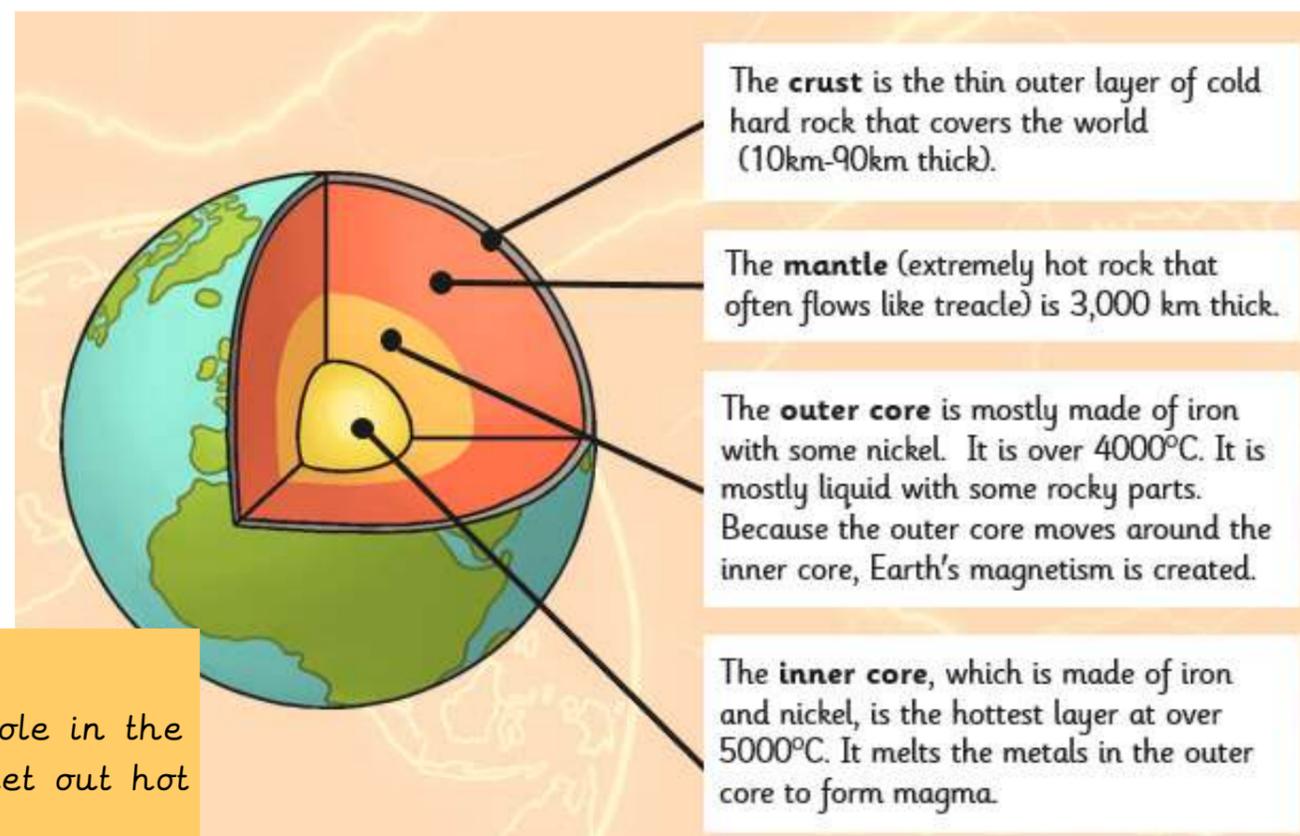


## Tsunamis

A tsunami is a giant wave. It comes from a Japanese word meaning 'Harbour Wave'. A tsunami is caused by a huge earthquake under the ocean. The earthquake causes a large amount of water to be displaced in a short amount of time. A series of waves then travel through the deep water. As they approach the shallower water near the land, the waves get bigger and spill onto the land. Tsunamis are capable of wiping out entire villages. Tsunamis can reach a height of 35 metres or more and can travel up to 1000km on land.

Crust	Vibration
Mantle	Earthquake
Core	Volcano
Tectonic plates	Tsunami
Erupt	Tornado
Lava	Magma
Active	Dormant
Extinct	Ring of fire

# Extreme Earth



## Tornadoes

A tornado is a swirling funnel of air that can come down from some of the biggest clouds, called Cumulonimbus. At the same time, there can be thunder and lightning.

This is how a tornado forms:

1. Warm air rises up from near the ground into big clouds.
2. The winds near the top of the storm clouds start rotating (the rotating air is called a vortex).
3. More air flows in along the ground from all directions. The vortex moves downwards and becomes more narrow.
4. Funnel clouds form and develop into tornadoes.

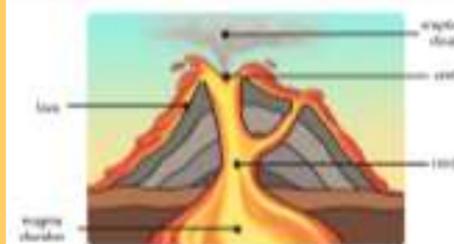
You can only see tornadoes because water droplets and dust get caught up in them.

## Volcanoes

A volcano is a very deep hole in the Earth's top layer that can let out hot gases, ash and lava. Many volcanoes are also mountains.

Volcanoes are formed in the following way:

1. Magma rises through cracks or weaknesses in the Earth's crust.
2. Pressure builds up inside the Earth.
3. When this pressure is released, magma explodes to the surface causing a volcanic eruption.
4. The lava from the eruption cools to form a new crust.
5. Over time, after several eruptions, the rock builds up and a volcano forms.



## Earthquakes

An earth quake is the shaking and vibration of the Earth's crust due to movement of the Earth's plates (tectonic plates). Earthquakes can happen along any of the plate boundaries. Earthquakes occur when tension is released from inside the crust. Plates do not always move smoothly alongside each other and sometimes get stuck. When this happens, pressure builds up. When this pressure is eventually released, an earthquake tends to occur.

## The Abominables

## Sharon Rentta

## Eva Ibbotson

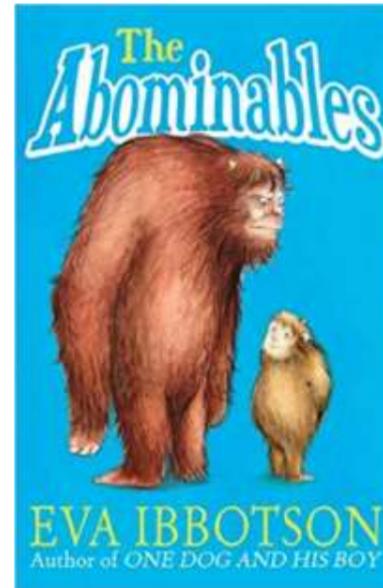
Jake Perry

Richard Davis Deacon

Jean-Claude Clairoux

George Mallory

Andrew Irvine



**Ring of fire:** Path along the Pacific Ocean where there are many active volcanoes and frequent earthquakes.

**Tectonic plates:** Large moving slabs of rock, which form the outer layer of the Earth.

**Fault:** A crack in the Earth's crust.

**Magma:** Molten rock deep below the Earth's surface.

**Lava:** Magma that flows out from under the Earth's surface.

**Pyroclastic flow:** An extremely fast moving body of gas, rock, ash resulting from a volcanic eruption.

**Eruption:** A sudden explosion or bursting out.

**Epicentre:** The point on the Earth's surface, which is directly above the focus of the earthquake.

**Magnitude:** The great size or extent of something.

**Active:** Volcanoes that are currently in a state of regular eruptions or activity.

**Dormant:** Volcanoes that are capable of erupting, and will probably erupt again in the future, but have not erupted for a very long time.

**Extinct:** A volcano that has shown no activity for over 10,000 years and is not expected to erupt again.

**Weather:** Short term changes in the atmosphere.

**Climate:** What the weather is like over a long period of time in a specific area.