







KS3 Knowledge Organisers

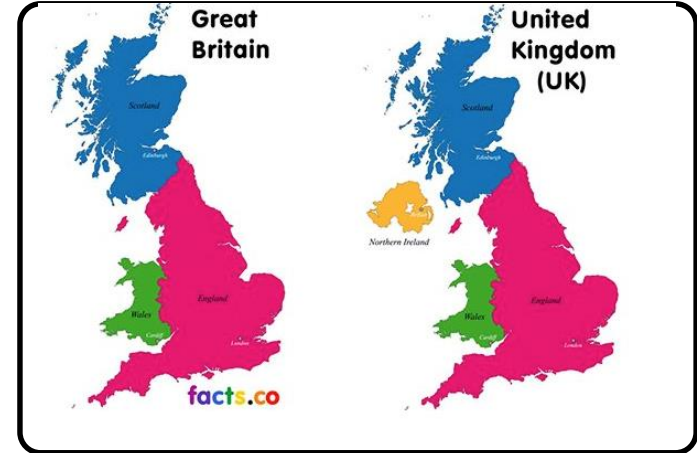


Geography



Year 7- Map Skills

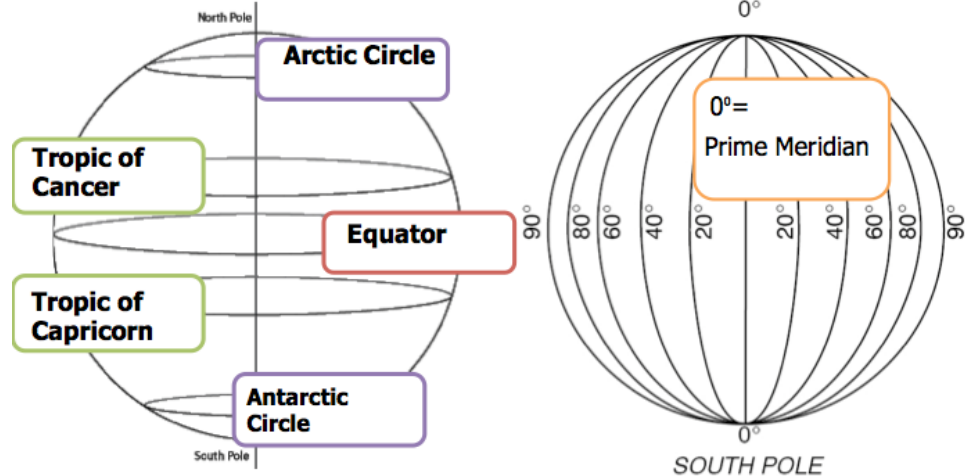
Countries	England	Scotland	Wales	Northern Ireland
Capital cities	London	Edinburgh	Cardiff	Belfast
Symbols				



South West



Lines of longitude and latitude

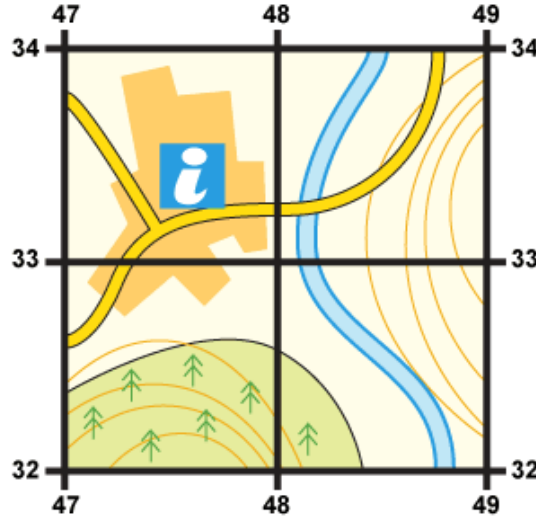


Year 7- Map Skills



Four-figure grid references can be used to pinpoint a location to within a square measuring 1 sq km. To find the number of the square:

- Start at the left-hand side of the map and go east until you get to the easting crossing through the bottom-left-hand corner of the square you want. Write this number down.
- Move north until you get to the northing crossing the bottom-left-hand corner of the square you want. Look at the number of this grid line and add it to the two-digit number you already have. This is your four-figure grid reference.

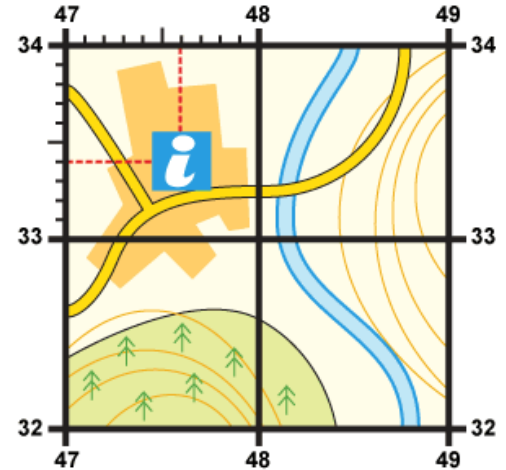


In this case, the tourist information office is in grid square 4733.



Sometimes it is necessary to be even more accurate. In this case you can imagine that each grid is divided into 100 tiny squares. The distance between one grid line and the next is divided into tenths.

- First, find the four-figure grid reference but leave a space after the first two digits. When you get to the easting at the left-hand side of the grid square you want, keep moving east and estimate or measure how many tenths across your symbol lies. Write this number after the first two digits.
- Next, move north from the bottom-left-hand corner of your grid square and estimate how many tenths your symbol is from this point. Put them together to create a six figure grid reference.



In this instance, the tourist information office is located at 476334.

Remember: Along the corridor and up the stairs!

Year 7- Where we live



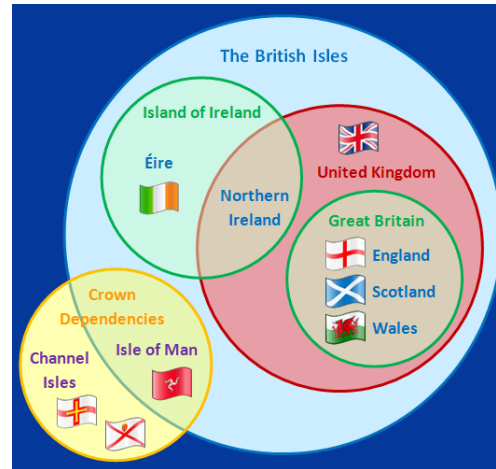
Why do some people live in different areas?

Urban: Towns and cities

- Housing
- Jobs
- Services

Rural: Countryside

- Lifestyle
- Less crime
- Wellbeing



Line graphs

**HIGH;
DATA;**

**LOW;
DATA;**

PATTERN;



Choropleth maps

Say WHERE the things are
EXACTLY where?
Places?

Say WHERE the things aren't
EXACTLY where?
Places?

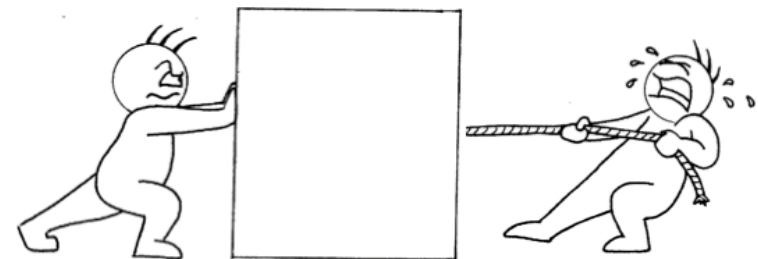
Is there a pattern? Link?



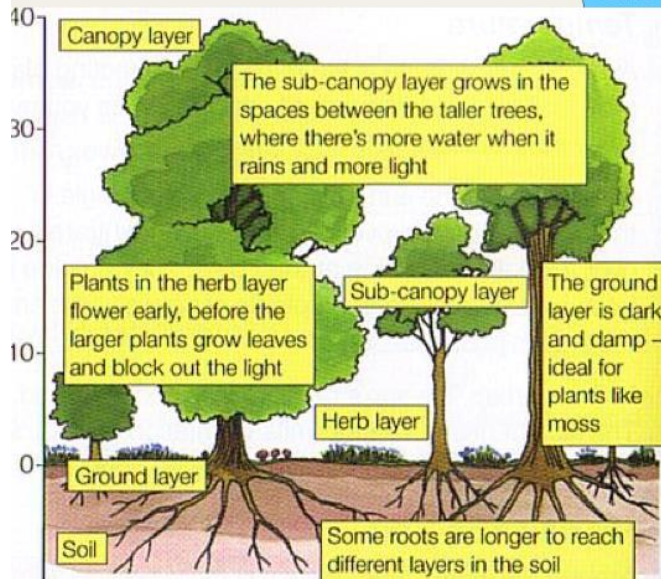
"Push" and "Pull" factors

PUSH factors are bad!
They PUSH people away from a place.

PULL factors are good!
They PULL people towards a place and attract them.



Temperate Deciduous Forest



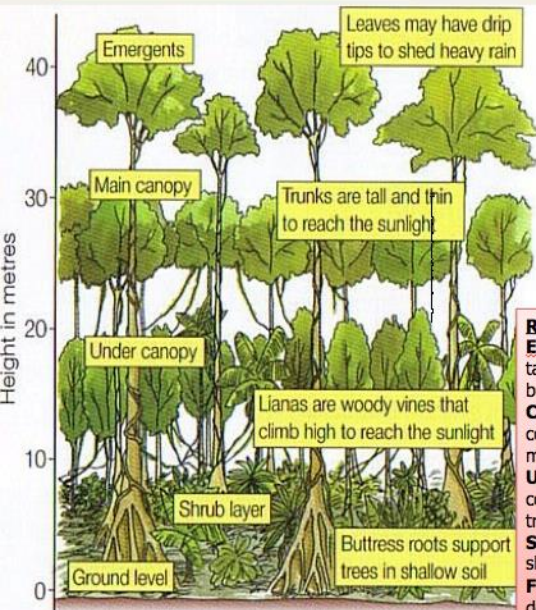
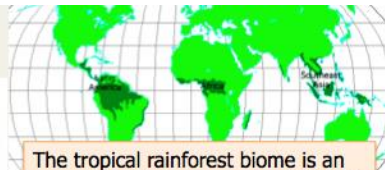
The temperate deciduous forest biome is characterised by its leaf-shedding trees and its seasons. This biome experiences all four seasons - winter, spring, summer, and autumn. The temperate deciduous forest biome is located in the United States, Canada, Europe, China, and Japan. There are also some parts of Russia that contain this biome. Soil pH is 5.5 to 6.

Year 7 - Biomes

What fieldwork techniques did we use when we compared biomes?

- Secondary research
- PH readings
- Field Sketches

Tropical Rainforest



The tropical rainforest biome is an ecosystem that covers about 7% of the Earth's surface. They are found all over the world but the majority of the tropical rainforest lies in South America in Brazil. The weather in the tropical rainforest is rainy yet warm all year round, day or night. Soil pH is 4.5 – 5.5.

Rainforest Structure

Emergents - or forest giants, 50 metres or taller. These trees are usually supported by buttress roots.

Canopy - This is a dense layer forming almost complete cover. Trees 20 - 30 metres tall include many hardwoods such as mahogany.

Under Canopy - This dark and humid area contains saplings between the trunks of larger trees.

Shrub Layer - This contains small trees and shrubs especially near rivers.

Forest Floor - This is covered with ferns and a deep litter of fallen leaves & branches.

What are the issues in our Tropical Rainforests?

Tropical rainforests are vital for the process of photosynthesis to produce oxygen and absorb carbon dioxide. They are also a vital habitat and are thought to be home to plants which may be medicinal.

However, tropical rainforests are being threatened by:

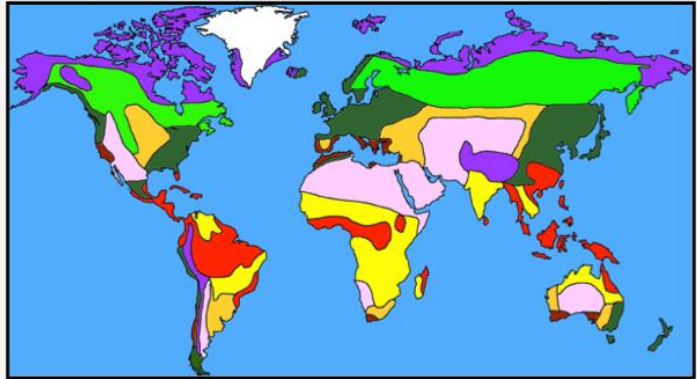
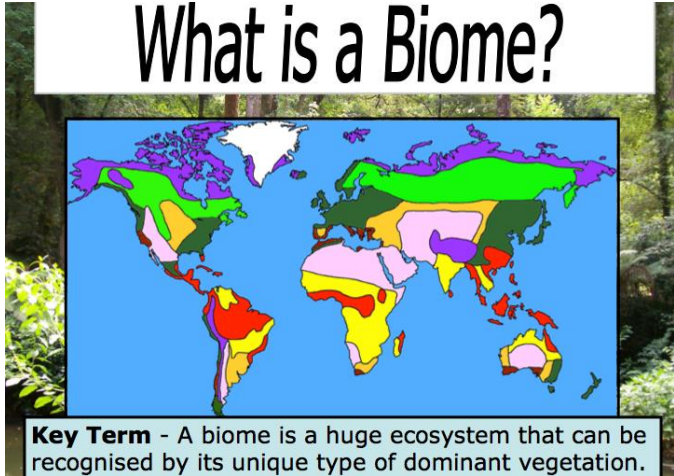
- Mineral extraction
- Deforestation
- Dams
- Population pressure
- Palm Oil





Year 7 - Biomes

What is a Biome?



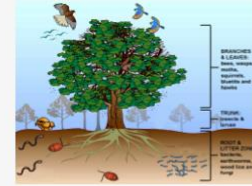
■ Tropical Rainforest	■ Grassland
■ Tropical Savanna	■ Temperate Deciduous Forest
■ Desert	■ Temperate Boreal Forest
■ Chaparral	■ Arctic and Alpine Tundra

Ecosystem

A complex system in an area with links between living things and their environment.

The living parts of the ecosystem are known as the biotic components e.g. vegetation and animal life.

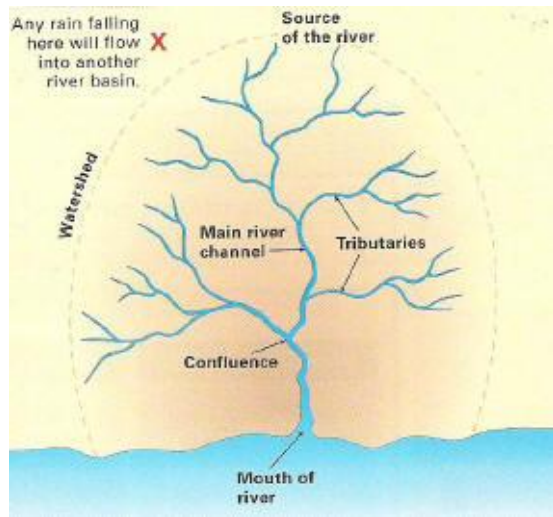
The non-living parts of the ecosystem are known as the abiotic components e.g. climate and soils.



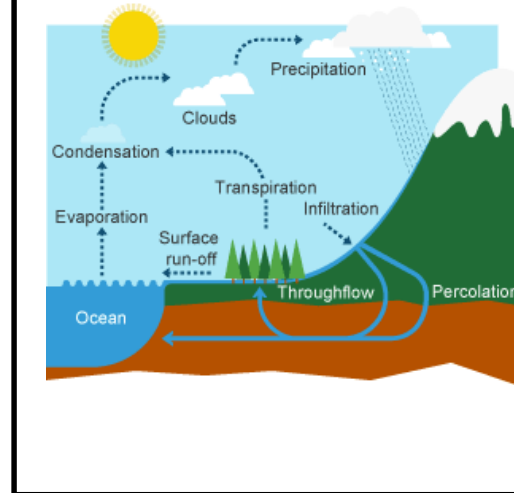
Climate zone?	Description of the climate and of the resulting vegetation
Savanna	A hot and dry grassland scattered with shrubs and isolated trees, which can be found between a tropical rainforest and desert biome
Tropical rainforest	A very hot and wet biome located on or near the equator and with the greatest biodiversity (number of plants and animals) found anywhere on earth.
Tundra	It is below freezing at night year round; This biome covers one-fifth of the land on earth – there is little precipitation, a short growing season; and poor nutrients. The word Tundra is comes from Lappish language (Lapland) which means "land with no trees".
Desert	This area is very hot and also very, very dry. Because of this very little grows – only very hardy plants such as cactus which can survive drought.
Taiga or Coniferous Forest	This biome is also called A taiga and is a northern coniferous (evergreen) forest. It is a cold woodland located north of temperate deciduous forests. It is the largest biome - covering about 50 million acres of land - about 17% of the Earth's land area and can be found in Canada, Europe, Asia, and the United States
Deciduous Forests	can be found in the eastern half of North America, and the middle of Europe. There are many deciduous forests in Asia. There are no extremes of climate. The deciduous forest has four distinct seasons, spring, summer, autumn, and winter. In the autumn the leaves change color. During the winter months the trees lose their leaves.
Chaparral	is found in a little bit of most of the continents - the west coast of the United States, the west coast of South America, the Cape Town area of South Africa, the western tip of Australia and the coastal areas of the Mediterranean. This biome has flat plains, rocky hills and mountain slopes. It is sometimes used in movies for the "Wild West". It is very hot and dry - the winter is very mild (usually about 10 °C), the summer is so hot and dry at 40 °C that fires and droughts are very common. Fortunately, the plants and animals are adapted to these conditions. Most of the plants have small, hard leaves which hold moisture. Some of these plants are poison oak, scrub oak, Yucca Wiple and other shrubs, trees and cacti.
Grasslands	A large biome with rolling terrains of grasses, flowers and herbs. It is a region where the average annual precipitation is great enough to support grasses, and in some areas a few trees. The precipitation is so unpredictable that drought and fire prevent large forests from growing.

Year 7 Rivers

The Drainage Basin



The Water Cycle



The long profile



Physical processes


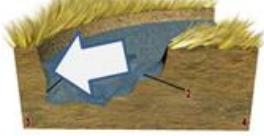
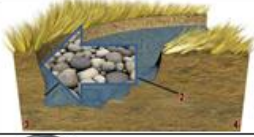

Erosion: Breaking down of rocks by the action of rock particles being moved over the earth's surface by water, wind and ice

Transportation: Movement of materials from the eroded position to the place they are deposited

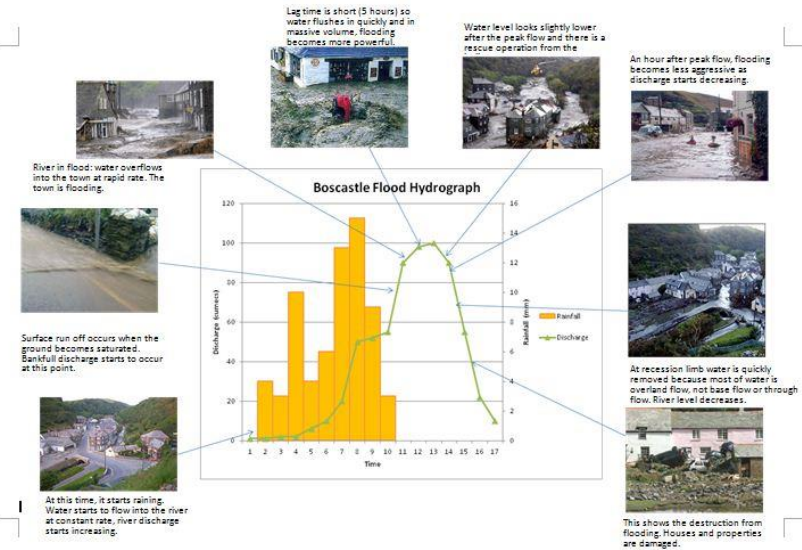
Deposition: The laying down of sediment on the bed of the river or sea floor

Year 7 topic 4 - Raging Rivers

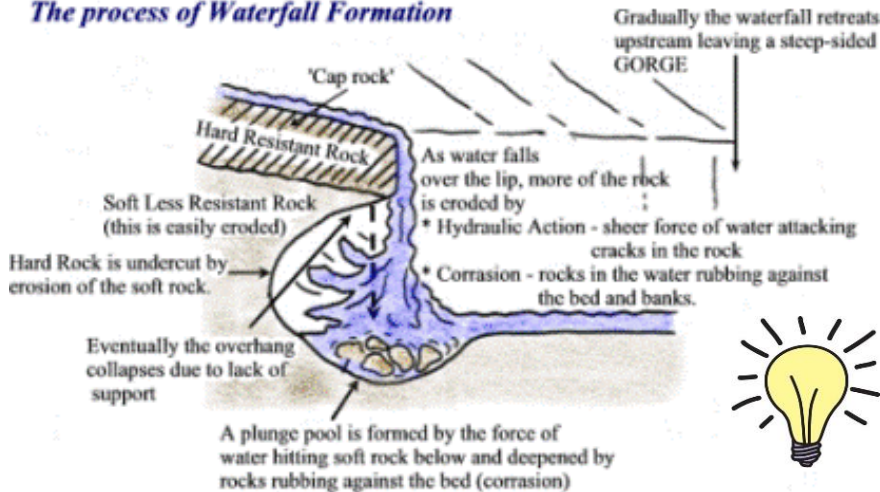
Processes of River Erosion

Name of process	Explanation of what happens	Diagram
Abrasion	The sheer force of the river's flow hits the river bed and banks. This weight of flowing water weakens the river bank and erodes it. This happens a lot on the outside of a meander bend (curves).	
Attrition	This is where pieces of rock or sediment (the load of the river) hit into each other. When they do they are weakened and bit fall off, reducing their size and making them rounder. This happens as they are being transported in the river.	
Solution	This is where pieces of rock or sediment (the load of the river) hit into the river bed and banks as they are being transported. They act like sand paper, causing bits of the bed and bank to be worn away. This happens a lot on the outside of a meander bend (curves).	
Hydraulic action	This is where certain rock types dissolve in the river water. It's also a transportation type. Dissolved rock can't be seen by the human eye but can be in a microscope.	

A **river flood** is when the **volume of water** increases and can no longer be contained in the **river channel**. This means that **river** bursts its **banks** and covers the **floodplain** and **valley bottom**. It can be caused by heavy rain, saturated soil, impermeable rock, urbanisation and deforestation. An example of flooding took place in Boscastle in 2004.



The process of Waterfall Formation



KEY COMMUNICATION SKILL: Photo labelling and annotation

Photo labelling is when you simply find something in a picture and write very briefly what it is, with an arrow pointing to it.

Photo annotation is when you find something in a picture and describe/explain in detail what it is and the effects it had, with an arrow pointing to it.

Example: Floods washed away parts of the main road going through Boscastle. This meant people could not get into or out of the village affecting local people.



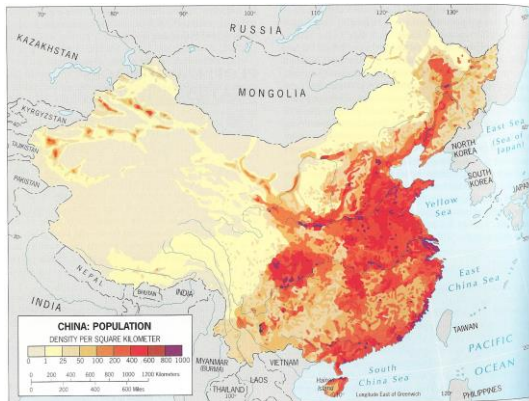
Year 7 China



Where do people live in China?

The 1.3 billion people in China make the choice of where they live based on push and pull factors such as:

- Cities near the coast
- Employment opportunities
- Relief of the land



Is China diverse?

When considering diversity we need to consider lots of factors, here are a few examples:

- Climate
- Culture
- Language
- Employment



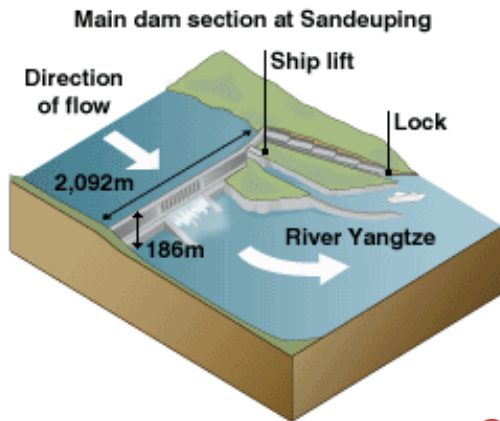
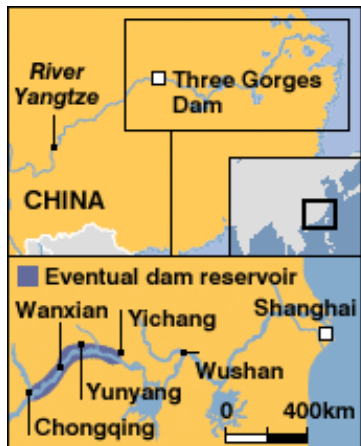
Year 7 China

What is a dam?

A dam is any barrier that holds back water; dams are primarily used to save, manage, and/or prevent the flow of excess water into specific regions. In addition, some dams are used to generate hydropower.

Another term often used when discussing dams is reservoir. A reservoir is a man-made lake that is primarily used for storing water.

An example is the Three Gorges Dam in China.



Infrastructure MENA

www.menainfra.com

THREE GORGES DAM

COST 39 BILLION USD TO BUILD = 180 BILLION YUAN

64.61 BN YUAN SPENT ON CONSTRUCTION

68.56 BN YUAN SPENT ON RELOCATION OF AFFECTED RESIDENTS

15.20 BN YUAN SPENT ON INTERESTS OF FINANCING

10 YEARS TO RECOVER COST WHEN GENERATED

1,000 TWHS OF ELECTRICITY STATUE OF LIBERTY

DAM WALL IS 2,309M LONG equal to **330 BLUE WHALES**

AND 101M HIGH equal to **2 and a bit STATUE OF LIBERTYS**

27,200,000 cubic metres of CONCRETE USED a world record and equal to same amount of concrete of **82.73 BURJ DUBAIS**

463,000 tonnes of steel used enough to build **163 EIFFEL TOWERS**

102,600,000 cubic metres of earth moved equal to **4.89 Kansai International Airports** landfills

The reservoir created, flooded a total area of 632 km² enough area to cover **SINGAPORE**

THE RESERVOIR IS 600 KM IN LENGTH IT WOULD TAKE 5.7 DAYS TO WALK ITS FULL LENGTH

CONTAINS 39.3 KM³ OF WATER EQUAL TO CALIFORNIA'S AGRICULTURE WATER CONSUMPTION PER YEAR

world's largest hydroelectric power station **34 generators installed**

22,500MW total capacity provides power for 9 provinces and 2 cities, including Shanghai

fully operational would provide 3% of China's total electricity consumption

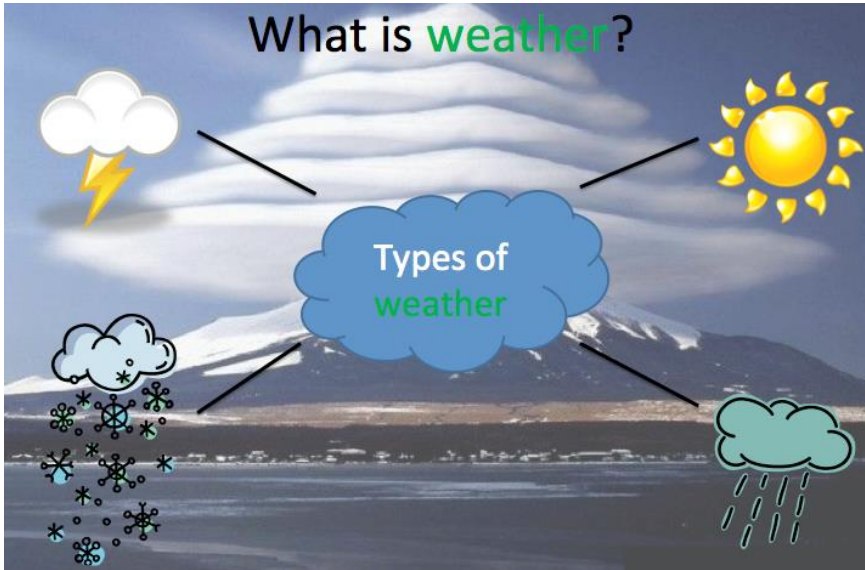
1.24m people relocated most relocated within Hubei Province

Source: en.wikipedia.org



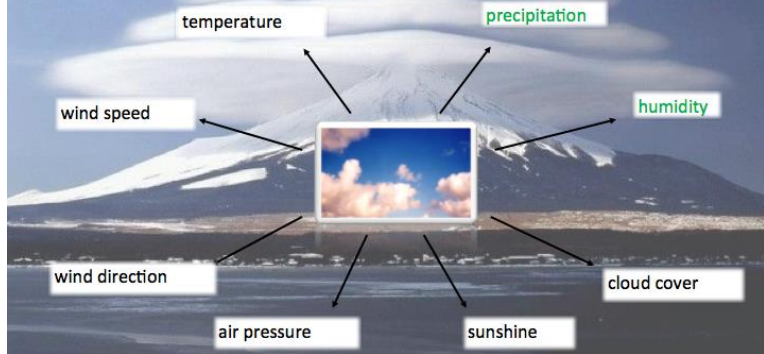
Year 7 - Weather and Climate

What is **weather**?



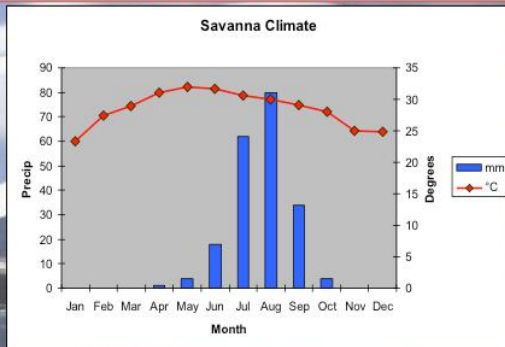
What is the difference between **weather** and **climate**?

Weather is the day to day changes in the atmosphere.



A climate graph tells us the average temperature and rainfall of a place for each month of the year. Here is an example from the Savannah in Africa;

The **red line** shows us the **temperature** in degrees Celsius, it uses the **right hand axis**



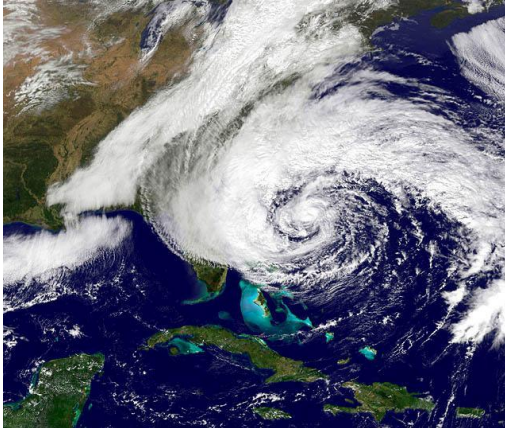
The **blue bars** show us the **Precipitation** (rain, snow etc) in mm, it uses the **left hand axis**

Weather term...	Definition of the term...	Instrument that measures this is...	Units of measurement...	Diagram of equipment...
Precipitation	Water falling from the sky in any form	Rain Gauge	In millimetres	
Temperature	Exactly how hot or cold it is.	Thermometer	Degrees centigrade	
Wind direction	Where the wind is blowing from.	Weather Vane	As a compass point (e.g. N, S, W, E).	
Wind speed	How fast the wind is blowing.	Anemometer	Kilometres or miles per hour.	
Cloud cover	How much of the sky is hidden by clouds.	Observations	Oktas	

Year 7 Weather and Climate

Hurricanes!

Hurricanes are a climatic hazard which forms over tropical or subtropical waters.



What is global warming?

- This is increase in global temperature.



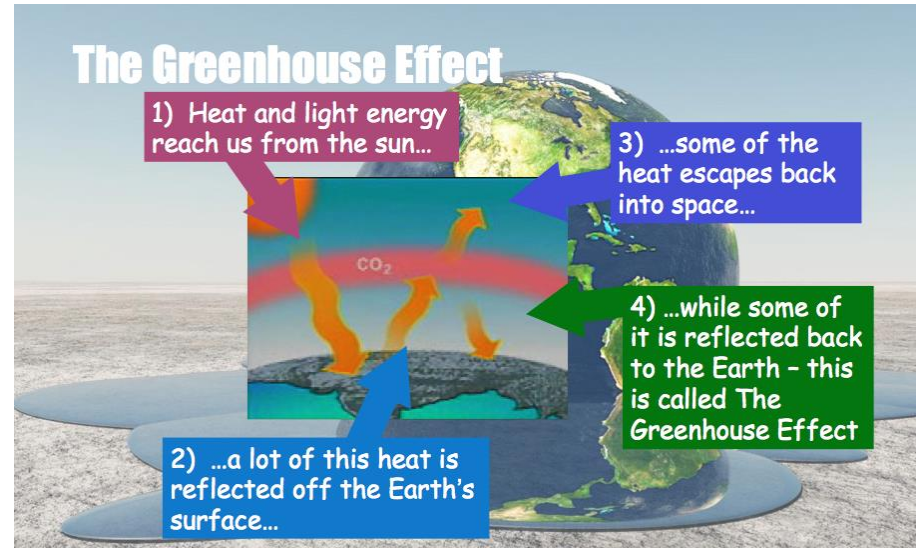
The Greenhouse Effect

1) Heat and light energy reach us from the sun...

3) ...some of the heat escapes back into space...

4) ...while some of it is reflected back to the Earth - this is called The Greenhouse Effect

2) ...a lot of this heat is reflected off the Earth's surface...

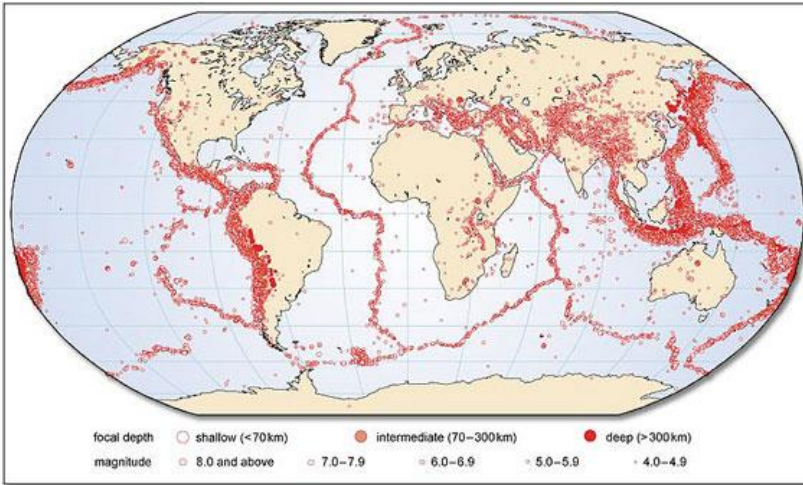


What is climate change?

- is a long-term change in the Earth's climate or in that of a region on Earth

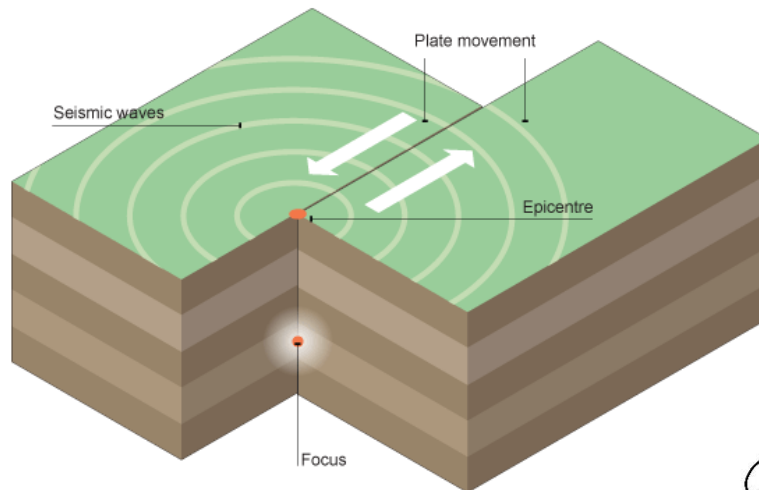
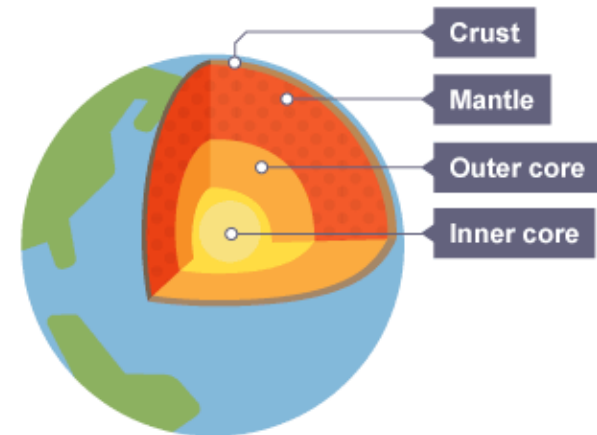


Year 8 - Natural Hazards



Where do we find Earthquakes?

We most commonly find earthquakes at plate margins. The most common is a Conservative margin where the plates rub side by side.



The theory behind tectonic hazards

Alfred Wegener developed plate tectonic theory. Due to the structure of the earth and the convection currents in the mantle he believed the Earth's plates must be moving. He developed the idea of there once being a supercontinent 'Pangaea' with the evidence of fossils and the jigsaw fit!



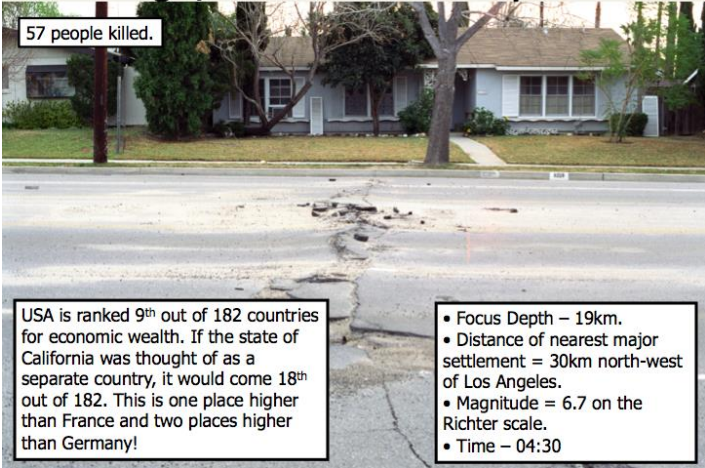


Year 8 - Natural Hazards



Comparing the effects of 2 Earthquakes:

Northridge, California Earthquake 1994

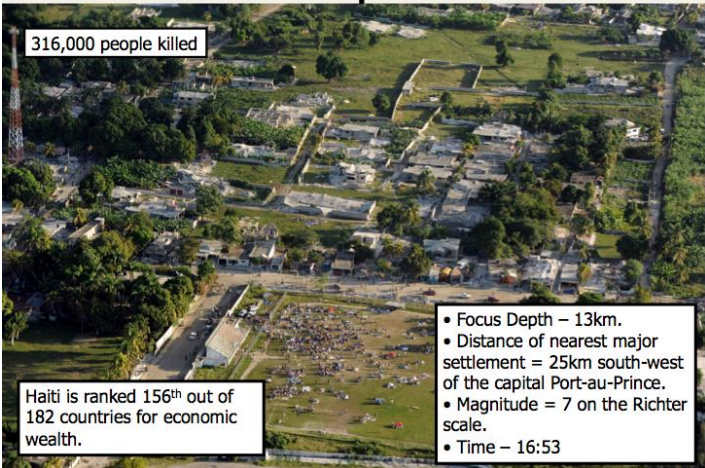


57 people killed.

USA is ranked 9th out of 182 countries for economic wealth. If the state of California was thought of as a separate country, it would come 18th out of 182. This is one place higher than France and two places higher than Germany!

- Focus Depth – 19km.
- Distance of nearest major settlement = 30km north-west of Los Angeles.
- Magnitude = 6.7 on the Richter scale.
- Time – 04:30

Haiti Earthquake 2010



316,000 people killed

Haiti is ranked 156th out of 182 countries for economic wealth.

- Focus Depth – 13km.
- Distance of nearest major settlement = 25km south-west of the capital Port-au-Prince.
- Magnitude = 7 on the Richter scale.
- Time – 16:53

Four hundred years ago, in the reign of James I of England, a disaster hit the south west of the country, as a huge **surge** of water came up the Bristol Channel - covering 200 square miles of land with water and killing 2,000 people.



What do scientists believe caused the Great Flood?

Scientists currently think that the evidence supporting the occurrence of a tsunami is very strong and that this represents the most likely explanation. However, they cannot rule out the possibility that it was a storm surge and that freak weather conditions were to blame.



Year 8 - Natural Hazards



Latitude and longitude

These are lines of latitude

Always write these first!!

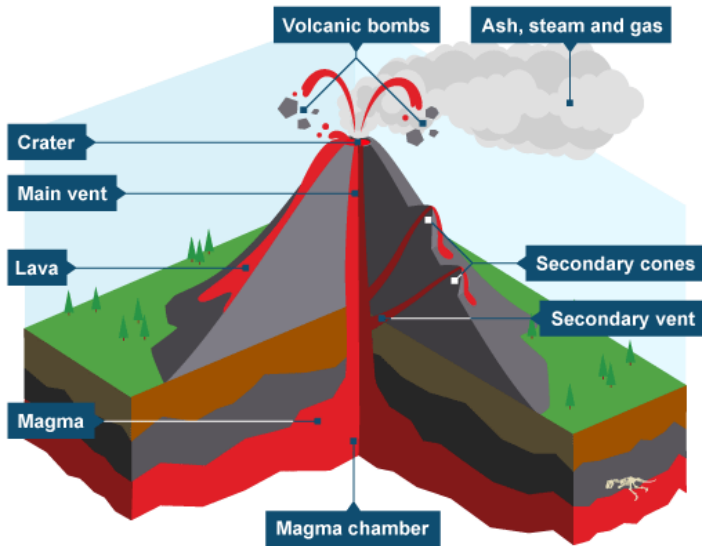
These are lines of longitude

The latitude of 'a' is 20°S... 'a' is 20° south of the Equator.
 The longitude of 'a' is 20°W... 'a' is 20° west of the Greenwich Meridian.
 Therefore we write the latitude and longitude of 'a' as **20°S 20°W**.

Indian Ocean Tsunami

26th December 2004

- The official magnitude of the earthquake that caused the tsunami was measured at 9.3 on the Richter scale. This is the second largest ever recorded.
- The earthquake caused the entire planet to vibrate as much as 1cm.
- The total death toll was nearly 230,000 across fourteen countries.
- India, Sri Lanka, Indonesia and Thailand were the hardest hit.
- A total of \$7 billion has been donated to the damaged regions from countries and organisations all over the world.



Volcano types



There are three different types of volcano. Geographers call the categories **active**, **dormant** or **extinct**.

- An **active** volcano is liable to erupt at any time, e.g. Mt Etna.
- A **dormant** volcano has not erupted for years. Mt Pinatubo erupted in 1991 after 500 years of dormancy.
- An **extinct** volcano has not erupted for a very long time and is unlikely to erupt again, e.g. Edinburgh.



Categorizing volcanoes can be tough. Chaitén in Chile erupted in 2008 for the first time since 7400BC!





Year 8 - Natural Hazards



Japan Earthquake and Tsunami 2011

Facts

Date: March 11, 2011

Time: 5:46 UTC; 2:46 PM
Japanese local time; 4:46 AM
Eastern time

Magnitude: 9.0

Location: 130 kilometers (81 miles) off the coast of the Oshika Peninsula of Tōhoku near Sendai
◦ 373 kilometers (232 miles) from Tokyo

Depth: 32 kilometers (19.9 miles)

Aftershocks: At least 517 (36 above magnitude 6)

Largest earthquake to hit Japan in recorded history

One of five largest in the world in recorded history

Preparations

Earthquakes	Tsunamis
Earthquake proof buildings	Smart phone and TV alerts to warn of the tsunami location
Fire station doors automatically open to prevent them getting stuck	10m high sea wall to protect the coast
Bullet trains automatically stop to prevent derailment	Pacific tsunami warning system to detect earthquakes under the sea and tsunami waves
Nuclear Power Stations automatically shut down to prevent disaster	Sirens in coastal communities to warn people to get to high ground
Annual earthquake drills to practice what to do in an emergency	



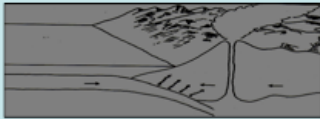
Year 8 - Natural Hazards



Where do we find volcanoes?

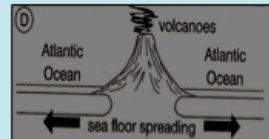
Volcanoes are found at constructive and destructive plate margins (recap in diagrams below!) They can also be found where the crust is thinner - we call these hot spots and an example is Hawaii.

Destructive Plate margin



Continental plate moves towards an oceanic plate
Earthquakes and volcanoes can be found at this plate margin

Constructive Plate Margin



Plates move away from each other
Volcanoes only can be found at this plate margin

Collision Plate Margin



2 continental plates move towards each other
Fold mountains can be found at this plate margin.

Conservative Plate Margin

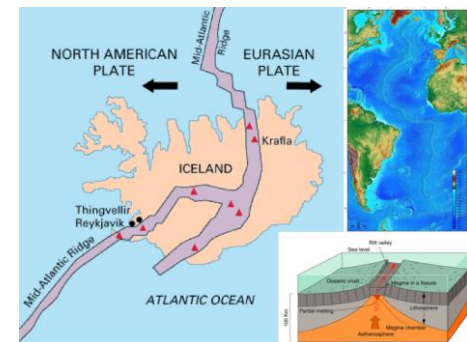


Plates move along side each other
Earthquakes only can be found at this plate margin

An example: Iceland

Iceland benefits massively from tectonic activity, particularly geothermal energy. It is also a risk people in Iceland have to live with, a recent example is Eyjafjallajökull (AYA-feeyapla-yurkul) Volcano which erupted 20th March - 27th October 2010.

Iceland benefits greatly from its effusive volcanic activity...



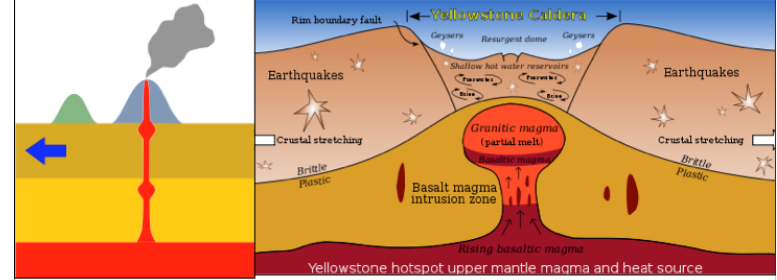
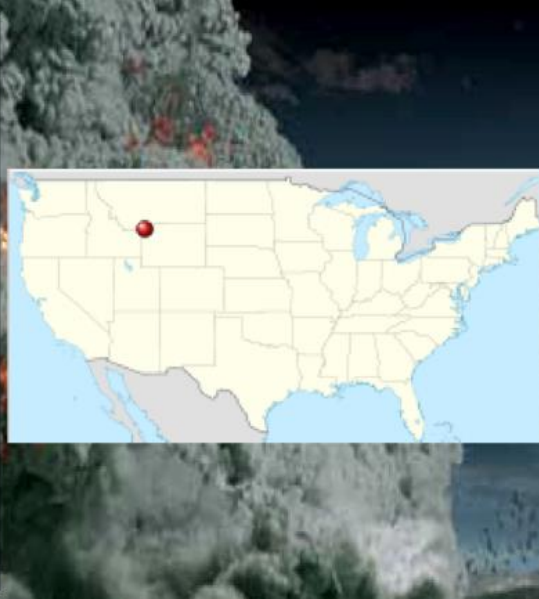


Year 8 - Natural Hazards



There has been past super eruptions at Yellowstone National Park. The park spans over three US states – Wyoming, Idaho and Montana. It is not just any volcano, it is something called a Caldera.

The last three super eruptions occurred 2.1 million, 1.3 million, and 640,000 years ago. Notice a pattern?



In geology, a hotspot is a portion of the Earth's surface that may be far from tectonic plate boundaries and that experiences volcanism due to a rising mantle plume. There are 40-50 hotspot volcanoes in world. Hotspots under oceanic crust tend to be more effusive but hotspots under continental crust tend to be very explosive!

How would people survive a super eruption? Is it possible?

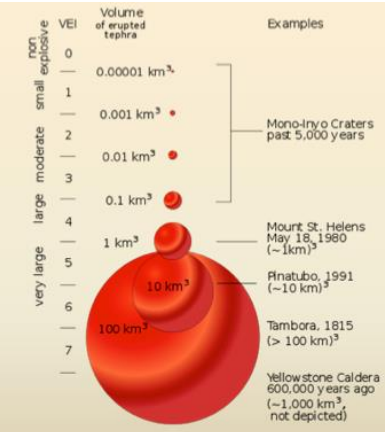
FEMA are the Federal Emergency Management Agency. They are responsible for planning how to reduce the impacts of natural hazards in the USA. We don't know if they have a real plan for a super eruption at Yellowstone - but if they don't, it might be time to start thinking about it!

Disaster management is an important job and something often left to Geographers with their expert knowledge of place and the interactions between physical processes and people. It is a very well paid job and likely to be very important in your future!

Mt. St. Helens was a VEI 5 eruption

VEI 8 eruptions are known as supervolcanoes.

The last one was 74,000 years ago at Lake Toba in Indonesia. This plunged the Earth into a volcanic winter, eradicating an estimated 60% of the human population.





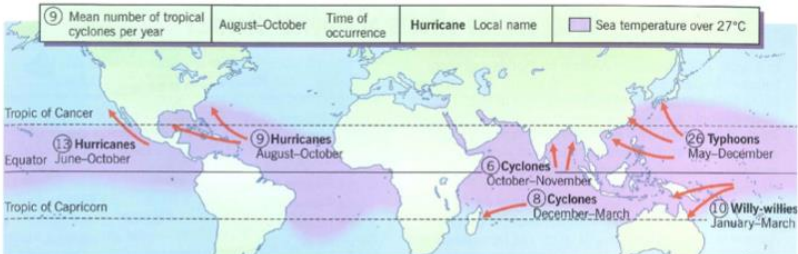
Year 8 - Natural Hazards



Hurricanes are one form of tropical storm. The name of a tropical storm depends on the region of the world they occur in as you can see on your map. Hurricanes occur in the Atlantic Ocean and the Eastern Pacific Ocean.



Where do Hurricanes happen?



Describe the location of tropical storms across the world.
 Tropical storms occur between the Tropic of Cancer and Tropic of Capricorn.

They travel from the sea towards the land.

They are called Hurricanes in the Atlantic Ocean and East Pacific Ocean, Cyclones in the Indian Ocean, Typhoons in the West Pacific Ocean and Willy-willies in Australia.

What does their location and time of occurrence suggest about how they form?
 They occur in the hottest part of the Oceans and at the hottest part of the year so are related to sea temperatures. It seems as if they need a temperature of over 27°C.

This temperature is likely to evaporate some of the ocean so the hurricane may be linked to rising water vapour.

OCLTRG - STEP AHEAD

WILL NJ LEARN LESSONS FROM HURRICANE KATRINA?

HURRICANE KATRINA

18000 HOUSEHOLDS IN NON-COMPLIANCE WITH GRANTS

AWARDED FOR REBUILDS

KATRINA GRANT NON-COMPLIANCE PROBLEMS

- USED GRANTS TO KEEP HEADS ABOVE WATER
- GRANTS DIDN'T FULLY COVER REPAIR & ELEVATION COST
- CONTRACTOR FRAUD & WASTE

SUPERSTORM SANDY

8,159 HOMEOWNERS AWARDED PRELIMINARY FUNDS

330 HOMEOWNERS WITH COMPLETED PROJECTS

OCLTRG'S SOLUTION TO NJ

- FLEXIBLE RESOURCES TO ADDRESS UNMET NEEDS
- SUPPORTIVE DISASTER CASE MANAGEMENT
- BIEM EDUCATION, REFERRALS AND FRAUD REPORTING

522 MILLION AWARDED TO THE FEDERAL GOVERNMENT

NEW JERSEY'S RECOVERY PERFORMANCE DASHBOARD 2/8/11 REPORT 4Q 2010



Year 8- Development

GDP per capita - This is the value of all the goods and services produced in a country in one year per person.

Life Expectancy - The average number of years that a person is expected to live in a country.

HDI - A combination of GDP per capita, life expectancy, literacy (the percentage of adults that can read and write) and the average number of years of schooling. This is measured on a scale of 0 to 1. More than 0.8 = high, 0.6 to 0.8 = medium and less than 0.6 = low.

Standard of living: A level of material comfort as measured by the goods, services, and luxuries available to an individual, group, or nation.

Quality of life: The overall well-being of a person. This is their mental, physical and social health. Generally when people have all of these things, they are happier.



How do we describe a trend on a graph?

General
Comment
Specifics
Exceptions

DESCRIBING...

Line graphs Bar graphs Pie Charts Choropleth maps

HIGH; What is the highest bar, segment of the pie, or point on the line graph? Say WHERE the things are

DATA; Say EXACTLY how HIGH Say WHERE the things are? Places?

LOW; What is the lowest bar, point on the line graph or smallest segment of the pie graph? Say WHERE the things aren't

DATA; Say EXACTLY how LOW Say EXACTLY where? Places?

PATTERN; What is the overall pattern? Is there a trend or link? Increase? Decrease? Is there a pattern? Link?



The Brandt Line

In 1980, a man called William Brandt produced a report of global attitudes towards poorer countries. In this report, he identified a pattern of rich countries and poor countries across the world. The division between the rich north and poor south became known as the Brandt line.



Year 8- Development

United Kingdom of Great Britain and Northern Ireland



GDP per capita	\$35,082
Life Expectancy	80
Infant Mortality Rate (babies dying before the age of 1 per 1000 live births).	4.8
Literacy Rate	99%



Kenya



GDP per capita	\$1,729
Life Expectancy	54
Infant Mortality Rate (babies dying before the age of 1 per 1000 live births).	64.4
Literacy Rate	73.6%



How do the two Eastleighs compare?

Eastleigh in the UK and Eastleigh in Kenya have some similarities but are mostly different.

The photographs show that Eastleigh in the UK has proper concrete roads whereas Eastleigh in Kenya has dirt tracks instead. It is also clear that Eastleigh in the UK is cleaner than in Kenya. The evidence for this is that there is rubbish everywhere. This would suggest that there is no rubbish collection. This is probably because it is poor. This is shown by the indicators. The GDP per capita is much higher in the UK (\$35,082) whereas in Kenya it is \$1,729.

What is drought?

A drought is a period when an area **lacks** water, which can last months or even years. Generally, this is because of a **reduction** in the amount of **rainfall**.

It affects Kenya, Somalia and Ethiopia - an area known as the 'Horn of Africa'.



Year 8- Development



Who are the Maasai?

- They are a group of people who have lived in East Africa for thousands of years.
- There are about 400,000 Maasai people in Kenya but also some in Northern Tanzania.
- They rely on livestock such as cattle and goats for food and will move with them to find grass and water.
- When they find a place with enough food and water for their animals, they will build small mud huts and live there until there is no more grass or water for the animals.
- This way of life is known as being semi-nomadic.

Tourism in Kenya

Tourism has both a positive and negative impact on Kenya.

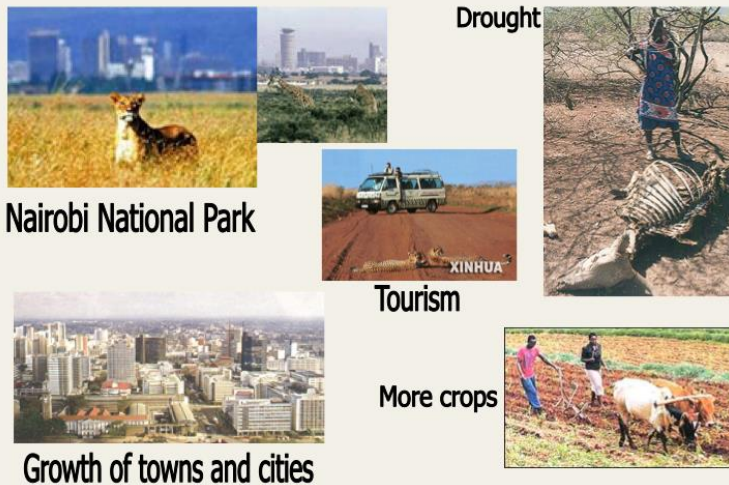
Positive:

- Development
- Employment
- Money
- Aid

Negative:

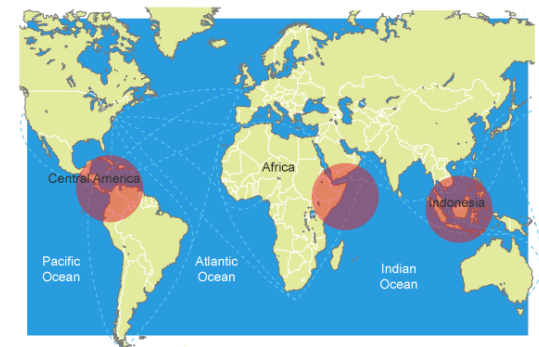
- Environmental impact
- Loss of tribal life

The Maasai way of life is changing!



Why do some people become pirates?

- Income
- Corruption
- Development
- Aspiration



Key
Red circle: Piracy hotspot
Blue line: Shipping route

Year 8- Development

What does 'poverty' really mean?

Absolute **poverty** is **defined** as the lack of sufficient resources with which to keep body and soul together.

Relative **poverty** defines income or resources in relation to the average. It is concerned with the absence of the material needs to participate fully in accepted daily life.



Life in Kibera

The largest slum (illegal settlement) in Nairobi is Kibera. One third of Nairobi lives here. Like most of the slum areas of cities it is located on the outskirts of the city.

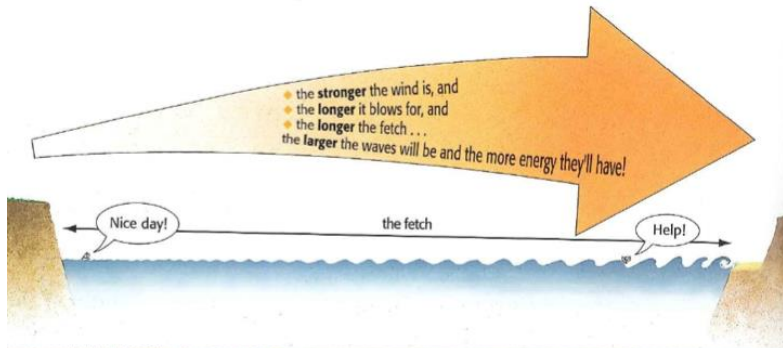
- The government does not help the people.
- It is an illegal settlement.
- It has no water, no sanitation, no schools, no roads and no hospitals.
- The people have to help themselves or rely on charity like WaterAid, Oxfam and Comic Relief.



Year 8 - Coasts

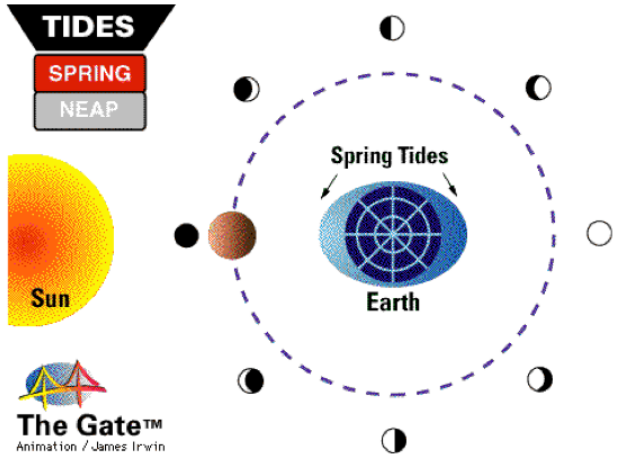
What is responsible for the different landforms at the coast?

The answer is waves! But what causes waves?

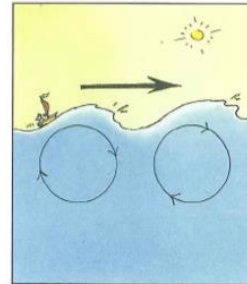


Waves are caused by the wind dragging on the surface of the water. The length of the water the wind blows over is called the **fetch**.

Tides are the rise and fall of the sea. They are caused by the moon!
As the moon orbits the earth, it attracts the sea and pulls it upwards!



When waves reach the coast



Out at sea, the waves roll like this. In a gale they can be over 30 metres high!



They break in shallow water, like this. The water that rushes up the sand is called the **swash**.



The water rolling back into the sea, like this, is called the **backwash**.

If the backwash has more energy than the swash the waves eat at the land, dragging pebbles and sand away. (This happens with high steep waves.) **These are destructive waves!**

But if the swash has more energy than the backwash, material is carried on to the land and left there. (This happens with low flat waves.) **These are constructive waves!**

Destructive waves cause erosion and create steep narrow beaches.
Constructive waves cause deposition and create gently sloping beaches.



Erosion Processes

Remember the word = **CASH**

C **C** **o** **r** **r** **a** **s** **i** **o** **n** (a**b** **r** **a** **s** **i** **o** **n**) – waves throw sand and pebbles at a cliff and wear it away.

A **A** **t** **t** **r** **i** **t** **i** **o** **n** – stones and pebbles smash into each other and break into small pieces, eventually becoming sand.

S **S** **o** **l** **u** **t** **i** **o** **n** – certain rock types (eg. chalk) react with sea water and dissolve.

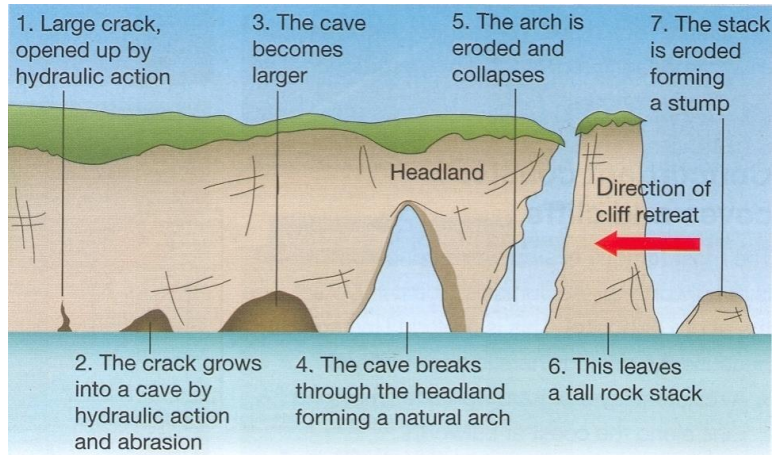
H **H** **y** **d** **r** **a** **u** **l** **i** **c** **A** **c** **t** **i** **o** **n** – the force of the waves crashing into the cliffs. Air can get trapped in cracks forcing them to fracture.



Year 8 - Coasts

What is a stack and how do they form?

A stack forms as a cliff is eroded and retreats. An example is Old Harry!



Old Harry had lived with his wife in Dorset for many years.

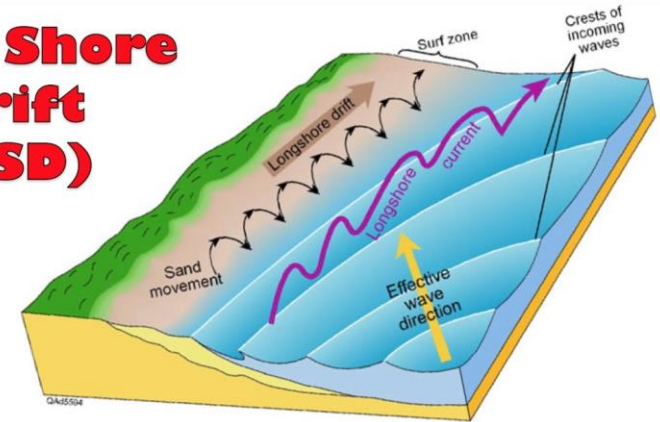
One day they had a particularly nasty argument, the first time any cracks had appeared in their relationship.

Old Harry and his wife patched things up, but a few months later the cracks widened.

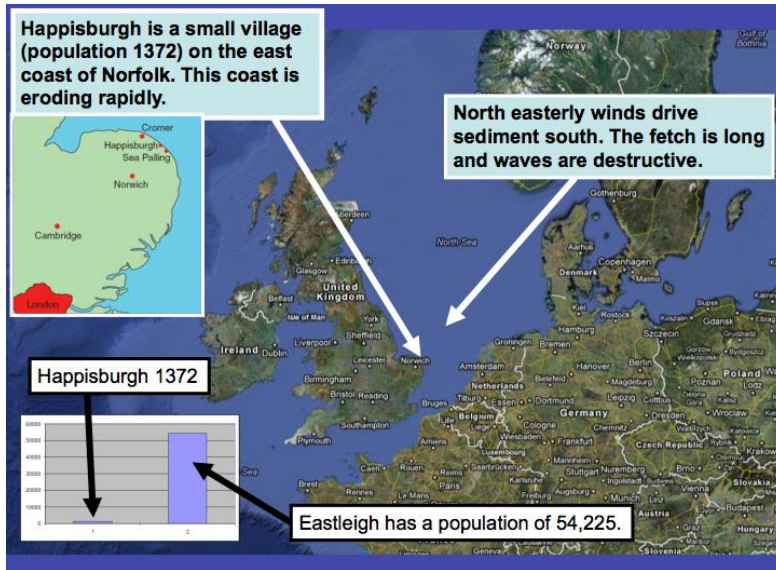
As time went on, a huge hole was eroded in their relationship. They weren't as close as they had been.



Long Shore Drift (LSD)



Year 8 - Coasts



Why is there so much erosion?

1. The cliffs are formed from soft glacial sands, gravels and clays (boulder clay).
2. There is a long fetch (distance the waves travel) to the north and northeast.
3. The narrow beaches give little protection to storm waves.
4. Weathering of the cliffs leads to slumping.
5. Human interventions along the coast e.g. Sea wall at Cromer have starved the beach at Happisburgh of sediment.

The History of Defence

1953 – Wooden groynes and revetments

1980 – Wooden defences failed due to their age, and a lack of maintenance and repair. Wooden defences are not very sustainable.

1989 – North Norfolk District Council identified the need to renew defences but had no funding to do so.

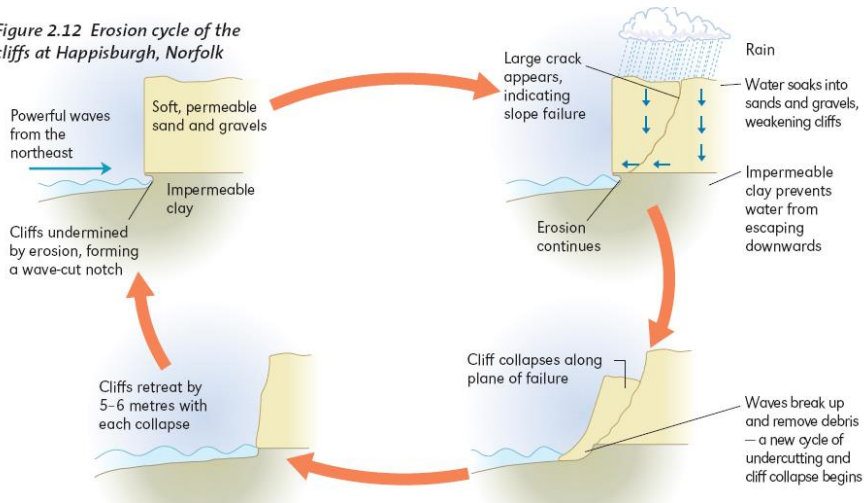
2000 – A plan to put in rock groynes was supported by many residents but a few objected. Erosion rates were now reaching 10-12m a year and the plan was withdrawn in 2002 as by this time it no longer met financial criteria.

2002 – Coastal Concern Action Group (CCAG) was set up to argue the case for protecting Happisburgh.

2006 – 5000 tonnes of rock put on the beach as rock armour at a cost of £250,000. This is a temporary measure to buy Happisburgh time (about 10 years) to adapt to the new SMP policy of doing nothing.

2010 – Local groups including CCAG have raised funds to top up existing rock armour.

Figure 2.12 Erosion cycle of the cliffs at Happisburgh, Norfolk



Speak like a Geographer



What is the question asking us to do?

- Analyse:** Separate information and discuss its parts.
- Argue:** Present a reasoned case for/against something.
- Compare:** Describe the similarities and differences of at least two things.
- Describe:** Give the main characteristics or account in words.
- Discuss:** Bring out the important points, consider the good/bad and come to a conclusion.
- Evaluate:** Give reasons why something happens.
- Summarise:** Present the points briefly, pick out key information.



Key terms spelling!

Look carefully at the spelling of these key terms:

Accessibility	Developing	Renewables
Altitude	Earthquake	Resources
Anticyclone	Economy	Settlement
Business	Environment	Sustainability
Climate	Erosion	Transportation
Continent	Hurricane	Tsunami
Countries	Migration	Urbanisation
Deforestation	Mountains	Volcanoes
Deposition	Population	Weather
Depression	Questionnaire	Weathering



Proper Nouns!

A name for a person, place or thing. For example: Africa, the Atlantic Ocean, Tidworth, and the River Thames. They should ALWAYS start with a capital letter.



Abbreviations!

CBD – Central Business District
 EU – European Union
 GDP – Gross Domestic Product
 HIC – High Income Country
 LIC – Low Income Country
 TNC – Trans National Corporation



Elaborating your ideas!

Use sentence starters such as:

- This suggests ...
 - This shows ...
 - This infers ...
 - This signifies ...
 - This implies ...
 - This portrays ...
 - This conveys ...
 - This means ...
 - Therefore ...
 - However ...
 - Furthermore ...
- ... To develop your brilliant points/ideas/arguments!



What do you think language!

Use these sentence starters when you want to share your views/opinions (which are very important!):

- I think that ...
- I believe ...
- In my opinion ...
- In my view ...
- It is my belief that ...
- It is clear to see ...

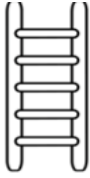


Use connectives to link each paragraph!	Explain an idea: <ul style="list-style-type: none"> • Although • Except • Unless • However • Therefore 	Sequencing: <ul style="list-style-type: none"> • Firstly • Secondly • Next • Finally • Since
Adding to: <ul style="list-style-type: none"> • Furthermore • Also • As well as • Moreover 	Cause and effect: <ul style="list-style-type: none"> • Thus • So • Therefore • Consequently 	Contrasting: <ul style="list-style-type: none"> • Whereas • Instead of • Alternatively • Otherwise • Then again
To emphasise: <ul style="list-style-type: none"> • Above all • Ultimately • Especially • Significantly 	To compare: <ul style="list-style-type: none"> • Likewise • Equally • In the same way • Similarly 	Give examples: <ul style="list-style-type: none"> • Such as • For example • In the case of • As revealed by • For instance



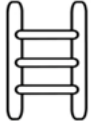
REACHING THE NEXT STEP IN GEOGRAPHY!

Describe a graph or map



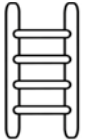
- Are there any gradient changes or smaller patterns?
- Use **GCSE** every time
- General** pattern/trend
- Compare**
- Specific** examples
- Exceptions/anomalies

Describe a landmark



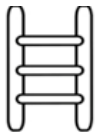
- Describe every part... front, back, middle?
- What shape and size is it? (What can you see?)
- Use adjectives
- Name it

Describe a location



- Add distances from other places
- Sequence sentences in order of scale (global and zoom in)
- Include seas, oceans or other physical landscapes
- Use compass directions
- Mention other place names

Develop your literacy



- Use paragraphs for different categories
- Use a wider range of adjectives
- Use a range of different connectives
- Use capital letters for all place names
- P.E.E** paragraphs: **P**oint, **E**vidence, **E**xplain!



Describe a process



- Link it to a landform
- Use key words
- Why is it happening?
- What is happening?

Write a case study answer



- L3 Ensure your answer is **balanced**... ie 3 positive and 3 negative
- L3 Detailed **CS facts** included
- L2 **Linked statements**
- L2 **Categorise** your answer ie short term and long term
- L2 Name a CS
- L1 Generic information
- S.H.E.E.P** it: **S**ocial? **H**istorical/**H**ealth? **E**nvironmental? **E**conomic? **P**olitical?

Think like a Geographer



- Link physical and human Geography together
- What will different people think?
- Link ideas using connectives
- Think further 'so what?'
- Sequence things
- Think processes...
- Categorise information
- Use key words

Explain a landform



- Sequence is complete and detailed
- Put sentences into correct **sequence**
- Include **processes**
- Include key words
- What does it look like before and after?