



The John of Gaunt School  
A Community Academy



Name

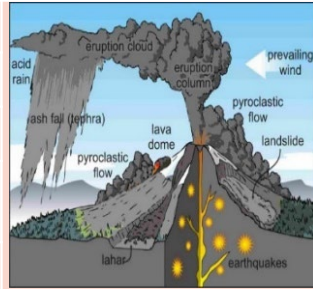
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*Year 11*

*Knowledge Organisers*

*Term 3- 2026*

The structure of the Earth		Volcanic Hazards		Managing Volcanic Eruptions	
					
<b>The Crust</b>	Varies in thickness (5-70 km). Made up of giant slabs of rock called tectonic plates. Can be oceanic or continental.	<b>Ash cloud</b>	Small pieces of pulverised rock and glass which are thrown into the atmosphere.	<b>Warning signs</b>	<b>Monitoring techniques</b>
<b>The Mantle</b>	Widest layer (2900km thick). The heat and pressure means the rock is in a liquid state ( <b>magma</b> ) that is in a state of convection.	<b>Gas</b>	Sulphur dioxide, water vapour and carbon dioxide come out of the volcano.	Small earthquakes are caused as magma rises up.	Seismometers are used to detect earthquakes.
<b>The Inner and outer Core</b>	Hottest section (5000 degrees +). Mostly made of iron and nickel and is 4x denser than the crust. Inner section is solid whereas outer layer is liquid.	<b>Lahar</b>	A volcanic mudflow which usually runs down a valley side on the volcano.	Temperatures around the volcano rise as activity increases.	Thermal imaging and satellite cameras can be used to detect heat within a volcano.
		<b>Pyroclastic flow</b>	A fast moving cloud of super-heated gas and ash (up to 1000°C). They travel at up to 450mph down the side of the volcano	When a volcano is close to erupting it starts to release gases.	Gas samples may be taken and chemical sensors used to measure sulphur levels.
		<b>Volcanic bomb</b>	A thick (viscous) lava fragment that is ejected from the volcano.	<b>Preparation</b>	
				Creating an exclusion zone around the volcano.	Being ready and able to evacuate residents.
				Having an emergency supply of basic provisions, such as food	Trained emergency services and a good communication system.



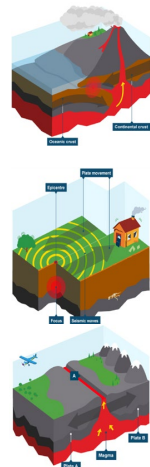
Convection Currents	
<b>The crust is divided into tectonic plates which are moving due to convection currents in the mantle.</b>	
1	Radioactive decay of some of the elements in the core and mantle generate a lot of heat.
2	When lower parts of the mantle molten rock (Magma) heat up they become <b>less dense</b> and <b>slowly rise</b> .
3	As they move towards the top they cool down, become <b>more dense</b> and <b>slowly sink</b> .
4	These <b>circular movements</b> of semi-molten rock are <b>convection currents</b>
5	Convection currents create <b>drag</b> on the base of the tectonic plates and this causes them to move.

LIC : Nepal Earthquake	
<b>Causes:</b> On April 25 <sup>th</sup> 2015 Nepal was struck by an earthquake measuring 7.9 on the Richter scale. The epicentre was 50 miles NW of Kathmandu. This is a collision margin where the Eurasian plate and the Indo Australian plate are colliding at a rate of 45mm/year	
<b>Effects</b>	<b>Management</b>
<ul style="list-style-type: none"> <li>9000 people died (P)</li> <li>3 million people homeless (P)</li> <li>7000 school were destroyed (P)</li> <li>\$5 billion (P)</li> <li>Avalanches in the Himalayas killed at least 19 people (S)</li> </ul>	<ul style="list-style-type: none"> <li>Search and rescue</li> <li>500,000 tents for shelter</li> <li>Field hospitals set up</li> <li>7000 schools repaired</li> <li>Roads repaired</li> <li>Stricter building codes</li> </ul>

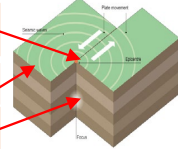
## Unit 1a AQA

# The Challenges of Natural Hazards

Types of Plate Margins	
<b>Destructive Plate Margin</b>	
When the denser plate subducts beneath the other, friction causes it to <b>melt and become molten magma</b> . The magma forces its way up to the surface to form a volcano. This margin is also responsible for <b>devastating earthquakes</b> .	
<b>Constructive Plate Margin</b>	
Here two plates are <b>moving apart</b> causing new magma to reach the surface through the gap. Volcanoes formed along this crack cause a submarine mountain range such as those in the <b>Mid Atlantic Ridge</b> .	
<b>Conservative Plate Margin</b>	
A conservative plate boundary occurs where plates <b>slide past each other</b> in opposite directions, or in the same direction but at different speeds. This is responsible for earthquakes such as the ones happening along the San Andreas Fault, USA.	

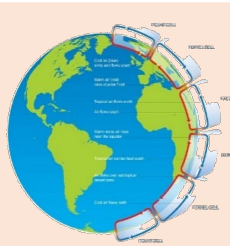
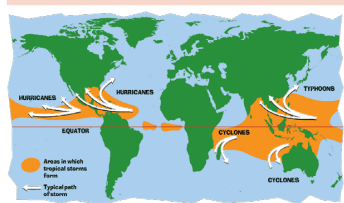
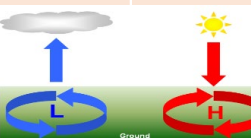


What is a Natural Hazard	
A natural hazard is a natural process which could cause death, injury or disruption to humans, property and possessions.	
<b>Geological Hazard</b>	<b>Meteorological Hazard</b>
These are hazards caused by land and tectonic processes.	These are hazards caused by weather and climate.

Causes of Earthquakes	
Earthquakes are caused when two plates become <b>locked</b> causing <b>friction</b> to build up. From this <b>stress</b> , the <b>pressure</b> will eventually be released, triggering the plates to move into a new position. This movement causes energy in the form of <b>seismic waves</b> , to travel from the <b>focus</b> towards the <b>epicentre</b> . As a result, the crust vibrates triggering an earthquake.	
The point directly above the focus, where the seismic waves reach first, is called the <b>EPICENTRE</b> .	
<b>SEISMIC WAVES</b> (energy waves) travel out from the focus.	
The point at which pressure is released is called the <b>FOCUS</b> .	

Earthquake Management	
<b>PREDICTING</b>	
<b>Methods include:</b>	
<ul style="list-style-type: none"> <li>Satellite surveying (tracks changes in the earth's surface)</li> <li>Laser reflector (surveys movement across fault lines)</li> <li>Radon gas sensor (radon gas is released when plates move so this finds that)</li> <li>Seismometer measures vibrations or shaking in the crust.</li> <li>Water table level (water levels fluctuate before an earthquake).</li> <li>Scientists also use seismic records to predict when the next event will occur.</li> </ul>	
<b>PROTECTION</b>	
You can't stop earthquakes, so earthquake-prone regions follow these three methods to reduce potential damage:	
<ul style="list-style-type: none"> <li>Building earthquake-resistant buildings</li> <li>Raising public awareness through education</li> <li>Improving earthquake prediction</li> </ul>	
<b>HIC – Chile earthquake</b>	
<b>Causes:</b> On 27 <sup>th</sup> February 2010 a very powerful earthquake measuring 8.8 on the Richter scale struck off the coast of Chile. It was caused by movement on a destructive plate margin where the Nazca plate is subducting beneath the South American Plate	
<b>Effects</b>	<b>Management</b>
<ul style="list-style-type: none"> <li>500 people died (P)</li> <li>220,000 homes destroyed (P)</li> <li>4500 schools destroyed (P)</li> <li>\$30 billion (P)</li> <li>Landslides damaged 1500km of roads (S)</li> <li>Several towns damaged by tsunamis(S)</li> </ul>	<ul style="list-style-type: none"> <li>Emergency services reacted quickly</li> <li>Route 5 was repaired within 24 hours</li> <li>90% of power restored within 10 days</li> <li>A housing reconstruction plan launched</li> </ul>



Global pattern of air circulation						
Atmospheric circulation is the large-scale movement of air by which heat is distributed on the surface of the Earth.						
<b>Hadley cell</b>	Largest cell which extends from the Equator to between 30° to 40° north & south.					
<b>Ferrel cell</b>	Middle cell where air flows poleward between 60° & 70° latitude.					
<b>Polar cell</b>	Smallest & weakest cell that occurs from the poles to the Ferrel cell.					
Distribution of Tropical Storms.		High and Low Pressure				
They are known by many names, including hurricanes (North America), cyclones (India) and typhoons (Japan and East Asia). They all occur in a band that lies roughly 5-15° either side of the Equator.		<table border="1"> <tr> <th>Low Pressure</th> <th>High Pressure</th> </tr> <tr> <td>Caused by hot air rising. Causes stormy, cloudy weather.</td> <td>Caused by cold air sinking. Causes clear and calm weather.</td> </tr> </table>	Low Pressure	High Pressure	Caused by hot air rising. Causes stormy, cloudy weather.	Caused by cold air sinking. Causes clear and calm weather.
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Formation of Tropical Storms						
1	The sun's rays heats large areas of ocean in the summer and autumn. This causes <b>warm, moist air</b> to rise over the particular spots					
2	Once the <b>ocean temperature is 27°</b> , the rising warm moist air leads to a <b>low pressure</b> . This eventually turns into a thunderstorm. This causes air to be sucked in from the <b>trade winds</b> .					
3	With trade winds blowing in the opposite direction and the rotation of earth involved (Coriolis effect), the thunderstorm will eventually start to <b>spin</b> .					
4	When the storm begins to <b>spin faster than 74mph</b> , a tropical storm (such as a hurricane) is officially born.					
5	With the tropical storm growing in power, <b>more cool air sinks</b> in the centre of the storm, creating calm, clear conditions called the <b>eye of the storm</b> .					
6	When the tropical storm hits land, it <b>loses its energy source</b> (the warm ocean) and it begins to lose strength. Eventually it will 'blow itself out'.					

Changing pattern of Tropical Storms	
Scientists believe that global warming is having an impact on the frequency and strength of tropical storms. This may be due to an increase in ocean temperatures.	
Management of Tropical Storms	
<b>Protection</b> Preparing for a tropical storm may involve construction projects such as sea walls that will improve protection.	<b>Aid</b> Aid involves assisting after the storm, commonly in LIC's.
<b>Development</b> The scale of the impacts depends on whether the country has the resources to cope with the storm.	<b>Planning</b> Involves getting people and the emergency services ready to deal with the impacts.
<b>Prediction</b> Constant monitoring by satellites can help to give advanced warning of a TS	<b>Education</b> Teaching people about what to do in a tropical storm.
Primary Effects of Tropical Storms	
<ul style="list-style-type: none"> <li>The intense winds of tropical storms can destroy whole communities, buildings and communication networks.</li> <li>As well as their own destructive energy, the winds can generate abnormally high waves called <b>storm surges</b>.</li> <li>Sometimes the most destructive elements of a storm are these subsequent <b>high seas and flooding</b> they cause to coastal areas.</li> </ul>	
Secondary Effects of Tropical Storms	
<ul style="list-style-type: none"> <li>People are <b>left homeless</b>, which can cause distress, poverty and ill health due to lack of shelter.</li> <li><b>Shortage of clean water and lack of proper sanitation</b> makes it easier for diseases to spread.</li> <li><b>Businesses are damaged</b> or destroyed causing unemployment.</li> <li>Shortage of food as <b>crops are damaged</b>.</li> </ul>	
Case Study: Typhoon Haiyan 2013	
<b>Causes</b> Started as a tropical depression on 2 <sup>nd</sup> November 2013 and gained strength. Became a Category 5 "super typhoon" and made landfall on the Pacific islands of the Philippines.	
<b>Effects</b> <ul style="list-style-type: none"> <li>Almost <b>6,500 deaths</b>.</li> <li><b>130,000 homes destroyed</b>.</li> <li>Water and sewage systems destroyed which caused <b>diseases</b>.</li> <li><b>Emotional grief</b> for dead.</li> </ul>	<b>Management</b> <ul style="list-style-type: none"> <li>The UN raised <b>£190m in aid</b>.</li> <li>USA &amp; UK sent <b>helicopter carrier ships</b> to deliver aid to remote areas.</li> <li><b>Education</b> on typhoon preparedness.</li> </ul>

Extreme weather in the UK Case Study: Somerset Levels floods	
<b>Causes</b> - Wettest January since 1910 & a series of depressions from the Atlantic ocean brought several weeks of very wet weather. The low lying farmland of the levels & 350mm or rain in January and February led to extensive flooding.	
<b>Effects</b> <ul style="list-style-type: none"> <li>Over 600 houses flooded</li> <li>£10 million in flood damage</li> <li>Floodwaters polluted with sewage, oil &amp; chemicals.</li> <li>Power supplies cut off</li> <li>Road &amp; rail links cut off</li> </ul>	<b>Management</b> <ul style="list-style-type: none"> <li>Flood victims travelled around in boats to go shopping &amp; et to work</li> <li>£20 million flood action plan launched by Somerset council</li> <li>Rivers Tone &amp; Parratt dredged to remove silt</li> </ul>
What is Climate Change?	
Climate change is a large-scale, long-term shift in the planet's weather patterns or average temperatures. Earth has had tropical climates and ice ages many times in its 4.5 billion years.	
Recent Evidence for climate change.	
<b>Global temperature</b>	Average global temperatures have increased by more than <b>0.6°C</b> since 1950.
<b>Ice sheets &amp; glaciers</b>	Many of the world's glaciers and ice sheets are melting. E.g. the Arctic sea ice has declined by <b>10% in 30 years</b> .
<b>Sea Level Change</b>	Average global sea level has risen by <b>10-20cms</b> in the past 100 years. This is due to the additional water from ice and thermal expansion.
Enhanced Greenhouse Effect	
Recently there has been an increase in <b>humans burning fossil fuels</b> for energy. These fuels (gas, coal and oil) emit <b>greenhouse gases</b> . This is making the Earth's atmosphere thicker, therefore trapping more solar radiation and causing <b>less to be reflected</b> . As a result, the Earth is becoming warmer.	
Evidence of natural change	
<b>Orbital Changes</b>	Some argue that climate change is linked to how the Earth orbits the Sun, and the way it wobbles and tilts as it does it.
<b>Sun Spots</b>	Dark spots on the Sun are called Sun spots. They increase the <b>amount of energy Earth receives</b> from the Sun.
<b>Volcanic Eruptions</b>	Volcanoes release large amounts of <b>dust containing gases</b> . These can <b>block sunlight</b> and results in cooler temperatures.
Managing Climate Change	
<b>Carbon Capture</b> This involves new technology designed to reduce climate change.	<b>Planting Trees</b> Planting trees increases the amount of carbon absorbed from the atmosphere.
<b>International Agreements</b> Countries aim to cut emissions by signing international deals and by setting targets.	<b>Renewable Energy</b> Replacing fossil fuels with clean/natural sources of energy like wind or solar

## R059 Plan and evaluate play activities

1: **Add details:** name of child (initials only) age of child, when the activity will take place, where the activity will take place

2. **Briefly describe the activity you have planned.** Give it a clear title.

This could include: mark making, gardening. What's the time Mrs Wolf?, ride on bikes, stepping stones, collage, model making.....

3. **Developmental area** What area of development are you targeting/promoting?

4. **Reasons for choice.** Explain how this activity will help the children's development in the area you have chosen. Explain how it will be relevant to a particular child and their developmental norms

5. **Aims:** Identify what area of the child's development needs support/developing. Focus on the specific skill you wish to promote and link it to the area of development. E.g. The aim may be to develop the fine motor skill of fastening and unfastening buttons. Make sure the aim is measurable

6. **Timing** Take into consideration the time it will take. Break the activity into parts and think about the time needed for each one e.g. the introduction, developing the activity, time for the child to put things away, time for the child to talk about what they have done.

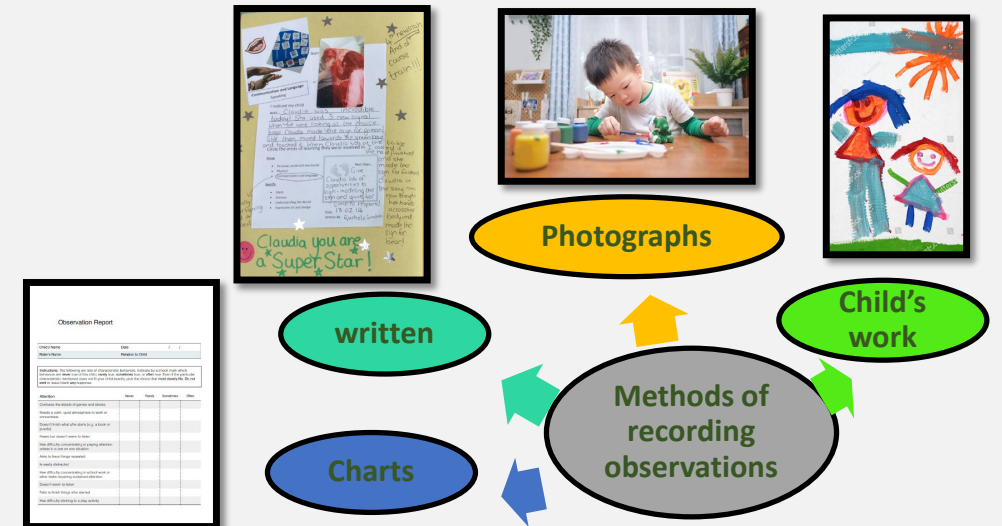
7. **Safety considerations** Think carefully about any safety issues there may be and explain how you will reduce this risk. Consider: where the activity will take place, the equipment needed, how you will supervise it. Consider the weather if you are doing the activity outside. Think about safety labels

8. **Resources** This includes everything you need to carry out the activity. Eg. Space needed, materials, equipment, List all the equipment you will need for the activity. Check that these will be available and are in usable condition.

9. **How will you introduce the activity to the child?** You need to capture the child's interest so they are keen to be involved. You might start by reading a story to inspire them, or show resources or material they could use, Think about if you will introduce the activity and step back or play alongside the child.

## Child Development Year 11 term 3

Method of observation	What the method involves
Narrative	A detailed written description of what is being observed over a short period of time.
Checklist	A list of possible skills is produced so that the observer can check off the child's skills as they are observed.
Snapshot	A brief note is made about a child to capture something they do or a skill they use.
Time sample	Capturing information about what a child is doing at particular times of the day. It could be how they play or how they behave.



# Where food comes from

## Where food comes from

Food can be grown, reared or caught.

Plants are grown in an environment where light, food (soil) and water are available to help them grow and photosynthesise.

Food production and processing ensures that food is edible and safe.

## Historical changes

Throughout the ages, people have hunted animals and gathered plants for food, relying on what was growing locally and animals that were easy to catch. The discovery of fire meant animals and plants could be cooked to eat and taste better. The industrial revolution in the 19<sup>th</sup> century led to greater mechanisation of food production allowing for the development of new products and increased volumes of production, as well as jobs outside of the home or even the local area.

Today, other factors that affect food production include:

- domestication of animals and crops;
- preservation methods;
- development of villages and towns;
- changes of land ownership;
- transport and travel;
- war;
- religion and culture;
- famine, drought, flood, disease,
- research and development of food ingredients.

Diets have changed too and the need for cooking in the home has been reduced by the availability of processed foods.

## Food provenance

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



## Farming systems

Agriculture in the UK can be grouped into the following:

- **Intensive** – a system of production using large amounts of labour and capital relative to land use (high input/high output);
- **Extensive** – a system of production using small amounts of labour and capital in relation to area of land being farmed (low input/lower output);
- **Conventional** – a system that may include the use of artificial and natural pesticides (to control pests, weeds and diseases), artificial fertilisers and organic manures; other techniques used may include concentrated animal feeding/rearing operations, includes both intensive and extensive approaches;
- **Organic** – a system where artificial fertilisers are not allowed to be used, soil fertility is built through crop rotation, and inorganic pesticide use is severely restricted. It is a form of extensive farming;
- **Free-range** – a system where animals, for at least part of the day, can roam freely outdoors. This may be done within a conventional or an organic system;
- **Regenerative farming** – a cropping system and grazing practice that, among other benefits, reverses climate change by rebuilding soil organic matter and restoring degraded soil biodiversity, resulting in both carbon capture and improving the water cycle.



## Farming types in the UK

There are seven main types of farming in the UK:

- **aquaculture** – farming fish in fresh or sea water;
- **arable** – growing of crops and cereals;
- **horticulture** – production of flowers, fruit, vegetables or ornamental plants;
- **market gardening** – small scale production of fruit and vegetables;
- **mixed farming** – combination of arable and pastoral;
- **pastoral** – rearing and production of animals, including pigs, chickens, hill farming sheep, beef and dairy cattle;
- **viticulture** – grapes.

For more information, go to: <https://bit.ly/398qABo>

## Farming across the UK

Some parts of the UK have excellent soil for crops, while others are used for cattle, sheep, pigs and poultry.

North West England, Wales and Scotland	Sheep and beef cattle are most suited to the land and colder temperatures.
Northern Ireland	Sheep, cattle, pigs and dairy are the largest commodity sectors.
South West England	Dairy farming is suited to this region due to the quality grass grown.
East of England	Arable crops such as wheat and barley and vegetables are grown.
South East of England and lowlands of Scotland	Grain, potatoes and sugar beet are grown along with vegetables.

## Hydroponics

Hydroponic vegetables are grown in a nutrient solution rather than soil. Tomatoes, peppers and lettuce are increasingly grown this way. Growing vegetables hydroponically enables them to be grown in a controlled environment with less chance of disease, faster growth and greater yield.

## Genetic modification and biotechnology

Genetic modification of plants and crops can help:

- improve crops resistance to pests, disease or drought;
- extend shelf life;
- improve nutrition and taste;
- produce higher yields;
- animals may be made more resistant to disease, produce less fatty meat, grow faster or be more fertile.

## Tasks

1. The Red Tractor food assurance scheme requires strict standards of animal welfare. List the main requirements for cows, sheep and pigs.
2. Create a presentation about farming in your local area. Include how it has changed over time.

## Key terms

**Food provenance:** Knowing where food was grown, caught or raised and how it was produced.

**Genetic modification:** The direct manipulation of an organism's genes using biotechnology.

**Hydroponics:** The process of growing plants in sand, gravel, or liquid, with added nutrients but without soil.

**Organic farming:** A system of farming and food production. Certification is legally required to grow, process or market organic products.

**Photosynthesis:** The process by which green plants and some other organisms use sunlight to synthesise nutrients from carbon dioxide and water.

**Seasonality:** Fruit and vegetables naturally grow in cycles, and ripen during a certain season each year.

## Seasonality in the UK

Fruit and vegetables naturally grow in cycles and ripen during a certain season each year. When they are in season they are harvested.

Buying and eating food that is season means that it is fresh, has the best flavour, texture and colour, and has optimum nutritional value. Other benefits include lower cost, supporting local growers, reduced energy needed to grow and transport the ingredients and food.

## World food

There are a wide variety of ingredients and foods that are not readily available in the UK, due to the climate. These are imported from other countries.

The availability of these ingredients and foods provides consumers with a wide choice throughout the year.

The variety of ingredients and foods that are now readily available have been introduced to the UK over a long period of time.



**KEY WORDS**

**System Diagram**

This is a diagram that breaks down an operation into three main component parts: Input, Process, Output.

**Processing device**

This device handles information and then turns on or off an output device.

**Microcontroller**

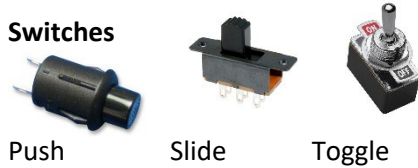
This is a small computer within a single integrated circuit.

**Integrated Circuit**

This is a self-contained circuit made from a number of components designed together.

**Input Devices**

**Switches**



**Light dependant resistor (LDR)**

When light hits this  
Component its resistance  
Changes turning on the circuit.



**Thermistor**

When heat hits this  
Component its resistance  
Changes turning on the circuit.



**Process Devices**

A PIC chip (peripheral interface controller) is a simple controller commonly used in schools.



**Microcontroller**

Are small computers within a single integrated circuit (counters, timers and decision-making components).



**Output Devices**

**Lamps**

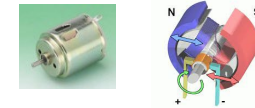


Bulb LED (light emitting diode)

**Buzzers and speakers**



**Motor**

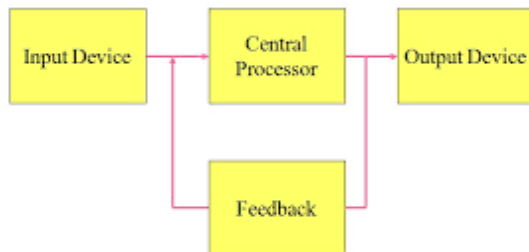


An **electric motor** is a device for converting **electrical** energy into mechanical energy in the form of rotation.

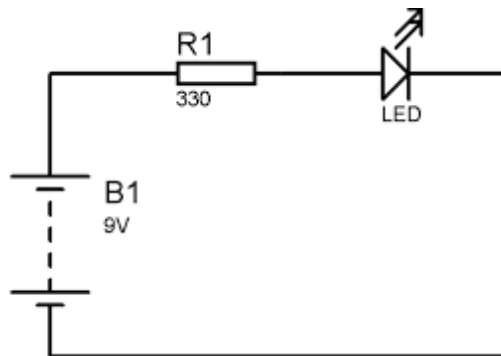
**Simple System Diagram**



**Simple System Diagram with feedback**



**LED series light circuit**



**KEY POINTS**

- System block diagrams describe what happens in a system.
- System block diagrams always have a minimum of one input, one process and one output.
- Input devices provide information from outside into the system.
- Process devices handle information received and turn outputs on or off.
- Output devices send out information into the environment.

## Crime and punishment Knowledge Organiser. 1 Medieval period, c.1000-c.1500.

Crimes	Policing and trials	Punishment	Key considerations
<p><b>Saxon period, c.1000 – 1066.</b></p> <ul style="list-style-type: none"> <li>Crimes against the person, e.g. assault / murder</li> <li>Crimes against property, e.g. theft</li> <li>Crimes against authority, e.g. treason</li> <li>Moral crimes (links to Church / religion), e.g. drunkenness, adultery, etc.</li> </ul> <p><b>Normans, 1066 - c.1200, continuity and change.</b></p> <ul style="list-style-type: none"> <li>William generally retained Edward the Confessor's laws Reason for continuity: stressed continuity and that William was Edward's legitimate successor</li> <li>Murdrum law - Saxon community collectively responsible for murder of a Norman: catch murderer or face fine Reason for change: Normans a tiny minority (7000 among 2m Saxons); deterrent through community pressure; placed responsibility for order on whole community.</li> <li>Forest Laws – banned hunting / collection of firewood / grazing of animals in forests; heavy punishments included blinding and execution for repeat offence Reason for change: to protect William's hunting which he loved Seen as unfair 'social crime'</li> <li>Wergild abolished; replaced by concept of the 'King's Peace' Reasons for change: crimes were against king so compensation paid direct to the king; raised money</li> </ul> <p><b>Later Medieval, c.1200 – c.1500, continuity and change.</b></p> <ul style="list-style-type: none"> <li>Murdrum fine abolished c.1350 Reasons for change: differences between Normans and Saxons faded over time</li> <li>Heresy Laws introduced from 1382 to deal with challenges to Church beliefs Reason for change: increasing challenges to the Church in England (Lollards) and over Europe</li> <li>Increased focus on treason</li> </ul>	<p><b>Policing – community based:</b></p> <p><b>Saxon period, c.1000 – 1066.</b></p> <ul style="list-style-type: none"> <li>Hue and cry – witnesses / whole village expected to chase suspect; fines if failed to do so: no organised police force</li> <li>Tithings – all males over 12 in a group of 10 – responsible for each other's behaviour</li> </ul> <p><b>Normans, 1066 - c.1200, continuity</b></p> <ul style="list-style-type: none"> <li>No change after Norman Conquest (1066) Reason for continuity: system cheap and reasonably effective.</li> </ul> <p><b>Later Medieval, c.1200 – c.1500, continuity and change</b></p> <ul style="list-style-type: none"> <li>1285, Parish Constable introduced Reason for change: to organise hue and cry and link with county Sheriff for more important crimes / crimes outside village boundaries</li> <li>Parish watch introduced - night-time patrols Reason for change: more organised efforts at policing</li> <li>Tithings fade out by the 1400s Reason for change: looser feudal ties of peasants after Black Death (1348/50)</li> </ul> <p><b>Trials - community-based plus religious influence:</b></p> <p><b>Saxon period, c.1000 – 1066.</b></p> <ul style="list-style-type: none"> <li>Local manor courts for most cases; King's Court in London existed for most serious cases</li> <li>Local jury (knew accused); made judgement based on witnesses / evidence and their knowledge of the character of accused / accuser</li> <li>Religious influence:             <ul style="list-style-type: none"> <li>accused / accuser / witnesses / jurors took oath to ensure honesty</li> <li>Trial by ordeal (hot / cold water, iron, consecrated bread): where jury could not reach verdict: 'God decides'.</li> </ul> </li> </ul> <p><b>Normans, 1066 - c.1200, continuity and change</b></p> <ul style="list-style-type: none"> <li>Trials essentially as before including trial by ordeal: Reason for continuity: court / jury system effective; trial by ordeal due to Normans' deep religious beliefs</li> <li>Addition of trial by combat to 'trial by ordeal' Reason for change: linked to traditional warlike Norman customs</li> </ul> <p><b>Later Medieval, c.1200 – c.1500, continuity and change.</b></p> <ul style="list-style-type: none"> <li>1166 creation of Assize / Circuit courts where Royal judges tried more serious crimes in circuits of important towns</li> <li>1190 Coroners appointed to investigate suspicious deaths</li> <li>1215 abolition by the Pope of Trial by Ordeal</li> <li>1361, Justices of the Peace – centrally appointed local judges (magistrates)</li> </ul>	<p><b>Saxon period, c.1000 – 1066.</b></p> <ul style="list-style-type: none"> <li><i>Early-Saxon Blood Feud - where victim's family took revenge - replaced by following punishments</i></li> <li>Wergild – paid to victim's family; amount varied according to importance of victim; types and extent of damage done</li> <li>Fines</li> <li>Corporal punishment - stocks, pillory, whipping, maiming</li> <li>Capital punishment – hanging</li> <li>NOT prison</li> </ul> <p><b>Purpose</b></p> <ul style="list-style-type: none"> <li>Compensation - Wergild</li> <li>Retribution – severity of punishment matched crime (treason – death; repeat offences maiming, etc.)</li> <li>Deterrent – painful / humiliating public punishment in front of community (linked to cost and lack of policing)</li> </ul> <p><b>Normans, 1066 - c.1200, continuity and change.</b></p> <ul style="list-style-type: none"> <li>Wergild abolished Reason for change: fines paid to the king for breach of 'King's Peace'</li> <li>Increase in crimes punishable by death or mutilation (e.g. Forest Laws) Reason for change: Norman harshness and need for deterrent as a small minority</li> <li>Retribution and deterrent overwhelmingly main purposes</li> </ul> <p><b>Later Medieval, c.1200 – c.1500, continuity and change.</b></p> <ul style="list-style-type: none"> <li>1305, introduction of 'hung, drawn and quartered' punishment for treason Reason for change: retribution / deterrent - hideous punishment to stress enormity of crime</li> </ul>	<p><b>Saxon period, c.1000 – 1066.</b></p> <p><b>Society:</b></p> <ul style="list-style-type: none"> <li>Agricultural: vast majority lived in small villages.</li> <li>Massive importance of community in policing, trials and public punishment.</li> <li>Growth of towns during Middle Ages reduced effectiveness of community.</li> <li>Importance of Church / religion in all areas of life (and death)</li> </ul> <p><b>Institutions – government</b></p> <ul style="list-style-type: none"> <li>Saxons – slow growth of royal power.</li> <li>Normans, 1066 - . increased harshness of laws and punishments, e.g. brutality (Harrying of the North); Forest Laws; Murdrum Law; castles, etc. Particularly linked to deterrence as Normans a tiny minority of c.7000 among 2m Saxons.</li> <li>Later Middle Ages: Norman / Saxon divisions faded; development of government institutions seen in courts / coroners, etc.</li> </ul> <p><b>Institutions – Church / religion</b></p> <ul style="list-style-type: none"> <li>Christian religion massively influential in all areas of life and crime, etc.</li> <li><b>Society:</b> profound belief in God; massive wealth and influence of Church; tension between Church and government (Thomas Becket – Church Courts)</li> <li><b>Crimes:</b> Religious influence on moral crimes e.g. drunkenness, adultery, failure to attend church; Heresy – crimes against Church beliefs especially after 1382.</li> <li><b>Policing:</b> Sanctuary linked to concept of mercy. Certain holy places left the criminal immune from arrest: had 40 days to decide whether to stand trial or go into exile.</li> <li><b>Trials:</b> Oaths to 'prove' honesty of accused / witnesses / jury; Trial by Ordeal – 'God decides' until abolished in 1215; development of 'Church Courts' to try clergy:             <ul style="list-style-type: none"> <li>The so-called 'Benefit of the Clergy' allowed those connected to the Church (or capable of reciting the 'neck verse' to be tried by Church Courts where sentences more lenient and excluded capital punishment.</li> </ul> </li> <li><b>Punishment:</b> mercy, especially in relation to crimes committed by the clergy.</li> </ul> <p><b>Individuals</b></p> <ul style="list-style-type: none"> <li>William the Conqueror – Norman laws, harshness, personal love of hunting.</li> </ul> <p><b>Attitudes</b></p> <ul style="list-style-type: none"> <li>Importance of religion</li> <li>Development of concept of 'social crime' under Normans. Unfair 'crime', e.g. Forest Laws.</li> </ul> <p><b>Science and technology</b></p> <ul style="list-style-type: none"> <li>Domination by religion</li> </ul>

**Physical Factors**

- o inherited conditions
- o physical ill health
- o mental ill health
- o physical abilities

**Social Factors**

- o supportive and unsupportive relationships
- o inclusion & exclusion
- o bullying
- o discrimination.

**Cultural**

- o religion
- o gender roles, identity and expectations
- o sexual orientation
- o community

**Lifestyle Factors**

- o nutrition
- o physical activity
- o smoking
- o alcohol
- o substance misuse.

**Economic**

- o employment situation
- o financial resources – income, inheritance, savings.

**Environmental**

- o housing needs, conditions, location
- o home environment
- o exposure to pollution – air, noise and light.

**Factors that affect Health & Wellbeing**

**Person-centred care ALL ABOUT THE INDIVIDUAL.. their circumstances, their needs to reduce health risks, individual's wishes, preferences and choices**

*Guidance from the government...*



**Eatwell plate guide proportions**



**Max 14 units alcohol**



**Importance of a person-centred approach for people**  
 more comfortable with recommendations, advice and treatment, more confidence, seen as unique and personal needs are met, increases the support available, improves their independence, more motivated, feel happier and more positive about their health and wellbeing.

**Importance of person-centred approach for staff and services**  
 job satisfaction for staff, saves time for services, saves money and reduces complaints about health and social care services and workers.

**Recommendations for improving health;**

- o improving resting heart rate and recovery rate after exercise
- o improving blood pressure and maintaining a healthy weight
- o eating a balanced diet and getting enough physical activity
- o quitting smoking, sensible alcohol consumption, stop substance misuse.

**Component 3 Health & Wellbeing**



*..from unhealthy to healthy.. your plan...*

**PIES health & wellbeing impact of different types of life event:**

- \* physical events
- \* relationship changes
- \* life circumstances



**No smoke and nicotine**



**No legal or illegal drugs**

*Problems and solutions.....*

**Potential barriers**

- o physical barriers
- o sensory disability
- o social and cultural backgrounds
- o language barrier or speech impairments
- o geographical barriers
- o resource barriers for service provider
- o financial barriers.

**Types or support to get and remain healthy;**  
 Formal support eg.GP  
 Informal support eg. family

**Potential obstacles;**

- o emotional/psychological
- o time constraints
- o availability of resources
- o unachievable targets
- o lack of support.

**Blood Pressure Stages**

Blood Pressure Category	Systolic mm Hg (upper #)	Diastolic mm Hg (lower #)
Low blood pressure (Hypotension)	less than 80	or less than 60
Normal	80-120	and 60-80
Prehypertension	120-139	or 80-89
High Blood Pressure (Hypertension Stage 1)	140-159	or 90-99
High Blood Pressure (Hypertension Stage 2)	160 or higher	or 100 or higher
High Blood Pressure Crisis (Seek Emergency Care)	higher than 180	or higher than 110

**Physiological indicators, measuring what's healthy and what's**

*Measuring good and not so good....*

**Resting Hear Rate Chart**

Men (beats per minute)						
Age	18 - 25	26 - 35	36 - 45	46 - 55	56 - 65	65 +
Athlete	49 - 55	49 - 54	50 - 56	50 - 57	51 - 56	50 - 55
Excellent	56 - 61	55 - 61	57 - 62	58 - 63	57 - 61	56 - 61
Great	62 - 65	62 - 65	63 - 66	64 - 67	62 - 67	62 - 65
Good	66 - 69	66 - 70	67 - 70	68 - 71	68 - 71	66 - 69
Average	70 - 73	71 - 74	71 - 75	72 - 76	72 - 75	70 - 73
Below Average	74 - 81	75 - 81	76 - 82	77 - 83	76 - 81	74 - 79
Poor	82 +	82 +	83 +	84 +	82 +	80 +

Women (beats per minute)						
Age	18 - 25	26 - 35	36 - 45	46 - 55	56 - 65	65 +
Athlete	54 - 60	54 - 59	54 - 59	54 - 60	54 - 59	54 - 59
Excellent	61 - 65	60 - 64	60 - 64	61 - 65	60 - 64	60 - 64
Great	66 - 69	65 - 68	65 - 69	66 - 69	65 - 68	65 - 68
Good	70 - 73	69 - 72	70 - 73	70 - 73	69 - 73	69 - 72
Average	74 - 78	73 - 76	74 - 78	74 - 77	74 - 77	73 - 76
Below Average	79 - 84	77 - 82	79 - 84	78 - 83	78 - 83	77 - 84
Poor	85 +	83 +	85 +	84 +	84 +	85 +

**Impact on current and future health risks**

**BMI Chart**

HEIGHT In/cm	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215
5'0" - 152.4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
5'1" - 154.9	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
5'2" - 157.4	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
5'3" - 160.0	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
5'4" - 162.5	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
5'5" - 165.1	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
5'6" - 167.6	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
5'7" - 170.1	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
5'8" - 172.7	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
5'9" - 175.2	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
5'10" - 177.8	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
5'11" - 180.3	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
6'0" - 182.8	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
6'1" - 185.4	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
6'2" - 187.9	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
6'3" - 190.5	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
6'4" - 193.0	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35

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