

Dynamic Earth



Activate Prior Knowledge

EY

- Recognise some environments are different from which they live drawing on their own experiences, simple maps (*Under the Sea, Dinosaurs, Transport*)
- Recognise similarities and differences between the natural world around them and contrasting environments (*Autumn, Winter, Minibeasts*)
- Explain some similarities and differences between life in this country and life in different countries drawing on their own experiences, simple maps (*All About Me, Under the Sea, On the Farm*)

KS1

- Locate and name the continents and Oceans on a World Map
- Compare life and our local area with other countries
- Identifying hot and cold areas of the world in relation to the Equator and the North and South Poles
Context: Chine, Africa (Kenya), Australia, North and South Poles

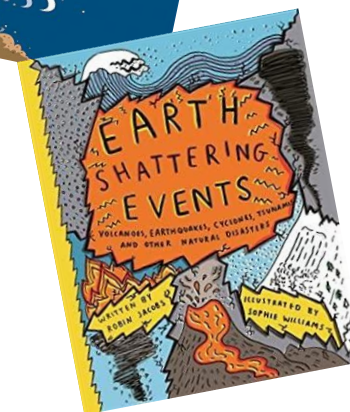
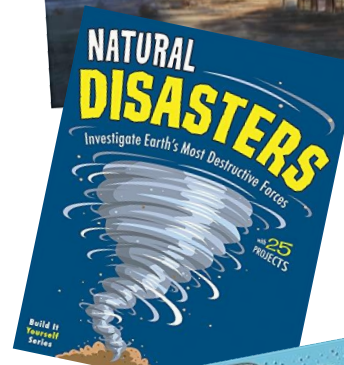
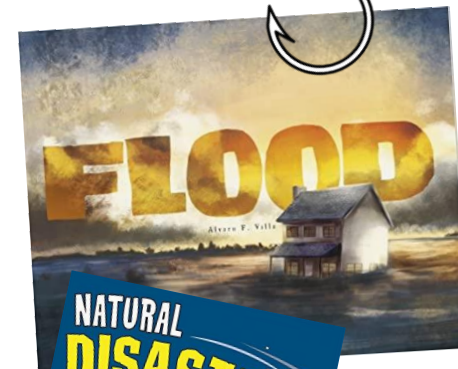
KS2

- Human and physical geography (UK, Africa (Egypt), Climate Change)
- Location of countries continents, oceans, equator, rivers, Tropics of Cancer and Capricorn, land use patterns (Egypt)

Links to Future Learning

- France (locational knowledge, comparing)
- The Americas (linking to regions in America where disasters take place, comparing)
- Modern Day Greece (locational knowledge, comparing)

Hook into a Book



Knowledge

Locational

I can locate the countries where these natural disasters happen.

Place

I can understand geographical similarities and differences and why natural disasters occur in different places and their impact on humans.

Human and Physical Geography

I know the different layers of the Earth

I can tell you where these natural disasters happen

I can explain why natural disasters happen.

I can tell you how to keep safe in these natural disasters and how humans have adapted to live in these places.

Geography Skills

I can use maps, atlases, globes and digital/computer mapping to locate the countries where these disasters happen.

Objectives

Locational

Locate the world's countries

Place

understand geographical similarities and differences through the study of physical geography and its impact on humans.

Human and Physical Geography

Children can describe and understand key aspects of:

- physical geography, including: volcanoes, tornadoes, tsunamis and earthquakes.
- human geography, impact on humans (housing, tourism, farming etc...)

Geography Skills

use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied

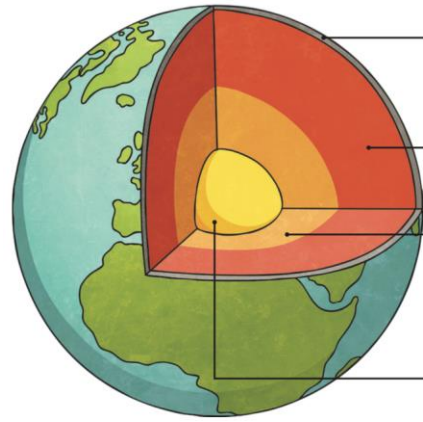
Key Vocabulary	
cumulonimbus cloud	Large thunderstorm clouds.
erupt	To suddenly burst out causing lava to explode out of the earth's surface.
fossils	The remains of plants or animals that lived a long time ago which can be found deep in the earth.
magma	Extremely hot, liquid rock.
tectonic plates	The earth's crust is made up of large areas called tectonic plates that join together.



How would you deal with a natural disaster?

Would you live near a volcano?

Layers of the Earth



Crust
Thin outer layer. Hard rock. 10km–90km thick.

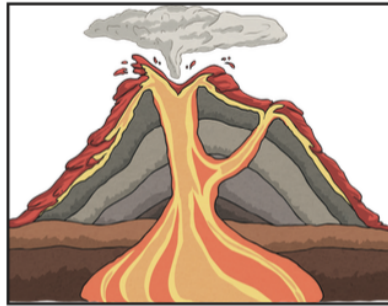
Mantle
Extremely hot rock that flows. 3000km thick.

Outer core
Iron and nickel. Mostly liquid with some rocky parts. 4000°C.

Inner core
Iron and nickel. Hottest layer at over 5000°C.

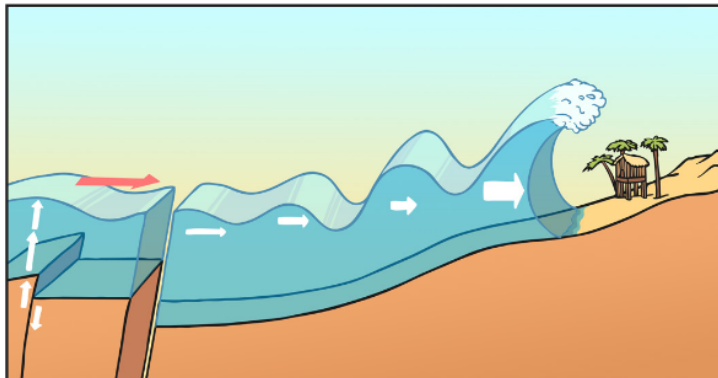
Volcanoes

- Volcanoes are made when pressure builds up inside the earth. This affects the earth's crust causing **magma** to sometimes **erupt** through it.
- Active volcanoes have **erupted** in the last 10 000 years.
- Dormant volcanoes haven't **erupted** in the last 10 000 years but may erupt again.
- Extinct volcanoes aren't expected to **erupt** again.



Tsunamis

- A tsunami is a giant wave caused by a huge earthquake under the ocean.
- The earthquake causes a large amount of water to be displaced very quickly causing a series of waves.
- As the waves travel through shallower water near land, they get bigger and bigger. The wave crashes onto the land causing devastation to buildings and sometimes even lives.



Physical Geography

I can describe and share my ideas on the varied physical geography of Mexico.

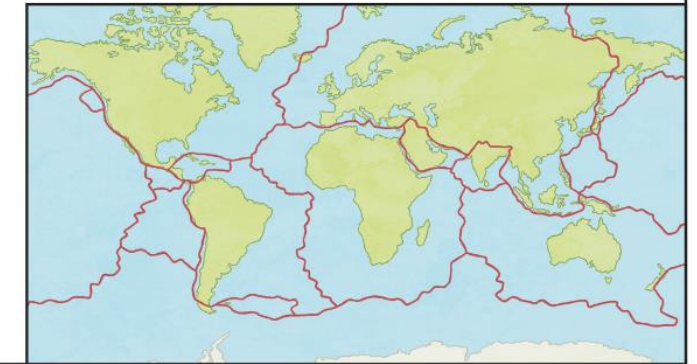
Tornadoes

- A tornado is a swirling funnel of air that forms when warm air rises from near the ground into big **cumulonimbus clouds**.
- There can be thunder and lightning at the same time.
- You can see tornadoes due to the dust and water droplets caught in the clouds.
- Storm chasers are film-makers and scientists who head towards the storms. They film the tornadoes and collect data about them.
- Most tornadoes happen in Tornado Alley in America – more than 500 each year.
- Tornadoes can happen in the UK but only around 30 per year.



Earthquakes

- Earthquakes are caused when the earth's **tectonic plates** suddenly move.
- Most earthquakes occur near the **tectonic plate** boundaries.
- Earthquakes can cause lots of damage to roads, buildings and property.



Arguments For

- Volcanic soil produces good crops for farmers.
- Volcanoes are tourist attractions which brings money and jobs to the area.
- Minerals from volcanic rocks can be mined and used for building materials, which brings jobs to the area.

Arguments Against

- Volcanic ash can cause health problems for people and animals.
- People's homes can be destroyed by lava flow.
- Volcanic ash can destroy a farmer's crops.