

# YEAR 10 GEOGRAPHY CRUCIAL KNOWLEDGE

## Development

Development refers to the long-term improvement of a country's people, economy, and environment (social, economic and environmental)

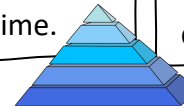
Uneven development causes global imbalance, the consequences of this are disparities in wealth and health, and increased international migration.



Development can be shown in a country through its birth rate, death rate, infant mortality, literacy rate, access to safe water and the number of doctors. These are known as indicators of development.



A population pyramid is a graph that shows the age-sex distribution of a given population. The demographic transition model shows population change, using birth and death rate, over time.



Uneven development in countries is caused by landlocked countries, extreme weather, inadequate water supplies, climate, trade, and colonialism.

We reduce the development gap through debt relief, fair trade, investment, microfinance loans, tourism, industrial development, aid, intermediate technology.

## Nigeria

Nigeria is a country located on the western coast of Africa. Nigeria has a diverse geography, with climates ranging from arid to humid equatorial.

Nigeria receives aid (help given by one country to another) from a variety of different sources, all with different degrees of success.



Over time Nigeria's relationship with the wider world has changed. Nigeria has changed from a UK colony to a key player in several international organisations and in global trade.

Due to industrialisation and urbanisation, Nigeria experiences air and water pollution. Nigeria is also a major oil producer and so has further environmental impacts such as oil spills.

Nigeria's industrial structure is changing. There has been a decline in primary industry (agriculture etc.) and a rise in both the secondary sector (manufacturing) and tertiary sector (services).

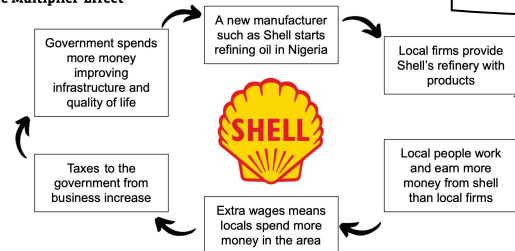


TNCs (transnational corporations - a company that operates in more than one country) such as Unilever and Shell have had both positive and negative impacts in Nigeria.



The HDI of Nigeria has steadily increased in Nigeria since 2005, this can be linked to economic growth; many people in Nigeria have a greater disposable income to spend on things such as school and healthcare.

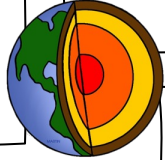
The Multiplier Effect



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## The Challenge of Natural Hazards

The Earth consists of 4 layers, the crust, mantle, outer core, and inner core. The crust is split into pieces called tectonic plates, to which there are 4 plate boundaries (constructive, conservative, destructive (c-c), and destructive (o-c)).



The Earth's crust is broken up into pieces called tectonic plates that move due to convection currents in the mantle caused by radioactive decay in the earth's core, this causes processes such as ridge push and slab pull.

Nepal experienced an earthquake in 2015 due to the collision of the Indian and Eurasian plates. This caused 8632 deaths and thousands of homes destroyed. To help this international aid was sent, including 100 search and rescue responders, medical experts and disaster experts from the UK.

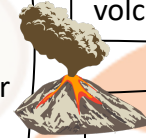


The Eyjafjallajokull volcano in Iceland erupted in 2010, this caused thousands of flights to be cancelled due to the ash cloud which cost airlines £200 million per day. The Red Cross helped the people affected by providing food and shelter.

An earthquake is a sudden, violent shaking of the ground caused by the sudden release of energy in the Earth's crust that creates seismic waves (P and S waves). These are measured by the Richter Scale, the Moment Magnitude Scale and the Mercalli Scale.



A volcano is an opening in the Earth's crust that allows magma, hot ash and gases to escape. There are different types of volcanoes e.g. cinder cones, composite, shield volcanoes and hotspots.



People live in hazardous areas due to poverty, fertile soil, geothermal energy, tourism, resources, friends and family, employment or/and ignorance.



We can predict eruptions using seismometers and thermal imaging, earthquakes are more difficult to predict. We prepare for eruptions by creating exclusion zones and evacuating people, whereas we prepare for earthquakes by building earthquake-proof buildings.

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## Urban Change in the UK

The UK population is unevenly distributed, with 82% living in urban areas. The distribution of the population may change due to migration, the economy, jobs, and age of the population.

Bristol is an important city across multiple scales (local, regional, and national). This is due to its industry, culture and entertainment, education, tourism, transport, and religion.



Bristol's industry in the 1980's included tobacco, sugar refining, distilling and chocolate making. Bristol experienced deindustrialisation due to goods being imported from LICs meaning that Bristol's exports decreased.

Social opportunities in Bristol include shopping, culture, sports, and events. Along with their access to other major UK cities, universities, and jobs.

Bristol is becoming a green city by improving its transportation system. They are doing this by increasing the number of buses and improving bus stops, increasing the number of pedestrianised areas and access for bicycles.



Bristol has a housing shortage due to its growing population. Many areas in Bristol have become derelict due to the port becoming inactive and therefore many warehouses were abandoned. To solve both issues, between 2006-13, 95% of houses were built on brownfield sites.



Bristol's population shows great variations between different areas. These can be measured by looking at a range of factors that affect people's lives, such as housing, education, crime, and health.

Bristol's industry today includes media (Aardman Studios), high-tech industries (GKN Aerospace) and defence procurement. These opportunities are a result of urban growth and redevelopment.



The Temple Quarter Regeneration covers 130 hectares of brownfield land in the areas around Temple Meads station and St Philip's Marsh to the east. The regeneration of the area will deliver 10,000 new homes. 22,000 new jobs will be created, alongside £1.6bn annual income to the city economy.

## Sustainable Urban Development

Urban sustainability aims to improve the social, economic, and environmental conditions of a city to ensure the quality of life and well-being of current and future residents.

Freiburg's integrated traffic system includes 400 km of cycle paths with 9000 parking spaces for bikes, and reducing tram fares which provide unlimited travel in the city.

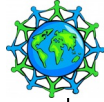


Freiburg is becoming more sustainable by collecting rainwater for indoor use, green roofs, using renewable energy and providing open green spaces.



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## UK Economy



The UK economy has experienced changes due to deindustrialisation, globalisation, and a variety of different government policies.

The UK has moved towards a post-industrial economy through the development of technology, service industries, finance, research, science, and business parks.

Science Parks are groups of scientific and technical knowledge-based businesses located on a single site. Business parks are an area of land occupied by a cluster of businesses.



Transport infrastructure in the UK has changed by improvements to rail (HS2), improvements by roads, improvements by ports (Liverpool2), and improvements by airports (Heathrow airport).

The North-South Divide refers to the real or imagined cultural and economic differences between the North and South of England. Generally, the South has higher standards of living, longer life expectancy and higher incomes.

The UK is linked through the wider world by globalisation, trade, transport, culture, and electronic communication.

Industry in the UK can have an impact on the physical environment, such as air and water pollution. Torr Quarry however is an example of how modern industrial development can be more environmentally sustainable.

Due to rural-urban migration, urban areas (e.g. South Cambridgeshire) are seeing an increase in population and rural areas (e.g. Outer Hebrides) are seeing a decrease in population.



## Human Fieldwork

There are two types of data: quantitative and qualitative. Both are useful when carrying out fieldwork. These can be presented through techniques such as bar charts, column charts and annotations.



To effectively evaluate a piece of writing, you must question why you have done your methods, considering the positives and the negatives.

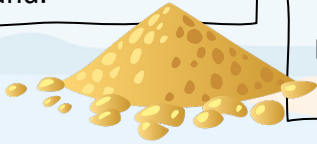


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## Coasts

Waves are caused by energy transfer from the wind to the sea, as friction is created between the wind and surface water. The greater the fetch the bigger the wave. Constructive waves build beaches, whereas, destructive waves destroy beaches.

Depositional landforms include spits, bars and tombolos, these form due to longshore drift. Sand dunes are also a depositional landform, these form due to aeolian (wind) transportation of sand.

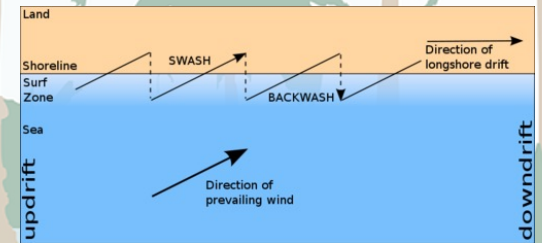


Weathering is the breakdown of rocks in situ. These processes include freeze thaw, exfoliation (mechanical weathering), chemical weathering and biological weather. Erosion is the wearing away of the land by water, ice or wind. These processes include hydraulic action, abrasion, attrition, solution and corrasion. Mass movement is the downhill movement of sediment that moves because of gravity.

Examples of caves, stacks and wave cut platforms are found at Old Harry Rocks. An example of an arch can be found at Durdle Door. An example of a spit can be found at Chesil Beach. These are all located in Dorset in the South of the UK.

Hard engineering involves building artificial structures which try to control natural processes. These include groynes, sea walls, revetments, rock armour, and gabions. Soft engineering does not involve building artificial structures but takes a more sustainable and natural approach to managing the coast. These include beach nourishment, managed retreat, and beach reprofiling.

Erosional landforms include caves, arches, stacks, stumps, and wave cut platforms. Transportation is the movement of sediment down the coast, through methods such as traction, saltation, suspension and solution. Longshore drift is the movement of material along the shore by wave action. It happens when waves approach the beach at an angle.



Lyme Regis is a honeypot site on the south coast of England, it has a destructive coastline and had a coastal management plan which cost around £20 million in total.