

Year 9 Geography

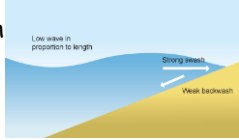
Unit 1: Coastal Landscapes

KEYWORDS



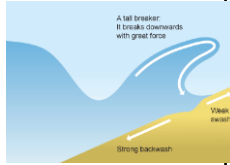
Constructive wave

Powerful swash
Weaker backwash
Long wave length
Low wave height
Gentle beach



Destructive wave

Weak swash
Strong backwash
Short wave length
High wave height
Steep beach



Types of Erosion:

- Attrition - when rocks/pebbles collide and chip away
- Abrasion - the sandpapering effect of the material rubbing against a cliff face
- Solution - when rock dissolves due to a reaction between the rock and sea
- Hydraulic Action - when water is forced into cracks into the cliff face, compressing air inside which in turn makes the crack wider.

Mass Movement - the downward movement of the land due to the pull of gravity. This usually occurs when the ground is saturated by water, is unstable or during a storm surge.



Transportation:

Saltation - the bouncing motion of pebbles
Traction - the rolling motion of rocks
Solution - the dissolved load within the body of water
Suspension - fine sediment is suspended within the flow of the water

Deposition

When the flow of the water falls and so material is dropped off along the coastline.

Erosion

Definition

The wearing away and removal of material by a moving force, such as a breaking wave.

Transportation

The movement of eroded material. The size and weight of the material affects how it moves.

Deposition

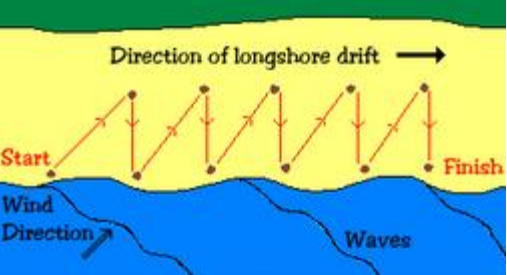
Occurs when material being transported by the sea is dropped due to the sea losing energy.

Soft Engineering

Managing erosion by working with natural processes to help restore beaches and coastal ecosystems.

Hard Engineering

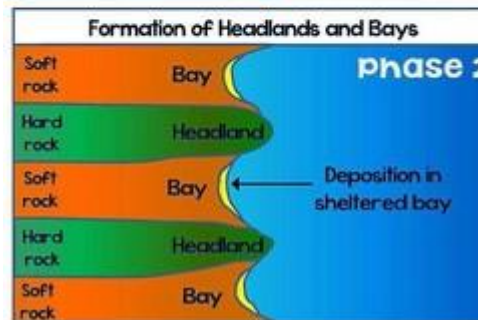
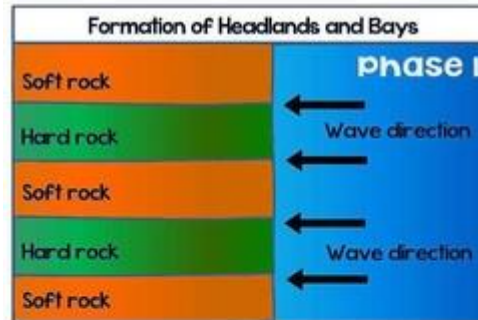
A coastal management technique used to protect coasts by absorbing the energy of waves, preventing erosion and flooding. They are highly visible man-made structures used to stop or disrupt natural processes.



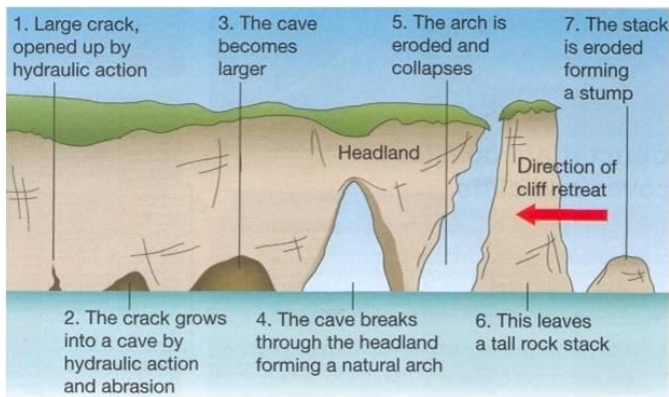
Longshore Drift

This is the zigzag motion of sediment. Sediment is pushed onto the beach at an angle and returns to sea perpendicular to the coastline due to gravity. When the coastline changes direction a spit will form.

Formation of a Bay



Erosion of a headland



Year 9 Geography

Unit 2: Challenges of Development



KEYWORDS

LOOK
 SAY
 COVER
 WRITE
 CHECK

Lesson 1-2

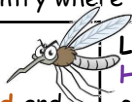
Every country in the world is at a different stage of development. If a country is **developing** it is changing for the better. The **Demographic Transition Model** which you studied in year 8 shows how a country changes overtime. They can be classed as:

- **Low Income Country** - a country where the **GNI per capita** is **\$1045 or below**
- **Newly Emerging Economy** - a country that has **begun to experience higher rates of economic development**, usually with higher levels of industrialisation. They no longer rely primarily on agriculture. eg Brazil, Russia, China and South Africa (the so-called **BRICS** countries).
- **High Income Country** - a country where the **GNI per capita** is **\$12746 or above**

Lesson 3-4

Development is uneven because...

- Some countries are **landlocked** and so can't trade as easily
- Some countries experience **climate-related diseases** weakening their working population
- **Extreme weather**, e.g. hurricanes, are expensive to respond to and so slow development of public services



Lesson 5

Human development index (HDI) was created to better measure development. HDI combines:

- **Living standards:** the **GNI per capita**
- **Health:** the life expectancy
- **Education:** the average number of years of schooling children receive



Lesson 6

The UK developed during the **Industrial Revolution**. Today **five countries, BRICS**, are considered to be going through **rapid economic development**. This will mean that the % employed in primary, secondary and tertiary industries will change.

Lesson 8

Inequalities in development can occur at a **global scale** (between countries) and a **local scale** (within countries or even cities).

Lesson 9

10.7% of the world's population live on less than **\$1.90** per day (World Bank). Poverty exists because of the climate, war, politics, gender inequality and location.

Lesson 10-14

Informal settlements grow around megacities where there are economic opportunities. **Megacities** continue to grow due to **natural increase** and **rural-urban migration**.



Lesson 10-14

Informal settlements are areas of land where groups of housing units have been constructed on land that the occupants have no legal claim to. **They often have social, economic and environmental problems.**

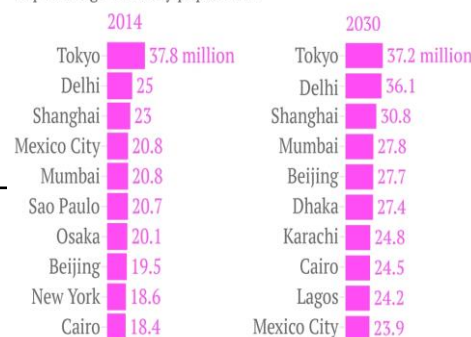
Lesson 15

Gender inequality occurs when people are treated differently just because they are male or female. If women are empowered the work force will increase and the number of dependent children will decrease.

Lesson 16-17

Aid can be given to areas in need to help them develop faster. In **2000**, the United Nations set up **8 Millennium Development goals** focussed on reducing global poverty. In **2015**, a new set of **17 targets were created**.

Top 10 mega-cities by population



Quartz | qz.com

Data: United Nations

	Definition
Develop ment	People reaching an acceptable standard of living or quality of life.
Human development	A measure of the access the population has to wealth, jobs, education, nutrition, health, leisure and safety - as well as political and cultural freedom
Economic development	A measure of a country's wealth and how it is generated (for example agriculture is considered less economically advanced than banking).
Standard of living	How much wealth a group of people have and the goods and services available to them. Life expectancy and literacy rate may also be taken into account.
Quality of Life	The general well being of people, which includes income, health, education, employment and the environment.



Year 9 Geography

Unit 4: Geopolitics and International Relations



LOOK

SAY

COVER

WRITE

CHECK

KEYWORDS



Part 1: Russia

Russia's Physical and Human Geography is incredibly varied. Physical Geographical factors such as extreme climate and the distribution of resources have meant that most of Russia's population lives in a small section to the west, whilst these same Geographical factors leave it prone to invasion from Europe

Russia invaded Georgia in 2008 which was driven by a number of Geographical factors, such as areas of Georgia having better access to the sea as well as parts of Georgia's population sharing lots in common with Russia.

Part 2: Africa

Africa's Geography is incredibly diverse and varied and often doesn't fit with many of the stereotypes people might have of it. Much of Africa's Geography has also dictated how developed different countries and regions have become.

Rather than developing naturally over time around natural boundaries, many of Africa's borders have simply been drawn by the Berlin Conference in 1878. This has led to the division of traditional tribes and groups of people and likewise has groups different people's who might not get on into the same country. Over time, this has led to conflict.

Both Ethiopia and Egypt have engaged in conflict historically but more recently are arguing over water supplies along the River Nile. Both countries want the water for their development, Egypt for farming and Ethiopia to generate electricity from a dam.

Even on a smaller scale, the Geography and development in Africa is incredibly varied. IN Nigeria, the climate is much more favourable in the south and this has led to a higher level of development. Meanwhile the north of the country is far less developed in comparison, creating a significant tension within the country.



Part 3: Asia

The Geography of South Western Asia is diverse and certain areas are rich with resources that have helped them develop quicker than others.

Due to the wealth of resources, particularly fossil fuels countries within the region have become important to the rest of the world and trade.

Countries in South Western Asia have begun attempting to use sport to diversify their income and improve their image around the world.

Conflict in Syria has been raging and has become a hugely significant battle ground within a wider global context.

	Definition
Geopolitics	The study of the effects of Earth's geography on politics and international relations.
International Relations	The relationships between countries.
Border	A line separating two countries
Colonialism	Where one country controls another usually for natural resources or access routes. The areas obtained are the colonies.
Topography	The study of the shape of the land and its natural or man made features.



Year 9 Geography

Unit 3: Climate Change and Atmospheric Hazards



KEYWORDS



Lesson 1: Hazard risk

What is a natural hazard? They are extreme natural events that can cause loss of life, extreme damage to property and disruption to human activity.

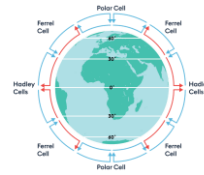
What factor can increase risk?



Urbanisation: With a more dense population urbanisation can increase hazard risk as there will be a more dense population which would increase the chance of those injured and the death rate.

Lesson 2: Global atmospheric circulation

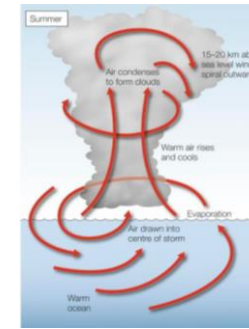
Global atmospheric circulation **creates winds** across the planet as **air moves from areas of high pressure to areas of low pressure**. It also leads to areas of high rainfall, like tropical rainforests, and areas of dry air, like deserts



Polar – Ferrel – Hadley

Lesson 3: Formation of tropical storms

- A tropical storm is a huge storm that develops in the tropics.
- They form over warm oceans above 27 degrees Celsius.
- They form between 5 and 15 degrees north and south of the equator.



Lesson 4 – Lesson 5: Hurricane Katrina

Hit New Orleans 29th August 2005.
Cat 3 storm – 120 miles per hour



Social	<u>1804 deaths</u> due to Hurricane Katrina (700 in New Orleans)
Economic	<u>350,000</u> peoples homes and possessions destroyed
Environmental	<u>24 million</u> gallons of oil spilt on the coastline

Responses:

- 20,000 people sheltered in the Superdome
- Coast guards rescued 33,500 people
- \$62.3 billion in aid



Lesson 6: Reducing the impacts of tropical storms

Monitoring/ prediction: hurricane watch and hurricane warning
Protection: reinforce windows and doors, houses close to the coast built on stilts, sea walls built to prevent flooding
Planning: Reduces hazard risk, education and evacuation plans



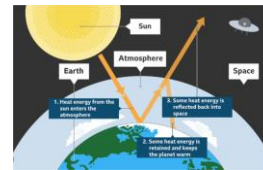
Lesson 7: Storm Fani

- Cyclone Fani made landfall in India 3rd May 2019.
- 1.6 million people were evacuated
- Storm surge breached the embankments
- 53,000 acres of agricultural land damaged
- 17 deaths in Bangladesh



Lesson 8: Global warming vs climate change

Global warming is the long-term heating of Earth's surface due to human activities which increases heat-trapping greenhouse gas levels in Earth's atmosphere



Lesson 9: Extreme weather in the UK

Extreme weather is a weather that is unusual or unexpected.

- Examples of extreme weather in the UK:
- Strong winds and storms
 - Droughts
 - Floods



Lesson 10: Storm Desmond

December 2015 storm hit Cumbria with record breaking rainfall of 341.4mm in 24 hours with 81 mph winds.



1000 people evacuated
£500bn in damaged
200 military personnel had to support evacuation



Lesson 11 – 14: Climate change



Human Causes: Fossil fuels and cattle farming
Physical causes: Volcanic eruptions and orbital tilt

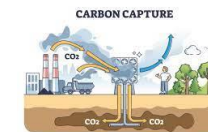
Effects:

- Sea level rise will affect 80 million people
- Increase in tropical storms
- Species will become extinct



How can we manage climate change?

Carbon capture – this is the removal of CO₂ from power stations and storing it underground.



	Definition
Hazard Risk	The probability of a hazard event causing harmful consequences (death, injury, loss of property, damage to environment etc.).
Tropical Storm	A very intense storm with winds faster than 73 miles per hour that forms over tropical oceans.
Climate change	The change in global or regional climate patterns.
Mitigation	Reducing the impact and severity of climate change such as through using environmentally friendly technology.

Scan the QR codes for useful links

