler's personal appeal (v passionate, persuasive orator) by end of 1920 party had 2,000 members. Changed name to National Socialist German Workers Party (NSDAP) – Nazi for short; began using swastika logo; set up party newspaper to spread ideas.</p> <p><u><b>July 1921</b></u> Hitler became party leader. He appointed key supporters Hess, Goering, Streicher and Rohm; also worked closely with General Ludendorff, leader of G army in WWI. SA formed in 1921, led by Rohm: former soldiers hired as a private army. Known as Brownshirts, paraded on streets as a show of force, controlled crowds and opposition, often violently. Also disrupted opposition party meetings. <u><b>1922</b></u> Hitler took complete control of NSDAP, no more elections for leader, Hitler dictated all policy. By 1923 party membership +50,000.</p>

Key developments	
1919	<b>The German Workers' Party (DAP) is founded by Anton Drexler in Munich. Hitler was recovering a gas attack in Munich, once discharged he began to attend DAP meetings. By September Hitler joins the party</b>
1920	<b>Hitler and Drexler write the 25 Point Programme.</b>
1921	Hitler replaces Drexler as the leader and shapes the party into the NSDAP or the Nazi Party
1923	The Nazis organise the <b>Munich Putsch</b> . Hitler is imprisoned and writes <i>Mein Kampf</i> .
1926	The Bamberg Conference
1929	The Wall Street Crash
1930	The Nazis won 107 of 577 seats in Reichstag
1932	<b>Presidential elections – March, Hitler wins 11 million votes and then a second election in April he wins 13 million. However, Hindenburg wins the election with 19 million votes (53%).</b>
1933	<b>The Nazis become the largest party in the Reichstag, eventually Hitler is made the Chancellor</b>

Key words		
1	DAP	German Workers' Party
2	NSDAP	The rename of the DAP. National Socialist German Workers' Party or more commonly known the Nazi Party.
4	25 Point Programme	These were the core policies and beliefs of the Nazi Party.
5	Chancellor	Head of the government, the German equivalent to Prime Minister.
6	President	Head of State
7	Election	A vote for people to decide who to run the country.
8	SA	Stormtroopers created in August 1921 from ex-soldiers and wore brownshirts. They were used to control crowds and violently attack opposition to the Nazi Party. Loyal to Rohm, Hitler did not quite trust them.
9	SS	The protection Squad. Created in 1925 to act as personal bodyguards to Hitler.
10	Putsch	A rebellion or uprising against the government
12	Mein Kampf	Translates as My Struggle. A book written by Hitler where he shares his political views.
13	Proportional Representation	A political party is awarded seats based on the percentage of the vote.
14	Reichstag	The German parliament building.



<b>Key concepts - Key Topic Two - Hitler's rise to power, 1919-33</b>	
<b>2</b>	<p><b>Munich Putsch and the Lean Years 1923 - 29</b></p> <p>By 1923 the Nazi Party had 50,000 members and many were unhappy with the Weimar government. In 1923 the French also occupied the Ruhr and contributed to the hyperinflation.</p> <p><b><u>Munich Putsch (Nov 1923) Causes:</u></b> "stab in the back" anger about Versailles / Weimar politicians; NSDAP strong support in Munich; copying Mussolini's fascist March in Rome; Hyperinflation; Ruhr invasion. German people v angry, so Hitler made a bid for power.</p> <p><b><u>8 Nov 1923,</u></b> meeting of Bavarian Govt, led by Von Kahr, in Munich beer hall. Hitler and 600 SA troops burst in, announced he was taking over the state of Bavaria and would march to Berlin to overthrow the Weimar govt. Rohm and SA captured local police and army HQs, but Ludendorff released the 3 Bavarian leaders. Became clear that local politicians and people did not support the uprising.</p> <p><b><u>Shooting in town square:</u></b> 14 Nazi supporters and 4 policemen killed, Hitler wounded. Hitler and Nazi leaders arrested.</p> <p><b><u>Consequences:</u></b> Hitler and Nazi leaders found guilty of treason, sent to prison. NSDAP banned (until 1925); Hitler realised needed a new strategy – violent uprising failed, so needed to win power through election; Wrote Mein Kampf – book of his political ideas – in Landsberg Prison; gained lots of publicity from trial.</p> <p><b><u>Lean Years 1924-28</u></b> In prison Hitler wrote Mein Kampf: Aryan race destined to rule the world; Jewish conspiracy to undermine Aryans by inter-marriage and taking over German business and industry; Nationalism (capturing Lebensraum "living space" for German people in East); totalitarianism – strong leader better than weak democracy; traditional German values.</p> <p><b><u>Hitler released 1924</u></b> after 9 months in prison, relaunched NSDAP: better organised party that could win political power through election; HQ in Munich, 35 local party organisations around the country.</p> <ul style="list-style-type: none"> <li>- SA continued to grow (400,000 members by 1930) – but many were thuggish, difficult to control, and more loyal to Rohm than Hitler. Hitler set up the SS, elite personal bodyguard, led by Himmler. 3,000 members by 1930.</li> <li>- NSDAP far better organised and had 100,000 members by 1929, but limited support because of the success of Stresemann in making Weimar more stable. Recovery of the economy meant NSDAP had no support from the working classes.</li> </ul>

<b>3</b>	<p><b>Growth of Nazi Party 1929-32</b></p> <p><b><u>October 1929</u></b> Stresemann died and Wall Street Crash led to Great Depression. Stock market crash in the USA led to the collapse of the economy in Germany. Banks demanded loans back, so factories and farms had to close and people lost jobs.</p> <p><b><u>Jan 1933</u></b> = 6.1m unemployed including 40% of factory workers, 50% of 16-30 year olds. People lost savings, govt increased taxes, no money to pay unemployment benefits, mass homelessness. <b><u>Chancellor Bruning</u></b> failed to deal with unemployment crisis; moderate parties could not agree so Bruning had to use Article 48 to pass emergency laws – he lost control, so forced to resign May 1932. As life became harder, growing support for KPD (communist party) among workers; and NSDAP among middle and upper classes who feared communism.</p> <p><b><u>Support for Nazi Party</u></b> Appeal of Hitler as a strong leader who could restore law and order and scrap Treaty of Versailles (he featured on propaganda posters and travelled extensively to speak at rallies); financial support from wealthy businessmen; uniformed SA made Nazis looked well organised and in control and also attacked opposition politicians, supporters, meetings in violent clashes. Particular policies to appeal to different groups in society: Big business (protection from communism); working class (traditional values, stronger Germany, promise of "work and bread"); middle class (recovery from Great Depression where they had lost savings, anti-communist); farmers (communists would seize their land); young people (Hitler's personal appeal, jobs). As well as appealing to different groups, another strand of Nazi message was appealing to united nation</p>
<b>4</b>	<p><b>How Hitler became Chancellor 1932 – 33</b></p> <p><b><u>1930 NSDAP 107 seats in Reichstag (18% of votes).</u></b> Moderate SDP 25%. Hindenburg's term as President ended. He stood for election again aged 84, beat Hitler by 18m votes to 11m; but nobody won 50% of votes, so another election later that year; Hindenburg beat Hitler again 19m votes to 13m.</p> <p>Chancellor Bruning banned the SA and SS and announced plan to buy up land from big landowners to house unemployed. This united right wing groups against Bruning; without support of the Reichstag or President Hindenburg he was forced to resign.</p> <p><b><u>After Bruning's resignation</u></b> Hindenburg made <b>Von Papen</b> Chancellor, with Nazis supporting a coalition of right wing supporters. Hitler becomes part of govt of Germany. 1932 Reichstag election, lots of violence, +200 killed. NSDAP won 230 seats, 38%, biggest party.</p> <p><b><u>Hitler demanded Hindenburg sack Von Papen</u></b> and appoint him as Chancellor. Hindenburg hated Hitler, assumed Nazi support would drop so refused to make him Chancellor. But Von Schleicher persuaded Hindenburg that he must force von Papen to resign or face civil war.</p> <p><b><u>Von Schleicher appointed Chancellor Dec 1932,</u></b> but with no public support, and no majority in Reichstag he was unable to govern. Von Papen persuaded Hindenburg to make Hitler Chancellor with Von Papen as vice, saying that he would be able to control him.</p> <p><b><u>Jan 1933 Hitler appointed chancellor.</u></b></p>

Key concepts - Key Topic Three - Nazi Control and dictatorship, 1933-39		Key developments		Key words		
1	<p><b>The creation of a dictatorship 1933-4</b>  <u>Reichstag Fire 30/1/33</u> Hitler = Chancellor, but limited by Weimar Constitution power of President Hindenburg.  <u>27/2/33 Reichstag building destroyed by fire.</u> Dutch Communist Van der Lubbe caught (possibly framed by Goering?). VdL claimed he was working alone, but Hitler said it was a communist plot – used this as excuse to attack communists.  <u>Triggered Article 40</u> (state of emergency) 4,000 Communists arrested immediately. Called election and used new powers to ignore SA violence. Nazis won more Reichstag seats, and took 81 Communist seats = 2/3 majority required to change constitution.  <u>Enabling Act New laws introduced in March 1933</u> to take power away from Reichstag. Chancellor’s cabinet (led by Hitler) could propose new laws, these laws did not need to be approved by Reichstag. SS Stormtroopers intimidated opponents, vote passed by Reichstag = end of democratic rule. <u>Removing opposition</u> Trade Unions - (workers’ organisations banned, officials arrested, strikes made illegal. Other political parties offices attacked, newspapers banned, money confiscated. July 1933 all parties except NSDAP (Nazi) made illegal. Local governments (parliament in each region) banned Jan 1934 – regions to be run by governors appointed by Hitler. <u>Night of the Long Knives</u> Hitler thought that Rohm (leader of the SA) was a threat to his power. 3m SA stormtroopers (of whom 60% unemployed, so angry) were loyal to Rohm – more troops than the army. Rohm also criticised Hitler’s close links with rich industrialists and army generals. Himmler and Heydrich (leaders of the SS) wanted to increase power of SS by weakening SA. 30 June 1934 Hitler arranged a meeting of Rohm and 100 SA leaders. They were arrested and shot. Some Germans opposed this violence, but most resented violence of the SA and convinced by Goering that Rohm had been planning a revolution  <u>2 August 1934 President Hindenburg dies.</u> Hitler declared himself Fuhrer, with combined powers of Chancellor and President. All soldiers had to swear oath of loyalty to him. Public vote: lots of Nazi propaganda 90% voted in favour of Hitler as Chancellor, end of Weimar Republic. The Third Reich had begun.</p>	1933 (January)	Hitler is appointed chancellor	1	Decree for the Protection of the People and State	Gave Hitler the power to imprison political opponents and ban communist newspapers.
		1933 (February)	Reichstag Fire – communists blamed	2	Enabling Act	Gave Hitler and the Reich Cabinet to propose new laws and could overrule the Weimar Constitution.
		1933 (March)	Hitler issued the Decree for the Protection of the People and State before the March election. The Enabling Act was passed shortly after the election. It was renewed	4	25 Point Programme	These were the core policies and beliefs of the Nazi Party.
		1933 (May)	Trade Unions were made illegal. The Social Democrats and the Communist Party offices were destroyed. 20,000 books written by Jews, communists and anti-Nazi authors were publicly burned.	5	Fuhrer	The Supreme Leader, combination of the powers of president and chancellor.
		1933 (July)	All other political parties were made illegal. The Concordat was agreed with the Catholic Church	6	Trade Unions	Look after the rights of workers in the workplace
		1934 (January)	The 18 Lander Parliaments were abolished.	7	Night of the Long Knives	Ernst Rohm and the SA were becoming a threat to Hitler. The SS was used to remove them and
		1934 (June)	The Night of the Long Knives	8	SA	Stormtroopers created in August 1921 from ex-soldiers and wore brownshirts. They were used to control crowds and violently attack opposition to the Nazi Party. Loyal to Rohm, Hitler did not quite trust them.
		1934 (August)	Death of President Hindenburg, Hitler combines the office of president with that of chancellor and calls himself Fuhrer. The army had to take a personal oath of loyalty to Hitler.	9	SS	The protection Squad. Created in 1925 to act as personal bodyguards to Hitler.
		1936	A unified police and security force created made up of the SS, SD and the Gestapo. The creation of the Reich Church. The Berlin Olympics. Removal of 12,000 paintings and sculptures	10	Police State	The use of the police and the secret police to control the people
				12	SD	The Security Services
				13	Gestapo	The secret police, plain clothed.
				14	Concentration Camps	Used to imprison any opposition to Nazi rule.

Key concepts - Key Topic Three - Nazi Control and dictatorship, 1933-39

2	<p><b><u>Police State Control:</u></b> Police were controlled by central and local govt, so Hitler set up his own police / security forces run by Nazi party to keep control. SS originally run by Himmler with 240 men = Hitler's personal body guar. During 1930s expanded to 240,000, in charge of all police and security forces. SS did not have to act within the law. SS led by Heydrich, kept information about everyone suspected of opposing Nazis Gestapo (secret police) led by Heydrich from 1936. Identified any opposition; spied on people and tapped phones; used torture to gain confessions; dawn raids; sent people to concentration camps. Only 30,000 Gestapo policing a population of 80m, but used fear to control people. By 1939 150,000 people in concentration camps: political opponents, minority groups (eg Jews), undesirables (eg homosexuals). Dachau was first, opened in 1933.</p> <p><b><u>Legal system:</u></b> all judges had to support Nazi ideas or they were removed; Judges decide innocence/guilt, not jury. 1930-32 8 people sentenced to death for political crimes; 1934-39 534.</p> <p><b><u>Religion:</u></b> At first Hitler tried to get Christian churches to work with the Nazis and support them, but this failed. Catholics were loyal to Pope not Hitler. July 1933 Concordat with the Pope, Hitler agreed that Catholics could worship freely and run Catholic schools in return for priests swearing loyalty to Nazi Party. But he did not keep the promise: Priests were arrested and sent to concentration camps, Catholic schools closed. Some Protestants were glad that Hitler had saved Germany from anti-Christian communists. Protestant churches which wanted to work with Nazis combined to form Reich Church: could carry on preaching, some displayed Swastika in churches. But some Ports opposed, and even openly criticised Nazis: Martin Niemoller.</p> <p><b><u>Germany was becoming a totalitarian state:</u></b> Hitler controlled Reichstag, Nazi Party, army, police, legal system, church.</p>
3	<p><b><u>Controlling attitudes</u></b> Joseph Goebbels was responsible for Nazi propaganda (newspapers, posters, radio, film), to control the attitudes of the German people. Newspapers which opposed Nazis were closed (1,600 in 1935), those that remained were censored (told by party what they could/not publish). From 1933 all radios were censored and used to broadcast</p> <p><b><u>Nazi propaganda:</u></b> Hitler and other Nazis made regular broadcasts, mass produced radios v cheap (1939 70% of German homes had one), could not pick up foreign radio stations. Goebbels had used mass rallies in election campaigns of 1920/30s. In Third Reich he made these bigger and more frequent. Mass rally held in Nuremberg each year to show strength of Nazi Germany and display national unity – in 1934 +200,000 attended.</p> <p><b><u>Sport</u></b> used to increase Nazi support: stadiums covered in Swastikas, visiting teams had to make Nazi salute (looked like they were showing respect to Nazi state). 1936 Berlin Olympics: built biggest stadium in world, v well organised to show Nazi organisation to the world, Germany won most medals. Nazis opposed modern culture / arts from Weimar era; approved of arts which focused on traditional values (eg family, loyalty and discipline).</p> <p><b><u>Reich Chamber of Culture</u></b> headed by Goebbels made sure that all culture was in line with Nazi ideas, banned anything that disagreed. +12,000 works of art removed from galleries, competitions to encourage Nazi-approved art. Architecture focused on buildings that made Germany look powerful (eg parade ground for Nuremberg Rally) Some types of music banned, eg Jazz seen as the work of black people. Traditional German folk music favoured All books had to be approved by the Chamber of Culture; 2,500 writers banned; millions of books (written by Jews, communists, anti-Nazi authors) were burned Film used to promote Nazi ideas. All film plots had to be approved by Goebbels; Nazi party made its own films – entertainment with political message.</p>
4	<p><b><u>Opposition:</u></b> Hitler and Nazis had high level of support from German people (censorship of alternative ideas, pro-Nazi propaganda, Nazi success eg reducing unemployment). But there were several areas of resistance (refusing the support Nazi ideas) and opposition.</p> <p><b><u>The Church:</u></b> Pastors Emergency League opposed Nazi control, set up Confessing Church (rival to Reich Church). 6,000 priests spoke against Nazis, +800 sent to concentration camps. 400 Catholic priests were also sent to concentration camps. Martin Niemoller opposed Nazi interference in church, repeatedly spoke against them. He was spied on by gestapo, arrested many times for treason.</p> <p><b><u>Youth Opposition:</u></b> Many young people were part of Nazi organisations, but some rebellious groups. <i>Edelweiss Pirates:</i> working class teenagers from cities who opposed Nazi discipline / lack of freedom. Copied American style of clothing, went on hikes, mocked Hitler Youth. <i>Swing Youth:</i> middle class teenagers, played American music, organised illegal dances. Both groups resisted some Nazi expectations, but little opposition (cultural, not political; also small: 2,000 Edelweiss Pirates 8m Hitler Youth in 1939.</p>

Key concepts - Key Topic Four - Life in Nazi Germany, 1933-39	
1	<p><b>Women:</b> Nazis believed women should adopt traditional role of wife and mother: stay at home to care for family; give birth to many children, dress in simple modest way. Used propaganda to change women's behaviour: focus on children, cooking, church Loans to encourage early marriage and women stopping work (loan paid off if had 4 children). Bronze/silver/gold Mothers Cross medal for having 4/5/6 children. Women banned from some professions, school girls trained for motherhood, not work. Nazi policies did result in less women working (so more employment for men), higher birth rate. But as German industry increased, more women were required to work</p>
2	<p><b>Young people</b> Hitler aimed to create the Thousand Year Reich (Nazi state to survive for a very long time), so policies for young people aimed to strengthen Germany and Nazi party now and in future. Hitler thought he could make young people loyal, even if some adults were not. Propaganda designed to make Hitler appear as a father figure to all German children. Nazi youth groups set up in 1920s, but less members than other groups (1932: 600,000 Protestant youth group; 100,000 Nazi youth groups). 1933 all non-Nazi youth groups banned, young people pressured to join Nazi groups; 1939 all German young people (except undesirables) forced to join from age 10</p> <p><b>Hitler Youth:</b> boys aged 6-18 swore loyalty to Hitler; taught about Nazi ideas, German heroes and evil Jews; had to report parents / teachers who were disloyal to Hitler; regular hiking and sports activities to make young people fit and healthy; military training (eg map reading, 1938 1.2m boys taught to use guns); activities to make them loyal and tough.</p> <p><b>League of German Maidens:</b> 10-21 year old girls took part in similar political activities to boys (eg rallies and oath of loyalty), and did some physical activities to build character and strength. But otherwise activities for girls were different: (no military training); trained to cook, iron, sew, prepare for motherhood; taught the importance of only marrying an Aryan man. Nazis took control of education to ensure that young people taught to follow Hitler and be good Nazis. 1933 law passed to allow sacking of any teachers who opposed Nazis; teachers forced to swear oath of loyalty to Hitler; 200,000 given training in teaching Nazi ideas. Swastikas on classroom walls, lesson start/finish with "Heil Hitler" and Nazi salute.</p> <p><b>Changes to school curriculum (what students learned):</b> new subjects eg Race studies; more physical education; girls studied different subjects eg cookery; all textbooks (especially history) had to be approved by Nazis, eg Treaty of Versailles described as "stab in the back" in school books; traditional subjects eg maths changed to promote Nazi ideas (eg maths</p>

Key developments	
1933 (January)	Hitler is appointed chancellor
1933 (February)	Reichstag Fire – communists blamed
1933 (March)	Hitler issued the Decree for the Protection of the People and State before the March election. The Enabling Act was passed shortly after the election. It was renewed
1933 (May)	Trade Unions were made illegal. The Social Democrats and the Communist Party offices were destroyed. 20,000 books written by Jews, communists and anti-Nazi authors were publicly burned.
1933 (July)	All other political parties were made illegal. The Concordat was agreed with the Catholic Church
1934 (January)	The 18 Lander Parliaments were abolished.
1934 (June)	The Night of the Long Knives
1934 (August)	Death of President Hindenburg, Hitler combines the office of president with that of chancellor and calls himself Fuhrer. The army had to take a personal oath of loyalty to Hitler.
1936	A unified police and security force created made up of the SS, SD and the Gestapo. The creation of the Reich Church. The Berlin Olympics. Removal of 12,000 paintings and sculptures

Key words		
1	Decree for the Protection of the People and State	Gave Hitler the power to imprison political opponents and ban communist newspapers.
2	Enabling Act	Gave Hitler and the Reich Cabinet to propose new laws and could overrule the Weimar Constitution.
4	25 Point Programme	These were the core policies and beliefs of the Nazi Party.
5	Fuhrer	The Supreme Leader, combination of the powers of president and chancellor.
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7	Night of the Long Knives	Ernst Rohm and the SA were becoming a threat to Hitler. The SS was used to remove them and
8	SA	Stormtroopers created in August 1921 from ex-soldiers and wore brownshirts. They were used to control crowds and violently attack opposition to the Nazi Party. Loyal to Rohm, Hitler did not quite trust them.
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Key concepts - Key Topic Four - Life in Nazi Germany, 1933-39	
3	<p><b>Employment</b> 1933 25% of labour force (5m people) unemployed; Hitler feared unemployed people may support Communists; also wanted Germany to be more productive. By 1939 unemployment reduced to 0.3m Labour Service (RAD) created jobs for unemployed providing public services (eg fixing roads, planting trees). This was voluntary at first, but compulsory for 6 months for young unemployed from 1935. Organised like the army: uniforms, parades, lived in camps. Pay and working conditions v poor. Autobahn (motorway) project. By 1935 125,000 men employed building motorways. Also public buildings, bridges, sports facilities. This created jobs, also made G economy more successful.</p> <p><b>Rearmament (rebuilding G armed forces):</b> Hitler defied limit on German army from Treaty of Versailles. 1935 military conscription; 1939 1.36m soldiers in German army. Also massive investment in industry to produce weapons and military equipment. Some historians argue that unemployment figures were low because women/Jews stopped from working (but not counted as unemployed), and men forced to do bad jobs working in Labour Service or public works – supported by huge government spending, which could not have continued for long.</p>
4	<p><b>Living Standards</b> Overall wages increased under Nazi rule, but so did prices. Higher earners could afford luxuries (eg number of car owners x3 in 1930s); lower earners struggled to pay for essentials like food. Working hours increased for 43 hours per week in 1933 to 49 hours in 1939. Nazis set up organisations to improve standard of living for workers: Trade unions replaced by Labour Front which protected rights of workers (eg minimum pay, maximum working hours). But hours increased, and workers lost right to negotiate pay. <b>Labour Front</b> focused on the interests of the Nazi state, not workers or business owners. Strength Through Joy (KdF), benefits for workers: cheap leisure/sports events, holidays. 35m workers joined. Volkswagen (people’s car) designed, workers encouraged to pay 5 marks per week to eventually buy a cheap car – though factory started making weapons not cars in 1938. Beauty of Labour campaigned for better facilities for workers.</p>
5	<p><b>Persecution of minorities</b> Nazis believed in Aryan master race, other races inferior. Eugenics: encouraged racially / physically superior people to reproduce; “undesirable” people sterilised (stopped from having children).</p> <p><b>Anti-semitism</b> (anti-Jew) had been common in Europe for centuries, but increased in 1930s G: seen as enemies of Germany; blamed for Treaty of Versailles and economic disasters of 1923 and 1929. Moderate Germans influenced by anti-semitic Nazi propaganda. Slavs (Eastern Europeans) portrayed as subhuman in Nazi propaganda, Nazis threatened to capture Lebensraum (living space) for Germany in the East.</p> <p><b>Other persecuted groups:</b> Roma gypsies seen as threat to racial purity of Aryans. From 1933 they could be sent to concentration camps; 1939 ordered to prepare for deportation (sent away from Germany). Homosexuals accused of lowering moral standards so Nazis passed laws against them. People with disabilities seen as a burden on society. 1933 law forced the mentally ill, alcoholics, deaf and other groups to be sterilised (+400,000 by 1939). +5,000 babies/children with physical disabilities killed.</p>
6	<p><b>Persecution of the Jews</b> 477,000 Jews in Germany in 1933, 1% of population. Nazis used propaganda and education to present Jews as enemies of G and began to change laws (eg banned from certain jobs, some councils provided separate yellow benches for Jews). 1933 boycott of Jewish shops and businesses – SA painted yellow stars on Jewish businesses and stood outside discouraging people from using them.</p> <p><b>Nuremberg Laws (1935):</b> Jews = subjects not citizens, so lost right to vote, have a passport; forced to wear a yellow star; not allowed to marry or have sex with Germans 1938 had to register all possessions (so easier for Nazis to confiscate them) and carry ID cards 9 November 1938: After a young Jew shot and killed a German; Goebbels used this to stir up hatred against Jews in Hannover, then across Germany. Nazis encouraged to attack Jews and their property, police told not to stop these attacks.</p> <p><b>Kristallnacht (1938)</b> SA, Hitler Youth and general public attacked on Kristallnacht (night of broken glass). +110 killed, 191 synagogues and 814 Jewish shops destroyed. Goebbels blamed Jews for starting the trouble, fined 1bn marks to pay for damage and 20,000 Jews sent to concentration camps.</p> <p><b>January 1939</b> Heydrich and gestapo given task of deportation of all Jews from Germany. Some of the atrocities against Jews kept secret, but people in Germany and abroad were aware of what was happening to German Jews from 1933-39. Some may have been too scared to oppose it, but others clearly thought it was justified because they supported / took part in it.</p>

**Migration Case Study - Notting Hill c1948-c1970**

**Summary:** As a deep dive case study, we will investigate the history of migrants in Notting Hill 1948-70. We will first describe the national and local context, before zooming in on the influence of Caribbean culture on the area, racial discrimination and policy treatment as well as the legacy of the migrant community. We will use primary sources in order to support our study

**Key concepts: Notting Hill, c1948-c1970**

National and regional context:

- Britain after the Second World War had been damaged very badly. Britain relied heavily on its empire
- Britain needed help to rebuild the country and it encouraged people from the Empire to come to Britain. This results in the 1948 Nationality Act
- There were job opportunities in Britain, but black employees were often discriminated against
- The 1960s saw a number of changes within Britain including the growth of black activism

The local context of Notting Hill:

- Many Caribbean people arriving in Britain faced discrimination and struggled to find housing. Most of the housing in Notting Hill that they found was very poor in quality
- Some landlords preyed on the vulnerable and exploited their situation
- The problems of housing: houses of multiple occupation (HMOs), overcrowding and slum landlords, e.g. Peter Rachman. Bruce Kenrick and the Notting Hill Housing Trust. The development of Portobello Road market.
- Portobello Road Market started to sell food for the black community in response to demand from the Caribbean people in the local area

- The influence of Caribbean cultures on the area, in particular the development of shops, markets, cafes and restaurants, shebeens, nightclubs and entertainment which featured Caribbean food and music. The development of All Saints Road. Mutual self-help organisations, e.g. 'pardner' schemes.
- When Caribbean people came to Britain they were denied access to leisure activities due to discrimination
- In response to this discrimination the black community developed their own identity and leisure activities
- This led to the emergence of a distinct culture that featured Caribbean shops, pubs, food, restaurants, music and entertainment
- Mutual self help organisations supported the community with finance, childcare, housing and legal advice

- In the 1950s racism in the police was a major barrier that prevented them from protecting the black community. Many officers believed racist stereotypes, leading to harassment and unfair treatment
- Anti-immigration groups and figures like Mosley created an atmosphere of fear for the black community with acts of violence and intimidation. These issues were not addressed by the police
- Institutional racism from the police force and violence from anti-immigration groups helped build tensions in the Notting Hill area - tensions that erupted into the 1958 riots
- The riots and Kelso Cochrane's murder became a catalyst for the growth of civil rights groups

- Claudia Jones set up the West Indian Gazette in 1958 in response to the many challenges faced by the black community in Britain. Her Caribbean Carnival laid the groundwork for the Notting Hill Carnival
- In the 1960s, several groups emerged to fight for civil rights, for example the British Black Panthers (BBP). They focused on police brutality, jobs, housing, education, healthcare and legal support.
- The Mangrove restaurant was a cultural community center for Black people in West London area of Notting Hill. The police often raided the restaurant
- After a protest march, nine people were arrested and charged with riot. The defendants used the trial to focus on wider issues of institutional racism in Britain. The trial became a major symbol of success for the black community fighting against institutional racism in Britain

**Key developments**

<b>1948</b>	British Nationality Act; migrants from the Caribbean arrived in Britain on the Empire Windrush
<b>1958</b>	Notting Hill riots
<b>1959</b>	Murder of Kelso Cochrane Oswald Mosley's election campaign Caribbean Carnival
<b>1963</b>	Notting Hill Housing Trust formed
<b>1970</b>	Trial of the Mangrove Nine

**Key words**

<b>Enquiry</b>	The topic that you are using the source to investigate
<b>Provenance</b>	The nature, origin and purpose of a source
<b>Origin</b>	Where does the source come from
<b>Nature</b>	What type of source is it
<b>Purpose</b>	Why was the source produced
<b>Content</b>	What does the source actually tell us
<b>Context</b>	How does the source fit in with what you already know?
<b>Own knowledge</b>	What historical knowledge do you have that supports or challenges the source
<b>Follow up</b>	How can you use the source to find out more about something?
<b>Utility</b>	How useful the source is

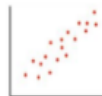


HISTORY

**Year 10 Maths - FOUNDATION Cycle 3 Knowledge Organiser**

**A: Error intervals**

Error interval	Lower bound $\leq x <$ Upper bound
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**B: Scatter graphs**

Positive correlation	
Negative correlation	
No correlation	

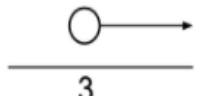
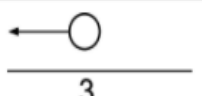
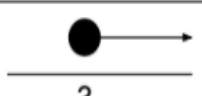

**C: Averages**

Mean	Add the numbers up and divide by how many numbers there are
Median	Write the numbers in order and find the middle number
Mode	The most common number
Range	Biggest number – smallest number

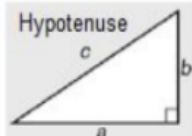
**D: Index laws**

$a^m \times a^n$	$a^{m+n}$
$a^m \div a^n$	$a^{m-n}$
$(a^m)^n$	$a^{m \times n}$
$a^0$	1
$a^{-1}$	$\frac{1}{a}$
$a^{-n}$	$\frac{1}{a^n}$
$\frac{1}{a^n}$	$a^{-n}$

**E: Inequalities**

	$x > 3$	Greater than 3
	$x < 3$	Less than 3
	$x \geq 3$	Greater than or equal to 3
	$x \leq 3$	Less than or equal to 3

**F: Pythagoras' theorem**

Hypotenuse	The longest side, opposite the right angle ( $c$ in Pythagoras' theorem)
Pythagoras' theorem	$a^2 + b^2 = c^2$
Labelled triangle	

**G: Standard form**

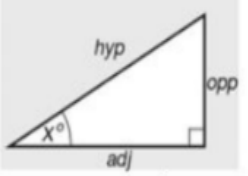



Standard form	$a \times 10^n$
$a$	A number between 1 and 10
$n$	A positive or negative integer

**Year 10 Maths - HIGHER Cycle 3 Knowledge Organiser**

A: Surds	
$\sqrt{a} \times \sqrt{b}$	$\sqrt{a \times b}$
$\sqrt{a} \times \sqrt{a}$	$a$
$\sqrt{\frac{a}{b}}$	$\frac{\sqrt{a}}{\sqrt{b}}$

C: Percentages	
Percentage change	$\frac{\text{Actual change}}{\text{Original amount}} \times 100$
Multiplier for an <b>increase</b> of $n\%$	<ol style="list-style-type: none"> <li><math>100 + n</math></li> <li>Divide by 100</li> </ol>
Multiplier for a <b>decrease</b> of $n\%$	<ol style="list-style-type: none"> <li><math>100 - n</math></li> <li>Divide by 100</li> </ol>

**F: Right-angled trigonometry**




Hypotenuse	The longest side, opposite the right angle ( $c$ in Pythagoras' theorem)	
Adjacent	The side next to the given angle	
Opposite	The side opposite the given angle	
Labelled triangle		
$\sin x$	$\frac{\text{Opposite}}{\text{Hypotenuse}}$	
$\cos x$	$\frac{\text{Adjacent}}{\text{Hypotenuse}}$	
$\tan x$	$\frac{\text{Opposite}}{\text{Adjacent}}$	

**B: Bounds**

Upper bound	UB + UB
	UB × UB
	UB – LB
	UB ÷ LB
Lower bound	LB + LB
	LB × LB
	LB – UB
	LB ÷ UB
Error interval	$LB \leq x < UB$

D: Compound growth and decay	
Final amount	Starting amount × multiplier <sup><math>n</math></sup> where $n$ is the number of years

**E: Scatter graphs**

Positive correlation	
Negative correlation	
No correlation	

**G: Exact trigonometric values**

	$0^\circ$	$30^\circ$	$45^\circ$	$60^\circ$	$90^\circ$
$\sin x$	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1
$\cos x$	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0
$\tan x$	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	-

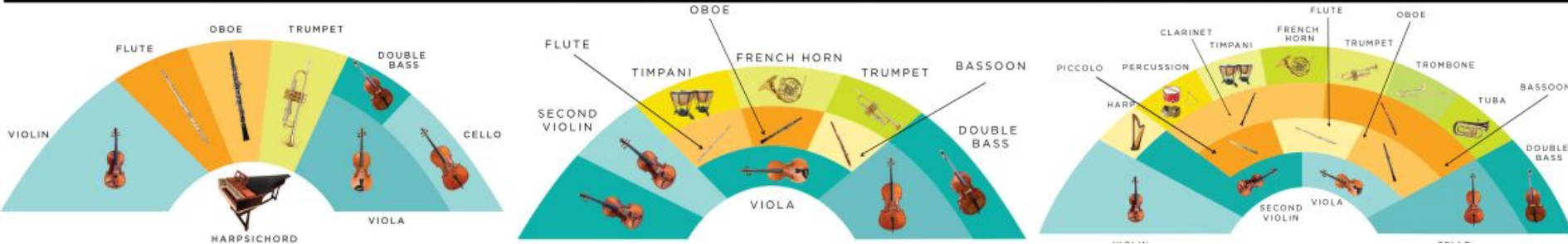


## AoS2: Concerto Through Time

What is a Concerto?	Key Terms
<b>1. Solo and Orchestra</b> Uses a solo instrument (solo concerto) OR a group of soloists (concerto grosso) with an orchestral	<b>1. Acciaccatura</b> An ornament: a very quick, "crushed" grace note (before the main note)
<b>2. Three Movements</b> 1. Fast 2. Slow 3. Fast	<b>2. Alberti Bass</b> A broken chord accompaniment figure, usually played in quavers
<b>3. Virtuosity</b> The soloist shows off the capabilities of the instruments and or the solo performer	<b>3. Appoggiatura</b> A slightly longer grace note
<b>4. Metre</b> Common or Simple time most commonly used in concertos (4/4; 3/4; 6/8)	<b>4. Cadenza</b> Orchestra stops whilst the soloist has a virtuosic solo section (sometimes improvised)
<b>5. Chromatic Harmony</b> Harmony that uses complex chords, using notes that are not part of the scale (accidentals)	<b>6. Concertino</b> The group of soloists in a concerto grosso
	<b>7. Concerto Grosso</b> A concerto with a group of soloists instead of just one
	<b>8. Continuo</b> Continuous bass line, played by a bass instrument (cello) and a chord instrument (harpichord)

Baroque		Classical		Romantic	
1600-1750	Corelli; Vivaldi; Bach	1750-1810	Mozart; Haydn; Beethoven	1810-1910	Brahms; Tchaikovsky; Mendelssohn
1. <b>Small orchestra</b> , consisting of strings and <b>continuo</b> section (bass line and chords)		1. <b>Medium sized orchestra</b> , with separate woodwind section including clarinets. <b>No continuo</b>		1. <b>Large orchestra</b> , more likely to include large <b>brass</b> and <b>percussion</b> sections	
2. <b>Concerto Grosso</b> very popular during this period		2. More likely to have <b>horns</b> and <b>timpani</b> used and contrasting dynamics with <b>cresc</b> and <b>dim</b>		2. <b>Brass</b> instruments now have <b>valves</b> giving them a larger range	
3. <b>Diatonic harmony</b> , mostly based on <b>primary chords</b> (I, IV, V)		3. <b>Diatonic harmony</b> still		3. Solo concertos much <b>longer</b> , more <b>virtuosic</b> and <b>cadenzas</b> not longer improvised but written	
4. Heavy use of <b>ornamentation</b>		4. Use of <b>equal length question and answer phrases</b> , known as <b>periodic phrasing</b>		4. More <b>chromatic harmony</b> , creating more <b>dissonance</b> , allowing more emotional/dramatic moods	
5. Often uses <b>contrapuntal</b> texture and use of <b>sequence</b> a lot to develop melody		5. <b>Melody and accompaniment</b> main type of texture, with orchestra often playing <b>homophonically</b>		5. <b>More contrasting dynamics, tonality and pitch</b> used to create emotional/dramatic moods	
6. <b>Terraced dynamics</b> due to the use of the <b>harpichord</b>		6. Introduction of <b>cadenzas</b> at the end of the first movement in particular		6. <b>Modulations</b> to more <b>distantly related keys</b> .	

Changes to the Orchestra		
Strings	Violin; Viola; Cello; Double Bass	The number of strings increases to be able to be heard over the growing orchestra over time.
Woodwind	Flute; Oboe; Bassoon	+ Clarinets + Piccolo; Cor anglais; Bass clarinet; Contrabassoon
Brass	Trumpet; Horn (rarely used)	Used more often + Trombone; Tuba
Percussion	Timpani	+ Snare; Bass drum; Cymbals; Glockenspiel
Other	Harpichord	Harpichord fell out of use with the invention of the piano



## AoS4: Film and Video Game Music

Key Ideas		Key Terms			
1. Purpose	Music in a film is there to set the scene, enhance the mood, tell the audience things that the visuals cannot, or manipulate their feelings. Sound effects are not music!	1. Click Track	A click metronome heard by musicians through headphones as they perform to keep in time	5. Mickey Mousing	When music fits exactly with a specific action on screen
2. Theme Song	Sometimes a song, usually a pop song, is used as a theme song for a film. This helps with marketing and publicity.	2. Cues	The parts of the film that require music. This is agreed between the director and composer	6. Non-diegetic	Music that is not part of the action: the audience can hear it but the character in the film cannot
3. Video Game Music	Music for video games fulfils a very similar function to that of film music.	3. Diegetic	Music that is part of the action: the characters in the film can actually hear the music	7. Sync point	A precise moment where the music needs to fit with an action
<b>Composing to enhance a mood:</b>		4. Leitmotif	A short melody that is associated with a character or idea in a film	8. Underscore	Music played underneath action or dialogue - used to set a mood
War/Military	1. Use of simple/duple metre will work for a military style drum beat	<b>Pitch &amp; Melody</b>		<b>Harmony &amp; Tonality</b>	
	2. Percussion instruments used to help depict a military band, including snare, bass drum and cymbals.	1. Arpeggio/Broken Chord	Going up or down the notes of a chord one at a time, ascending or descending	1. Atonal	Not in a key - often sounds dissonant
	3. Brass instruments evoke a military feel but also heroism associated with fanfares.	2. Chromatic scale	Going up or down by one semitone at a time	2. Consonant	Not clashing - harmony that sounds nice
Drama	1. Thick textures and rich timbres can help to convey emotion	3. Conjunct/stepwise	Moving up or down by step (notes that are next to each other)	3. Dissonant	Clashing harmony
	2. Often using string instruments	4. Disjunct/leap	Moving up or down by leaps (notes that are further apart from each other)	4. Major/Minor	The key - generally major keys sound happy and minor keys sound sad
	3. Major tonality for epic/triumphant feel. Minor tonality for tragedy/reflectiveness	5. Ostinato	A repeating pattern (can be melodic or rhythmic)	5. Pedal Note	a held note under or over the rest of the music
Horror	1. Sustained/tremolo strings bring tension to a scene, especially when played quietly	<b>Dynamics, expression and articulation</b>		<b>Texture</b>	
	2. Sudden changes in dynamics and pitch prevent the listener from feeling comfortable	1. Accent/Stab	A note that is louder than the ones surrounding it (a chord is known as a stab in film music)	1. Antiphonal	Alternating groups of instruments
	3. Unpleasant/screeching timbres and dissonance	2. Crescendo/Diminuendo	Getting louder/quieter gradually	2. Call and Response	Question and answer
Comedy	1. Faster tempo and major key to help create a bright melody	3. Glissando	A very quick scale, played as fast as possible so that it is as close to a slide as possible	3. Homophonic	Chords
	2. Pizzicato strings and usually a lot of Mickey Mousing	4. Muted	A dampened sound on a brass or string instrument	4. Monophonic	A single melody - no harmony
Tragedy	1. Minor tonality with heavy use of strings	5. Legato	Played smoothly	5. Polyphonic	Many independent lines of music
	2. Slow tempo, unless conveying a panic before a tragedy	6. Pizzicato	When a violin, viola, cello or double bass is plucked (instead of bowed)	6. Octave	The interval of an 8th
	3. Generally quiet dynamics with warm timbres	7. Staccato	Short, detached notes	7. Imitative	A melody repeated a little later by another instrument

## AoS5: Conventions of Pop

Rock n' Roll of the 50s & 60s		Rock Anthems of the 70s & 80s		Pop Ballads of the 70s, 80s & 90s		Solo Artists from 90s to the present	
Small dance hall/clubs or concert halls	Little Richard/Elvis Presley	Clubs/Festivals or Stadiums	Queen/Europe	Clubs/Concert Halls or individual listening	Elton John/Bonnie Tyler	Clubs/Small concert hall or Stadium	Rihanna/Adelle/Ed Sheeran
1. Moderate - fast tempo, with a strong back beat rhythm, in 4/4		1. Moderately fast tempo, in 4/4, with a steady rock beat (often a back beat)		1. Often in 4/4 (sometimes in 6/8 or 3/4) with a slow tempo		1. A range of popular styles including: pop, rock, rap, RnB, electronic and dance	
2. Almost always using primary chords, often using 12 bar blues structure		2. Powerful and uplifting lyrics designed to be sung along with by the audience in the chorus		2. Range of textures to reflect the emotional lyrics of the song		2. More use of electronic instruments and synthesisers with improvements in technology	
3. Melody and accompaniment texture, with homophonic chordal accompaniment		3. Power chords used on electric guitars, to create a melody and accompaniment texture		3. Sentimental lyrics often reflected in the vocals with the use of rubato and melisma		3. Typical band instruments but with more computerised additions and effects	
4. Syncopated walking bass lines, and often swung rhythms in the chords		4. Riffs played by keyboards, electric guitars and bass, with long drum or guitar solos		4. Harmony often using a mix of major and minor chords with inversions		4. Effects like autotune can now be applied to live performances and so are used more creatively	
5. Rock band instruments mostly acoustic: piano, drums, guitar (electric), bass/double bass and brass		5. More electronic sounds using music technology: distortion; overdrive, delay and wah-wah pedals		5. Instruments with a typical band setup (guitar, drums, bass) but with more piano and strings		5. Still often uses a typical pop song structure (as do the other 3 styles)	

### Key Terms

1. A capella	Voices without instrumental accompaniment	11. Glissando	A slide between two notes, when you can hear individual notes (e.g.: like on a piano)	21. Reverb	Effect added to vocals once they have been recorded to add 'warmth' - gives a slight echo
2. Autotune	An effect which alters pitch in vocal and instrumental music recording and performances	12. Hook	The catchy part of the song, often in the chorus	22. Riff	A repeating melodic or rhythmic idea
3. Back beat	A drum beat which emphasises the second and fourth beats of the bar	13. Instrumental break	A section where the singing stops and there is a solo on an instrument	23. Rubato	Momentarily not keeping to strict tempo to allow a slight quicken/slow of expression
4. Bridge	A section that links the verse and chorus. Sometimes called a pre-chorus	14. Looping	Technology-based method of repeating a short musical idea	24. Sampling	A short extract of already composed music and reused in a new piece
5. Broken Chord	Each note of a chord played separately	15. Melisma	Lots of notes sung to a single syllable	25. Scat	Vocal improvisation with nonsense syllables or without words
6. Delay	Electronic effect that delays the sound. Sounds like an exaggerated echo	16. Middle Eight	A section of the song where there is a new, different tune	26. Strumming	Playing all the strings of a guitar at once to play a chord
7. Distortion	An effect used on guitars: a dirty, fuzzy kind of sound	17. Overdrive	An effect like distortion, but more subtle to create a more natural effect and less aggressive	27. Syllabic	Each syllable is sung to a single note
8. Falsetto	High pitched male voice (when he is using his head voice)	18. Panning	Making certain tracks come through different sides of the speakers/headphones (left/right)	28. Turn	Playing the note above, then the main note, then the note below and then back to the main note quickly
9. Fill	At the end of a phrase, the drummer plays a more complex beat for a moment	19. Picking	On guitar, playing one note at a time (as opposed to strumming)	29. Vibrato	Pulsating change of pitch. It is used to add expression
10. Flanger	A guitar effect that makes a whooshing sound	20. Portamento	When a singer slides between notes	30. Wah-Wah pedal	a guitar effects pedal that alters the tone and frequencies to mimicking the human voice saying "wah-wah"

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# MUSIC

Knowledge organiser Ao3: Music of the Indian subcontinent		Key terms
<b>1. Indian classical music</b>	The Indian subcontinent is a vast and culturally diverse area. The classical music we have looked at comes from the north (Hindustan). The music is largely improvised based around ragas and talas, and usually contains three separate sections.	<b>1. Guru</b> A master performer
<b>2. Bhangra</b>	Bhangra started in the Punjab region of India (now split between India and Pakistan) from the 14th Century. Normally performed at festivals. Modern bhangra is a fusion of traditional bhangra and western pop influences.	<b>2. Improvise</b> Making up music during a performance, rather than referring to a pre-existing melody or part.
<b>Music of the Indian subcontinent</b>		<b>3. Raga</b> A set of pitches, similar to a scale.
<b>1. Indian classical music</b>	1. Performers play <b>entirely by ear and from memory</b> , and learn from a master performer called a <b>guru</b> .	<b>4. Drone</b> A repeated note or set of notes repeated throughout a piece.
	2. Performers (and often the audience) <b>sit crossed legged</b> on the floor during performances.	<b>5. Tala</b> A cycle of beats that repeat.
	3. <b>Performances can last several hours</b> and are of indeterminate length.	<b>6. Alap</b> The opening section of a piece of Indian classical music.
	4. The vast majority of the music is <b>improvised</b> , and the performers are constantly communicating and responding to each other with their playing.	<b>7. Gat</b> The main, middle section of a piece of Indian classical music. It is a fixed composition.
	5. <b>Raga</b> - a set of pitches, similar to a scale or mode. Used to create a melody. There are <b>hundreds of different ragas</b> to be used at <b>different times of the day or year</b> . Usually played on a <b>sitar</b> .	<b>8. Jhala</b> The fast climax of a piece of Indian classical music.
	6. <b>Drone</b> - a repeated note or set of notes played throughout the piece. It is <b>static</b> - unchanging. It does not change chord. Traditionally played on a <b>tanpura</b> or <b>shruti box</b> .	<b>9. Sitar</b> A stringed instrument. Its distinctive sound is due to a number of 'sympathetic strings' incorporated within the instrument.
	7. <b>Tala</b> - a cycle of beats that repeat. Hundreds of different types. The <b>tintal</b> is 16 beats long. - divided into 4 <b>bols</b> (bars). The <b>sam</b> is the first beat and is accented. Bols 1, 2 & 4 are the <b>vibhag</b> , and bar 3 is the <b>khali vibhag</b> . This is performed on a <b>tabla</b> - played with hands and fingers to create a wide variety of sounds and pitches. The performers <b>improvise rhythms</b> based on the tala.	<b>10. Tabla</b> A pair of Indian drums, capabale of a wide variety of sounds and pitches.
	8. The <b>structure</b> can be divided into <b>3 sections</b> : <b>Alap</b> - opening section, slow, improvised, in free time, only the drone and melody play. <b>Gat</b> - tabla plays, there is a clear pulse, some fixed phrases may be played, but still has lots of improvisation. <b>Jhala</b> - fast and exciting final section, music becomes faster and more virtuosic.	<b>11. Sarod</b> A lute
	9. Famous performers include <b>Ravi Shankar</b> (sitar) and <b>Alla Rakha</b> (tabla).	<b>12. Tanpura</b> A stringed instrument used to create a drone.
	<b>2. Bhangra</b>	1. The term 'bhangra' originally referred to a type of <b>Punjabi dancing</b> .
	2. <b>Traditional bhangra</b> is from the <b>Punjab</b> region.	<b>14. Bansuri</b> A side blown flute.
	3. <b>Modern bhangra</b> formed by <b>British Asian</b> musicians and is a <b>fusion</b> between traditional bhangra and <b>western pop</b> influences.	<b>15. Dohl</b> A double-headed barrel drum .
	4. The <b>structure</b> of most bhangra pieces is similar to a standard pop song, featuring <b>verses, choruses and instrumental</b> sections.	<b>16. Tumbi</b> A high-pitched, single-stringed instrument.
	5. Modern bhangra uses <b>synthesisers, drum machines, samples</b> . It often contains shouts of <b>'Hoi'</b> .	<b>17. Riff</b> A short repeated phrase.
	6. Instrumental sections are frequently constructed of <b>riffs</b> and the use of samples.	<b>18. Chaal</b> The fundamental rhythm used in bhangra, played on the dhol.
	7. Famous performers include <b>Punjabi MC</b> .	<b>19. Synthesiser</b> An electronic keyboard instrument.
		<b>20. Sampling</b> Taking an extract from one recording and using it in another.

## Knowledge organiser AoS3: The Eastern Mediterranean and the Middle East

Key ideas and concepts		Key terms	
<b>1. Greece</b>	Folk music in Greece consists of both dances and songs. These are heard at celebrations and other social events. Folk songs might be heard in cafes, restaurants or bars.	<b>1. Bouzouki</b>	A stringed instrument that is played using a plectrum, similar to a guitar.
<b>2. Israel &amp; Palestine</b>	Many regions in these two states have changed hands   recent history. They share many musical traditions. Diverse religious and cultural history - Jewish, Arabic and Christian. Also influences from Africa and the wider Middle East. Rich in vocal music.	<b>2. Tremolo</b>	When playing the bouzouki, this is fast repetition of notes.
<b>Music of the Eastern Mediterranean and the Middle East</b>			
<b>1. Folk music of Greece</b>	<b>1. Bouzouki</b> - a stringed instrument that has three or four pairs of strings tuned to the same note or an octave apart. Usually plays the <b>melody</b> and plays distinctive <b>slides</b> and <b>tremolos</b> in thirds.	<b>3. Defi</b>	A Greek hand drum with bangles attached.
	<b>2. Melody</b> - simple with lots of ornamentation. Move by step over a relatively small range. They are lyrical, enjoyable to sing. The scales are similar to major and minor with some chromatic alterations. Often <b>harmonised</b> a third higher by another part.	<b>4. Diatonic</b>	In a major or minor key.
	<b>3. Tonality</b> - Diatonic major and minor chords. The <b>tonic (I)</b> and <b>dominant (V)</b> are emphasised by the bass note. There is some modulation to other keys (often relative major or minor).	<b>5. Slide</b>	To glide from one note to the next.
	<b>4. Structure</b> - Short sections. Sections are <b>repeated</b> .	<b>6. Dounbek</b>	A goblet drum, similar to a djembe, but played with a lighter, faster touch.
	<b>5. Timbre and articulation</b> - Many strings instruments, either <b>plucked</b> or <b>bowed</b> . <b>Tremolo</b> and <b>slides</b> are a feature. A wide range of hand percussion instruments. Several wind instruments used, resembling recorders and clarinets.	<b>7. Oud</b>	A pear-shaped stringed instrument played with a pick.
	<b>6. Texture</b> - The melody line is prominent with accompaniment. <b>Off-beat</b> chords are a feature.	<b>8. Modes</b>	A type of scale often used in traditional music from around the world, rather than major or minor scales.
	<b>7. Tempo, metre and rhythm</b> - <b>Irregular</b> time signatures (5/8, 7/8), although <b>simple time</b> (2/4, 3/4, 4/4) is also common. The music is often created for dancing.	<b>9. Drone</b>	A repeated note, or set of notes, repeated throughout a piece.
	<b>8. Off-beat chords</b> are a feature.	<b>10. Microtones</b>	Notes between the semitones of Western classical music.
	<b>1. Oud</b> - a pear shaped stringed instrument, similar to the European lute. Typically they have 11 strings, tuned in five pairs with one 'drone' sounding string. Functions as both a melody and an accompaniment instrument, and is played with a pick. Mainly used in Arabic music.	<b>11. Magsum</b>	The name given to a basic rhythmic pattern used throughout the Middle East.
	<b>2. Israeli music</b> tends to adopt more Western musical instruments, rather than Arabic.	<b>12. Saidi</b>	An upbeat folk rhythm.
	<b>3. Maqam</b> - used in Arabic music, is a system of melodic <b>modes</b> or <b>scales</b> . Similar to the raga in Indian music. Many Arabic scales use <b>microtones</b> - notes between the semitones of Western classical music.	<b>13. Accelerando</b>	A gradual increase in tempo.
	<b>4. Improvisation</b> is a feature of Arabic music, especially at the <b>beginning</b> of a piece to establish the <b>maqam</b> .	<b>14. Grace notes</b>	An extra note added as an embellishment to a melody.
	<b>5. Israeli folk dances</b> are commonly associated with dancing and takes places at <b>Jewish weddings</b> and <b>bar mitzvah</b> ceremonies. Usually in 2/4 or 4/4. Bass plays on every beat, often playing the root note or the fifth. A chord instrument plays chords on the off-beat. A fast tempo. Gradual <b>accelerando</b> .	<b>15. Ornatmentation</b>	Fast notes that are added to a melody, such as a trill.
	<b>6. Israeli melodies</b> are often played on the clarinet, violin and accordion, often using <b>grace notes</b> and <b>pitch bends</b> to create a distinctive sound. Melodic decoration and <b>ornatmentation</b> are common.		

# MUSIC

## Knowledge organiser AoS3: The Music of Central and South America

### Key ideas and concepts

### Key terms

<p><b>1. Calypso</b></p>	<p>Calypso is a form of traditional music from the (twin) island nation of <b>Trinidad and Tobago</b>. It has since become popular throughout the <b>Caribbean</b>. Calypso music consists largely of <b>songs</b>, where the music and lyrics are equally important. <b>The lyrics usually tell a story, or comment on politics and society.</b></p>	<p><b>1. Steel pans - tenor or pings</b></p>	<p>Play the melody</p>
<p><b>2. Samba</b></p>	<p>Samba is the <b>dance</b> and musical style that typifies <b>Brazilian</b> music. It combines a large number of different musical styles, but its roots are mainly in African drumming. Originally the rhythms of samba were played on guitar-like instruments and accompanied by small percussion. Taking influences from the American military marching bands, the samba developed into the <b>percussion-based</b> style we hear today.</p>	<p><b>2. Steel pans - altos, guitars and cellos</b></p>	<p>Play the chords</p>
<p><b>Music of Central and South America</b></p>			
<p><b>1. Calypso</b></p>	<p><b>1. Steel pans - Percussion</b> instrument constructed from <b>oil drums</b>. Different sized drums used for the melody, chords and bass line.</p> <p><b>2. Melody</b> - call and response singing in the chorus. Chorus consists of short, simple phrases. The melodies are syncopated. Some of the instrumental melodies have an improvised quality.</p> <p><b>3. Tonality</b> - simple harmony using <b>primary chords</b> (I, IV, V). Usually in a <b>major</b> key.</p> <p><b>4. Structure</b> - Verse, chorus and instrumental sections.</p>	<p><b>3. Steel pans - bass</b></p> <p><b>4. Tremolo</b></p> <p><b>5. Surdo</b></p> <p><b>6. Caixa</b></p> <p><b>7. Repinique</b></p> <p><b>8. Tamborim</b></p> <p><b>9. Agogo</b></p> <p><b>10. Ganzá</b></p>	<p>Plays the bass line.</p> <p>A rolling effect, rapidly play the same note, is used on long notes.</p> <p>Large drum played with a soft beater, and muted with the hand. Provides the basic rhythmic pulse.</p> <p>A snare drum that provides a constant rhythm.</p> <p>High pitch tom-tom drum to cut through the ensemble. Played with a stick.</p> <p>A small frame drum, tuned very high, and played with a small wooden or nylon beater.</p> <p>A bell-like instrument that can produce two pitches.</p> <p>Shaker-like instrument. Plays a constant pattern.</p>
<p><b>2. Samba</b></p>	<p><b>5. Instruments and timbre</b> - Solo vocals with backing vocals. Often a combination of singing and spoken lyrics. <b>Steel pans</b>, bass guitar, guitar, percussion.</p> <p><b>6. Texture</b> - Melody and accompaniment.</p> <p><b>7. Tempo, metre and rhythm</b> - Usually in <b>2/4 or 4/4</b> with <b>syncopation</b>. The shaker and guitar often play continuously, providing a rhythm for the others to follow. Often there are <b>stops</b> in the rhythm between sections.</p> <p><b>1. A 2/4 or 4/4 rhythm</b>, nearly always 'felt' as two beats.</p> <p><b>Polyrhythmic</b> layers of many different percussion instruments. Use of <b>call and response</b>.</p> <p><b>2. Led by one player</b> with a whistle and a <b>repinique</b>. They are the <b>master drummer</b> and are usually a <b>virtuoso</b>.</p> <p><b>3. Melody</b> - sometimes this is created with <b>brass instruments and vocals</b>. Often there is no melody or chords, hence often no harmony.</p> <p><b>4.</b> - Samba often accompanies <b>special events</b>, such as <b>carnivals</b>. It is always associated with <b>dancing</b>.</p> <p><b>5.</b> No sheet music. <b>Aural tradition</b>.</p> <p><b>6. Structure</b> - section where all instruments play individual repeated patterns (<b>ostinato</b>). A section where all the instruments play the same rhythm. A <b>solo</b> section for the repinique. A <b>call and response</b> section where instruments copy or respond to rhythms of the repinique.</p>	<p><b>11. Cuica</b></p> <p><b>12. Call and response</b></p> <p><b>13. Ostinato</b></p> <p><b>14. Virtuoso</b></p> <p><b>15. Clave rhythm</b></p>	<p>A friction drum with a large pitch range, produced by changing tension on the head of the drum.</p> <p>One instrument plays a 'call', and the rest of the performers (or audience) respond.</p> <p>A gradual increase in tempo.</p> <p>Someone who possesses outstanding technical ability.</p> <p>We learnt this as the Saturday / Sunday rhythm. Originally from Cuba played on claves.</p>

# MUSIC

## Knowledge organiser AoS3: African drumming

### Key ideas and concepts

### Key terms

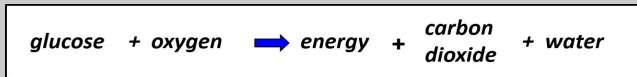
<p><b>1. African drumming</b></p> <p>Africa is a huge continent with a rich and diverse history. Music is performed every day in some African cultures; at celebrations, funerals and even for mundane tasks. The sounds and rhythms are like a language that crosses both time and place, communicating messages.</p>		<p><b>1. Djembe</b></p> <p>A single-headed, goblet-shaped drum that is played with the hands.</p>
<b>African drumming</b>		
<p><b>1. African drumming</b></p> <p>1. <b>Djembe</b> - a <b>single-headed, goblet shaped</b> drum that is played with the <b>hands</b>. They come in several sizes and can produce several different sounds with one drum. Traditionally <b>played by men</b>, whilst women play other percussion instruments. It can produce <b>three different sounds - low, mid, and a high slap</b>.</p> <p>2. African music is rarely written down. It is learnt by listening, copying and remembering.</p> <p>3. <b>Dunun</b> - A large <b>double-headed</b> drum played with a <b>stick</b>. Often worn on the shoulder using a strap. Often a bell-like instrument is mounted on the dunun. A dunun can produce <b>three sounds: open, muted and the bell sound</b>.</p> <p>4. <b>Agogo</b> - A bell-like instrument that can produce two pitches. Often leads the ensemble keeping everyone else in time.</p> <p>5. <b>Polyrhythm</b> - the combining of several different rhythms. Many African rhythms are simple to play; however, when combined they create a complex sound.</p> <p>6. <b>Cross rhythms</b> - a complex <b>polyrhythm</b> that uses different 'conflicting' rhythms. Often the rhythms do not follow the <b>same pulse</b>. A common example is the <b>two against three</b> cross rhythm.</p> <p>7. <b>Call and response</b> - one person shouts or plays a 'call', and the rest of the performers (or audience) <b>respond</b>. A caller might start a rhythm, and pass it to another drummer. It is often used in <b>vocal singing</b>. A caller controls the <b>tempo</b> of the piece, as well as when it starts and ends.</p> <p>8. <b>Master drummer</b> - a <b>virtuosic</b> (really good) musician who acts as the <b>caller</b> during the performance. As well as controlling the piece, they often perform the <b>core rhythm</b> that the other rhythms fit around. They may also <b>improvise</b> rhythms based on the core rhythm, as a kind of <b>solo</b>, and then fit it seamlessly back into the overall texture.</p> <p>9. <b>Talking drum</b> - played with a <b>hooked stick</b>, and contains <b>string</b> that can be <b>tightened and loosened to alter the pitch</b>. A special instrument in African culture. A performer can <b>replicate the sound of human speech</b>, and communicate messages using the drum. Historically this <b>language was understood between tribes</b>.</p> <p>10. <b>Melody</b> - <b>Call and response</b> singing. The majority of the musicians play percussion. Melodies are often <b>short and contain only a few different pitches</b>.</p> <p>11. <b>Tonality</b> - percussion based. Very little harmony or tonality.</p> <p>12. <b>Structure</b> - the <b>master drummer controls the structure</b>. Instruments start and stop as indicated by the master drummer. <b>Short improvisations</b> are developed around <b>set patterns</b>. There may be a <b>central vocal melody that keeps returning</b>.</p> <p>13. <b>Instruments</b> - several different drums are used. Several different sounds can be produced using a single instrument. <b>Bells, rattles and shakers</b> are used.</p> <p>14. <b>Texture</b> - the music consists of <b>several layers of drums</b> and other percussion instruments. Drums combine in complex layers - <b>polyrhythms</b>.</p> <p>15. <b>Tempo, metre and rhythm</b> - there is a <b>strong pulse</b>, which is usually <b>divided into groups of three or four</b>. Rhythms are '<b>cyclic</b>'. <b>Contrasting rhythms</b> are played simultaneously (polyrhythms). <b>Triplets and cross rhythms</b> are often used.</p>	<p><b>2. Dunun</b></p> <p>A large double-headed drum played with a stick.</p> <p><b>3. Agogo</b></p> <p>A bell-like instrument that can produce two pitches.</p> <p><b>4. Polyrhythm</b></p> <p>The combining of several different rhythms.</p> <p><b>5. Cross rhythms</b></p> <p>A complex polyrhythm that uses different 'conflicting' rhythms.</p> <p><b>6. Improvise</b></p> <p>Make up on the spot.</p> <p><b>7. Tempo</b></p> <p>The speed of the pulse in a piece of music.</p> <p><b>8. Master drummer</b></p> <p>The leader of the group.</p> <p><b>9. Virtuoso (virtuosic)</b></p> <p>Someone who possesses outstanding technical ability.</p> <p><b>10. Call and response</b></p> <p>One person shouts or plays a 'call', and the rest of the performers (or audience) respond.</p> <p><b>11. Talking drum</b></p> <p>A drum played with a hooked stick, and contains string that can be tightened and loosened to alter the pitch.</p> <p><b>13. Triplets</b></p> <p>Three notes played in the time of two.</p> <p><b>14. Cyclic</b></p> <p>Short repeated patterns.</p>	

**Year 10 GCSE Physical Education – Aerobic/Anaerobic and long term effects of exercise**

**Aerobic and Anaerobic exercise** – two methods of energy production by the body (Energy: the capacity to do work)

Two factors determine which method is used: **Intensity & duration**

**Aerobic energy production** – takes place in the presence of oxygen

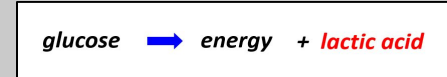


Exercise intensity is moderate/low for a sustained period of time. *i.e. marathon runner/endurance cycling*



By products are released as sweat and CO<sub>2</sub> exhaled.

**Anaerobic energy production** – takes place in the absence of oxygen



Intensity of anaerobic activity is high as muscle contraction are powerful & quick *i.e. 100m sprinter/long jump*



By product (lactic acid) builds up and causes fatigue.

**Cardiovascular system**

Cardiac equation – Cardiac output (Q) = Stroke Volume (SV) x Heart Rate (HR)

**Long term effects of exercise**

1. Cardiac hypertrophy – this is the increased size of the heart due to training. This impacts on the cardiac equation above.

**Lower resting HR   -   Increased maximum Q   -   Increased SV**

2. Increased elasticity in the walls of arteries and veins – more efficient constriction and dilation.
3. Increased number of red blood cells – has capacity to carry more oxygen to working muscles.

**Respiratory system**

**Long term effects of exercise**

1. Increased capillarisation – better blood supply around the alveoli.
2. Increased number of alveoli – results in better gaseous exchange (oxygen delivery and waste product removal)
3. Increased strength of diaphragm and intercostal muscles – this increased tidal volume and vital capacity.

**Skeletal system**

**Long term effects of exercise**

1. Increased bone density – strong bones reduce the risk of injuries.
2. Increased strength of ligaments and tendons – allows the body to change direction quickly without injury occurring.

**Muscular system**

**Long term effects of exercise**

1. Muscular hypertrophy – increase in muscle size and strength/endurance.
2. Increase size and number of mitochondria – produces more energy aerobically.
3. Increased tolerance to lactic acid – reduces muscle fatigue.

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PE





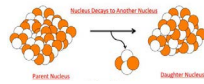
Radius of an atom  
 $1 \times 10^{-10} \text{m}$



**Electrons gained**  
Negative ion

**Electrons lost**  
Positive ion

Atom	<b>Same number of protons and electrons</b>
Ion	<b>Unequal number of electrons to protons</b>
Mass number	<b>Number of protons <u>and</u> neutrons</b>
Atomic number	<b>Number of protons</b>



Particle	Charge	Size	Found
Neutron	None	1	In the nucleus
Proton	+	1	
Electron	-	Tiny	Orbits the nucleus

Isotope	${}^6_3\text{Li}$		${}^7_3\text{Li}$	
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Different forms of an element with the same number of protons but different number of neutrons

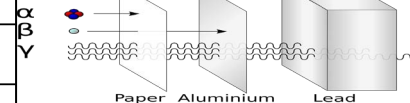
**Discovery of the nucleus**

Democritus	Suggested idea of atoms as small spheres that cannot be cut.
J J Thomson (1897)	Discovered electrons— emitted from surface of hot metal. Showed electrons are negatively charged and that they are much less massive than atoms.
Thomson (1904)	Proposed 'plum pudding' model – atoms are a ball of positive charge with negative electrons embedded in it.
Geiger and Marsden (1909)	Directed beam of alpha particles ( $\text{He}^{2+}$ ) at a thin sheet of gold foil. Found some travelled through, some were deflected, some bounced back.
Rutherford (1911)	Used above evidence to suggest alpha particles deflected due to electrostatic interaction between the very small charged nucleus, nucleus was massive. Proposed mass and positive charge contained in nucleus while electrons found outside the nucleus which cancel the positive charge exactly.
Bohr (1913)	Suggested modern model of atom – electrons in circular orbits around nucleus, electrons can change orbits by emitting or absorbing electromagnetic radiation. His research led to the idea of some particles within the nucleus having positive charge; these were named protons.
Chadwick (1932)	Discovered neutrons in nucleus – enabling other scientists to account for mass of atom.

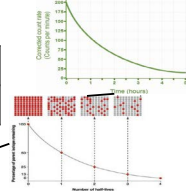
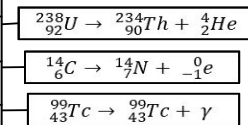
Radioactive decay	<b>Unstable atoms randomly emit radiation to become stable</b>
Detecting	<b>Use Geiger Muller tube</b>
Unit	<b>Becquerel</b>
Ionisation	<b>All radiation ionises</b>

**Atoms and Isotopes**      **Atoms and Nuclear Radiation**

Decay	Range in air	Ionising power	Penetration power
Alpha	Few cm	Very strong	Stopped by paper
Beta	Few m	Medium	Stopped by Aluminium
Gamma	Great distances	Weak	Stopped by thick lead



Decay	Emitted from nucleus	Changes in mass number and atomic number	
Alpha ( $\alpha$ )		-4	-2
Beta ( $\beta$ )		0	+1
Gamma ( $\gamma$ )	<b>Electromagnetic wave</b>	0	0
Neutron	<b>Neutron</b>	-1	0



Contamination	<b>Unwanted presence of radioactive atoms</b>
Irradiation	<b>Person is in exposed to radioactive source</b>

Half life      **The time taken to lose half of its initial radioactivity**

Sievert	<b>Unit measuring dose of radiation</b>
Background	<b>Constant low level environmental radiation, e.g. from nuclear testing, nuclear power, waste</b>

**AQA ATOMIC STRUCTURE**      **PHYSICS ONLY: Hazards and uses of Radioactive emissions and of background radiation**

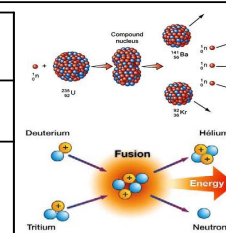
Uses	<b>Different isotopes have different half lives</b>	Short half-lives used in high doses, long half lives used in low doses.
Tracers	<b>Used within body</b>	Isotope with short half life injected, allowed to circulate and collect in damaged areas. PET scanner used to detect emitting radiation. Must be beta or gamma as alpha does not penetrate the body.
Radiation therapy	<b>Used to treat illnesses e.g. cancer</b>	Cancer cells killed by gamma rays. High dose used to kill cells. Damage to healthy cells prevented by focussed gamma ray gun.

**Nuclear fission and fusion**

Fuel rods	Made of U-238, 'enriched' with U-235 (3%). Long and thin to allow neutrons to escape, hitting nuclei.
Control rods	Made of Boron. Controls the rate of reaction. Boron absorbs excess neutrons.
Concrete	Neutrons hazardous to humans – thick concrete shield protects workers.

**PHYSICS ONLY: Nuclear energy**

Nuclear fission	<b>One large unstable nucleus splits to make two smaller nuclei</b>	Neutron hits U-235 nucleus, nucleus absorbs neutron, splits emitting two or three neutrons and two smaller nuclei. Process also releases energy.	Process repeats, chain reaction formed Used in nuclear power stations
Nuclear fusion	<b>Two small nuclei join to make one larger nucleus</b>	Difficult to do on Earth – huge amounts of pressure and temperature needed.	Occurs in stars

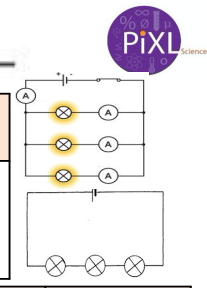


better hope – brighter future

**PHYSICS**



Electrons carry current. Electrons are free to move in metal.	Cell	Battery	Switch	Lamp	Ammeter	Volt meter	Diode	LED	LDR	Fuse	Resistor	Variable resistor	Thermistor
	Store of chemical energy	Two or more cells in series	Breaks circuit, turning current off	Lights when current flows	Measures current	Measures potential difference	Current flows one way	Emits light when current flows	Resistance low in bright light	Melts when current is too high	Affects the size of current flowing	Allows current to be varied	Resistance low at high temp



Current	Flow of electrical charge	Ampere (A)
Potential difference (p.d.)	How much electrical work is done by a cell	Volts (V)
Charge	Amount of electricity travelling in a circuit	Coulombs (C)

**Circuit symbols**

Current and Charge

Current, potential difference and resistance

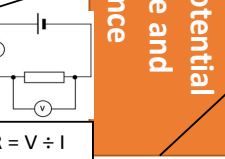
**Series and parallel circuits**

Series circuit	Current is the same in all components.	Total p.d. from battery is shared between all the components.	Total resistance is the sum of each component's resistance.
Parallel circuit	Total current is the sum of each component's current.	p.d. across all components is the same.	Total resistance is less than the resistance value of the smallest individual resistor.

Series	Parallel
A circuit with one loop	A circuit with two or more loops
Total p.d	If cells are joined in series, add up individual cell values

Charge = Current X time  $Q = I \times t$

Changing current	Change the p.d. of the cells	Control current
	Add more components	



**AQA Electricity**

**Energy transfers**

Power (W) = potential difference X current  $P = V \times I$

Power = (current)<sup>2</sup> X resistance  $P = I^2 \times R$

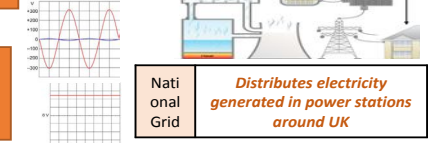
Energy transferred = Power X time  $E = P \times t$

Ammeter	Set up in series with components
Voltmeter	Set up parallel to components

$R = V \div I$

Resistance = Potential difference ÷ Current

**Domestic uses and safety**



Step-up transformers	Step-down transformers
Increase voltage, decrease current	Decrease voltage, increase current
Increases efficiency, reduces heat loss.	Makes safer for houses.

Resistance (Ω)	A measurement of how much current flow is reduced
The higher the resistance, the more difficult it is for current to flow.	
Increasing resistance, reduces current.	
Increasing voltage, increases current.	

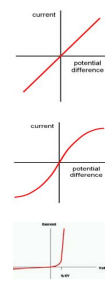
Thermistor	LDR
Resistance varies with temperature	Resistance varies with light intensity
Resistance decreases as temperature increases.	Resistance decreases as light increases.

Alternating current	Direct current
p.d. switches direction many times a second, current switches direction	p.d. remains in one direction, current flows the same direction
Generator.	Cell or battery.

**Static electricity** **PHYSICS only**

Static electricity	Electrical charge is stationary	When two insulating material are rubbed together, electrons move from one material to the other.
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Ohmic conductor	At a constant temperature, current is directly proportional to the p.d. across the resistor.
Filament lamp	As current increases, the resistance increases. The temperature increases as current flows.
Diode	Current flows when p.d. flows forward. Very high resistance in reverse.



**Current - Potential difference graphs**

'Earthing' a safety device; Earth wire joins the metal case.

Mains supply

Frequency 50Hz, 230V

Like charges	Repel
Unlike charges	Attract

3 pin plug	Live - Brown	Carries p.d from mains supply.	p.d between live and earth = 230V
	Neutral - Blue	Completes the circuit.	p.d. = 0V
	Earth - Green and Yellow stripes	Only carries current if there is a fault.	p.d. = 0V

**Shocks**

Walking on carpet causes friction. Electrons move to the person and charge builds up. When the person touches a metal object, the electrons conduct away, making a spark.

**Electric fields**

Charged objects create electric fields around them. Strongest closest to the object. The field direction is the direction of force on a positive charge. Add more charge increases field strength.

PHYSICS

Living the Christian Life

Topic	Christian View	Importance	Impact on Christians Today
<b>Christian worship</b>	<ul style="list-style-type: none"> <li>Worship is showing respect to God.</li> <li>It can take different forms including:                             <ul style="list-style-type: none"> <li>Liturgical – Formal set pattern of worship.</li> <li>Non-Liturgical – Less formal worship</li> <li>Denominations worship in different ways</li> </ul> </li> </ul>	Divergent types of worship: <ul style="list-style-type: none"> <li>Eucharist/Holy Communion/Mass (E.g. Catholic)</li> <li>Charismatic worship (E.g. Pentecostal)</li> <li>Personal/Private prayer</li> <li>Silence (E.g. Quakers)</li> </ul>	<ul style="list-style-type: none"> <li>Enables Christians to become spiritually closer to God.</li> <li>Allows Christians to communicate with God in an intimate and personal way.</li> <li>Christians believe that God can sometimes answer prayers or can enter the person through the Holy Spirit.</li> </ul>
<b>The Sacraments</b>	<ul style="list-style-type: none"> <li>A sacrament (or ordinance) is a rite of passage or ceremony where the grace and power of God can be received.</li> <li>Catholics recognise 7, most others only 2.</li> </ul>	<ul style="list-style-type: none"> <li>Enables Christians to recognise important milestones in their lives.</li> <li>The 39 articles (CofE) state that the sacraments are important signs of God's Grace for Christians.</li> </ul>	Sacraments include: <ul style="list-style-type: none"> <li>Infant Baptism – Welcoming a baby into the faith.</li> <li>Adult/Believer's baptism – Making a conscious choice.</li> <li>The Eucharist – Re-enacting the Last Supper</li> </ul>
<b>Prayer</b>	<ul style="list-style-type: none"> <li>Prayer is communication with God.</li> <li>There are different types/forms of prayer that include: Traditional set prayers, spoken prayers (e.g. the Lord's Prayer), Informal and silent prayers.</li> </ul>	<ul style="list-style-type: none"> <li>The purpose of prayer is to:                             <ul style="list-style-type: none"> <li>Get closer to God and communicate with Him.</li> <li>Praise God and thank him for what he has done.</li> <li>Ask God for Help</li> <li>To say sorry to God when the person feels they have sinned.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Prayer can be a way for Christians to reach out to God and affirm their relationship with Him.</li> <li>It can strengthen the congregation and The Church.</li> <li>It can be a way to reflect, focus and find calm in life.</li> <li>Children are taught to pray from a young age.</li> </ul>
<b>Pilgrimage</b>	<ul style="list-style-type: none"> <li>A pilgrimage is a religious journey.</li> <li>Normally to a special or holy place.</li> <li>Many pilgrimages are associated with the life of Jesus or other religious figures.</li> </ul>	<ul style="list-style-type: none"> <li>Christian pilgrimages follow the Jewish tradition of travelling to holy sites for religious festivals etc.</li> <li>As well as Jesus, Christian pilgrims visit sites of association with saints or supposed visions.</li> </ul>	<ul style="list-style-type: none"> <li>Jerusalem – The last days of Jesus' life.</li> <li>Iona – Scottish island associated with many saints.</li> <li>Taize, France – A spiritual place to gather as a community</li> <li>Walsingham – Vision of Mary and reminder of Jesus.</li> </ul>
<b>Christian celebrations</b>	<b>Christmas</b> – Celebrates the incarnation and Birth of Jesus.		<b>Easter</b> – Remembers the crucifixion and resurrection of Jesus.
	<ul style="list-style-type: none"> <li>Special services, houses and churches are decorated, special meal for families.</li> <li>Many Christians act on the meaning of Christmas by helping and sharing things.</li> <li>The countdown to Christmas is the festival of Advent - calendars and candles.</li> </ul>	<ul style="list-style-type: none"> <li>Holy week is the last week of Jesus' life – Palm Sunday-Easter Sunday. End of lent.</li> <li>Special services are held to remember, re-enact, cards and eggs are given.</li> <li>Celebrations are held to focus on the resurrection and hope for new life.</li> </ul>	
<b>The future of the Church</b>	<ul style="list-style-type: none"> <li>The Church works hard to continue to grow.</li> <li>Many Christians feel a responsibility to share their faith with others and grow The Church.</li> </ul>	<ul style="list-style-type: none"> <li>Society has changed and so Christians respond to this by trying to unite people and bring them to the faith. This can be done by education, charity and missionary work.</li> </ul>	<ul style="list-style-type: none"> <li><b>Missionaries</b> are sent on religious missions to spread the faith and undertake <b>Evangelical work</b>.</li> <li>Missionaries evangelise using the message of the Bible.</li> <li>This continues a rich history of Christian missionary work.</li> </ul>
<b>The local Church</b>	<ul style="list-style-type: none"> <li>The local church has always had an important place in the community and society. Has been where key messages are shared and people meet as well as a hub for worship.</li> </ul>	The important role of the local church community is to: <ul style="list-style-type: none"> <li>Unite the local community.</li> <li>Provide support and comfort when needed.</li> <li>Provide advice from sources of authorities (Vicar).</li> <li>Give identity and belonging to people in the community.</li> </ul>	Today the church helps the community by: <ul style="list-style-type: none"> <li>Providing a centre of Christian identity.</li> <li>Ecumenism – bringing different denominations together.</li> <li>Outreach work in the community (E.g. for families)</li> <li>Worship through living practices (e.g. rites of passage)</li> </ul>
<b>The worldwide church</b>	<ul style="list-style-type: none"> <li>Even though the Church contains many denominations across the world, They are all united as on Christian faith and worldwide Church. This is supported by things like charity. Most will aim to support charity in some way.</li> </ul>	<ul style="list-style-type: none"> <li>It gives a global identity to Christians.</li> <li>It promotes unity.</li> <li>Provides support when needed –to anyone.</li> <li>Shows how Christian teachings can be put into action on a global level.</li> </ul>	<ul style="list-style-type: none"> <li>The worldwide church acts to stand together and overcome persecution.</li> <li>Christian Aid is just one example of charity which implements Christian ideas such as compassion and love to promote respect, justice and equality in the world.</li> </ul>

RE

Living the Christian Life

Key Words	Meaning
Creed	A statement of firmly held beliefs; for example, the Apostles' Creed or the Nicene Creed.
Denominations	The name given to the main groups within the Church.
Liturgical	A set of worship, usually following agreed words.
Non-liturgical	A form of worship which is not set.
Sermon	A talk or teaching from a church leader.
39 Articles of Religion	A historical record of beliefs (or 'doctrines') held by the Church of England.
Anoint	Apply oil to a person's head as a sign of holiness and God's approval.
Sacrament	An important Christian ceremony.
Eucharist	The ceremony commemorating the Last Supper, involving bread and wine; also called Holy Communion or Mass.
Shrine	A holy place.
Advent	A season of preparation for Christmas.
Epiphany	A moment of suddenly revealing something surprising or great.
Lent	A festival where Christians either give up a luxury or fast.
The Lord's Prayer	<i>Our father in heaven, hallowed be thy name. (Matthew 6: 9-13)</i>
Confession	Sacrament in the catholic church where sins are absolved through confessing to a priest

Key Words	Meaning
Pentecostalism	A protestant movement that puts special emphasis on a direct and personal relationship with God through the Holy Spirit.
Evangelism	Preaching the gospel in order to attract new believers.
Ecumenism	A movement that tries to bring different Christian denominations closer together.
Local church	A meeting place for local believers and the community of believers who gather there.
Outreach	An activity to provide services to people in need.
Parish	A community of local believers within a particular denomination.
Persecution	The ill-treatment of an individual or group, usually on the grounds of religion, politics or ethnicity.
Reconciliation	Restoring peace and friendship between individuals or groups.
Holy Week	The week before Easter. (Palm Sunday, Holy Monday, Tuesday, Wednesday, Maundy Thursday, Good Friday, Holy Saturday)
Nativity	The birth of someone.
Vigil	Staying awake at night in order to pray; also the name given to the celebration of a festival on the eve before the festival itself.
Mission	Sending individuals or groups to spread the Christian message.
Missionary	A person who preaches and invites people to convert to the Christian faith.
Baptism	Sacrament of initiation into the church, can be done at any age depending on denomination
Holy orders	sacrament of initiation for those becoming members of the clergy

RE

Living the Muslim Life – Islam

Topic	Muslim View	Importance	Impact on Muslims Today
<b>The Ten Obligatory Acts</b>	<b>Most important duties for a Shi'a Muslim:</b> 1. <b>Salah</b> (Prayer), 2. <b>Sawm</b> (Fasting during Ramadan), 3. <b>Hajj</b> (Pilgrimage to Makkah), 4. <b>Zakah</b> (Giving to charity), 5. <b>Khums</b> (20% tax), 6. <b>Jihad</b> (Striving for Allah), 7. <b>Amr Bil Ma'roof</b> (Encouraging good actions), 8. <b>Nahi anil munkar</b> (Discouraging evil actions), 9. <b>Tawalla</b> (associating with good people), 10. <b>Tabarra</b> (disassociating with evil people).	They are a way of guiding the practices of Shi'a Muslims. They are a way to show commitment to Islam through actions (not just words). They enable Muslims to connect with Allah so that they can become pure, help others and be blessed with a good afterlife.	<ul style="list-style-type: none"> <li>These are considered to be as important as Jews and Christians consider the 10 commandments.</li> <li>Shi'a Muslims have a duty to perform each action to the best of their ability.</li> <li>They help to shape individuals but also to help others and to impact society.</li> </ul>
<b>Shahadah</b>	<b>Declaration of Faith (2 or 3 parts):</b> 'I bear witness that there is none worthy of worship except Allah alone and He has no partner.' – (Tawhid) 'And I bear witness that Muhammad is His servant and His Messenger' – (Risalah) (+ 'And I bear witness that Ali is the Friend of God - Shia)	<ul style="list-style-type: none"> <li><b>First pillar of Islam</b> to show its prominence above all of the other pillars.</li> <li>It is the testimony a person declares to enable them to remember their important commitment to their faith and to Allah.</li> <li>Rewards are promised for putting Allah first.</li> </ul>	<ul style="list-style-type: none"> <li>Recited to converts, new born babies, throughout someone's life and during burial.</li> <li>It enables Muslims to connect with and be reminded of Allah.</li> <li>A person who repeats the Shahadah is called Shahid (one who bears witness).</li> </ul>
<b>Salah</b>	<b>Prayer 5 times a day + Second Pillar of Islam</b> <ul style="list-style-type: none"> <li>Important to worship regularly to show devotion to God</li> <li>Obligatory for all Muslims from an early age.</li> <li>Can be in Mosque or home. <b>Jummah</b> (Friday @ Mosque)</li> </ul>	<ul style="list-style-type: none"> <li>Directed by the prophets including Muhammad.</li> <li>P. Muhammad showed people how to pray.</li> <li>Aimed to communicate directly with Allah (who desires a personal relationship)</li> </ul>	<ul style="list-style-type: none"> <li>Times: 1. <b>Fajr</b> 2. <b>Zuhr</b> 3. <b>Asr</b> 4. <b>Maghrib</b> 5. <b>Isha</b></li> <li>Performed facing Makkah (<b>Qiblah</b>)</li> <li>Ablution (Wudu) completed before prayer.</li> <li>Movements known as <b>Rak'ah</b>.</li> </ul>
<b>Sawm</b>	<ul style="list-style-type: none"> <li>Third Pillar of Islam meaning Fasting.</li> <li>This happens during the month of Ramadan.</li> <li>Food, Smoking, sexual activity and Bad thoughts are forbidden during daylight.</li> </ul>	<ul style="list-style-type: none"> <li>Laylat al Qadr (Night of Power) took place during Ramadan and was when the first words of the Qur'an were revealed from Allah to Muhammad via Jibril.</li> <li>Only the elderly, young, pregnant and unwell are exempt.</li> </ul>	<ul style="list-style-type: none"> <li>It helps Muslims to learn self discipline.</li> <li>To appreciate what Allah has provided.</li> <li>To remember the importance of the Qur'an, revealed during Ramadan.</li> </ul>
<b>Zakah and Khums</b>	<ul style="list-style-type: none"> <li>Zakah is the third pillar of Islam – Giving to charity. Normally giving 2.5% of one's wealth each year.</li> <li>Khums is a Shi'a obligatory act – 20% of surplus income.</li> </ul>	<ul style="list-style-type: none"> <li>Both duties are contained in the Qur'an and have long traditions in Islam.</li> <li>They aim to support the poor and the Ummah.</li> </ul>	<ul style="list-style-type: none"> <li>Both are duties to the respective types of Muslims.</li> <li>Wealth is a gift from Allah and is only material.</li> <li>It helps Muslims grow spiritually and links to judgement.</li> </ul>
<b>Hajj</b>	<ul style="list-style-type: none"> <li>Hajj is the 5<sup>th</sup> Pillar of Islam and an annual pilgrimage to Makkah.</li> <li>It follows the journeys of important figures in the history of Islam (Ibrahim, Hagar, Ishmael, Adam &amp; Muhammad)</li> </ul>	<ul style="list-style-type: none"> <li>All Muslims are obligated to make this journey once in their lifetime if they are physically fit and can afford to.</li> <li>It allows Muslims to focus on their religion without distractions and visit the centre of Islam (Makkah).</li> </ul>	<ul style="list-style-type: none"> <li>Allows Muslims to show commitment to Allah and can help them to reach Al Jannah.</li> <li>Strengthens the Ummah and individual faith.</li> <li>Enables a Muslim to seek forgiveness from Allah.</li> </ul>
<b>Jihad</b>	<ul style="list-style-type: none"> <li>Jihad means '<b>struggle</b>' and is split into two types:</li> <li>Lesser Jihad is the <b>outward struggle</b> to defend Islam.</li> <li>Greater Jihad is the <b>inner struggle</b> to be a better Muslim.</li> </ul>	<ul style="list-style-type: none"> <li>Both are mentioned in the Qur'an.</li> <li>Muhammad was a role model for both types.</li> <li>Muhammad highlighted the greater jihad.</li> </ul>	<ul style="list-style-type: none"> <li>Sometimes the religion of Islam will need defending but the Greater Jihad is called so because all Muslims must focus on doing good deeds and overcoming evil.</li> </ul>
<b>Celebrations &amp; Commemorations</b>	<ul style="list-style-type: none"> <li>Eid-ul-Fitr – End of Ramadan – celebrating an end to fasting.</li> <li>Eid-ul-Adha – Festival of sacrifice – Remembering Abraham's willingness to sacrifice his son for Allah.</li> <li>Ashura and Eid-al Ghadeer (Shi'a only) are also important.</li> </ul>	<ul style="list-style-type: none"> <li>Remember past events and important people within Islam.</li> <li>To have a cycle of special days and events that are marked during the year.</li> </ul>	<ul style="list-style-type: none"> <li>To strengthen the Ummah and unite Muslims together around the world.</li> <li>To share common Muslim beliefs and remember important times and people.</li> </ul>

RE

Living the Muslim Life – Islam

Key Words	Meaning
Ten Obligatory Acts	The most important duties of a Shi'a Muslim
Five Pillars	The most important duties to all types of Muslims
Shahadah	Declaration of belief which Muslims are required to say
Shirk	A sin that involves setting up equals to Allah; worshipping anyone or anything besides Him.
Adhan	The call to prayer in Arabic
Imam	Person who leads to Salah
Jummah Prayer	A special congregation held every Friday, usually in the Mosque
Qiblah	The direction Muslims face (towards Makkah) during Salah
Rak'ah	Set of movements and words in each Salah
Salah	The Muslim prayer
Wudu'	Purification ritual to ensure one is clean before prayer
Laylat al-Qadr	The Night of Power
Ramadan	Month of fasting, one of the pillars of Islam
Sawm	To 'keep away' from something, also known as fasting
Khums	A system for Shi'a Muslims to pay an additional 20% of their savings towards community causes
Zakah	Literally 'purification' (of wealth), one of the pillars of Islam
Hajj	The pilgrimage made by Muslims to Makkah
Pilgrimage	A journey to a place which is special for religious reasons
Tawaf	Anti-clockwise circuit of the Ka'bah (cube shaped building in centre of Makkah), completed seven times during Hajj
Jihad	Struggling/Striving – Lesser Jihad = Physically resisting evil – Greater Jihad = Spiritually resisting evil

Key Quotes & linked topics	Key Quotes & linked topics
<i>'God has promised the believers, both men and women, Gardens graced with flowing streams where they will remain'. (Surah 9:72)</i> 10 obligatory acts, Zakah, Khums, Hajj	<i>'Alms [food or money given to the poor] are meant only for the poor, the needy, those who administer them, those whose hearts need winning over, to free slaves and help those in debt, for God's cause.'</i> (Surah 9) Zakah
<i>'I bear witness that there is none worthy of worship except Allah alone and He has no partner'</i> Shahadah (Tawhid)	<i>'One fifth of your battle gains belongs to God and the Messenger.'</i> (Surah 8) Khums
<i>'And I bear witness that Muhammad is His servant and His Messenger.'</i> Shahadah (Risalah)	<i>'Purify My House for those who walk round it, those who stay there, and those who bow and prostrate themselves in worship.'</i> (Surah 2) Hajj
<i>'Keep up regular prayer, for prayer is obligatory for the believers at prescribed times'</i> (Surah 4:103) Salah	<i>'You who believe, be mindful of God...and strive [jihad] for His cause, so that you may prosper.'</i> (Surah 5) Jihad
<i>'Fasting is prescribed for you, it was prescribed for those before you, so that you may be mindful of God'</i> (Surah 2) Sawm	<i>'The Night of Glory is better than a thousand months.'</i> (Surah 97) Sawm (Night of Power)

RE

**Key methods terms**

<b>Aim</b>	A general statement about what a sociologist expects to find out in research
<b>Hypothesis</b>	A prediction about what the sociologist expects they will find in research
<b>Pilot study</b>	A small test-run of a study which is carried out before the main study to check for any problems (e.g. equipment)
<b>Sampling</b>	How participants are chosen to take part in a study (e.g. volunteer, opportunity)
<b>Primary data</b>	Data which is collected first hand by the researchers (e.g. using a questionnaire or interview)
<b>Secondary data</b>	Data that already exists and is used by the researcher (e.g. official statistics, letters)
<b>Quantitative data</b>	Data which IS in the form of numbers
<b>Qualitative data</b>	Data which is NOT in the form of numbers and tends to be visual or in letters (e.g. diaries, photographs)
<b>Validity</b>	The accuracy of the findings – how truthful the data is.
<b>Reliability</b>	How consistent the findings are. If we repeated the study, would we find the same results?

**Sampling methods**

**Random** – all participants have an equal chance of being chosen (e.g. names out of hat)  
 ✓ Less biased and likely to be more representative  
 ✗ May not be fully representative – could choose all males  
**Volunteer** – participants choose/self-select to take part (e.g. responding to an advert)  
 ✓ Easy to gain a sample, less likely to drop out  
 ✗ May not be representative – only certain people will agree  
**Opportunity** – participants who are available are chosen  
 ✓ Easy to gain a sample ✗ may not be representative  
**Stratified** – participants chosen according to % in the population  
 ✓ Most representative ✗ difficult for the researcher to do

**Primary research methods**

Method	Advantages	Disadvantages
<b>Questionnaires</b>	✓ Participants are likely to be honest as anonymous ✓ Can be given to a large sample so more representative	✗ Participants may not understand the questions ✗ May not be honest as want to appear desirable
<b>Structured interviews (set questions)</b>	✓ Can compare responses easily between participants ✓ Less likely to be biased as set questions	✗ May not get full detail or gain a deep understanding ✗ Cannot ask additional questions
<b>Unstructured interviews (no set questions)</b>	✓ Can get full detail and a deep understanding ✓ You can build rapport/relationship so may be more honest	✗ May not get full detail or gain a deep understanding ✗ Cannot ask additional questions
<b>Group interviews</b>	✓ Can gain a variety of opinions ✓ May be more honest as have group support	✗ Some participants might take over the interview ✗ Participants might be embarrassed to be honest
<b>Participant observation (researcher joins group)</b>	✓ May understand behaviour more as joining in ✓ Can ask questions to help with research	✗ Could be biased as too involved ✗ Difficult to note behaviour so may not be accurate
<b>Non-participant observation (watches from a distance)</b>	✓ Less likely to be biased as not involved ✓ Easier to note behaviour so more likely to be accurate	✗ May not get full understanding of behaviour as not involved in the group
<b>Longitudinal study (follows a group over time)</b>	✓ Can look at the influence of different factors over time ✓ Can gain detailed information of the group you study	✗ Participants may drop out of the study ✗ Sample is likely to be small so not representative

**Secondary sources of data**

Method	Advantages	Disadvantages
<b>Official statistics (quantitative)</b>	✓ Often large sample sizes – more representative ✓ Easy to analyse and compare over time as quantitative ✓ Likely to be accurate as collected by the government	✗ May not give reasons for behaviour (just trends) ✗ May not include all behaviours e.g. crime statistics may ignore the dark figure
<b>Documents (qualitative) e.g. letters, diaries, school reports</b>	✓ Lots of detailed data as qualitative ✓ Can find reasons behind behaviour	✗ May be small sample sizes and not representative ✗ May be time-consuming to analyse ✗ Could be biased and not valid

**Triangulation and mixed methods**

Where a sociologist uses more than one method to find out lots of information about a topic e.g. using a questionnaire, interview and observation.  
 Is used to:  
 Gain more data on a topic  
 Check the validity/accuracy of the data  
 ✗ But, the data may be difficult compare as it is collected using different methods.

Paper 1 Families

Key terms

**Breadwinner** - The person in the family who earns the money, usually the male.

**Cereal packet family** - The 'ideal' nuclear family shown in the media and advertising.

**Cohabitation** - When two partners live together in a relationship without being married.

**Commune** - Self-contained and self-supporting communities where childcare, property etc. are shared.

**Conjugal roles** - The domestic roles of married partners-who does what in the home.

**Domestic division of labour** - The division of tasks such as housework and childcare in the family.

**Double shift** - When women are in full time employment and be responsible for household tasks.

**Expressive role** - Traditionally a woman's role in the family according to Parsons, where they look after the emotional needs of the family.

**Extended family** - A family which contains members beyond the nuclear

**Family diversity** - This means there are a range of families in society today e.g. lone-parent, reconstituted, same-sex.

**Household** - One or more people who live at the same address but may not related e.g. university students.

**Instrumental role** - Traditionally the male's role within the family to be the breadwinner and provide financially for the family.

**Lone-parent family** - A family of one parent and their dependent children Usually headed by the mother.

**Neo-conventional family** - A typical nuclear family but where both parents go to work.

**Nuclear family** - A family of one man and one woman with their dependent children. Patriarchy - Male power and dominance over women.

**Reconstituted family** - A family of one man and one woman with children from previous relationships.

**Secularisation** - A decline in religious belief and activity.

**Stratified diffusion** - How the roles adopted by those at the top of the social hierarchy (richer families) filters down to the rest of society.

**Symmetrical family** - Families which are equal on both sides where partners have joint roles

Sociological views of families

<b>Functionalist</b>	<p>The family is a key social structure as it performs several essential functions for individuals and society. Murdock argue it performs four vital functions:</p> <ol style="list-style-type: none"> <li>1. Sexual Function: regulates sexual behaviour that is approved by society, prevents breakdown and maintains stability</li> <li>2. Reproductive function: creates the next generation to fill roles needed</li> <li>3. Economic function: providing shelter, food &amp; clothes, economic cooperation</li> <li>4. Socialisation function: provides primary socialisation and learning of shared norms and values</li> </ol> <p>Parsons – the family performs two important functions today</p> <ol style="list-style-type: none"> <li>1. Primary socialisation</li> <li>2. Stabilisation of adult personalities (warm bath theory)</li> </ol> <p>× Functionalists ignore the dark side of the family and the impact of diversity</p>
<b>Marxist</b>	<p>The family helps to maintain the class divide and benefits capitalism. This happens in three main ways:</p> <ol style="list-style-type: none"> <li>1. Inheritance: money and wealth is passed down in richer families through inheritance and is not shared with the working classes</li> <li>2. Consumerism – families are targeted as consumers who buy products, children use 'pester power', profits go to the ruling class</li> <li>3. Socialisation – children learn to accept hierarchy and that someone is in charge meaning they accept it in the workplace and don't revolt</li> </ol> <p>Zaretsky – The family provides an 'illusion' that society is fair and this maintains capitalism as it prevents a revolution</p> <p>× Marxists ignore positive functions and that not all families benefit capitalism</p>
<b>Feminist</b>	<p>The family helps to maintain the gender divide and promotes patriarchy in society (male dominance and power). This happens through:</p> <ol style="list-style-type: none"> <li>1. Men acting as the breadwinner in the family (they usually earn more) so have more control and power</li> <li>2. Women often have a double shift or triple shift and take on the majority of unpaid housework</li> <li>3. Domestic abuse from men in the family</li> <li>4. Gender socialisation in families teaching stereotypical roles for boys and girls</li> </ol> <p>× Feminists ignore that some women may enjoy/choose the housewife role and that positive changes have been made</p>
<b>New Right</b>	<p>Nuclear families are the ideal family type and are the best for members and society because:</p> <ul style="list-style-type: none"> <li>• They promote traditional values such as marriage</li> <li>• Children grow up with two role models (for better socialisation)</li> <li>• They are more likely to be financially stable and less likely to be reliant on benefits (and become part of the underclass)</li> </ul> <p>They see lone-parent and same-sex families as causing problems for society</p>

Family diversity

	Increase or decrease	Reasons why
Nuclear	↓	Secularisation Increase in divorce Changing position of women
Reconstituted	↑	Increase in divorce Changing attitudes Greater individualism
Lone parent	↑	Increase in divorce Changing position of women Changing attitudes
Same sex	↑	Changing laws (gay marriage is legalised) Changing attitudes
Beanpole	↑	Increase in life expectancy Decrease in the birth rate
Neo-conventional	↑	Changes in law (equal pay) Changing attitudes Changing position of women
Cohabitating couple	↑	Changing attitudes Changing position of women Increase in divorce
One person household	↑	Increase in divorce Longer life expectancy Greater individualism

Alternatives to families

Living alone (increasing among younger and older individuals)

Living in a commune (shared property, resources, childcare etc.

An example: Living in a kibbutz



**Key studies**

<p><b>Rapoport and Rapoport (functionalist)</b></p> <p>Families are changing, there is increasing diversity Five different aspects of family diversity: organisational (eg internal divisions of domestic labour), cultural (beliefs and values), class (eg how the family's position in the social class system affects the availability of resources), life course (stage in the family life cycle) and cohort (historical period).</p>
<p><b>Parsons (functionalist)</b></p> <p>Family has two basic functions which are common to all families in all societies: primary socialisation of children and the stabilisation of adult personalities e.g to give and receive emotional support</p>
<p><b>Young and Willmott (functionalist)</b></p> <p>Large scale social survey (over 2,000 respondents in Greater London and surrounding areas) Families are more symmetrical with both husband and wife make similar contributions to the running of the household eg shared chores and decisions. More common in working class families. Stage 4 is the 'managing director family'. This is work centred and the wife is responsible for home and children – more common in middle class families</p>
<p><b>Zaretsky (Marxist)</b></p> <p>The family also helps to maintain capitalism in society. He thinks that the family helps to provide an 'illusion' that society is fair and provides a safe haven away from exploitation at work. Women become responsible for personal relationships within the family. This cushions them from capitalism.</p>
<p><b>Delphy and Leonard (Feminist)</b></p> <p>Men benefit the most from the exploitation of women's labour. They believe that the family has a central role in maintaining patriarchy. Women are oppressed because even when wives have paid employment outside the home they still have to carry out household tasks which are not equally shared</p>
<p><b>Oakley (Feminist)</b></p> <p>Segregated conjugal roles adopted by men and women are part of the conventional family also known as the 'cereal' packet' family. This contains married parents and at least one child, the father is the breadwinner and the mother stays at home to look after the house and Children. This type of family may actually exploit women and support patriarchy.</p>
<p><b>Criticisms of families:</b> isolation, loss of functions, lack of contact, dysfunctions, patriarchy</p>

**Changing patterns of marriage**

Trends	Reasons	Impacts
First time marriages are decreasing	Secularisation / changing attitudes Changing position of women Increasing cost of marriage	Less married nuclear families More cohabitating couples
Remarriages are increasing	Secularisation / changing attitudes Increase in divorce / changes to divorce laws	More reconstituted families Serial monogamy
Age of first time marriage is increasing	Changing position of women Increasing cost of marriage Changing attitudes	More couples cohabit before marriage
Increase in same-sex marriages	Changing attitudes Changes in law	

Is marriage still important?	
Yes	No
Remarriages are increasing Same sex marriages are increasing Married persons tax allowance was introduced (policies encourage marriage) People still aspire to be married	First time marriages are decreasing Cohabitation is more acceptable Divorce is increasing (suggesting marriage isn't valued) Some couples choose a civil partnership

**Changing patterns of divorce**

<p><b>Trends in divorce</b></p> <p>42% of marriages end in divorce The divorce rate has increased compared to 30 years ago The divorce rate has declined slightly over the past 10 years but is still high</p>
<p><b>Reasons for increases in divorce</b></p> <p>Changes in law – Divorce reform act (1969) widened the grounds for divorce (to include irretrievable breakdown), waiting time for a divorce decreased from 3-1 years Changing attitudes – More acceptable to divorce Changing position of women – greater financial independence</p>
<p><b>Sociological views of divorce</b></p> <p>Functionalist – divorce can lead to fewer dysfunctional families and greater harmony. Divorce creates jobs to help the economy. Divorce shows people have higher expectations of marriage. Marxist – divorce is more common in working class families due to stress/inequality caused by capitalism, Feminist – divorce can be positive to allow women to escape patriarchal relationships.</p>

**Changing relationships**

**Families over time**

**Pre-industrial:** Extended families, worked as a productive unit, families performed most functions  
**Industrial:** Nuclear families, male took on breadwinner role, government took over functions from families  
**Contemporary:** Family diversity, diversity of roles, smaller families

**Gender roles**

**Wilmott and Young:** Families are more symmetrical with shared contributions and equal roles.  
**Reasons** for symmetrical families: changing attitudes, commercialisation of housework.  
**Stratified diffusion:** roles filter from middle to working class (will become less equal)

Are gender roles more equal?	
Yes	No
Symmetrical families – joint conjugal roles The New Man Women take part in decision making	Double shift/triple shift The New Man is myth – women still responsible (men cherry pick) for housework/childcare Men still make the most important decisions ¼ women are victims of domestic abuse (evidence of patriarchy)

**Parents and children**

**Relationships in the past:** Parents had authority, strict discipline, children 'seen and not heard'  
**Relationships today:** Parents show less discipline, children have more freedom, families are more child-centered  
**Reasons for changes:** women are having less children (families are more child-centered), greater emphasis on children's rights, families more likely to be dual worker  
**Toxic childhood:** children poisoned by junk culture of media and food, leading to poor behaviour and development

**Extended families**

In pre-industrial era, extended families were important  
Extended families may be less important today due to: seeing less of each other (living far away), may only see for special occasions  
Extended families may still be important today due to: Grandparents helping with childcare, better technology to keep in contact, still common in some cultures

Key terms

**Comprehensive school** - A type of school introduced in 1965 where all students are educated together regardless of ability.

**Correspondence principle** - schools reflect the workplace and through learning routine and obedience, children are prepared to be exploited in capitalist life.

**Cultural capital** - The skills and knowledge middle class parents have that they can use to give their children an advantage in the education system.

**Deschooling** - An alternative form of education proposed by Illich where formal schools are replaced by other methods of education such as home schooling.

**Ethnocentric curriculum** - A curriculum (things that are taught) that focuses on a particular ethnicity

**Formal curriculum** - The subjects and topics that are directly taught in schools

**Further education** - Education after compulsory level

**Gendered curriculum** - How stereotypes and expectations about gender are promoted through both the formal and hidden curriculum.

**Hidden curriculum** - Things that are indirectly learnt in school (in and outside on lessons) e.g. competition.

**Labelling** - Attaching a name or trait to a person or group e.g. smart. This is often based on a stereotype

**Marketisation** - 1988 act and aimed to bring competition and choice into education

**Material deprivation** - When students lack the money and the things that money can buy to succeed

**Meritocracy** - The functionalist view that all students have an equal chance in education and success is based on ability and effort

**Selective schools** - Where students are selected for a school based on certain criteria such as academic ability or religion

**Social capital** - The networks of relationships/contacts that middle class parents have to help pupils succeed

**Social cohesion** - When individuals in society are brought together and share the same norms and values.

**Social mobility** - Movement up the social ladder (e.g. working class to middle class

**Vocationalism** - Education focused on more practical or technical skills aimed at a certain job or career

Sociological views of Education

Functionalist	Education is positive as it prepares individuals for work and creates a stable society All pupils have an equal chance to succeed as education is based on meritocracy <b>Durkheim</b> – Education transmits shared norms and values, promoting social cohesion. Schools act like a ‘mini society’ encouraging cooperation. <b>Parsons</b> – Education acts as a ‘bridge’ between family and society, children are judged by ‘universalistic standards’ and have an equal chance to succeed. × Education may not benefit all students equally (due to class, gender)
Marxist	Education is negative as it helps to maintain the class divide and benefits the middle classes who have a better chance of succeeding. Education prepares working class pupils for low paid jobs and to accept capitalism. <b>Bowles and Gintis</b> – ‘correspondence principle’ – school corresponds to (reflects) the workplace through teaching obedience, accepting boredom and to be motivated by external rewards (qualifications or pay) × Could be outdated as pupils are prepared for a range of jobs today
Feminist	Education is negative as it helps to maintain the gender divide and transmits patriarchal values and ideas. Females learn to adopt the stereotypical ‘expressive’/housewife role in society through gender stereotypes shown in textbooks, the majority of headteachers being male and being encouraged to take ‘softer’ subjects which could lead to lower paid jobs than males. × Could be outdated as girls are encouraged to take ‘STEM’ subjects and more females are becoming headteachers.

What is taught in schools

<b>Formal/official curriculum</b> – Things that are directly taught in schools (e.g. English/maths) and this is mainly through the National Curriculum in England	<b>Hidden curriculum</b> – Things that are indirectly taught in education (rules, routines, regulations) and competition, hierarchy and gender roles
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Functions of education

<b>Serving the economy</b> Education provides qualifications/skills which prepares pupils for jobs. This helps the economy as essential roles are filled in society.	<b>Social mobility</b> Education helps pupils move up the social class ladder through gaining qualifications and skills (through work and effort)	<b>Social cohesion</b> Education teaches shared norms and ‘British’ values which unites society and brings everyone together with shared beliefs.	<b>Secondary socialisation</b> Education is an agency of secondary socialisation teaching norms, values, beliefs, ideas through the formal curriculum and hidden curriculum.
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Types of schools

State	Funded by the government (state) Free to attend (admissions by catchment) Teach the National Curriculum
Independent / private	Not funded by the government (state) Parents usually pay for their children to attend Do not have to teach the National Curriculum Usually have smaller class sizes and improved facilities / opportunities
Grammar	These select pupils based on academic ability Pupils must pass the 11+ to attend High ability pupils can be ‘challenged’ and ‘stretched’ in these schools
Faith	These select students if they are of a certain faith (e.g. Christian, Catholic, Muslim) Religious beliefs are promoted in school life and focused on in RE
Academies	These receive funding directly from the government (rather than the local authority) and have more control over how to spend it Do not have to follow the National Curriculum and may have different term dates
Free school	These can be set up by charities, universities, communities etc. and have control over how to spend funding, set term dates etc. Do not have to follow the National Curriculum and are ‘all ability’ schools
Special schools	These educate children with Special Educational Needs (SEN) and may follow a different curriculum Pupils can receive more one-one support and the use of special facilities/equipment

Alternatives to schooling

**Deschooling** – Illich believed schools should be replaced with alternative forms of education (e.g. homeschooling) where their learning is more personalised and less likely to promote capitalism

**Homeschooling** – Where children are educated at home by parents/tutors etc. rather than in school. They must receive a full time education and are inspected by the local authority. Gives children more personalised one-one support and less chance of behaviour issues.

1.1 ¿Cómo es tu casa o tu piso? (How is your house/flat like?) [Quizlet 1.1](#)

<p><b>Vivo en una casa grande-</b> <i>I live in a big house</i></p>	<p><b>Mi casa es...</b> <i>My house is</i></p>	<p><b>Moderna/o</b> (<i>modern</i>) - <b>Antiguo/a</b> (<i>old</i>)</p>	<p><b>En la cocina hay...</b> - <i>In the kitchen there is / there are...</i></p>	
<p><b>Vivo en un piso -</b> <i>I live in a flat</i></p>	<p><b>Mi piso es...</b> <i>My flat is...</i></p>	<p><b>Grande (big)- pequeño/a</b> (<i>small</i>) <b>cómoda</b> (<i>comfortable</i>) <b>tradicional</b> (<i>traditional</i>)</p>	<p><b>un fregadero</b> - <i>kitchen sink</i> <b>un lavaplatos / lavavajillas-</b> <i>dishwasher</i> <b>un microondas-</b> <i>microwave</i></p>	
<p><b>Mi familia y yo vivimos en una casa con jardín-</b> <i>my family and I live in a house with garden</i></p>	<p><b>Mi piso en el pasado era</b> <i>My flat in the past was</i></p>	<p><b>Está* sucia/o</b> (<i>it is dirty</i>) <b>Está* limpia/o</b> (<i>it is clean</i>)</p>	<p><b>En el salón hay...</b> - <i>In the living room there is / there are...</i></p>	<p><b>Además, está situado/a en el centro/este/norte/oeste</b> <i>In addition, it is located in the centre/east/north/west</i></p>
<p><b>Mi hermano y yo vivimos en un apartamento</b> <i>My brother and I live in an apartment</i></p>	<p><b>Mi casa/ piso tiene...</b> <i>My house/flat has...</i></p>	<p><b>tres dormitorios</b> (<i>3 bedrooms</i>) <b>dos baños</b> (<i>two bathrooms</i>) <b>una cocina amplia</b> (<i>a spacious kitchen</i>) <b>un comedor</b> (<i>a dining room</i>) <b>un estudio</b>(<i>a study</i>) <b>un salón</b>(<i>a living room</i>) <b>un aseo</b> (<i>a toilet</i>) <b>un jardín</b> (<i>a garden</i>) <b>un sótano</b> (<i>a basement / cellar</i>)</p>	<p><b>En el baño hay...</b> - <i>In the toilet there is / there are...</i></p>	<p><b>Por otro lado, hay muchos bosques</b> <i>On the other hand, there are many woods</i></p>
	<p><b>Antes, mi casa / piso tenía</b> <i>Before, my house /flat used to have</i></p>		<p><b>En el lavabo-</b> <i>a sink/washbasin/ una ducha-</i> <i>a shower</i> <b>una bañera-</b> <i>a bath/ un espejo-</i> <i>a mirror</i></p> <p><b>En el dormitorio hay...</b> - <i>In the bedroom there is / there are...</i></p>	<p><b>Pero antes estaba entre el desierto y la sierra</b> <i>But before it used to be between the desert and the mountain range</i></p>
			<p><b>una cama-</b> <i>a bed/ unas cortinas-</i> <i>some curtains</i> <b>armarios-</b> <i>wardrobes/ estantes-</i> <i>shelves</i></p>	

Grammar Non-Negotiables: Key verbs in different tenses [Quizlet](#)

DPR9: Imperfect	DPR9: Preterite	DPR8: Present	DPR11: Conditional
<p><b>había</b> = there used to be <b>teníamos</b> = we used to have <b>era</b> = it used to be <b>(no) se podía</b> = you could (not) <b>la gente pensaba que</b> = people used to think that <b>estaba en=</b> it used to be in (location) <b>tenía=</b> it used to have <b>visitaba=</b> I/he/she used to visit</p>	<p><b>Fui a</b> = I went to <b>tuve la oportunidad de</b> = I had the opportunity to <b>fuimos a</b> = we went to <b>visité</b> = I visited <b>visitamos</b> = we visited <b>mi hermano fue a=</b> my brother went to <b>Mi hermana pensó que</b> = my sister thought that...</p>	<p><b>hay</b> = there is/are <b>tiene</b> = it has <b>tenemos</b> = we have <b>tenemos que</b> = we have to <b>se puede</b> = you can <b>vamos=</b> we go <b>voy=</b> I go <b>Suelo ir=</b> I usually go <b>Solemos ir=</b> we usually go</p>	<p><b>me gustaría visitar</b> = I'd like to visit <b>invertiría dinero en</b> = I'd invest money in <b>nos permitiría</b> = it'd allow us to <b>deberíamos</b> = we should <b>visitaría</b> = I would visit <b>Iría</b> = I would go <b>Visitaríamos</b> = we would visit <b>Iríamos</b> = we would go</p>

1.2 ¿Llevas una vida sana? (Do you have a healthy lifestyle?) [Quizlet list 1.2.](#)

<p><b>Normalmente (no) llevo</b> <i>Normally I (don't) have</i></p>	<p><b>Una vida sana ya que...</b> <i>A healthy lifestyle because</i></p>	<p><u>Negative:</u>  <b>Drogarse – take drugs</b>  <b>Fumar - smoking</b>  <b>Emborracharse – get drunk</b>  <b>Comer comida basura / comida rápida- eat junk food/ fast food</b></p>	<p><u>Negative:</u>  <b>Es peligroso para mi salud- It is dangerous for your health</b>  <b>Ya que el alcohol/las drogas afectan tu salud</b>  <i>Because alcohol/drugs affect your health</i>  <b>Causa enfermedades como diabetes / cáncer / depresión</b>  <i>It causes illnesses like diabetes/ cancer / depression</i></p>
<p><b>En el pasado (no) llevaba</b> <i>Normally I didn't have /had</i></p>	<p><b>Una vida sana ya que...</b> <i>A healthy lifestyle because</i></p>	<p><u>Positive:</u>  <b>Hacer ejercicio- do exercise</b>  <b>Evitar el estrés- avoid stress</b>  <b>Comer bien- eat well</b>  <b>Dormir ocho horas- sleep 8 hours</b></p>	<p><u>Positive:</u>  <b>Tiene beneficios para el corazón / los pulmones- It has benefits for the heart/ lungs</b>  <b>Te permite mejorar tu salud mental- It allows you to improve your mental health</b></p>

1.3 Describe los problemas medioambientales (Describe environmental problems) [Quizlet list 1.3](#)

<p><b>Me preocupa(n)</b> <i>I'm worried</i></p>	<p><b>la contaminación del aire- air pollution</b></p>	<p><b>Ya que</b></p>	<p><b>Causa</b> <i>it causes</i></p>	<p><b>El cambio climático- climate change</b>  <b>Huracanes- hurricanes</b>  <b>El calentamiento global- global warming</b>  <b>Contaminación atmosférica- atmospheric pollution</b>  <b>Enfermedades pulmonares- lungs illnesses</b></p>
<p><b>Me molesta(n)</b> <i>I'm annoyed by</i></p>	<p><b>la contaminación acústica- noise pollution</b></p>		<p><b>Puesto que</b></p>	<p><b>Afecta a</b> <i>it affects</i></p>
<p><b>Lo que más me preocupa(n) es</b> <i>The thing that worries me the most is</i></p>	<p><b>la deforestación- deforestation</b></p>	<p><b>Dado que</b></p>		
<p><b>Lo que más me molesta(n) es</b> <i>The thing that annoys me the most is</i></p>	<p><b>la falta de transporte público- the lack of public transport</b></p>	<p><b>Porque</b></p>		
<p><b>El problema medioambiental más grave es</b> <i>The most serious environmental problem is</i></p>	<p><b>el malgasto de energía/agua- the waste of energy/water</b></p>			

**1.4 ¿Qué opinas de la pobreza y los sin techo?** (What do you think about poverty and homeless people?) [Quizlet list 1.4](#)

<p><b>Me preocupa</b> <i>It worries me</i></p> <p><b>Me molesta</b> <i>It annoys me</i></p>	<p><b>El paro-</b> <i>unemployment</i></p> <p><b>El hambre-</b> <i>hunger</i></p> <p><b>La diferencia entre los ricos y los pobres-</b> <i>the difference between rich and poor</i></p> <p><b>La criminalidad-</b> <i>crime</i></p> <p><b>La pobreza-</b> <i>so much poverty</i></p> <p><b>Los sin techo-</b> <i>homeless people</i></p>	<p><b>Se necesita(n) más</b></p> <p><i>We need more</i></p>	<p><b>Oportunidades de trabajo-</b> <i>job opportunities</i></p> <p><b>Bancos de alimentos-</b> <i>food banks</i></p> <p><b>Viviendas nuevas-</b> <i>new houses</i></p> <p><b>Ayudas económicas-</b> <i>financial support</i></p>
<p><b>Sin embargo, en el pasado me preocupaba más-</b></p> <p><i>However, in the past, I was more worried about</i></p>	<p><b>El paro-</b> <i>unemployment</i></p> <p><b>El hambre-</b> <i>hunger</i></p> <p><b>La diferencia entre los ricos y los pobres-</b> <i>the difference between rich and poor</i></p> <p><b>La criminalidad-</b> <i>crime</i></p> <p><b>La pobreza-</b> <i>so much poverty</i></p> <p><b>Los sin techo-</b> <i>homeless people</i></p>	<p><b>Pero a mi hermano le preocupaba</b></p> <p><i>But my brother was worried about...</i></p>	<p><b>El paro-</b> <i>unemployment</i></p> <p><b>El hambre-</b> <i>hunger</i></p> <p><b>La diferencia entre los ricos y los pobres-</b> <i>the difference between rich and poor</i></p> <p><b>La criminalidad-</b> <i>crime</i></p> <p><b>La pobreza-</b> <i>so much poverty</i></p> <p><b>Los sin techo-</b> <i>homeless people</i></p>

**1.5 ¿Te gustaría hacer un voluntariado?** (Would you like to do voluntary work?) [Quizlet list 1.5](#)

<p><b>Si fuera posible...</b></p> <p><i>(If it were possible)</i></p>	<p><b>Me gustaría trabajar como voluntario/a en...</b></p> <p><i>(I would like to work as a volunteer in...)</i></p>	<p><b>Una tienda benéfica</b> <i>Charity shop</i></p> <p><b>Una residencia de ancianos</b> <i>Nursing home</i></p> <p><b>Un hogar de menores</b> <i>Children's home</i></p>	<p><b>Porque quiero..</b> <i>Because I want</i></p> <p><b>Ya que es importante...</b> <i>Because it is important...</i></p>	<p><b>Ayudar a la gente mayor</b> <i>Help the elderly</i></p> <p><b>Trabajar con niños necesitados</b> <i>Work with children in need</i></p> <p><b>Ayudar a los sin techo</b> <i>Help homeless people</i></p> <p><b>Apoyar a los demás</b> <i>Support others</i></p>
<p><b>Si tuviera la oportunidad...</b></p> <p><i>(If I had the chance)</i></p>	<p><b>Me gustaría ayudar en...</b></p> <p><i>(I would like to help in...)</i></p>	<p><b>Un banco de alimentos</b> <i>Food bank</i></p> <p><b>Un comedor social</b> <i>Soup kitchen</i></p>	<p><b>Puesto que es importante</b></p> <p><i>Because it is important</i></p> <p><b>Porque me permite ayudar a los demás</b> <i>Because it allows me to help others</i></p> <p><b>Ya que es importante apoyar a otras personas</b> <i>Because it is important to support other people</i></p>	<p><b>Ayudar a la gente</b> <i>Help people</i></p> <p><b>Proteger la naturaleza</b> <i>Protect nature</i></p>

1.1 ¿Cómo es tu casa o tu piso? (How is your house/flat like?) [Quizlet 1.1](#)

<p><b>Vivo en una casa adosada-</b> <i>I live in a semi-detached house</i></p> <p><b>Vivo en un bloque de pisos</b> <i>-I live in a block of flats</i></p> <p><b>Mi familia y yo vivimos en un chalet</b> <i>- my family and I live in a detached house</i></p> <p><b>Mi hermano y yo vivimos en una granja</b> <i>- my brother and I live in a farm</i></p> <p><b>Mi hermana vive en una casa con jardín-</b> <i>my sister lives in a house with a garden</i></p> <p><b>Vivo de alquiler en un apartamento con mi hermano</b> <i>I live renting an apartment with my brother</i></p>	<p><b>Mi casa es...</b> <i>My house is</i></p> <p><b>Mi piso es...</b> <i>My flat is...</i></p> <p><b>Mi casa ideal sería</b> <i>My ideal house would be</i></p> <p><b>la casa de mis sueños sería-</b> <i>my dream house would be</i></p> <p><b>Mi piso en el pasado era</b> <i>My flat in the past was</i></p>	<p><b>Moderna/o</b> (<i>modern</i>) - <b>Antiguo/a</b> (<i>old</i>)</p> <p><b>Grande (big)- pequeño/a</b> (<i>small</i>)</p> <p><b>Enorme</b> (<i>huge</i>)/<b>Espaciosa/a</b> (<i>spacious</i>)</p> <p><b>amplia/o / espaciosa/o</b> (<i>spacious</i>)</p> <p><b>cómoda</b> (<i>comfortable</i>)</p> <p><b>tradicional</b> (<i>traditional</i>)</p> <p><b>Está* sucia/o</b> (<i>it is dirty</i>)</p> <p><b>Está* limpia/o</b> (<i>it is clean</i>)</p>	<p><b>En la cocina hay...</b> - <i>In the kitchen there is / there are...</i></p> <p><b>un fregadero</b> - <i>kitchen sink</i></p> <p><b>un lavaplatos / lavavajillas-</b> <i>dishwasher</i></p> <p><b>un microondas-</b> <i>microwave</i></p> <p><b>En el salón hay...</b> - <i>In the living room there is / there are...</i></p> <p><b>una alfombra-</b> <i>a carpet</i></p> <p><b>un sillón / un sofá-</b> <i>a sofa/couch</i></p> <p><b>una mesa y sillas -</b> <i>a table and chairs</i></p> <p><b>unas plantas-</b> <i>some plants</i></p>	<p><b>Además, está situado/a en un valle</b> <i>In addition, it is located in a valley</i></p> <p><b>Por otro lado, está lleno/a de bosques / selvas</b> <i>On the other hand, it is full of woods / rainforests</i></p> <p><b>Además, estaría rodeado/a de volcanes / sierra</b> <i>In addition, it would be surrounded by volcanoes / mountains</i></p> <p><b>Por otro lado, estaría a ... metros sobre el nivel del mar</b> <i>On the other hand it would be ... metres above sea level</i></p> <p><b>Pero estaba entre el desierto y la sierra</b> <i>But it used to be between the desert and the mountain range</i></p> <p><b>Por otro lado, tiene unos impresionantes paisajes naturales</b> <i>On the other hand, it has some amazing natural landscapes</i></p>
	<p><b>Mi casa/ piso tiene...</b> <i>My house/flat has...</i></p> <p><b>Antes, mi casa / piso tenía</b> <i>Before, my house /flat used to have</i></p> <p><b>Mi casa ideal tendría</b> <i>My ideal house would have</i></p>	<p><b>tres dormitorios</b> (<i>3 bedrooms</i>)</p> <p><b>dos cuartos de baño</b> (<i>two bathrooms</i>)</p> <p><b>una cocina amplia y bien equipada</b> (<i>a spacious, well-equipped kitchen</i>)</p> <p><b>un comedor recién renovado</b> (<i>a recently refurbished dining room</i>)</p> <p><b>un estudio(a study)/un salón(a living room)</b></p> <p><b>un aseo (a toilet) / un jardín ( a garden) un sótano</b> (<i>a basement / cellar</i>)</p>	<p><b>En el baño hay...</b> - <i>In the toilet there is / there are...</i></p> <p><b>un lavabo-</b> <i>a sink/washbasin/ una ducha-</i> <i>a shower</i></p> <p><b>una bañera-</b> <i>a bath/ un espejo-</i> <i>a mirror</i></p> <p><b>En el dormitorio hay...</b> - <i>In the bedroom there is / there are...</i></p> <p><b>una cama-</b> <i>a bed/ unas cortinas-</i> <i>some curtains</i></p> <p><b>armarios-</b> <i>wardrobes/ estantes-</i> <i>shelves</i></p>	

Grammar Non-Negotiables: Key verbs in different tenses [Quizlet](#)

DPR9: Imperfect	DPR9: Preterite	DPR8: Perfect	DPR8: Present	DPR11: Conditional
<p><b>había</b> = there used to be</p> <p><b>teníamos</b> = we used to have</p> <p><b>era</b> = it used to be</p> <p><b>(no) se podía</b> = you could (not)</p> <p><b>la gente pensaba que</b> = people used to think that</p> <p><b>estaba en=</b> it used to be in (location)</p> <p><b>tenía=</b> it used to have</p> <p><b>visitaba=</b> I/he/she used to visit</p>	<p><b>Fui a</b> = I went to</p> <p><b>tuve la oportunidad de</b> = I had the opportunity to</p> <p><b>fuimos a</b> = we went to</p> <p><b>visité</b> = I visited</p> <p><b>visitamos</b> = we visited</p> <p><b>mi hermano fue a=</b> my brother went to</p> <p><b>Mi hermana pensó que</b> = my sister thought that...</p>	<p><b>hemos invertido mucho dinero en</b> = we've invested lots of money in</p> <p><b>hemos tenido problemas con</b> = we've had problems with</p> <p><b>he notado cada vez más problemas con</b> = I've noticed more and more problems with</p> <p><b>he decidido=</b> I have decided</p> <p><b>Hemos decidido=</b> we have decided</p> <p><b>Ha decidido=</b> he/she has decided</p>	<p><b>hay</b> = there is/are</p> <p><b>tiene</b> = it has</p> <p><b>tenemos</b> = we have</p> <p><b>tenemos que</b> = we have to</p> <p><b>se puede</b> = you can</p> <p><b>vamos=</b> we go</p> <p><b>voy=</b> I go</p> <p><b>Suelo ir=</b> I usually go</p> <p><b>Solemos ir=</b> we usually go</p>	<p><b>me gustaría visitar</b> = I'd like to visit</p> <p><b>invertiría dinero en</b> = I'd invest money in</p> <p><b>nos permitiría</b> = it'd allow us to</p> <p><b>deberíamos</b> = we should</p> <p><b>visitaría</b> = I would visit</p> <p><b>Iría</b> = I would go</p> <p><b>Visitaríamos</b> = we would visit</p> <p><b>Iríamos</b> = we would go</p>

1.2 ¿Llevas una vida sana? (Do you have a healthy lifestyle?) [Quizlet list 1.2.](#)

Normalmente (no) llevo <i>Normally I (don't) have</i>	Una vida sana ya que... <i>A healthy lifestyle because</i>	<b>Negative:</b> Acostarse tarde- <i>go to sleep late</i> Drogarse – <i>take drugs</i> Fumar - <i>smoking</i> Emborracharse – <i>get drunk</i> Comer comida basura / comida rápida- <i>eat junk food/ fast food</i> Tomar bebidas azucaradas – <i>drink sugary drink</i>	<b>Negative:</b> Es perjudicial para la salud- <i>It is harmful for your health</i> Es peligroso para mi salud- <i>It is dangerous for your health</i> Ya que el alcohol/las drogas afectan tu capacidad para tomar decisiones <i>Because alcohol/drugs affect your capacity to make decisions</i> Causa enfermedades como diabetes / cáncer / depresión <i>It causes illnesses like diabetes/ cancer / depression</i>
En el pasado (no) llevaba <i>Normally I didn't have /had</i>	Una vida saludable dado que <i>a healthy lifestyle because</i>		
En el futuro (no) llevaré <i>In the future I will (not) have</i> Dentro de cinco años (no) voy a llevar <i>Within five years I am (not) going to have</i>	Una vida sana ya que... <i>A healthy lifestyle because</i> Una vida saludable dado que <i>a healthy lifestyle because</i>	<b>Positive:</b> Mantenerse en forma- <i>keep fit</i> Hacer ejercicio- <i>do exercise</i> Evitar el estrés- <i>avoid stress</i> Comer bien- <i>eat well</i> Dormir ocho horas- <i>sleep 8 hours</i> Levantarse temprano- <i>wake up early</i>	<b>Positive:</b> Nos permite desarrollar los músculos- <i>It allows us to develop the muscles</i> Tiene beneficios para el corazón / los pulmones- <i>It has benefits for the heart/ lungs</i> Te permite mejorar tu salud mental- <i>It allows you to improve your mental health</i>
Es importante que lleve <i>It is important that I have</i> Es esencial que llevemos <i>It is essential that we have</i>	Una vida sana puesto que <i>A healthy lifestyle because...</i>		

1.3 Describe los problemas medioambientales (Describe environmental problems) [Quizlet list 1.3](#)

<b>Me preocupa(n) /me molesta(n)</b> <i>I'm worried/annoyed by</i> <b>A .... le preocupa(n)/molesta(n)</b> <i>.... Is worried/annoyed by</i> <b>Lo que más me preocupa(n)/molesta(n) es</b> <i>The thing that worries/annoys me the most is</i> <b>El problema medioambiental más grave es</b> <i>The most serious environmental problem is</i>	<b>Los animales en peligro de extinción-</b> <i>animals in danger of extinction</i> <b>la contaminación del aire-</b> <i>air pollution</i> <b>la contaminación acústica-</b> <i>noise pollution</i> <b>el efecto invernadero-</b> <i>the greenhouse effect</i> <b>la deforestación-</b> <i>deforestation</i> <b>la falta de transporte público-</b> <i>the lack of public transport</i> <b>el malgasto de energía/agua-</b> <i>the waste of energy/water</i> <b>el agujero en la capa de ozono-</b> <i>ozone depletion</i> <b>los problemas de las mareas negras-</b> <i>the slick problems</i>	<b>Ya que</b>  <b>Puesto que</b>  <b>Dado que</b>  <b>Porque</b>	<b>Podría</b> <i>(it could)</i>	<b>Causar</b> <i>cause</i>	<b>El cambio climático-</b> <i>climate change</i> / <b>Huracanes-</b> <i>hurricanes</i> <b>Sequías-</b> <i>droughts</i> / <b>El calentamiento global-</b> <i>global warming</i> <b>Incendios forestales-</b> <i>forest fires</i> / <b>Contaminación atmosférica-</b> <i>atmospheric pollution</i> <b>Enfermedades pulmonares-</b> <i>lungs illnesses</i>
				<b>Afectar a</b> <i>affect</i>	<b>La flora y la fauna / Las aves marinas-</b> <i>sea birds</i> <b>La vida marina-marine life / Las playas-</b> <i>beaches</i>
				<b>Constituir</b> <i>be</i>	<b>Un riesgo para la salud-</b> <i>a risk for health</i> <b>Un riesgo para la vida de los animales-</b> <i>a risk for animals' lives</i>
				<b>Amenazar</b> <i>threaten</i>	<b>El planeta-</b> <i>the planet</i> / <b>La vida humana-</b> <i>human life</i> <b>La vida de los animales-</b> <i>animals' life</i>
<b>Los animales en peligro de extinción</b> - <i>animals in danger of extinction</i>				<b>Algunos animales no van a sobrevivir y van a desaparecer</b> <i>Some animals are not going to survive and are going to disappear</i>	
<b>la contaminación del aire-</b> <i>air pollution</i>		<b>es cuando</b> <i>is when</i>		<b>es difícil respirar en las ciudades a causa del CO2</b> <i>it's difficult to breathe in the cities because of the CO2</i>	
<b>la contaminación acústica-</b> <i>noise pollution</i>		<b>pasa cuando</b> <i>happens when</i>		<b>hay un exceso de ruido-</b> <i>there is noise excess</i>	
<b>el efecto invernadero-</b> <i>the greenhouse effect</i>				<b>Hay un aumento de los gases en la atmósfera-</b> <i>There's an increase of gases in the atmosphere</i>	
<b>la deforestación-</b> <i>deforestation</i>		<b>is a serious problem because</b>		<b>cortamos árboles en las selvas y no los reemplazamos</b> <i>we cut down trees in the rainforests and we don't replace them</i>	
<b>la falta de transporte público-</b> <i>the lack of public transport</i>		<b>es un problema grave porque</b>		<b>Necesitamos más trenes y autobuses para reducir el uso del coche</b> <i>We need more trains and buses to reduce the use of cars</i>	



**HIGHER: Los problemas sociales y globales (THEME 2- Social and Global Issues)**

el malgasto de energía/agua- <i>the waste of energy/water</i>		no pensamos en las consecuencias de no apagar los electrodomésticos we don't think about the consequences of not switching off appliances muchas personas no pueden acceder al agua limpia many people cannot access clean water
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**1.4 ¿Qué opinas de la pobreza y los sin techo? (What do you think about poverty and homeless people?) [Quizlet list 1.4](#)**

Me preocupa <i>It worries me</i> Me molesta <i>It annoys me</i> Me fastidia <i>It annoys me</i> Me irrita <i>It irritates me</i>	Que haya <i>That there is/there are</i>	Demasiado paro- <i>too much unemployment</i> El paro/ el desempleo- <i>unemployment</i> El hambre- <i>hunger</i> / La diferencia entre los ricos y los pobres- <i>the difference between rich and poor</i> / Demasiada criminalidad- <i>too much crime</i> Tanta pobreza- <i>so much poverty</i> Tanta gente sin techo/ sin hogar- <i>so many homeless people</i>	Se necesita(n) más <i>We need more</i>	Empleo- <i>employment</i> Oportunidades de trabajo- <i>job opportunities</i> Bancos de alimentos- <i>food banks</i> Viviendas nuevas- <i>new houses</i> Hospitales- <i>hospitals</i> Programas de ayuda- <i>aid programmes</i> Ayudas económicas- <i>financial support</i>
Sin embargo, en el pasado me preocupaba más- <i>However, in the past, I was more worried about</i> Pero hace cinco años me molestaba más- <i>But five years ago I was more annoyed by</i>	El paro/ el desempleo- <i>unemployment</i> El hambre- <i>hunger</i> La diferencia entre los ricos y los pobres- <i>the difference between rich and poor</i> La criminalidad- <i>crime</i> La pobreza- <i>poverty</i> Los sin techo/ sin hogar- <i>homeless people</i>		Pero a mi hermano le irritaba <i>But my brother was irritated by...</i>	La falta de empleo - <i>The lack of employment</i> La escasez de ayudas económicas- <i>The lack of financial support</i> La falta de ayuda del gobierno- <i>The lack of help from the government</i> El problema de los desalojos - <i>The eviction problem</i>

**1.5 ¿Te gustaría hacer un voluntariado? (Would you like to do voluntary work?) [Quizlet list 1.5](#)**

Si fuera posible... <i>(If it were possible)</i> Si tuviera la oportunidad... <i>(If I had the chance)</i> Si me tocara la lotería <i>(If I won the lottery)</i> Si fuera famoso/a... <i>(If I were famous...)</i> Si tuviera mucho dinero... <i>(If I had a lot of money)</i> Si fuera alcalde/alcaldesa <i>(If I were the mayor)</i>	Trabajaría como voluntario/a en... <i>(I would work as a volunteer in...)</i>	Una tienda benéfica <i>Charity shop</i> Una residencia de ancianos <i>Nursing home</i> Un hogar de menores <i>Children's home</i>	Porque quiero.. <i>Because I want</i>  Ya que es importante... <i>Because it is important...</i>	Ayudar a la gente mayor <i>Help the elderly</i> Trabajar con niños necesitados <i>Work with children in need</i> Atender a los clientes <i>Take care of /serve clients</i>
	Ayudaría en... <i>(I would help in...)</i>	Un banco de alimentos <i>Food bank</i> Un comedor social <i>Soup kitchen</i>	Porque me parece esencial... <i>Because it seems essential to me...</i>	Ayudar a los sin techo <i>Help homeless people</i> Apoyar a los demás <i>Support others</i>
	Recaudaría dinero para... <i>(I would raise money for...)</i>	Una organización benéfica <i>Charity</i> Un grupo ecologista <i>Environmental group</i>	Puesto que es importante que hagamos campañas de concienciación para <i>Because it is important that we do awareness campaigns for</i>	Ayudar a la gente del Tercer Mundo <i>Help Third World people</i> Proteger la naturaleza <i>Protect nature</i>
	Participaría en... <i>(I would participate in...)</i>	Un partido de fútbol/baloncesto <i>Football/ basketball match</i> Un concurso de natación <i>Swimming contest</i> Un maratón <i>marathon</i>	Porque me permite pasar tiempo ayudando a los más necesitados <i>Because it allows me to spend more time helping those most in need</i> Ya que es importante apoyar a otras personas <i>Because it is important to support other people</i>	

**1.6 Subjunctive with social issues [Quizlet list 1.6](#)**

No es justo que <i>It's not fair that</i> Es terrible que <i>It's terrible that</i> Es una vergüenza nacional que <i>It's a national shame that</i> Es un escándalo que <i>It's a scandal that</i> Me da pena que <i>It saddens me that</i>	Haya <i>(there is/there are)</i>  Tengamos <i>(we have)</i>	tanta desigualdad social <i>so much social inequality</i> tanta gente sin techo <i>so many homeless people</i> tanta gente obesa <i>so many obese people</i> tantos drogadictos/ alcohólicos <i>so many drug addicts / alcoholics</i>
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KS4

Textiles

As a means to further develop your critical thinking and interpretation/analytical skills, as well as a means to develop your cultural capital and creativity, it is important for you to expose yourself to the work of a range of Textile designers/artists. This year, two of the Textiles artists you will be looking at are discussed below:

Billie Zangewa

Billie Zangewa (born in 1973 in Blantyre, Malawi) is a half-Malawian, half-South African artist who hand sews silk fabrics to create collage tapestries, and who now lives in Johannesburg. Since 2004, her art has featured in international exhibitions including at the Paris Art Fair at the Grand Palais in Paris. Zangewa's work is autobiographical and centralizes Black femininity and everyday domesticity and motherhood. Her artistic approach is indicative of the artist's expressing resistance to the oppression she faces through self-love.



Zangewa works primarily with raw silk offcuts in intricate hand-stitched collages, creating figurative compositions that explore her intersectional identity in the contemporary context and challenge the historical stereotyping, objectification and exploitation of the black female body. Working in a flat, colourful style, she depicts narratives concerned with experience: both personal and universal. These narratives do not make grand gestures or even overt political statements, but rather focus on mundane domestic preoccupations; universal themes connecting us to each other. Almost always the protagonist in her works, Zangewa becomes a heroine whose daily life is revealed through the scenes she illustrates.

Zangewa's finished tapestries celebrate imperfection with their raw, irregular edges and often large pieces seemingly cut out of the tapestry that seem to impede on the scene. This tactic also works to break any illusions of the work being painted on canvas.



Sheila Hicks

Sheila Hicks (born 1934) is an American artist. She is known for her innovative and experimental weavings and sculptural textile art that incorporate distinctive colours, natural materials, and personal narratives. Working primarily with fibre; Hicks creates vibrant and dynamic sculptures and wall hangings that refer to traditional artisan textiles such as weaving, knitting, knotting, and braiding. Her fibre forms – with their bright colours – whether shaped into vertical cords, disks, or horizontal tubes, present a visual experience.



KS4

Textiles

In Textiles Design we use a range of specialist techniques in order to decorate textiles to make them more aesthetically pleasing and interesting. The information below explains some of the techniques you will explore this year.

**Tufting**

Tufting is the act of a needle punching through a backing material in the form of a loop. The traditional method is to stretch Monks Cloth over a frame and punch yarn through it using a tufting gun or tufting needle. Depending on loop heights, these loops can add texture, dimension, and, if cut, the "cut pile" can add a velvet like appearance to the tufted area.



**Fabric Painting**

Fabric painting simply refers to any painting done on a fabric. It encompasses everything from ancient artifacts with intricate resist paintings to the painting a young child may do on a t-shirt. Fabric painting has been around for thousands of years.



**3D Shibori**

3D Shibori is a technique for adding texture and shaping textiles. You wrap items into fabric, secure them with thread and set them with heat, and in this way the process leaves a "memory on cloth" – a permanent record, whether of patterning or texture, of the particular forms of resistance to the change. Cloth holds the memory of action performed on it!



**Wet Felting**

Wet felting involves creating rectangular fabric made of several layers of wool (not plant or synthetic fibres because those won't felt well), applying water and mild soap, and sponging or agitating the wool to encourage the fibres to lock together



**Lino Printing**

Lino Printing is a form of block printing that involves carving a pattern or design into a linoleum, rubber or vinyl surface that can then be printed from. The recesses carved out leave the design in relief and it is the raised design that the ink is applied to and then transferred to the paper when pressure is applied by hand or printing press.



**Screen Printing**

Screen printing, also known as silk screening or silkscreen printing, is the process of transferring a stencilled design onto a surface using a mesh screen, ink, and a squeegee (a rubber blade). The basic process of screen printing involves creating a stencil on a mesh screen and then pushing the ink to create and imprint the design on the below surface.



TEXTILES

SPaG

Grammar: Write in sentences

A sentence is a group of words that make sense. Sentences start with a capital letter and end with a full stop, question mark or exclamation mark. All sentences contain **clauses**. You should try to use a range of sentences when writing. There are three main types of sentences.

**Simple sentence:** A sentence containing one main clause with a **subject** and a **verb**.  
 He **reads**.  
 Literacy **is** important.

**Compound sentence:** Two simple sentences joined with a **conjunction**. Both of these simple sentences would make sense on their own. Varying conjunctions makes your writing more interesting.  
 He **read** his book **because** it **was written** by his favourite author.  
 Literacy **is** important **so** students **had** an assembly about reading.

**Complex sentence:** A longer sentence containing a main clause and one or more **subordinate clause (s)** used to add more detail. The main clause makes sense on its own. However, a subordinate clause would not make sense on its own, it needs the main clause to make sense. The subordinate clause is separated by a comma (s) and/or conjunction. The clause can go at the beginning, middle or end of the sentence.  
 He **read** his book **even though it was late**.  
**Even though it was late**, he **read** his book.  
 He **read** his book, **even though it was late**, because it was written by his favourite author.

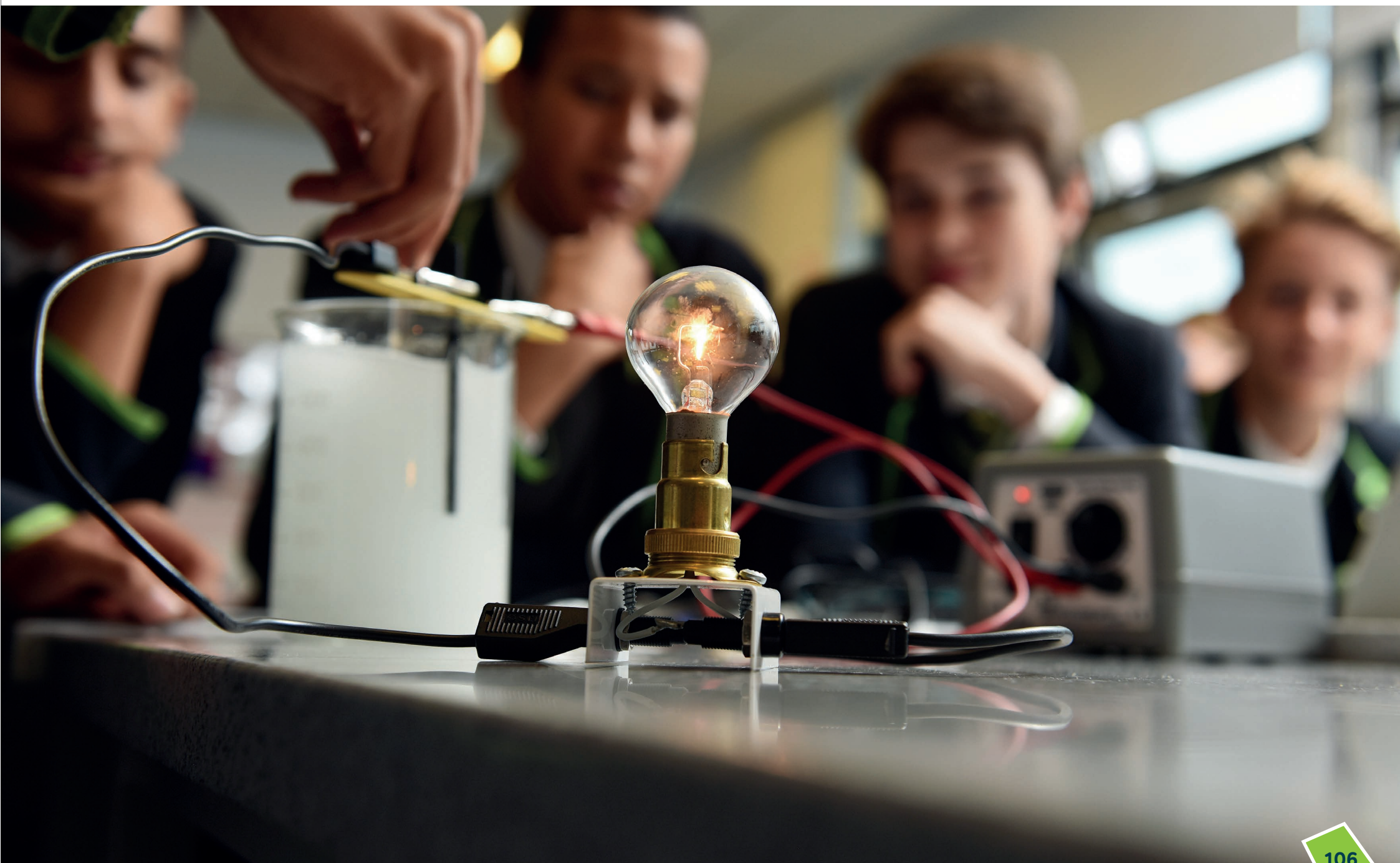
**How can you develop your sentences?**

- Start sentences in different ways. For example, you can start sentences with adjectives, adverbs or verbs.  
**Adjective:** **Funny** books are my favourite!  
**Adverb:** **Regularly** reading helps me develop a reading habit.  
**Verb:** **Looking** at the front cover is a good way to choose a reading book.
- Use a range of **punctuation**.
- Nominalisation**  
 Nominalisation is the noun form of verbs; verbs become concepts rather than actions. Nominalisation is often used in academic writing. For example:  
 It is important to **read** because it helps you in lots of ways.  
 Becomes: **Reading** is beneficial in many ways.

Germany **invaded** Poland in 1939. This was the immediate cause of the Second World War breaking out.  
 Becomes: Germany's **invasion** of Poland in 1939 was the immediate cause of the outbreak of the Second World War.

Connectives and Conjunctions	
<b>Cause And Effect</b>	Because So Consequently Therefore Thus
<b>Addition</b>	And Also In addition Further (more)
<b>Comparing</b>	Whereas However Similarly Yet As with/ equally/ Likewise
<b>Sequencing</b>	Firstly Initially Then Subsequently Finally After
<b>Emphasis</b>	Importantly Significantly In particular Indeed
<b>Subordinate</b>	Who, despite, until, if, while, as, although, even though, that, which

NOTES





# Year 10 Knowledge Organiser

**Haggerston School**

**Aspiration Creativity Character**