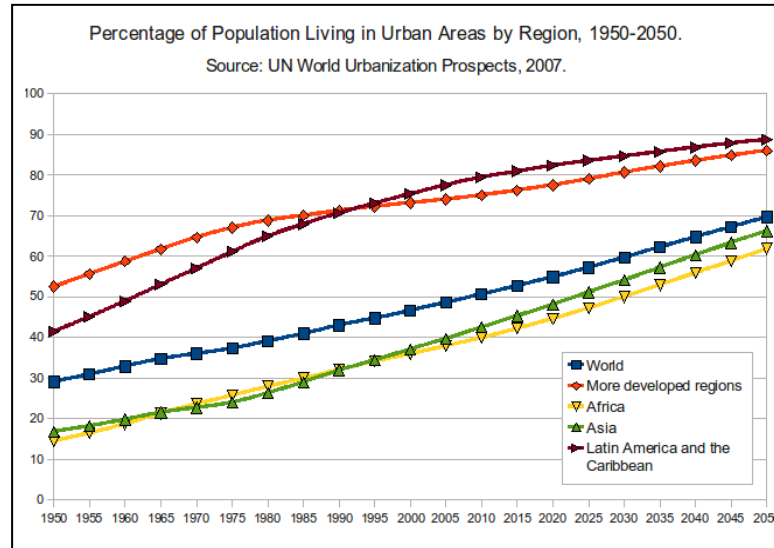




Key Word	Definition
Urbanisation	A rise in the percentage of people living in urban areas
Megacity	A city with a population of over 10 million people
World City	A city with global power and influence
Net growth (migration)	The difference between those entering and those leaving an area
De-industrialisation	The closure of industries
Informal economy	An unofficial economy, where no records are kept. People have no rights or contracts
Formal economy	An official economy which meets legal standards for accounts, taxes, pay and conditions
Counter-urbanisation	People leaving cities
Brownfield sites	Former industrial areas that have previously been developed
Sustainable development	Develop that meets the needs of the present without compromising the needs of future generations
Top-down development	Large-scale development, led and funded by governments or large companies
Bottom-up development	Experts working with communities to identify their needs, offer assistance and let people have control over their lives



Variation Between Regions

- More people now live in urban areas than rural areas.
- Asia and Africa have seen the most rapid growth.
- The causes of this are:
 - Migration to cities
 - Natural increase (more births than deaths)

Megacities:

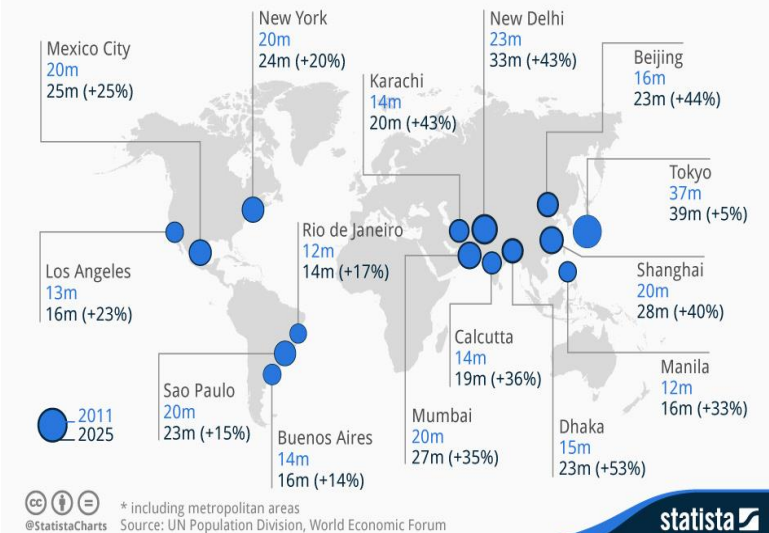
Only 25% of the world's megacities are in developed countries. Most are found in emerging countries.

World Cities/ primate cities:

Play a disproportionate role in world affairs and have more influence than their size suggests (urban primacy). They are influenced by things such as: politics, transport links, investment, infrastructure and cultural links.

The World's Megacities Are Set for Major Growth

Population growth of the world's top 15 megacities (millions, 2011-2025)



Urban Land Use Model



CBD: Expensive land value, high rise building, shopping centres, cultural centres, offices, transport hubs means good access.

Inner City: industrial areas with terraced housing for workers. Very often facing socio-economic problems from closure of industries.

Suburbs: larger semi-detached and detached housing, often built in estates. Land value generally cheaper although demand can increase price. Facilities such as houses, churches, local services to serve these estates.

Rural-Urban Fringe: Where town meets countryside. Mixture of land use including housing, business parks and airports. Conflicts of interest may occur due to varying needs of users.

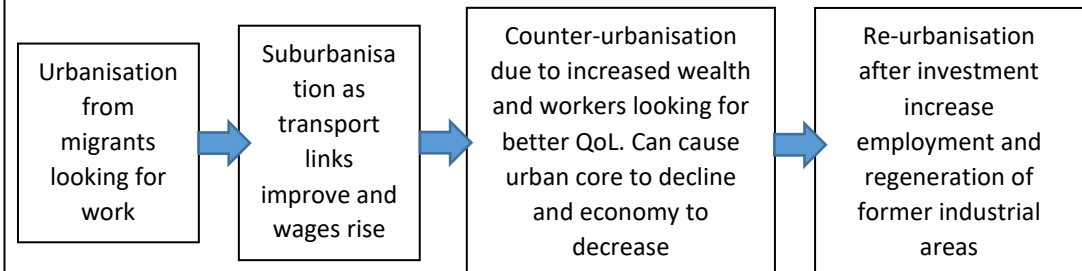
The development of this pattern of land use is down to three things: accessibility, cost of land and planning decisions made by councils/government. This can cause the structure of some cities to vary.

Skills:

- Construction and analysis of graphs to show change and growth.
- Using satellite images to identify land use zones in urban areas and spatial growth.
- Using quantitative and qualitative data to judge variations in quality of life.

Push Factors <i>(Reasons for people leaving a rural area)</i>	Pull Factors <i>(Reasons that people are drawn into an urban area)</i>
Lack of job opportunities Low wages due to large proportion of primary jobs Poor Infrastructure Lower quality of life	Higher paid jobs in tertiary and quaternary sector Access to education, healthcare etc. Better transport network Perceived better quality of life

Urban Populations can change over time



Developing City (e.g. Kampala)

High proportion of workers in the informal economy such as street vending, small scale repairs and drug dealing.

Small proportion of workers in the formal economy such as office and bank workers and shops.

Very little money is paid to the government through taxes so the country remains poor.

Emerging City (e.g. Mumbai)

Large proportion of workers in the informal economy selling and making food, cigarettes and clothing – many of these are factories that have no minimum wage, benefits or working conditions.

Some workers in the formal economy in growing tertiary industries created by outsourcing from TNCs.

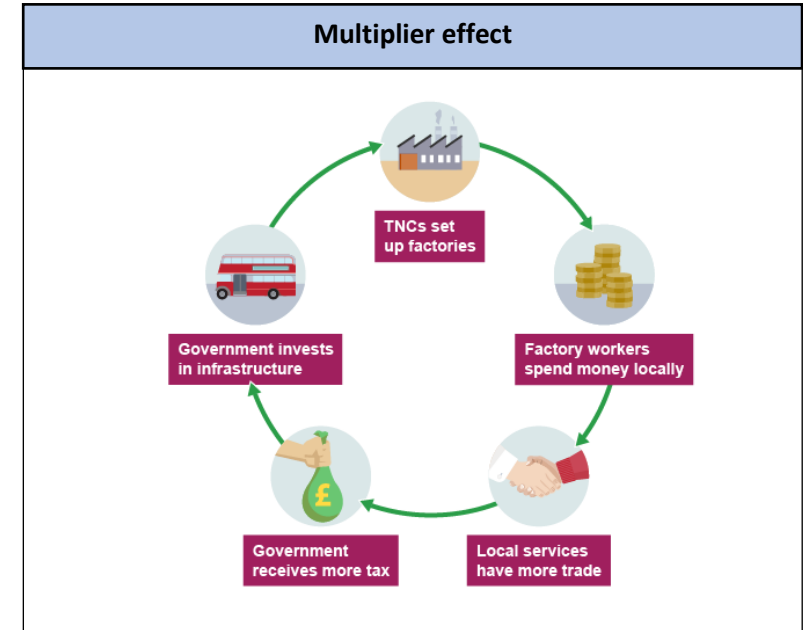
Developed City (e.g. New York)

Lots of money comes from workers in the 'knowledge economy' – high proportion of people working in finance and business. This allows economic growth and investment.

Still evidence of informal economy workers. This may be illegal migrant workers or self-employed workers not paying taxes.



Term	Definition
Dependency ratio	Proportion of people below 15 and over 65 who rely on the working population.
Economic liberalisation	When a country's economy is given the freedom of 'market economy', consumers and companies decide what people buy based on demand.
Globalisation	Increased connections between countries.
Gross domestic product (GDP)	The total value of goods and services produced by a country per year.
High Income Countries (HIC)	Wealthier countries mostly located in the northern hemisphere e.g. In North America, Western Europe.
Human development index (HDI)	A standard means of measuring human development.
Infant mortality	Number of children who die before their first birthday.
Life expectancy	Average age a person is expected to live to.
Low income countries (LIC)	Poor countries mostly located in the southern hemisphere e.g. Latin America, Africa and Asia.
Multiplier effect	When businesses move to an area and invest money on housing and services which in turn creates more jobs and attracts more people.
Newly Industrialising Countries (NIC)	Countries which have experienced rapid development. E.g. Hong Kong, Singapore and Malaysia.
Purchasing power parity	Shows what you can buy in each country, now used to measure GDP.
Transnational companies (TNCs)	Companies which operate in more than one country.
World Trade Organisation	A global organisation which aims to make trade easier.



- Skills:**
- Ranking countries using development measures
 - Interpreting population pyramids.
 - Analysing global inequality.
 - Using proportional flow-line maps to look at trade patterns and flows.
 - Using numerical data
 - Using socio-economic data to look at core and periphery regions.

Revision Websites:

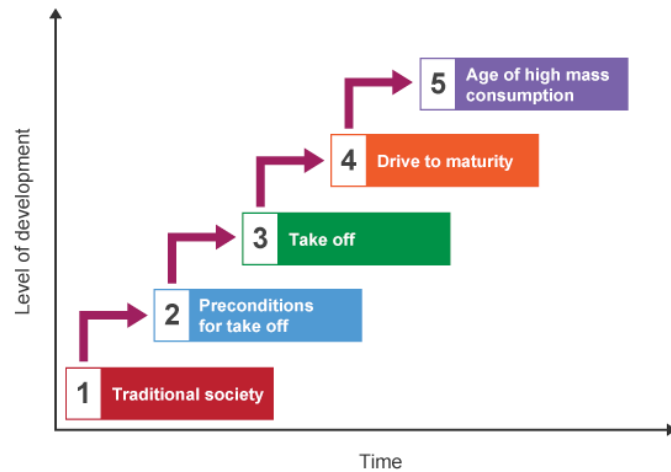


Geography
is Easy



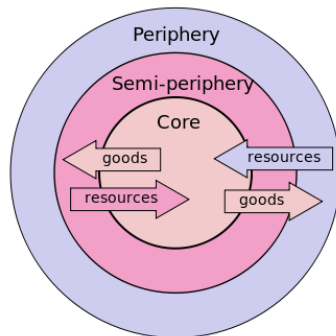
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Rostow's Theory



Rostow's theory summarises economic growth into 5 different stages. Most countries can be put into the stages. However, it is out of date as it doesn't take into account technological advances. Some countries are difficult to put into one stage as different regions are more developed than other regions.

Frank's Dependency Theory



Frank believed that development was about two types of global region – core and periphery. Low value raw materials are traded between the periphery and the core where they are processed into high-value products. Frank believed that historical trade had made these countries poor in the first place and are weaker members of the global society.

Measuring Development

There are different ways in which we can measure development.

- Development Indicators:** comparing a country's GDP, levels of poverty, levels of inequality, access to safe drinking water and literacy rate.
- HDI:** countries are given a number between 0 and 1 based on four indicators – life expectancy, literacy rate, length of schooling and GDP per Capita.
- Corruption Perceptions Index:** devised to help investors work out where their money is safe. A more corrupt country may be less developed as money is spent on weapons as opposed to education.

Factors Affecting Development

Physical: e.g. a landlocked country and rural isolation results in poor infrastructure which makes it difficult to trade.

Environment: e.g. climate change can result in water shortages and food shortages and less products to sell. Pollution can affect water supplies and air quality resulting in high death rates.

Economic: e.g. countries who sell mostly primary products are often given poor terms of trade resulting in low incomes. They also often must pay high taxes on these. Colonisation often means that money generated from products benefits developed countries rather than being reinvested in the developing country. Globalisation can result in some countries benefiting from increased trade and a shift from primary to secondary and tertiary economies, resulting in higher incomes.



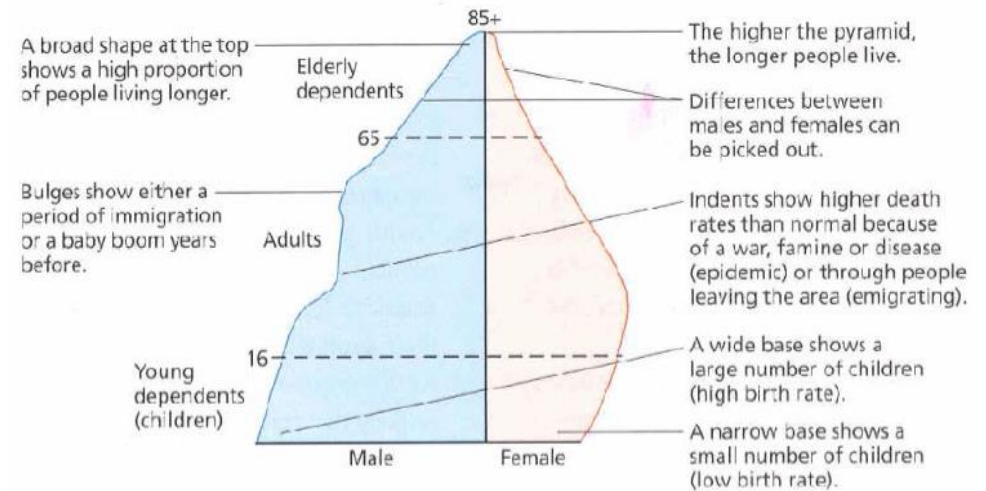


Population Pyramids

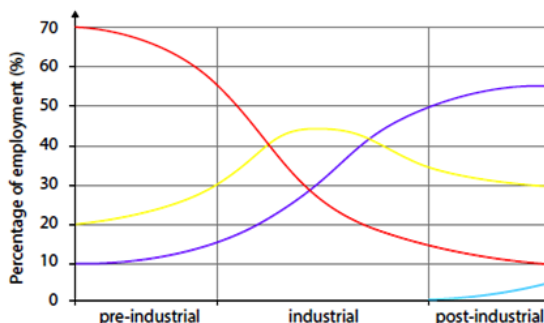
As countries develop, their population structure will change, due to a number of reasons:

- Birth and death rates will fall
- Fertility rates will fall
- Dependency ratios will fall
- Maternal mortality rates will fall
- Life expectancy will increase
- The number of elderly dependents will increase

This is generally due to increased education and healthcare, better hygiene and an increase in skilled workers. E.g. Malawi has a high birth rate due to high numbers of girls leaving school and marrying at a young age, whereas the UK sees women more likely to develop careers and put off having children.



Clark-Fisher Model



As countries develop, employment structure will change as their economies grow.

Low-income countries are dominated by the primary sector.

Middle-income countries are dominated by the secondary sector.

High-income countries are dominated by the tertiary and quaternary sector.

Case Study: Unequal Development in India (emerging country)

Maharashtra - GDP per capita \$2561 (2014)

- Service industries - e.g. banking, IT, call centres.
- Manufacturing - half of Mumbai's factory workers make clothing. Other industries include food processing, steel, and engineering.
- Its port, which is the second largest in the country.
- A booming construction industry, building factories and offices.
- Entertainment. Mumbai hosts the world's largest film industry, Bollywood.

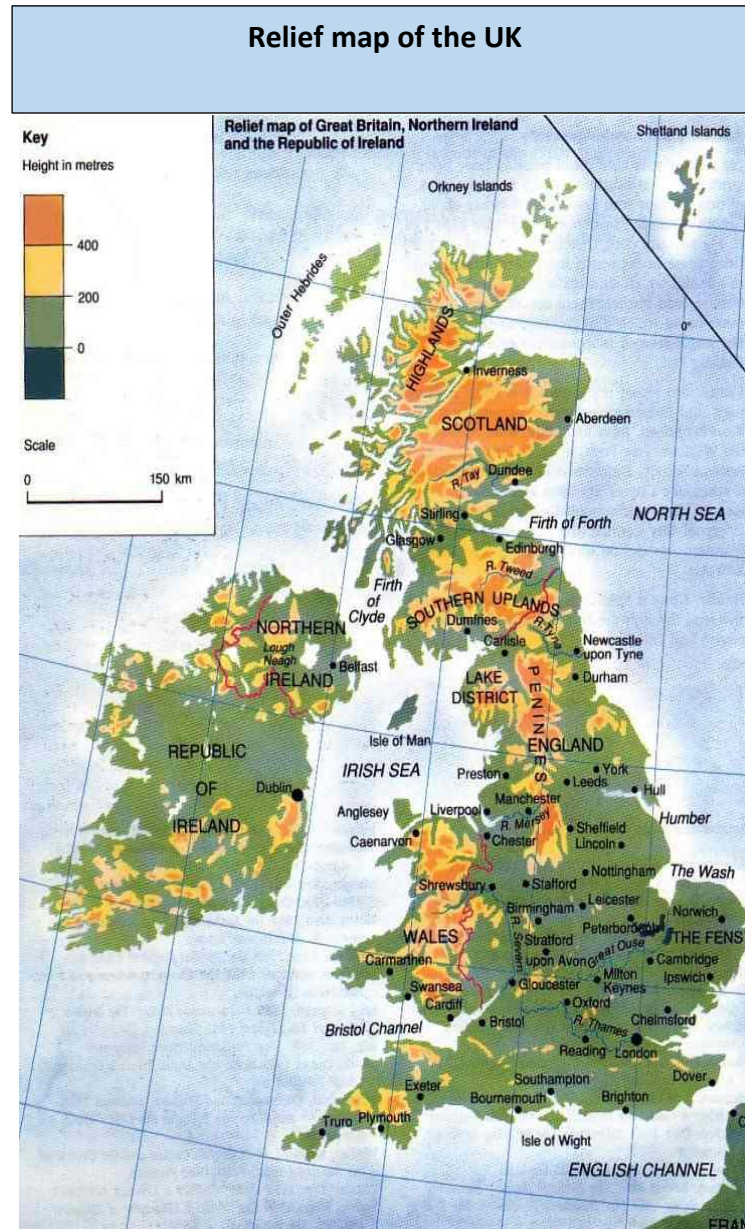
Bihar - GDP per capita \$682 (2014)




- Part of the 'rural periphery'
- 86% of its population is rural.
- Half of its households earn less than 80p a day, and 80% work in low-skilled jobs.
- Even with 100 million people, Bihar gets little investment, because people can't afford basic services - only 59% of its population has electricity.
- Bihar is also a traditional caste-based society. Those in higher castes are literate, whereas those in lowest castes are mostly illiterate.
- School attendance is low. Only a third of children complete primary school, and 2% reach Years 12 and 13. Overall, literacy in Bihar is 47%.



The UK's evolving physical landscape - overview

Key Word	Definition
Alluvium	Deposits laid down by rivers or glaciers.
Carbon dating	Using radioactive testing to find the age of rocks which contained living material.
Erosion	Wearing away of the landscape
Faults	Large cracks caused by past tectonic processes.
Glacial	A cold period of time when glaciers expanded over larger areas of the world.
landslides	A rapid mass movement or rock fragments and soil under the influence of gravity.
Lowland	A broad expanse of land with a general low level.
Strata	Distinctive layers of rocks.
Topography	The shape and physical features of an area.
Upland	Land at a high elevation.
Weathering	The physical, chemical and biological breakdown of rocks by the action of weather, plants or animals.



Rock Type	Formation	Examples	Fossils or not	Where found in UK.
 <p>Igneous</p>	Formed when magma solidifies	Small crystals e.g. Obsidian and basalt Large crystals e.g. granite and gabbro	No fossils	Upland E.g. Scotland England and Wales.
 <p>Metamorphic</p>	Rocks that are heated and put under pressure until they change. Formed from the other two types of rock.	Examples are Slate, Marble	Sometimes contain fossils.	Upland e.g. Scotland,
 <p>Sedimentary</p>	Small pieces of rock deposited over time, compacted and cemented together	Examples include chalk, limestone, sandstone, shale	Contain fossils from when animals and plants trapped in sediment.	Lowland E.g. south-east England



Component 2: UK Geographical Issues

The UK's evolving physical landscape - overview

Feature	Lake District	The Weald
Geology	Igneous rocks	Sedimentary – chalk and clay.
Highest point	Scafell Pike 978m	Crowborough Beacon 225m
Main weathering processes	Freeze thaw creates scree.	Chemical and biological weathering,
Main slope processes	Unstable scree moves easily in rockfalls. Rain causes landslides.	Soil creep caused by rain.
Effects of last ice age	Glaciers created U-shaped valleys, arete and pyramidal peaks.	Water frozen in chalk caused water to flow over the surface making river valleys left dry valleys once the temperature warmed up.

Skills:

- Use and interpret geology maps
- Interpret a range of photographic evidence, including ground, aerial and satellite photos
- Identify landscape features and their characteristics from photographic evidence
- Outline the characteristics of upland, lowland and glaciated UK landscapes
- Explain how physical and human activities create distinct UK landscapes
- Understand interactions between physical processes and human activities

Glaciation

During the last ice age, ice covered a large part of the UK. This ice eroded the land producing some of the mountainous landscapes which exist today.

U-shape valleys in the UK were formed when thousands of years ago when the glaciers eroded the v-shaped valleys that they moved through. As they slowly flowed through the valley, they dragged the rocks and debris that was trapped underneath them and wore away the sides of valley, giving it a more rounded shape.

Imagine that scraping continuing for **millions of years** and you can see how **glaciers turn V shaped valleys into U shaped valleys.**



People in the landscape

Settlements – located where sources of food, flat and easy to build on, fertile soils, Rivers and sea for transport. Forests provided source of fuel and building materials.

Agriculture – Rock/soil type, amount of precipitation and relief all have an impact on the type of farming. Arable tends to favour flat land whilst livestock will be based on hills.

Revision Websites



BBC
Bitesize



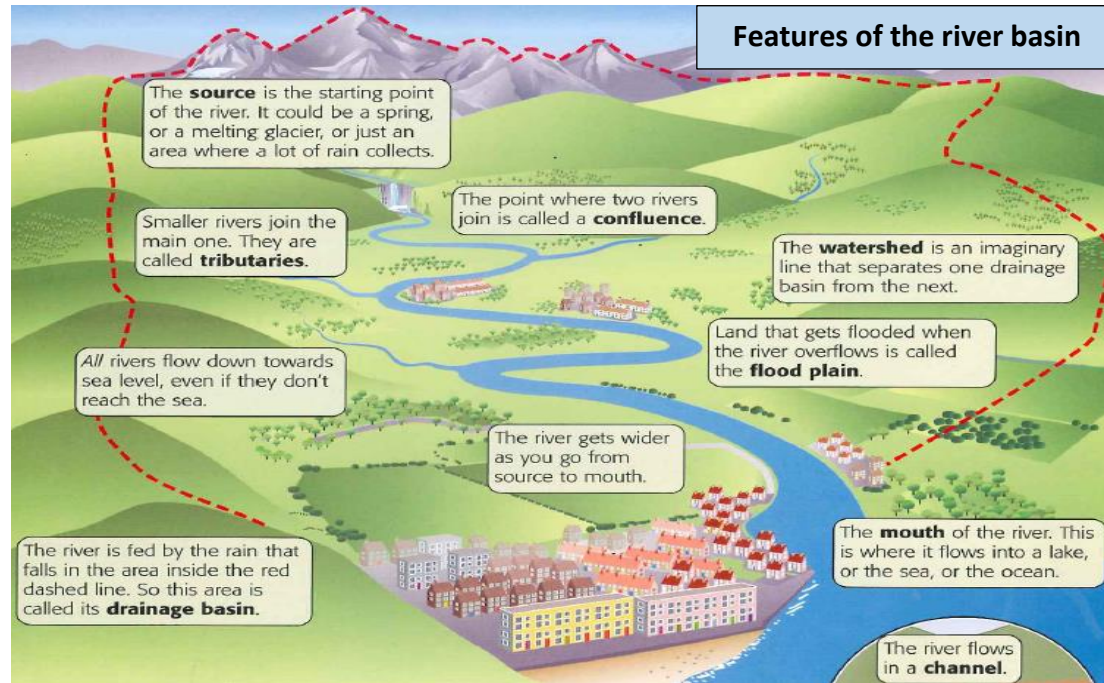
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Revising



Component 2: UK Geographical Issues

The UK's evolving physical landscape – Rivers

Key Word	Definition
Bedload	The material carried by a river by being bounced or rolled along it's bed.
Confluence	The point at which rivers meet.
Discharge	The volume of water flowing in a river
Erosion	The wearing away of the bed and banks of the river channel.
Lag time	The time between peak precipitation and peak discharge.
Levees	River embankments built by deposition as the river floods.
Profile	The cross-section of the river, from its source to its mouth.
Transportation	The movement of material within the river water as load.
Tributary	A smaller river that joins a larger one.
Velocity	The speed of the water flow.



<u>Features of the upper course</u>		Upper level Mid-course Lower course	
Vertical erosion	Interlocking spurs		
Steep gradient	Angular bedload		
Waterfalls			
V-shaped valleys			
Rapids			
<u>Features of the middle course</u>		<u>Features of the lower course</u>	
Gentler gradient	Flat gradient		
Lateral erosion	Little erosion		
Meanders	Deposition		
Ox-bow lakes	Deltas		
Flood plains	Estuaries		

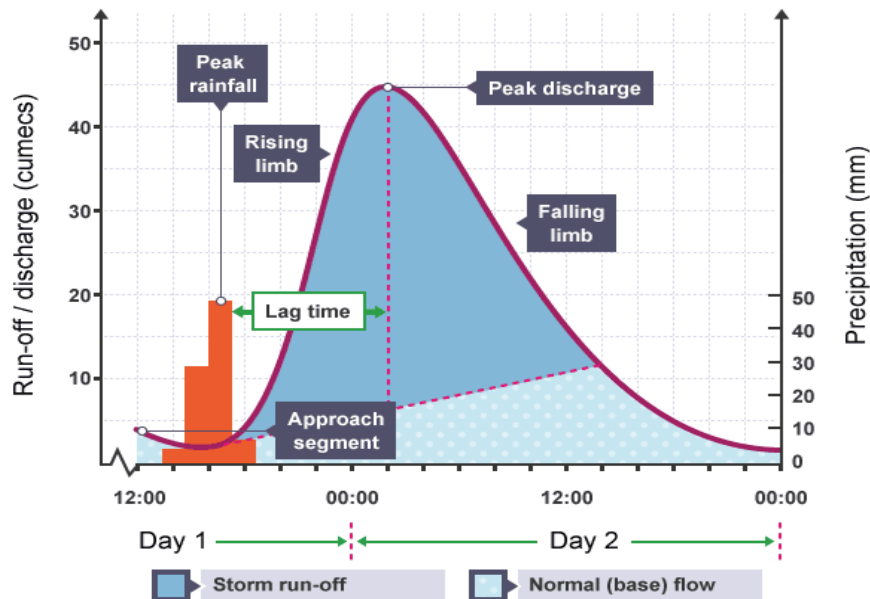
Processes of erosion	
Abrasion	Sand and pebbles dragged along the river bed or knocked into it wearing it away.
Attrition	Rocks knock into each other and are made smaller.
Hydraulic action	Fast flowing water gets into cracks and breaks material off.
Solution	Alkaline rocks such as limestone are dissolved by acidic rain water.
Processes of transportation	
Saltation	Stones and pebbles are bounced along the river bed.
Solution	Dissolved chemicals are carried along dissolved in the water.
Suspension	Tiny particles are carried in the water making it look dirty.
Traction	Large stones being dragged along the bed of the river.



Component 2: UK Geographical Issues
The UK's evolving physical landscape - Rivers

Storm hydrographs

- Storm hydrographs show how drainage basins respond to a period of high rainfall.
- Peak discharge is the highest amount of water that is recorded in the river.
- Lag time is the time between the peak rainfall and peak discharge.
- Lag time is influenced by the nature of the drainage basin.
- The shorter the lag time the quicker the water reaches the channel.
- Base flow is the normal amount of water in the channel.



- Skills:**
- Interpret rivers on OS maps.
 - Using OS maps to draw valley cross sections.
 - Drawing and Interpreting storm hydrographs.
 - Discuss the effectiveness of a range of river management strategies
 - Explain the impacts of human activity on a UK fluvial landscape
 - Explain the increasing risks from and impacts of river flooding

Causes of flooding	Effects of flooding
<ul style="list-style-type: none"> • Heavy rainfall • Long periods of rain • Melting snow • Storm surges • Saturated soils • Dry or compacted soil. • Urbanisation • Deforestation • Agricultural practises. • Lack of dredging • Poor maintenance of drainage channels 	<ul style="list-style-type: none"> • Deaths • Homes flooded • People evacuated • Farmland flooded • Ruined crops • Villages and towns cut off • Schools closed. • Main roads flooded • Loss of business

Flood Management Schemes

Hard

- Flood walls and levees - increase the capacity of the river.
- Dredging - clearing sediment out of the river channel to make it deeper.
- Flood relief channel - create extra channels to divert water away from settlements.

Soft

- Flood plain retention - flood plains lowered, and vegetation restored to retain water.
- Flood channel restoration - meanders rebuilt to lengthen river and slow water down.

*You must be able to apply this knowledge to a **specific named example** (e.g. the Sheffield floods 2007)*

Revision Websites



BBC Bitesize



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Component 2: UK Geographical Issues

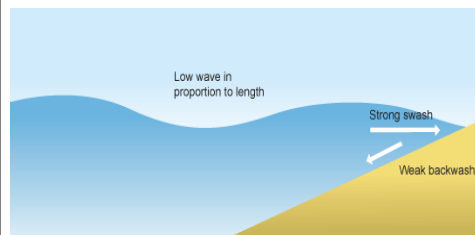
The UK's evolving physical landscape - coasts

Key word	Definition
Discordant coastline	Alternates between bands of hard and soft rock at right angles to the coast
Concordant coastline	The different bands of rock are parallel to the coastline
Fetch	The distance over which waves have travelled
Swash	The movement of waves up the beach
Backwash	The movement of waves down the beach
Constructive wave	Waves which deposit sediment and therefore build up the coastline
Destructive wave	Waves which remove sediment and therefore erode the coastline
Abrasion	Sediment is thrown against the cliffs by waves. This wears away the cliff and chips bits of rock off the cliff.
Attrition	Loose sediment is swirled around by the waves and constantly collides with other sediment so it becomes smaller and rounder.
Hydraulic action	Water is forced into cracks in rocks and the air is compressed. When the wave retreats the air blasts out and can force rocks apart.

Skills:

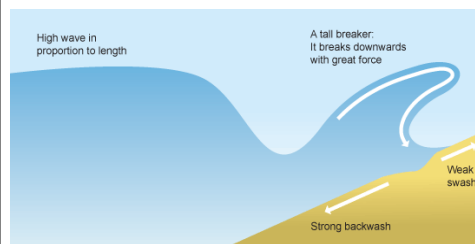
- Locate and recognise features on OS maps
- Using BGS geology maps
- Using cost-benefit analysis to investigate coastal management

Constructive and Destructive Waves



Constructive waves have:

- Strong swash
- Weak backwash
- Low frequency
- Normally seen in UK in summer



Destructive waves have:

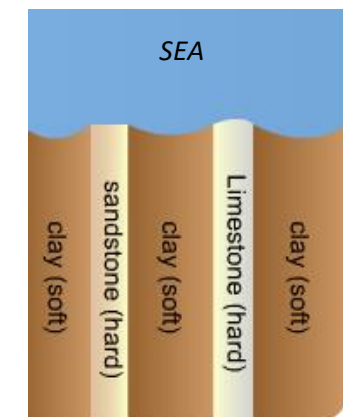
- Weak swash
- Strong backwash
- High frequency
- Normally seen in UK in winter

Concordant and Discordant coastlines

- Erosion happens in stages over time.
- Associated with coves and cliffs.



- Sea erodes weaker rock quickly creating bays.
- The hard rock erodes much more slowly leaving behind headlands.



Revision websites:



Time for Geography



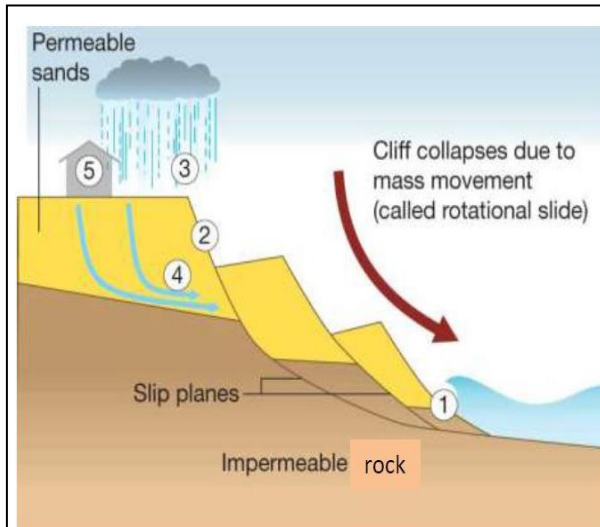
BBC Bitesize



Component 2: UK Geographical Issues

The UK's evolving physical landscape - coasts

Key word	Definition
Mechanical weathering	The breakdown of rock without changing its chemical composition.
Carbonation weathering	The breakdown of rock by changing its chemical composition
Biological weathering	The breakdown of rocks by living things (e.g. plant roots)
Longshore drift	The movement of sediment along the beach by waves breaking at an oblique angle.
Tidal surge	A rise in sea-level above normal high-tide level in a coastal area, caused by a combination of low atmospheric pressure and strong onshore winds.
Integrated coastal zone management (ICZM)	Looking at the coastline as a whole and deciding which areas should be protected and which shouldn't, taking into account land value, environmental impacts and long term implications.



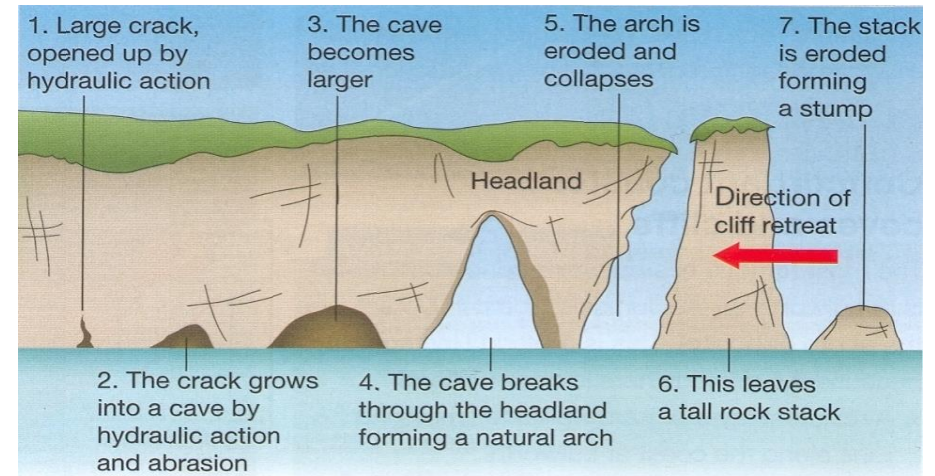
Cliff Collapse

- Base of cliff eroded by hydraulic action and abrasion.
- Weathering weakens the cliff face
- Heavy rain saturates rock at the top of the cliff
- Building on top of the cliff can add too much weight.

Eventually, large chunks give way and slide down the cliff, known as a rotational slip.

Coastal landforms

Weaknesses in rocks from joints and faults can eventually lead to the formation of stacks:



If longshore drift is allowed to continue, it can form spits, bars and tombolos:

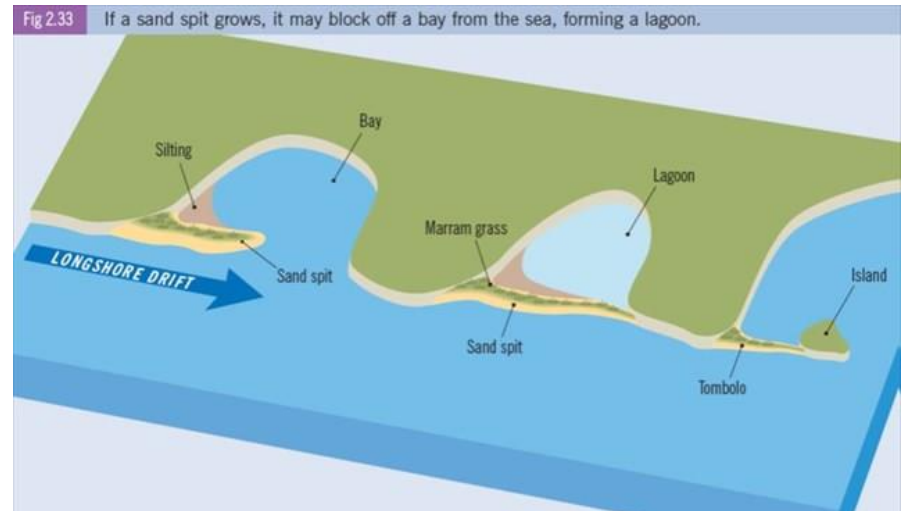


Fig 2.33 If a sand spit grows, it may block off a bay from the sea, forming a lagoon.



Component 2: UK Geographical Issues

The UK's evolving physical landscape - coasts

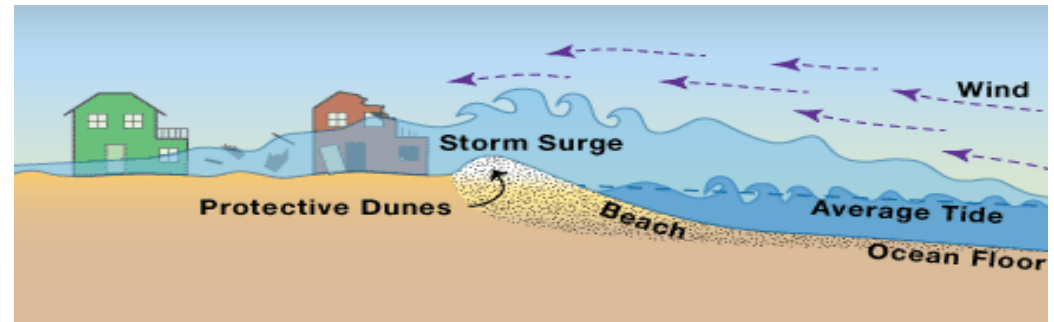
Use of Coasts

- Development** – housing and office development.
- Agriculture** – grazing for cattle on marsh land.
- Industry** – Gas terminals, oil and chemical refineries, shipping, power stations etc.

Managing the coast (ICZM and SMPs)

- Hold the Line** – use sea defences to stop erosion. No more coastline is lost.
- Advance the line** – use sea defences to move the coast further into the sea.
- Strategic retreat** – gradually let the coast erode and move people and businesses with it.
- Do nothing** – take no action and let nature take its course.

Coastal Flooding



Storm surges occur when air pressure drops. When you combine this with high spring tides and large waves severe surges occur which can cause devastating floods and damage to coastal communities.

Scientists believe that global warming will cause sea levels to rise as seas warm up and expand and ice sheets melt. In the UK, London and Essex are at risk of increase flooding or even whole areas being lost as they are low-lying. Global warming could also make storms more powerful.

Coastal Management Techniques

Hard engineering <i>Using concrete and steel structures to stop waves. Building physical structures.</i>	Soft Engineering <i>Using smaller structures, often built from natural materials, to reduce wave energy and working with nature to limit damage.</i>
Sea walls – reflect waves back out to sea.	Planting vegetation – plants are used to make the cliff face more stable
Sea walls with steps and bullnose – steps help to dissipate wave energy and the bullnose throws the waves back out to sea.	Offshore breakwaters – rocks placed out to sea force waves to break before they reach the beach and cliff.
Revetments – breaks up incoming waves	Beach nourishment – sand is added to the beach to increase its size
Gabions – a cheap type of sea wall	In cliff drainage – pipes reduce water pressure and prevent saturation
Rock armour (Rip-Rap) – dissipates wave energy and look 'natural'	Managed retreat – allowing low lying coastal land to flood so it becomes a marsh. This slows waves before they reach high value areas.
Groynes – prevents longshore drift, trapping sand and shingle and allows the beach to build up which then dissipates wave energy to prevent erosion	