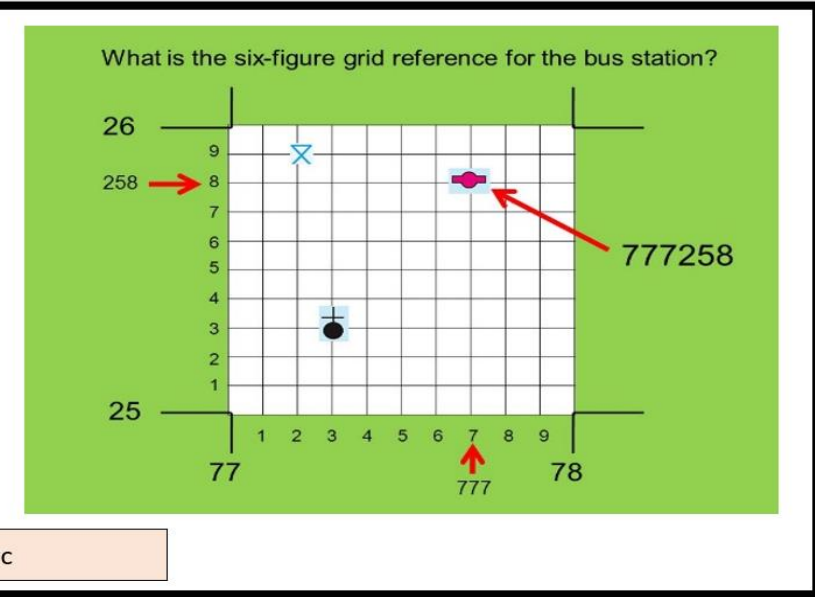
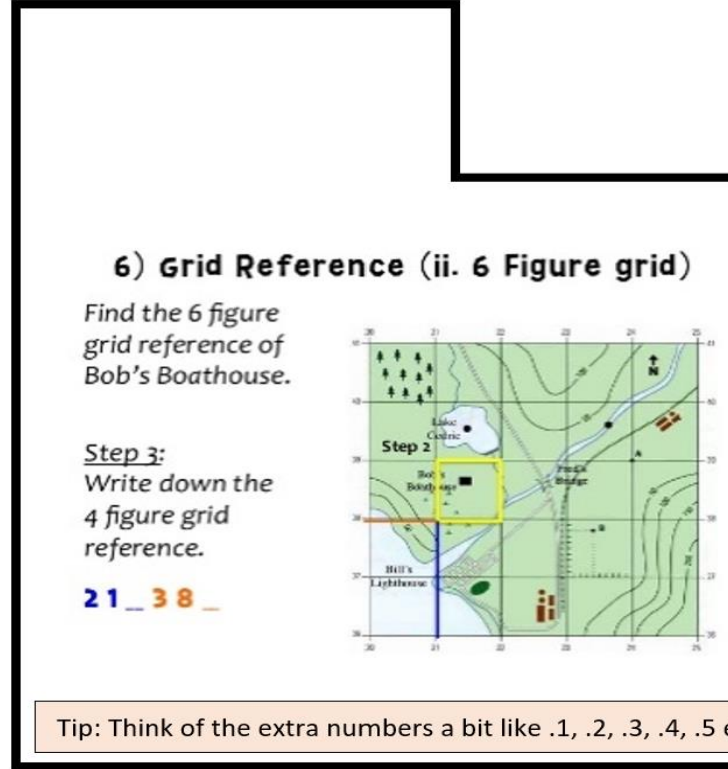
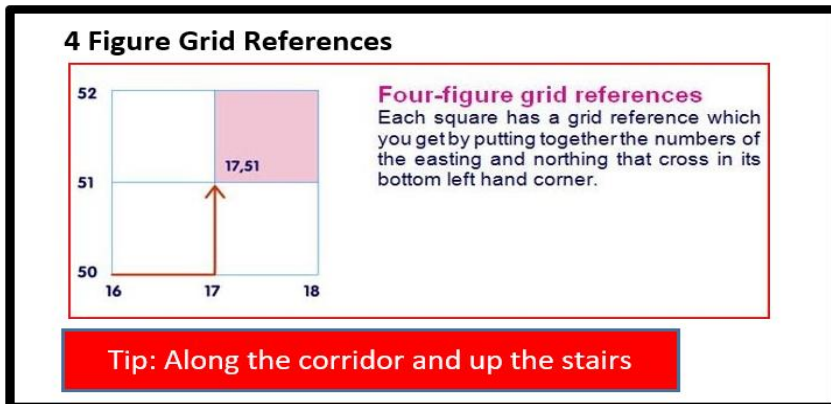
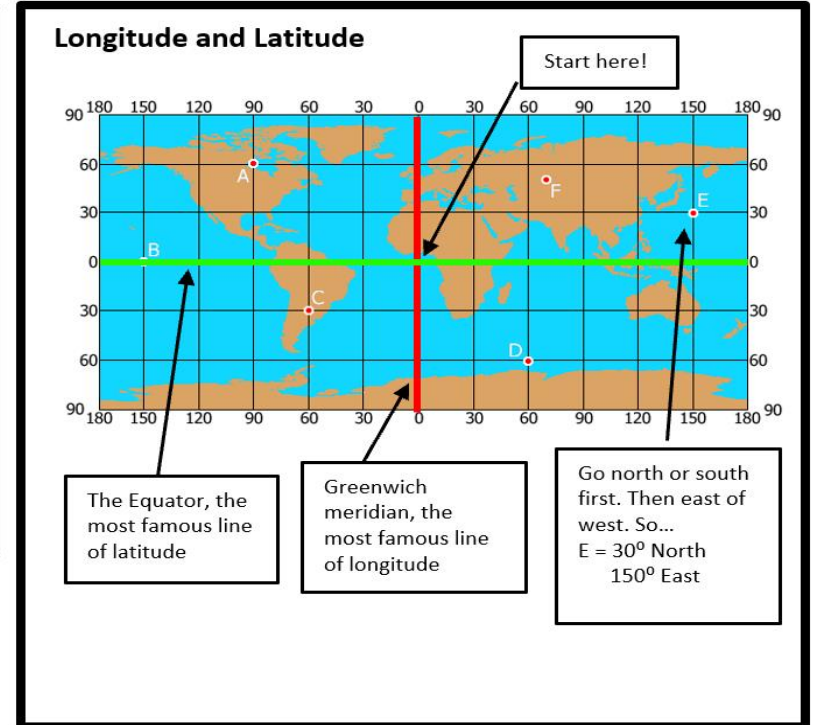
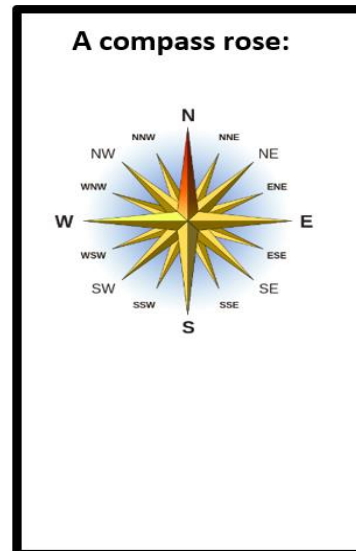
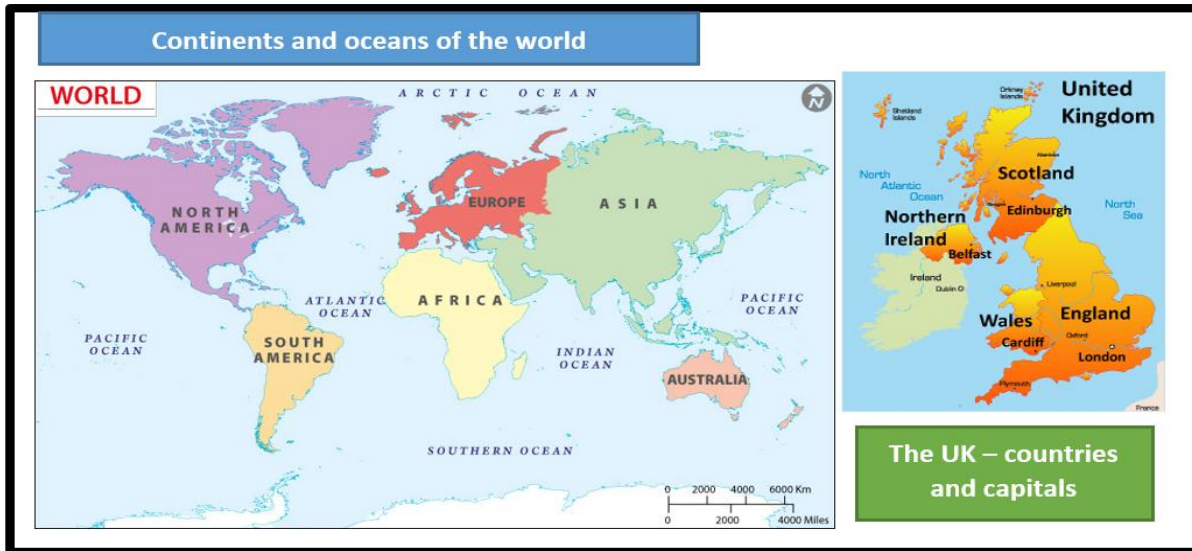


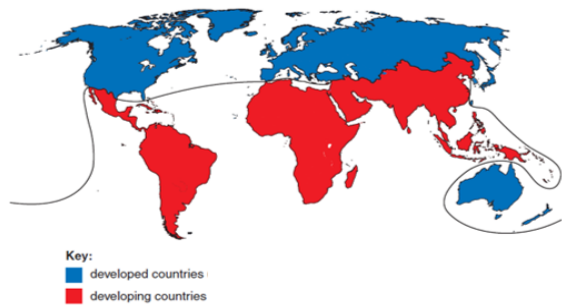
Unit 1 - What is a geographer?



- Key Terms:**
- 1) **Continent** – One of the seven large land masses of the earth
 - 2) **Country** – A nation with its own government occupying a particular territory
 - 3) **Longitude** – The lines down the earth showing east or west
 - 4) **Latitude** – The lines across the earth showing north and south
 - 5) **Eastings** – The grid reference along the bottom
 - 6) **Northings** – The grid reference up the side
 - 7) **Contour Lines** – Brown lines on a map which show height
 - 8) **Relief** – The height of the land
 - 9) **OS Map** – Ordnance Survey is a map of areas of the UK

Unit 2 – Development – Part 1

Where are the poor countries of the world?

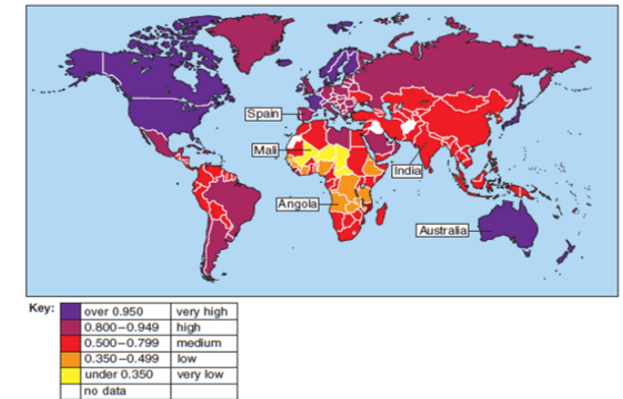


1. Development across the world is not even.
 2. As can be seen from the map Brandt made in the 1980s.
 3. The **developed countries** are in the **northern** hemisphere. The **developing countries** are in the **southern** hemisphere. The **anomaly** is Australasia.
- NB: The Brandt line was constructed in the 1980s.

How do we measure development?

1. **Life expectancy** – The average age you are expected to live to in a country. If this is low the country may have poor health care and an unreliable source of water and food, so would be classed as developing.
2. **Infant mortality** – The number of babies that die per 1000 before their first birthday. If this is high the country may have poor health care, so would be classed as developing.
3. **Birth rate** – The number of births per 1000. If this is high, then the country probably has little access to contraception and sex education, so would be classed as developing.
4. **Literacy rate** – The % of people that can read and write. If this is low it shows people cannot read and write, so some may not have access to schools (developing).
5. **People per doctor** – The number of people to one doctor. If this is high, it means the country has less money to employ doctors, so would be classed as developing.
6. **Access to internet** – The % of people with access to the internet. If this is low it shows that people can't afford computers, phones or tablets. It also shows us that the government might not be able to afford the installation of broadband lines to areas, so the country would be classed as developing.
7. **Access to safe water** – This is the % of people with access to clean water. If this is low, it means that the people do not have clean water running into their homes, either because they can't afford it, or the Government cannot afford to install it (developing).

Is the Brandt line still relevant?



1. The above map shows the **human development index scores** for different countries.
2. HDI uses three indicators to work out how developed countries are (GDP per capita, life expectancy and literacy rate).
3. As can be seen, many countries in **Africa are still classified as developing**. As shown by the light colours. This shows the Brandt line is still relevant
4. **The USA and Europe are still classified as developed**, which also proves the Brandt line is still relevant.
5. However, **Brazil, China, north and south Africa etc. are more developed today**. This proves that the Brandt line is wrong and out of date, as there is a third category – 'emerging countries.'

Reasons why some countries develop whilst others do not:

Factors which encourage development.	Factors which hinder development.
<ul style="list-style-type: none"> • A strong government who can enforce taxes and spend them on things like schools and hospitals, to improve quality of life. • Locational benefits such as having a coastline, meaning trade can happen easily with surrounding countries. • Loans used to improve infrastructure, such as roads, meaning that more imports and exports can take place. • Rich in natural resources e.g. coal, oil, fertile soil etc. • Few droughts or problems with access to food, so children do not spend time looking for these things; instead they can attend school and their literacy rate improves. 	<ul style="list-style-type: none"> • Historic colonialism means resources were exploited by the colonial rulers. • Droughts and famines common so people starve, or spend their days looking for water. • Limited natural resources, meaning it is difficult to power industry. • The country is landlocked meaning they have no ports to import and export goods, reducing trade. • Reliance on primary products, leading to a trade deficit and little money to invest in schools and hospitals, therefore life expectancy and literacy could be low in some areas.

Different types of aid?

Bilateral aid: International aid given by one country to another.

Multilateral aid: Aid given by NGOs (Non-Government Organisations) like the Red Cross or Oxfam.

Short term aid: Aid given to support a country following a crisis e.g. after an earthquake.

Long term aid: Aid given over a prolonged period to support a country's development e.g. teaching farmers different farming techniques.

Unit 2 – Development – Part 2

Advantages and disadvantages of aid?

Good Aid	Bad Aid
1. Aid that gives people the chance to learn new skills , like farming, so people can feed themselves and pass their skills onto other people.	1. Aid that requires electricity, spare parts , or an expert to fix it e.g. computers. The recipient country could become dependent on the donor.
2. Aid that helps people through a disaster like food and medicine during a hurricane; reduces the death toll.	2. Giving countries food and water year after year, as the people will become dependent .
3. Aid that can be used for a long time , like a water pump which is simple and cheap to run and will not break down.	3. Aid such as loans , or aid where deals are made, could lead to the recipient country getting into debt .

Aid Case Study – Tree Aid

Background

1. Set up in the **Sahel** region of Africa.
2. In **Mali**.
3. Run by locals.



Features

1. **Tree seeds** given, so tree nurseries can be set up for food production, creating 7.2 million trees and helping over 450,000 people.
2. **Bikes and donkey** carts given so that finished items can be taken to market to sell; these are easy to maintain and stop dependence.
3. **People taught** how to look after the trees, so they can become self-sufficient.

Success / Sustainability

1. **More food** such as cashew and shea nuts, which they use to feed themselves and sell, this means they now have money to send children to school, which is improving literacy rates.
2. The tree roots stop **soil erosion** meaning that more crops can be grown, and higher yields achieved, increasing profits for farmers.
3. The trees **hold moisture** in the area, meaning less drought and less chance of death through dehydration or lack of food.



Fairtrade as a way of escaping poverty?

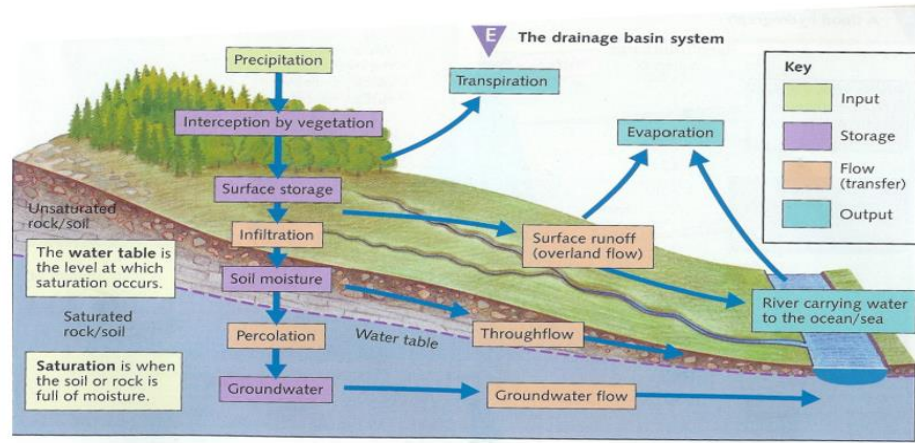
Fairtrade is trade between companies in developed countries and producers in developing countries in which **fair prices are paid** to the producers.

Advantages of Fairtrade	Disadvantages of Fairtrade
1. Provides producers with a fair price , meaning they can afford to buy food and medicine for their families.	1. The product is usually a higher price than a non-fair-trade product. The customer pays more meaning the products may not sell, so the farmers may not make the money they thought they would.
2. Ensures workers get reasonable working conditions this means that injuries and long working hours are avoided	2. The non-fair-trade workers earn less meaning some people are forced into greater poverty and will struggle to provide for their families.
3. It creates jobs for local people, meaning the government gets taxes to invest in schools and hospitals to improve development.	



Unit 3 - Rivers Part 1

- Drainage Basin:** An area of land drained by a river and its tributaries.
- Watershed:** The dividing line between two drainage basins.
- Source:** The start of a river.
- Mouth:** Where the river enters the sea or lake.
- Tributary:** A small river than joins a larger river.
- Confluence:** The point at which two or more rivers meet.



- Precipitation:** Any form of water falling from the sky.
- Interception:** When the leaves of trees stop precipitation reaching the ground.
- Soil moisture:** When water is stored in the soil layer.
- Transpiration:** The process where plants absorb water through their roots and then give off water vapour through pores in their leaves.
- Infiltration:** The movement of water from the surface into the soil.
- Surface run-off:** The movement of water overland back into a river.
- Surface storage:** Water stored on the surface in lakes or puddles.
- Through flow:** The movement of water through the soil back into the river.
- Groundwater flow:** The flow of water through the rock layer.
- Percolation:** The movement of water from the soil layer into the rock layer below.

River Profile:

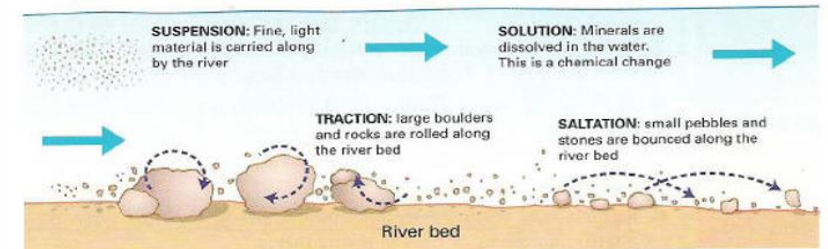
Course	Channel shape	Valley shape	Cross Profile
Upper	Narrow, shallow	V shaped, steep gradient, narrow valley, river takes up valley floor	
Middle	Wider deeper channel	U shaped, gentle sloping valley sides, valley is wider	
Lower	Very wide and deep channel	Open U shaped, almost flat, river only takes up a small proportion of the channel	

Long Profile - Shows how the gradient changes from source to mouth.
Cross Profile - Shows what a cross section of a river looks like.

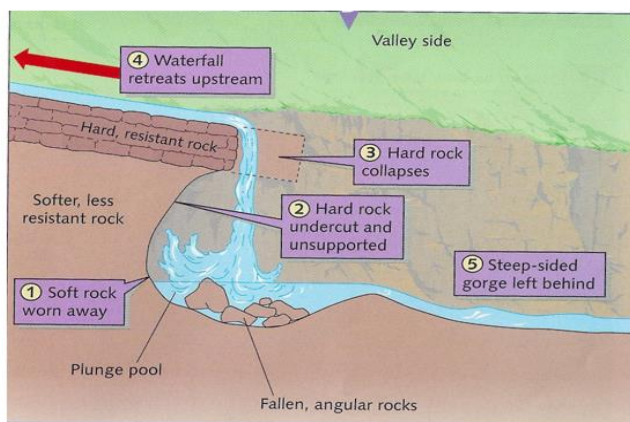
The four types of erosion:

- Hydraulic Action:** The sheer force of the water causing the bed and banks to erode.
- Solution/Corrosion:** The acids in the water causing erosion.
- Abrasion:** Material carried by the river scrapes along the river bed/banks.
- Attrition:** The river's load hits into each other breaking down into smaller pieces.

Transportation:

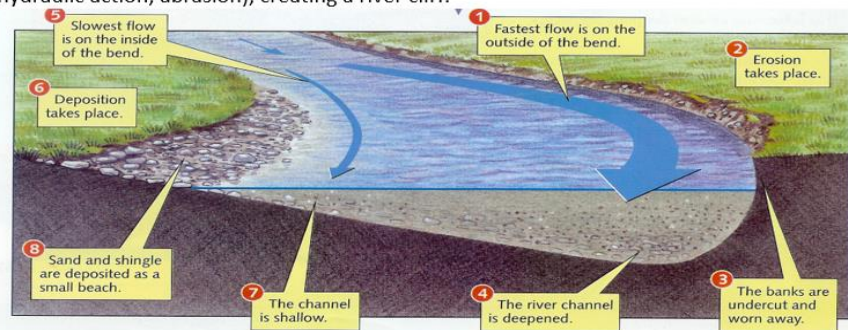


Upper course feature – Waterfall



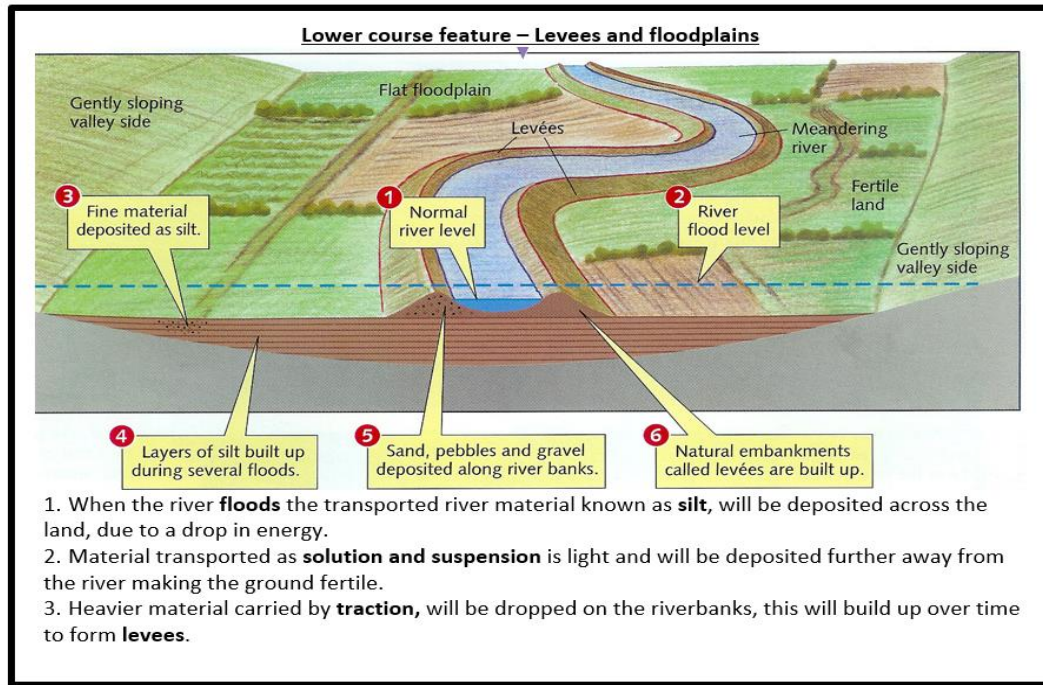
Middle course feature – Meander

- Meanders are constantly changing shape and position. They are eroding in a **lateral** direction (across).
- Deposition** happens on the **inside**, slow part of the bend leading to a **slip off slope**.
- Erosion** happens on the outside, fast part of the bend (hydraulic action, abrasion), creating a river cliff.



Oxbow lake: An isolated horseshoe-shaped bend that forms when two outside bends of a meander meet. Over time this will dry out and will fill with vegetation.

Unit 3 – Rivers Part 2



Causes of flooding:

Physical – Steep slopes, impermeable rock, saturated ground, snow melt, heavier than average rainfall, meanders, low lying ground.

Human– Deforestation, impermeable surfaces e.g. tarmac / concrete, urbanisation, storm drains, bridges, climate change leading to changes in intensity of rainfall and rising sea levels.

Flood defences

Hard engineering methods:

1. **Dams and reservoirs** – Control the flow of the river.
2. **Widening and deepening** the river, so it can hold more water.
3. **Embankments (levees)** – Raise the height of the riverbanks so it can hold more water.

Soft engineering methods:

1. **Afforestation** – Planting trees to increase interception.
2. **Floodplain zoning** – Allowing only certain land uses on the floodplain reduces the risk of flooding to houses and important buildings.
3. **Flood warnings** – Sirens and messages which warn people to evacuate and move expensive items to safe locations.



Positives and negatives of the different flood defence methods

A **dam** is **positive** as it reduces the flood risk, so will **lower insurance costs** for residents. It is also **multi-purpose** so jobs can be created as people will visit the reservoir.

However, **dams can be negative** as they are very **expensive** so reduce government revenue during construction. Also huge areas of **land must be flooded** to create the reservoir, this floods farmland and habitats.

Consider the positives and negatives of the other methods discussed.

	Town of Boscastle, Cornwall, south west of the UK, developed country – August 2004	South Asia, Bangladesh, developing country - July and August 2007
Causes	<p>Physical factors - A massive downpour of rain, 89mm of rainfall in 2 hours. The soil was already saturated (previous rain) which meant increased surface run-off. The gradient is steep at Bodmin Moor and contains impermeable rock. Located at the confluence of the River Jordan and Valency.</p> <p>Human factors – Building on the floodplain, Boscastle has also experienced some deforestation. Narrow span bridges across the river caused a bottle neck for debris and the flood water.</p>	<p>Physical factors – Heaviest rain in 50 years, 900mm in July. This saturated the soils. Snow melt from glaciers in the Himalayas. Low lying country – 80% lies on floodplains, around 1m below sea level.</p> <p>Human factors – Deforestation to use wood for fuel and to build homes for the increasing population in areas such as Nepal. This reduced interception and caused more surface run off.</p>
Effects	<p>Social – Nobody died, 6 injured, 58 properties damaged, people had to stay in caravans for 6 months during repairs.</p> <p>Economic - 25 businesses flooded costing £25 million in repairs. Four bridges destroyed causing a decline in tourism and a negative impact for businesses as trading was made difficult.</p> <p>Environmental - 75 cars washed into the river, causing fuel to leak into the river and the sea, damaging local habitats.</p>	<p>Social - 2000 deaths, 25 million homeless.</p> <p>Economic - Many factories closed, so lost jobs and income.</p> <p>Environmental - 60% of the country under water.</p> <p>Secondary Effects – Sewage contaminated the water supply, as a result 10,000 people caught diseases like cholera. Children lost out on schooling. Flooded fields meant a reduced production of rice and so rice prices increased considerably.</p>
Responses	<p>Immediate Responses</p> <p>7 helicopters sent in to rescue people from the roofs of their homes.</p> <p>The community centre was used as an evacuation centre for the local people and tourists, providing food and a place of safety.</p> <p>Long term responses</p> <p>The rivers were widened and deepened, so they could hold more water.</p> <p>The river was straightened in certain places, to give the river a more direct route back to the sea.</p> <p>The car park was rebuilt on higher ground.</p> <p>Wider span bridges were built, so flood water can pass through next time.</p>	<p>Immediate responses</p> <p>Poor warning system.</p> <p>Many people didn't evacuate areas flooded, as they wanted to stay with their belongings. Destroyed roads slowed down the evacuation.</p> <p>International charities distributed food, water, medical aid. Also technical equipment like rescue boats.</p> <p>Long term responses</p> <p>International charities funded the re-building of homes.</p> <p>Some homes rebuilt on stilts.</p> <p>Provision of flood shelters for people and animals.</p> <p>Flood warning system with speakers placed in most villages.</p>