



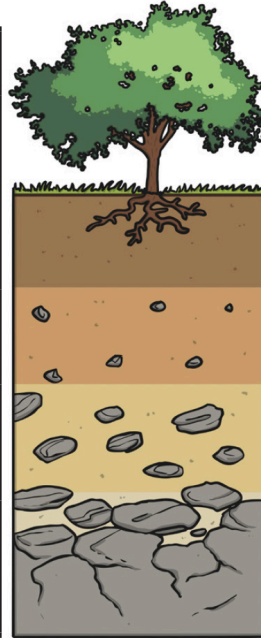
**Topic:** Extreme Earth

**Year:** 5

**Term:** Summer

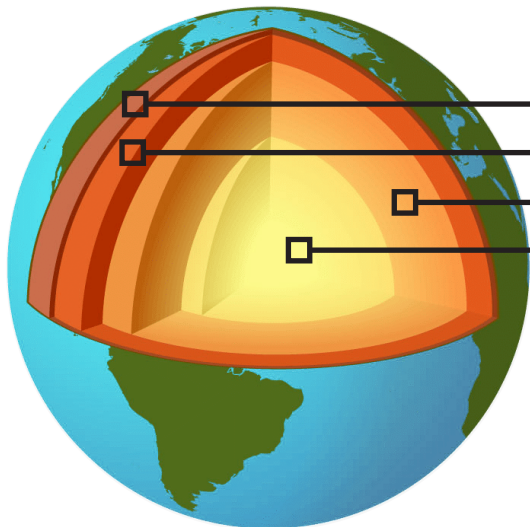
## Key Facts

Layers of Soil	
humus	rotting dead leaves and animals
topsoil	where plants grow, with very few rocks
subsoil	rocks and stones, full of nutrients; some tree roots reach here; some fossils
bedrock	large mass of hard rock and fossils



## Vocabulary

Word	Explanation
cloud	water droplets floating in the sky
cumulonimbus	large thunderstorm clouds
erupt	to explode or burst out - lava erupts from volcanoes
fossils	plant and animal remains from millions of years ago that have turned to stone and are found deep in the Earth
magma	extremely hot, liquid rock
tectonic plates	large areas of Earth that join together



**Crust (10km - 90km thick)**  
Thin outer layer of hard rock.

**Outer Core (4000°C)**  
Made of iron and nickel. Mostly liquid but with some rocky aprts.

**Inner Core (5000°C)**  
Hottest layer of Earth.

**Mantle (3000km thick)**  
Extremely hot rock that flows beneath the Earth's surface.



## Key Facts

### Volcanoes

Volcanoes are ruptures (holes) that are found in the crust layer of a planet.

From volcanoes, hot lava, volcanic ash, and gases may escape.



On Earth, volcanoes are usually found where tectonic plates diverge (go away from each other) or converge (come together).

Volcanoes erupt (explode) when molten rock called magma rises to the surface.

There are three types of volcano:

- Active: have erupted in the last 10,000 years.
- Dormant: have not erupted in the last 10,000 years, but still may.
- Extinct: have not erupted in the last 10,000 years, and won't again.

### Earthquakes

Earthquakes are caused when Earth's tectonic plates begin to move suddenly.

They occur near the boundaries of tectonic plates - this is where they meet other plates.

They can cause lots of damage to roads, buildings, and properties, and can cause loss of life.



### Tornadoes

Tornadoes are swirling funnels of air that are formed when warm air rises from near the ground into big, cumulonimbus clouds.

They can be seen due to the dust and water droplets caught in the clouds.



Thunder and lightning can sometimes occur at the same time as a tornado.

In 'Tornado Alley' in America, there are over 500 tornadoes each year, whereas the UK only has about 30.

### Tsunami

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 (removed) very quickly. This causes a series of incredibly large waves.

These waves move towards land and, as the land gets shallower, the waves get bigger and bigger.

Like other natural disasters, they cause extreme devastation to buildings and other human made features.

They are also responsible for loss of human and animal life.

