

## Why are coastlines important in the UK?

Here in the UK, we have a coastline over 12,000 km long.

- Social** - Residential areas = emotional attachment to the area.
  - Recreational activities = happy/ healthy community
- Economic** - Tourism = brings money into local community through employment and hotels etc.
  - Fishing = fish are sold for money that people spend in local area.
- Environmental** - Provides habitats for animals = breed

## Weathering

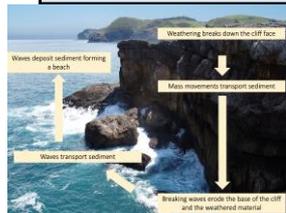
*Weathering is when rocks are broken down. There are 3 types of weathering;*

**Mechanical (physical)** - When rocks break up due to water entering the cracks and freezing and thawing, making the rock weak.



**Chemical** - Caused by chemical changes. Slightly acidic rainwater slowly dissolves certain rock types

**Biological** - Plant roots grow causing cracks in the rocks and animals burrow into weak rocks like sand.



# COASTS YEAR 8

## Coastal Processes

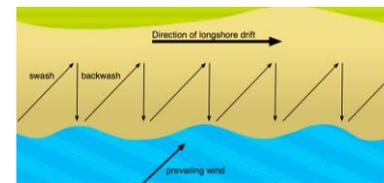
**Transportation** - The movement of sediment along the coast

- Traction** - large material is rolled along the sea floor.
- Saltation** - beach material is bounced along the sea floor.
- Suspension** - beach material is suspended and carried by the waves.
- Solution** - material is dissolved and carried by the water.

**Erosion** - The breakdown of sediment into smaller fragments

- Hydraulic Action** - The force of water into cracks helps to break it up.
- Abrasion** - Waves fling sand and pebbles against the rock. These wear away like sandpaper.
- Attrition** - Chunks of rock get knocked together and worn into smaller bits
- Solution** - Water dissolves the soluble material from the rock.

**Deposition** - When waves loose energy they leave behind the smaller pieces.



**Longshore drift** - A form of transportation that moves sediment from one end of the coast to the other.

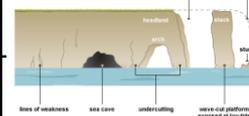
## Landforms of Erosion

**Headland and Bay** - form along coastlines where there are alternating outcrops of resistant (harder) and less resistant (softer) rock. The softer rock erodes faster than the harder rock.



**Cave, Arch, Stack and Stump** -

Caves occur when waves force their way into cracks in the cliff face. Eventually it will break through to the other side forming an arch. The arch will gradually become bigger until it can no longer support the top of the arch. When the arch collapses, it leaves the headland on one side and a stack (a tall column of rock) on the other. Overtime, it will eventually collapse to form a stump.



## Waves

A wave is a movement of energy through water, not a movement of water. The size of the waves depend on 3 factors;

- The **FETCH** (the distance the wind blows over the water) - The greater the fetch, the more powerful the waves will be.
- The **STRENGTH** of the wind
- How **LONG** the wind blows for

## Management of the coast

**Hard engineering** - using artificial structures such as sea walls to control natural processes

**Groynes** - wooden or stone fences that are built at right angles to the beach. They trap sediment being moved by longshore drift and enlarge the beach.

- ✓ Traps material and therefore reduces longshore drift
- ✓ Reduces flooding rate
- ✗ *Unnatural and ugly*

**Rock Armour** - Large boulders placed along the coast. The rocks force the wave to break, absorbing their energy and protecting the coastline.

- ✓ Reduces erosion
- ✓ Reduces flooding.
- ✗ *Unnatural and ugly*
- ✗ *In storms it can be moved*

**Sea Wall** - A large concrete, often curved, wall that reflects the energy back from waves

- ✓ Creates a promenade for people to walk along
- ✓ Reduces flooding.
- ✗ *Unnatural and ugly*
- ✗ *Expensive*



## Landforms of Deposition -

**Beach** - Found between areas of high and low tide marks. Generally formed by constructive waves.

**Sand dunes** - Mounds of sand that are found behind sandy beaches. To form they require a large flat beach, a good supply of sand, strong wind and obstacles.

**Spit** - Sediment is carried by longshore drift. When there is a change in the shape of the coastline, deposition occurs. A long thin ridge of material is deposited.

**Bar** - When a spit continues to attach two headlands

**Tombola** - a spit connecting an island to the mainland



*Soft engineering is using natural processes to protect the coastline.*

**Beach Replenishment** - The addition of sand or shingle to an existing beach to make it higher or wider.

- ✓ Relatively cheap and easy to maintain
- ✓ Blends in with existing beach
- ✗ Needs constant maintenance



**Dune regeneration** - Sand dunes are effective buffers to the sea but are easily damaged and destroyed by trampling.

- ✓ Maintains a natural coastal environment
- ✓ Relatively cheap
- ✗ Needs constant maintenance



Wave characteristics	Constructive waves	Destructive waves
	Smaller wave height, less energy waves gently spill over	Larger wave height, lots of energy crashing breakers
	Strong 'onward' 'swash' movement builds up the beach	Weak 'wash' movement
	Weak backwash movement	Strong backwash movement erodes material from the beach
<b>Wave height</b>	Gentle	Steep
<b>Wave length</b>	Long	Short
<b>Type of wave</b>	Spilling	Plunging
<b>Strength of swash</b>	Strong	Weak
<b>Strength of backwash</b>	Weak	Strong
<b>New beach sediment</b>	Gain	Loss
<b>How they are created</b>	Distant	Local

## Key Words

**Abrasion:** wearing away of cliffs by sediment flung by breaking waves.

**Arch:** This begins as a cave formed in the headland, which is gradually widened and deepened until it cuts through.

**Attrition:** erosion caused when rocks and boulders transported by waves bump into each other and break up into smaller pieces.

**Backwash:** the return of water to the sea after waves break on a beach.

**Bar:** where a spit grows across a bay.

**Beach:** the temporary deposition of sand and shingle along the coastline.

**Biological Weathering:** the breakdown of rock through the action of plants and animals.

**Chemical Weathering:** the decomposition (or rotting) of rock caused by a chemical change within that rock; sea water causes chemical weathering of cliffs.

**Constructive Waves:** found on low-angled beaches and mainly responsible for coastal deposition. They are gently breaking, with a much stronger swash than backwash.

**Destructive Waves:** found on steep beaches, are steeply breaking and mainly responsible for coastal erosion. Their backwash is much stronger than their swash.

**Erosion:** the wearing away of the land by rivers, ice sheets, waves and wind.

**Fetch:** the maximum distance of water over which winds can blow

**Freeze-Thaw Weathering:** Water enters the cracks during the warmer day and freezes during the colder night. As the water turns into ice it expands and exerts pressure on the surrounding rock, causing pieces to break off.

**Gabions:** steel wire mesh filled with boulders used in coastal defences.

**Groyne:** a wooden barrier built out into the sea to stop the longshore drift of sand and shingle

**Headlands:** areas of land protruding out to sea formed of resistant (harder) rock. They help protect the bay which forms between them from wave attack.

**Hydraulic Action:** the process by which breaking waves compress pockets of air in cracks in a cliff. The pressure may cause the crack to widen, breaking off rock.

**Longshore Drift:** waves approaching the coast at an angle result in the gradual zig-zag movement of beach materials along the coast.

**Sea Defences:** measures taken to defend the coast from erosion, cliff collapse and flooding.

**Sea Walls:** aim to prevent erosion of the coast by providing a barrier which reflects wave energy.

**Spit:** a long, narrow accumulation of sand and shingle formed by longshore drift and deposited where the coastline abruptly changes direction.

**Stack:** rock left standing out at sea after wave erosion has separated it from the mainland.

**Swash:** forward movement of a wave up a beach.

**Tombolo:** a spit joining an island to the mainland.

**Waves:** caused by the transfer of energy from the wind blowing over the surface of the sea.

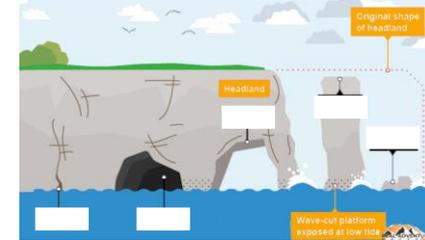
**Weathering:** the break-down of rock by physical or chemical processes.

## Revision Tasks:

- Make a mindmap/poster/ revision cards/notes/ presentation/ song/ answer the following questions.

1. Define deposition.
2. Define weathering
3. How long is the UK coastline?
4. True or false: attrition makes pebbles more rounded and less angular.
5. What is the name given to the movement of water up the beach after a wave breaks?
6. Why is the coast important?
7. Name the two types of engineering involved in coastal management.
8. Name a landform of deposition
9. Draw and name the four types of erosion.
10. List the features of a constructive wave.
11. What feature is formed when a spit extends out to join the mainland to an island offshore?
12. There are three factors that effect the size of a wave, what are they?
13. Label the features in image a.
14. Annotate the photo b, with coastal processes you can see.
15. Compare a constructive wave with a destructive wave.
16. What is the difference between social, economic and environmental reasons the coast is so important.
17. State a method of hard engineering to manage the coast.
18. Describe how groynes help to manage the coast.
19. Explain the processes of longshore drift
20. Explain the four processes of erosion
21. Explain the four processes of transportation
22. Explain the formation of a headland and bay
23. Explain the formation of a spit
24. Justify the need to manage the coast.
25. Discuss the benefits of using hard engineering to manage the coast.

a.



b.



## Command Words:

**Analyse** - Take apart an idea, concept or statement and criticise it.

**Assess** - Come to a conclusion about the overall value or significance of something; discuss its positive and negative aspects to show balance.

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**Discuss** - Set out both sides of an argument (for and against) and come to a conclusion; there should be some evidence of balance.

**Evaluate** - Make a judgement about the effectiveness of something; discuss its strengths and weaknesses and come to a conclusion about its overall success or importance.

**Explain** - Give reasons why something happens.

**Give** - Produce an answer from recall.

**Justify** - Support an idea or argument with evidence; for the outcome chosen, the positives must outweigh the negatives.

**State** = name

# IS THE GEOGRAPHY OF RUSSIA A CURSE OR BENEFIT?



YEAR 8

### What Continent is Russia in?

Russia is within the continents Europe and Asia. Eurasia is the combined continental landmass of Europe and Asia. The country shares its international boundaries with sixteen sovereign republics of the world. 77% of the total landmass of Russia is in Asia while the rest is in Europe.

The Ural Mountains are a particularly important physical feature. The mountain range forms the traditional separation between Europe and Asia.

### Rural to Urban Migration –

The movement of people from the countryside to the city.

Push factors (away from countryside)- Pull factors (attracts to city)-

### Russia's Climate:

Russia experiences a continental climate. It has long, cold, harsh winters and short, hot summers. This can be represented on a climate graph:

Temperature = LINE GRAPH  
Rainfall = BAR CHART

A climate graph tells us the average kind of weather expected there over the year.

Weather	Climate
The state of the atmosphere at a particular place	The atmospheric conditions prevailing in an area in general or over a long period.

### Biomes in Russia:

The biomes (areas of distinctive plant and animal groups, which are adapted to that particular environment) are very diverse in Russia.

**Tundra:** There is very little rainfall in the tundra. There are shrubs and animals will include reindeer and Muscox.

**Taiga:** The taiga is characterized by a cold, harsh climate, low rate of precipitation, and short growing season. There are coniferous trees and animals include the Siberian Tiger.

**Steppe:** Warm summers and really cold winters. Animals include rabbits and foxes. Grass is the main form of vegetation.

**Temperate Forest:** The deciduous forest regions are exposed to warm and cold air which cause this area to have four seasons.

Ecosystem = an interconnected community of all of the living things - biotic (e.g. plants and animals) and all of the non-living parts - abiotic of the environment (e.g. soil, water and air) that they require to survive.

### Tourism in Russia:

Russia is visited by 33 million people each year. There are many benefits and negatives of tourism in Russia. Many people visit Russia for culture and sightseeing religious buildings.

Positives	Negatives
Jobs created	Local traditions and customs are kept alive because tourists enjoy traditional shows
More money for the country	Most money goes out of the area to big companies, not locals
New facilities for the tourists also benefit local	Culture and traditions change as outsiders arrive

### Population in Russia:

- Home to as many as 160 different ethnic groups and indigenous peoples.
- Russia's population density is 8.4 people per square kilometre (22 per square mile), making it one of the most sparsely populated countries in the world.
- Christianity is Russia's largest religion with 71.8% of the population belonging to the Orthodox Christian faith.

Population density =  $\frac{\text{Total population}}{\text{area}}$

- Post reproductive years (44-85+)
- Reproductive years (15-44)
- Pre-reproductive years (0-14)

### What is development?

The degree of wealth and material comfort available to a person or community.

HDI – a group of all countries development rates - In 2013, Russia had the world's 55th highest score.

Life expectancy – The amount of time people are expected to live – In Russia it is 64 years.

GDP – Gross domestic product - A measure of the total value of all the final goods and services produced in a specific time period. In Russia it is \$18,000.

### Climate Change –

Changes in Earth's climate system result in new weather patterns that last for at least a few decades.

- The warming in Russia was 1.29°C for the last 100 years
- Rain increased (7.2 mm/10 years) for the period 1976–200
- Permafrost thawing
- 2010/ 2015 and 2017 Wildfire destruction has increased.

### Economy of Russia:

Primary Sector - This is the process of getting the raw materials together – 9.4% of jobs

Secondary Sector - This is the using the raw materials to create a new product – 27.6% of jobs

Tertiary Sector - Using or selling this new product – 63% of jobs

Economic sector	% of jobs
Primary	9.4
Secondary	27.6
Tertiary	63

Russia has an abundance of natural resources. It produces 20 per cent of the world's natural gas and is the world's leading producer of oil.

### Russia Rural vs Russia Urban -

Rural	Urban
A geographic area that is located outside towns and cities. Generally it has low population and lots of farming.	A town or city. Generally a built up area with a large population density (lots of people living in a small space).
<ul style="list-style-type: none"> <li>X The most remote areas of Russia, some homes lack gas, plumbing, running water, and electricity.</li> <li>X When Russia was part of the Soviet Union, most rural people worked on huge farms run by the government. After the Soviet Union collapsed, Russia began to break up these farms.</li> <li>✓ People of Russia are avid nature lovers, and they enjoy spending time in the countryside.</li> <li>✓ Rural homes generally are larger than those in the city and have private garden plots.</li> </ul>	<ul style="list-style-type: none"> <li>X Russian cities are crowded.</li> <li>X The scarcity of housing forces some families to share kitchen and toilet facilities.</li> <li>✓ The quality of education, health care, and cultural life is better</li> <li>✓ Education or technical training that is available only in cities</li> </ul>
	Russia is mostly an urban country; according to the census results, 74% of Russians live in urban areas -- either towns or cities.

## Key words:

**Biome** = a large geographical area of distinctive plant and animal groups, which are adapted to that particular environment.

**Climate Change** – Occurs when changes in Earth's climate system result in new weather patterns that last for at least a few decades.

**Commodity** - Any product that can be used, bought, sold or traded especially in a world market

**Continental climate** = A climate with a high temperature range away from the influence of the sea.

**Development** - The degree of wealth and material comfort available to a person or community.

**Ecosystem** = an interconnected community of all of the living things - biotic (e.g. plants and animals) and all of the non-living parts - abiotic of the environment (e.g. soil, water and air) that they require to survive.

**GDP**- is a monetary measure of all of the services (IT) and goods (cars) produced in a country over one year.

**Human features** – structures that have been built by man

**Permafrost** – Ice that stores carbon

**Physical features** – structures that occur naturally.

**Plain** = a landmass that is flat or gently rolling that covers many kilometres.

**Population Density** = the amount of people that live in a certain space.

**Population distribution** = How the people are spread out

**Rural to Urban Migration** = The movement of people from the countryside to the city.

**Tectonic Plates** - The Earth's crust (top layer) is not a solid shell. It is made up of thick, connecting pieces.

**Tourism** = People visiting a different place to where they live.

**Volcano** = a mountain or hill, typically conical, having a crater or vent through which lava, rock fragments, hot vapour, and gas are or have been erupted from the earth's crust.

## Revision Tasks:

- Make a mindmap/ poster/ revision cards/notes/ presentation/ song/ answer the following questions.

1. Define rural- urban migration
2. State two positives of tourism in Russia
3. Define ecosystem
4. In which sector do the majority of the population work in within Russia?
5. Define rural to urban migration.
6. Name one biome found in Russia
7. Using the climate graph annotate to show what shows rainfall and what shows temperature.
8. Describe the location of Russia in the world.
9. Describe the rural environment in Russia
10. Describe the distribution of the population in Russia, using the graph to the right.
11. Compare the Steppe biome to the tundra biome
12. Explain the impacts of climate change in Russia.
13. Explain how Russia's climate is different to the UK's
14. Decide whether you would rather live in rural or urban environment in Russia. Explain why.
15. Evaluate whether the physical geography of Russia influences the development rate in Russia.



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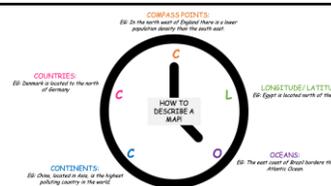
**Justify** - Support an idea or argument with evidence; for the outcome chosen, the positives must outweigh the negatives.

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## Describe the Distribution/ Location...

When asked to describe the distribution use CLOCC.

- Compass points
- Longitude/ Latitude
- Oceans
- Continents
- Countries



## How do humans use rivers?

**Mineral Extraction** – Taking out valuable minerals or other natural materials from the rivers.  
*Over \$3 billion globally is thought to come from mineral extraction in rivers.*

**Tourism** – Rivers that attract tourists bring in more money for local areas. This money can then be given to locals so that they can afford more food and services.

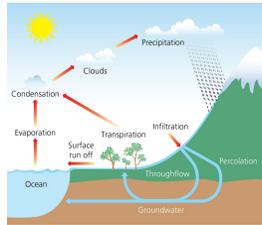
**Food** – Global demand for fresh fish for humans to eat is 143.8 million tonnes per year

**Dam** – A barrier constructed to hold back water and raise its level, forming a reservoir used to generate electricity or as a water supply.  
*There are around 50 000 large dams in the world, 168 of which are located in the UK.*

**Ports** – Accessible water to navigable water where ships load or unload.  
*In 2017 470 million tonnes of goods passed through UK ports.*

## Drainage Basin:

**Infiltration** – Water soaks into the soil from the ground  
**Throughflow** – Water runs through the soil  
**Surface run off** – Water that runs over the surface of the land  
**Groundwater flow** - Water that is saturated down into the rock  
**Percolation** – water passing through



## 2015 York Floods

### Causes of the flood:

- Record levels of rainfall (December 2015 storm Desmond occurred)
- Changes of land use in drainage basin as peat had been removed which meant more surface run off
- Two tributaries into the River Ouse.
- Urbanisation – York has grown as a city.

### Responses:

- £45 million investment provided to York by the government to upgrade flood defences and install embankments, flood walls and temporary flood gates.
- Installation of pumps to pump 30% more water out the local area at a cost of £17 million
- An increase in education for local people as to what to do in a storm.

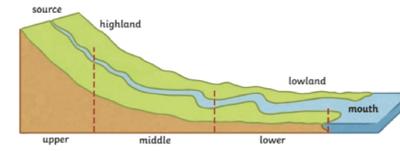
At the public consultation in York, locals expressed an opinion that protection of farmland seemed to be more important than the city and by building higher walls, it would spoil the look of the city for tourists.

### Effects:

- 250 people evacuated
- 18000 properties flooded
- Shops shut before Christmas
- Insurance company increased staff
- Sewage leaked into surrounding fields
- Bridges collapsed



## How does a river change from source to mouth?



	Upper Course	Middle Course	Lower Course
<b>Gradient</b>	Steep gradient	more gentle gradient	Flat gradient
<b>Velocity</b>	Low velocity	Faster velocity	Fastest velocity
<b>Features</b>	Waterfalls, gorges, and rapids	Meanders, Ox bow lakes, floodplains	Floodplains, deltas, estuaries
<b>Channel</b>	Narrow and shallow channel	Wider and deeper channel	Widest and deepest channel

**Long profile** - shows how the gradient of the land changes as the river travels downstream.

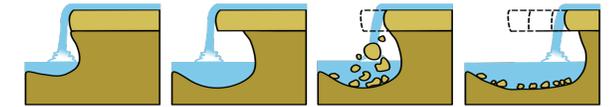
**Cross profile** - shows the cross-section of the river and the river valley.

### Upper Course of a River

Near the source, the river flows over a steep gradient but has limited energy. The river erodes vertically, producing **V-shaped valleys**, **interlocking spurs**, and **waterfalls**.

Waterfall formation:

- River flows over layers of more resistant and less resistant rock
- Hydraulic action and abrasion causes a plunge pool in the less resistant rock
- The more resistant rock is undercut, leaving the rock unsupported
- The overhanging rock collapses and the waterfall retreats upstream, forming a gorge.



### Middle Course of a River

The river now flows over a more gentle gradient, but has more energy (more water flowing, more quickly). The river erodes **laterally**, creating a **u-shaped valley**, **meanders**, and **ox bow lakes**.

Formation of a meander and ox-bow lake:

- The fastest flowing water erodes the outer bank forming a **river cliff**; slower water causes deposition on the inner bank, forming a **slip off slope**.
- Further erosion causes the two outside bends to move towards each other, **narrowing the neck of the meander**.
- Erosion eventually cuts through the neck of the meander, and the fastest flow is redirected.
- Deposition separates the old meander loop from the new main channel, forming an **ox-bow lake**.



## Physical and Human Causes of Flooding.

### Physical: Prolonged/heavy rainfall

This causes the soil to become saturated, stopping infiltration and causing surface runoff which increase peak discharge.



### Physical: Geology

Impermeable rocks prevent infiltration, causing surface runoff which decrease lag time.



### Human: Deforestation

Clearing trees reduces interception and evapotranspiration, increasing peak discharge.



### Human: Urbanisation

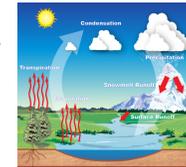
Tarmac and concrete are impermeable, preventing infiltration and causing surface runoff.



# RIVERS – YEAR 8

## Water Cycle

Energy from the Sun heats the surface of the Earth. Water is **evaporated** from oceans, rivers, lakes, etc. The warm, moist air rises because it is less **dense**. **Condensation** occurs and clouds form. **Precipitation** occurs as water droplets get bigger and heavier.



## Processes

**Transportation** - The movement of sediment along the coast

- Traction** - large material is rolled along the sea floor.
- Saltation** - beach material is bounced along the sea floor.
- Suspension** - beach material is suspended and carried by the waves.
- Solution** - material is dissolved and carried by the water.

**Erosion** - The breakdown of sediment into smaller fragments

- Hydraulic Action** – The force of water into cracks helps to break it up.
- Abrasion** – Waves fling sand and pebbles against the rock. These wear away like sandpaper.
- Attrition** - Chunks of rock get knocked together and worn into smaller bits
- Solution** – Water dissolves the soluble material from the rock.

**Deposition** - When water loose energy it leave behind the smaller pieces.

- The energy of a river decreases, leading to deposition if:
- the gradient of the river or the volume of water decreases
  - the water slows down on the inside of a bend in the river
  - the river channel becomes shallower
  - the river enters a lake or the sea.

## Flood management schemes

### Soft Engineering (natural processes)

**Afforestation** – plant trees in the upper course to increase interception to lengthen lag time, and increase evapotranspiration to reduce discharge.



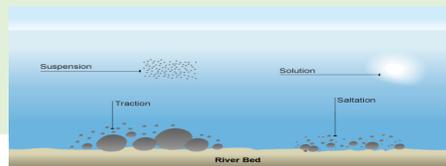
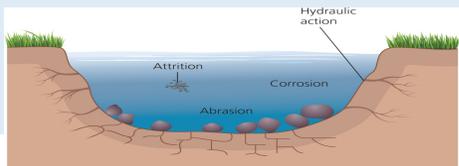
The Environment Agency (EA) is a government body and has responsibility for the management of the risk of flooding from main rivers, reservoirs, estuaries and the sea, as well as making people aware of flood risk and advising them how they can protect themselves

### Hard Engineering (building structures)

**Embankments**– increase the height of the river banks to increase channel capacity.

**Temporary gate**– Free standing frames that can be installed prior to a flood and removed when the water levels have dropped.

**Permanent flood walls**– These defences remain fully in place and are built into the natural surroundings. During a flood the gates would be closed to prevent water from entering.



### Key words:

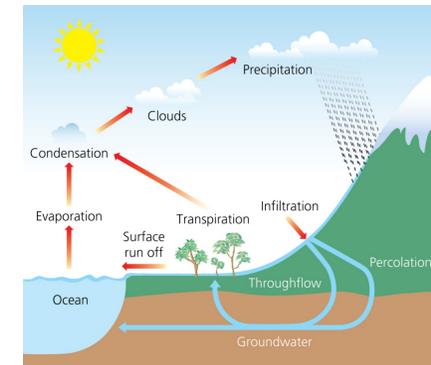
- Condensation** – Conversion of water vapour or gas into a liquid
- Cross profile** – A slice taken across a river showing how wide and deep it is
- Drainage basin** – The area of land that is drained by a river and its tributaries
- Erosion** – The breakdown of sediment into smaller fragments
- Flood plain** – Low-lying land either side of a river which regularly floods
- Groundwater flow** – Water flowing very slowly through rocks deep underground.
- Hard engineering** – Using artificial structures to stop a river from flooding
- Hydrologist** – People who solve water-related problems such as finding new sources of water or managing floods
- Infiltration** – Water soaking into the soil
- Intercepted** – Water caught by leaves
- Interlocking Spurs** – Hillsides that a river flows between
- Lateral erosion** – When a river erodes horizontally
- Mouth** – the end of a river where it meets the sea
- Plunge pool** – A deep part of a river eroded by a waterfall
- Precipitation** – Moisture falling from clouds as rain, snow or hail
- River cliff** – A steep bank on the outside of a river
- Saturated** – holding as much water as can be absorbed
- Sediment** – Rocks or stones found in the river
- Soft engineering** – Using natural methods to stop a river from flooding.
- Source** – the point at which the river starts to flow
- Surface run off** – Water flowing quickly over the surface into rivers
- Throughflow** – Water flowing more slowly through the soil to the river.
- Transportation** – Water carrying sediment down a river
- V-shape valley** – A valley created by vertical erosion with steep sides near the source of the river
- Vertical Erosion** – When the river cuts down
- Watershed** – Area where water drains into a certain river

### Revision Tasks:

- Make a mindmap/ poster/ revision cards/notes/ presentation/ song/ answer the following questions.

1. Define deposition.
2. Define precipitation.
3. State two ways rivers are used by humans.
4. Name a flood case study.
5. Give three reasons why deposition happens.
6. State the causes of flooding in a case study you have studied.
7. Using figure a, annotate the processes in a drainage basin.
8. Name the two types of engineering involved in flood management.
9. Name a landform of deposition.
10. Draw and name the four types of erosion.
11. Give two factors that influence deposition from happening.
12. Draw an annotated diagram of a waterfall.
13. Describe a method of soft engineering.
14. Compare the physical causes and human causes of flooding.
15. Explain how the river changes from source to mouth.
16. Using figure b, explain the effects of a flood you have studied.
17. Explain how tourism allows people to use rivers.
18. Evaluate the responses of a flood you have studied.
19. Justify the use of a temporary flood gate to protect towns from flooding.
20. Using figure c, annotate the water cycle and explain the processes.

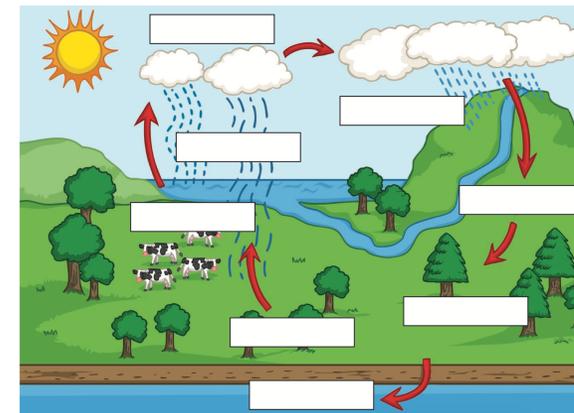
a.



b.



c.



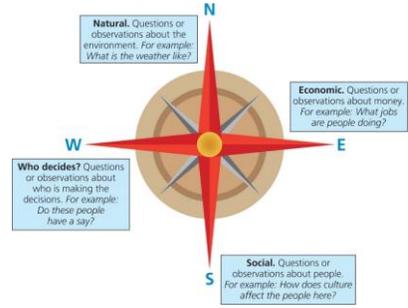
### Command Words:

- Analyse** - Take apart an idea, concept or statement and criticise it.
- Assess** - Come to a conclusion about the overall value or significance of something; discuss its positive and negative aspects to show balance.
- Compare** - Identify similarities and differences.
- Define** - State the meaning of an idea or concept.
- Describe** - Set out the main characteristics of something; DON'T EXPLAIN.
- Discuss** - Set out both sides of an argument (for and against) and come to a conclusion; there should be some evidence of balance.
- Evaluate** - Make a judgement about the effectiveness of something; discuss its strengths and weaknesses and come to a conclusion about its overall success or importance.
- Explain** - Give reasons why something happens.
- Give** - Produce an answer from recall.
- Justify** - Support an idea or argument with evidence; for the outcome chosen, the positives must outweigh the negatives.
- State** = name

# DEVELOPMENT – YEAR 8

## What is development?

Development is about making the lives of those who live in a country better through wealth, getting rid of poverty, equality.



Every country in the world is at a different stage of development.

If a country is developing it is changing for the better.

The development compass rose is used to show the main areas of development.

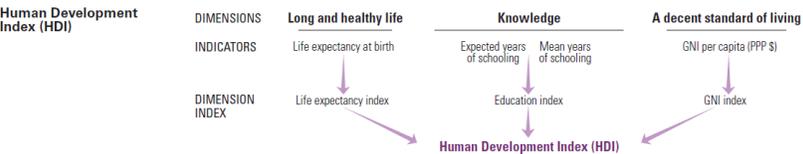
- **Developed country** (HIC – High Income Country) has a lot of money, many services and a high standard of living. eg: England
- **Developing country** (NIC – Newly Industrialised Country) is one with lots of change happening often involving technology. eg: China
- **Poor country** (LIC – Low Income Country) is often quite poor, has few services and a low standard of living. eg: Malawi

## Human Development Index (HDI)-

In 1990, the **Human Development Index (HDI)** was created to better measure development. HDI combines these elements:

- living standards: the GNI per capita
- health: the **life expectancy** or average age which people live to
- education: the average number of years of schooling children receive.

The HDI has a value between 0 and 1. The higher the number the greater the level of development.



- ✓ It takes into account economic measures, such as income, but also social measures, such as levels of education.
- ✓ Widely accepted so can be used as a comparison
- ✗ Reflects long-term changes (e.g. life expectancy) and may not respond to recent short-term changes

## BRICS:

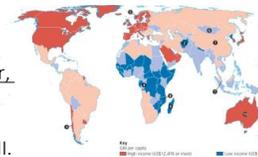


Brazil, Russia, India, China and South Africa, are considered to be at a similar stage in a process of rapid economic development.

These countries are developing at a rapid rate, all at once, as they benefit from global inventions and ideas. Countries like the UK developed more slowly. The inventions and discoveries we made more slowly, leading to a slower rate of development.

## GNI

Gross National Income per capita =  $\frac{\text{The country's total income in a year}}{\text{population}}$



The World Bank uses one main indicator to measure development, GNI.

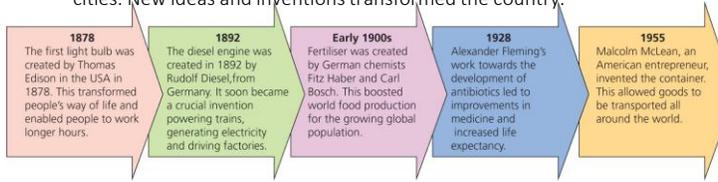
- ✓ Shows economic development which can imply lots of information about the countries resources
- ✗ Says nothing about whether people in a country have a good quality of life
- ✗ It is an average and so it hides information about people who are very rich or very poor.

## How can development change over time?

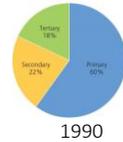
Development is not static. It can change over time.

Cause –

- **The Industrial Revolution** - People began to leave the countryside for new jobs in growing cities. New ideas and inventions transformed the country.

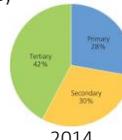


**Economic crash** – In 2008 the global financial crisis saw banks crash and home values decrease. This meant that lots of people lost money and development was halted due to the issue that countries could not loan money.



When countries become more developed they will often see a change in their economic sector from mainly Primary to Tertiary.

This is evident in China from 1990 to 2014.



For example:

- One in five teenage girls around the world is denied access to education.
- In the UK there is also inequality. For every £1 earned by a man, a woman earns 81p.
- One in three girls in the lower income countries will be married by her 18th birthday.

This inequality often takes place because of cultural beliefs or economic factors, but it results in half a country's population being held back

## Sustainable Development Goals -

In 2015 the MDG's were replaced by 17 sustainable development goals (SDG's) with a target to meet them by the year 2030. The SDG's are targets for ALL countries regardless of their level of development



## UK north/south



	North	South
Economic	Average income = £13,560	Average income = £20,509
Education	University attendance = 32%	University attendance = 56%
Life expectancy	Male = 71/ Female = 77	Male = 83/ Female = 84
House Prices	Average = £154,00	Average = £305,00

## Aid:

**Bilateral Aid** – a government in one country provides aid to the government of a foreign country.

Eg: Between 2014 and 2015 the UK government gave £249 million in aid to Pakistan

**Non-governmental Aid** -Raise money from the public to support development projects in other countries.

EG: ActionAid is an international NGO which works with over 15 million people in 45 countries. It has been working for a world free from poverty and injustice for over 40 years.

Change lives. For good.

actionaid

## Causes of Poverty-

Nearly 1/2 of the world's population — more than 3 billion people — live on less than \$2.50 a day. More than 1.3 billion live in extreme poverty — less than \$1.25 a day.

- War
- Education
- Ill health and Diseases
- Debt
- Unfair Trade
- Status of Women

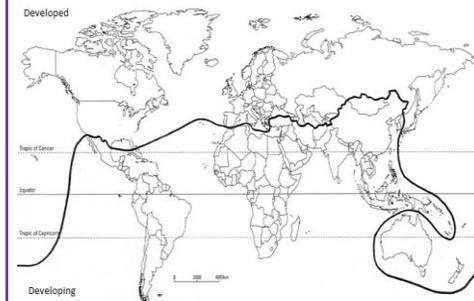
Often the causes of poverty are interlinked and can a domino effect leading to a second cause of poverty and impacting development in the country.

- Debt → Ill-health and disease = hospital care cannot be paid for
- Ill health and disease → loss of education = if children are poorly then they cant be at school.
- War → Loss of education = schools are destroyed meaning that children cant go to school.
- Loss of education → Status of women = The most likely children not to go to school are women.
- Unfair Trade → Debt = People are not paid fair wages

## Gender Inequality:

Occurs when people are treated differently and given different opportunities just because they are male or female.

## The North South Divide-



This is the Brandt line (sometimes called the North South divide). It was introduced in 1980 by William Brandt.

He said that the North possess 80% of the earths wealth whereas the South only possess 20%.

- ✓ Uses simplified data so that it is easy to understand
- ✗ Many countries are incorrectly places such as Qatar and the UAE which are played south of the line so should be LIC's but have developed to be HIC's
- ✗ Considered to be out of date.

## Key Words:

**Adult Literacy Rate** -% of total adults that can read

**Bilateral Aid** – a government in one country provides aid to the government of a foreign country.

**Development** - making the lives of those who live in a country better through wealth, getting rid of poverty, equality.

**Debt** – When you owe someone else money

**GDP per capita** - How much each person earns

**Gender Inequality** - men and women are not equal

**HIC** – High Income Country - has a lot of money, many services and a high standard of living.

**Human Development Index (HDI)** – an inclusive way to measure development

**Infant Mortality rate per 1000 births** -The amount of babies under the age of one who die.

**LIC**- Low Income Country - is often quite poor, has few services and a low standard of living.

**Life Expectancy** - How long you can expect to live.

**NIC** – Newly Industrialised Country

**Non-governmental Aid** -Raise money from the public to support development projects in other countries.

**Poverty** - The state of being extremely poor.

**Primary** – Process of collecting the raw product.

**Recession** - a period of temporary economic decline during which trade and industrial activity are reduced

**Secondary** – Using the raw product to create a new product

**Standard of Living** - the level of wealth, comfort etc. available to a certain group of people in a certain geographic area.

**Status of Women** – How important women are in society

**Social Inequality** – uneven distribution of power and wealth.

**Sustainable Development Goals (SDG's)**– 17 targets for all countries regardless of their level of development

**Tertiary** – Using or selling a product

**Unfair Trade** – Countries making use of others vulnerability

**Quality of Life** – How good someone's life is

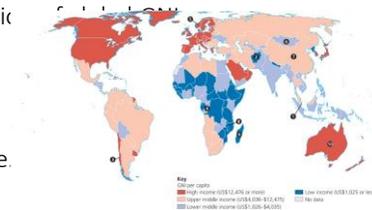
## Revision Tasks:

- Make a mindmap/ poster/ revision cards/notes/ presentation/ song/ answer the following questions.

1. Define development.
2. State how we measure development?
3. What is GNI per capita?
4. State how a aid can be given to countries who need it.
5. The Human Development Index combines three elements. What are these elements?
6. Name all the sustainable development goals
7. List the causes of poverty.
8. Name the different types of industry involved in creating/ making and selling a product.
9. Using the map to the right, describe the distribution of development.
10. Describe an LIC.
11. Describe the features of a HIC.
12. Describe how development can change over time.
13. Explain what the Brandt line is.
14. Explain how the causes of poverty are linked.
15. Identify reasons for why the sustainable development goals were introduced.
16. Which goal from the sustainable development goals do you believe is the most important? Why?
17. Explain what is sustainable development and why is it so important for the future of the planet and its people?
18. Do you think the UK north/south divide is a real issue? Why/ why not?
19. Evaluate the effectiveness of the Brandt line.
20. Create a speech explaining how as a school we could achieve the SDG's.

TOP TIP:  
Make sure you double develop your points  
EG: I think that .... because...

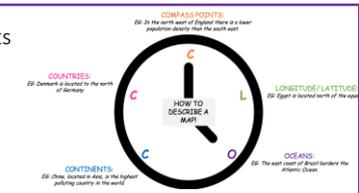
TOP TIP:  
Use your key words!  
They were poor → They live in poverty



### Describe the Distribution/ Location...

When asked to describe the distribution use CLOCC.

- Compass points
- Longitude/ Latitude
- Oceans
- Continents
- Countries



### Command Words:

**Analyse** - Take apart an idea, concept or statement and criticise it.

**Assess** - Come to a conclusion about the overall value or significance of something; discuss its positive and negative aspects to show balance.

**Compare** - Identify similarities and differences.

**Define** - State the meaning of an idea or concept.

**Describe** - Set out the main characteristics of something; DON'T EXPLAIN.

**Discuss** -Set out both sides of an argument (for and against) and come to a conclusion; there should be some evidence of balance.

**Evaluate** - Make a judgement about the effectiveness of something; discuss its strengths **and** weaknesses and come to a conclusion about its overall success or importance.

**Explain** - Give reasons why something happens.

**Give** - Produce an answer from recall.  
**Justify** - Support an idea or argument with evidence; for the outcome chosen, the positives must outweigh the negatives.

**State** = name