A **natural** disaster is an event caused by nature such as tsunamis, volcanic eruptions, earthquakes, tropical storms, tornadoes, landslides, wild fire and many more. These events cause great financial hardship for the people and communities in the locations where they occur, and they can sometimes even result in loss of life.

In the event of an earthquake

...

Earthquake: Earthquakes occur when two large pieces of the Earth's crust suddenly slip causing shockwaves to make the surface of the Earth shake.

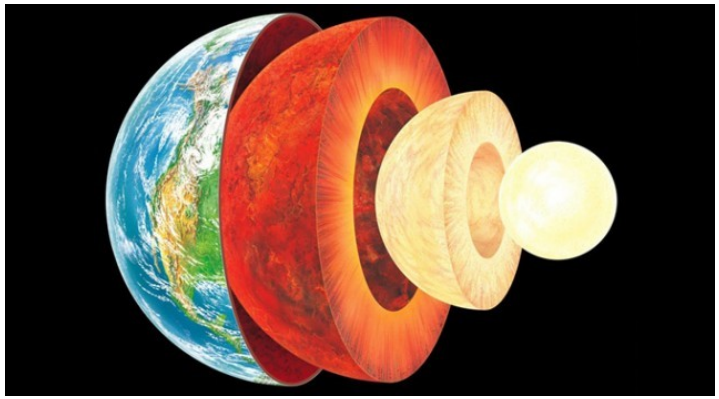
Volcanic eruption: A landform (usually a mountain) where molten rock erupts through the surface of the planet.

Tsunami: A large ocean wave usually caused by an underwater earthquake or volcanic eruption. Tsunamis are NOT tidal waves which are caused by a combination of the forces of the moon, sun and other planets upon the tides, as well as the wind.

Tropical Storms: A large rotating storm with high speed winds that form over warm waters in tropical areas. They must have sustained winds of at least 74 miles per hour.

## WORLD'S DEADLIEST NATURAL DISASTERS IN THE LAST 100 YEARS

| Disaster | Year | Death Toll |
|---|---|---|
| China floods | 1931 | 1-4 million |
| Indian Ocean earthquake and tsunami | 2004 | 280,000 |
| Haiyuan earthquake (China) | 1920 | 273,400 |
| Bhola cyclone (Bangladesh) | 1970 | 250,000-500,000 |
| Tangshan earthquake | 1976 | 242,000-655,000 |
| Typhoon Nina (China) | 1975 | 229,000 |
| Haiti earthquake | 2010 | 160,000 |
| Yangtze River flood (China) | 1935 | 145,000 |



**The Ring of Fire** is a string of volcanoes and sites of seismic activity, or earthquakes, around the edges of the Pacific Ocean. Roughly 90% of all earthquakes occur along the Ring of Fire and the ring is dotted with 75% of all of the Earth's active volcanoes. The Ring of Fire is not quite a circular ring. It is shaped more like a 25,000 mile horseshoe. A string of 452 volcanoes stretches from the southern tip of South America, up along the coast of North America, across the Bering Strait, down through Japan and into New Zealand. Some dormant volcanoes in Antarctica however close the 'ring'.

## Why live near the ring of fire?

Key words

Ring of Fire: The Ring of Fire is a major area in the basin of the Pacific Ocean where many earthquakes and volcanic eruptions occur.

Tectonic Plate: The Earth's outer layer is made up of large, moving pieces called plates. All of Earth's land and water sit on these plates. The plates are made of solid rock. Under the plates is a weaker layer of partially melted rock.

Earth's Crust: The Earths crust is the outermost layer of our planet and is less than 1% of the Earth's volume. The crust is mostly made of silicon and oxygen, but it also contains a variety of metals. Its makeup differs slightly between its two types: oceanic and continental crust.

Mantle: The mantle is located below the Earth's crust and above the Earth's outer core. The mantle is mostly solid rock but some parts are hotter and more fluid. Scientists have divided the mantle into an upper and lower section.

Core: The **Earth's core** is the part of Earth in the middle of our planet. It has a solid inner core and a liquid outer core.

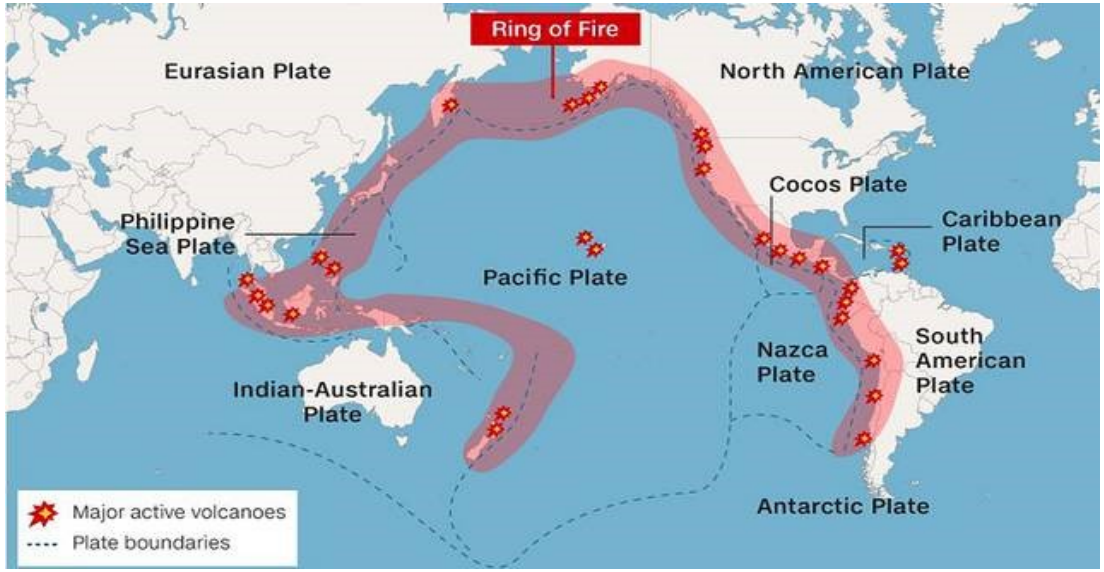
Magma and Lava: Magma and lava are both forms of melted **rock**. The difference between them is based upon their location. Magma is foundbelow the **Earth's** surface while lava is found on top of it.

Richter Scale: The **Richter magnitude scale** is a scale of numbers used to tell the size of earthquakes. The scale runs from 1—10.

Seismic waves: **Seismic waves** are waves of energy that travel through the Earth's layers, and are a result of earthquakes, volcanic eruptions, magma movement and large landslides.

**Pros:**

- The lava can harden and make new land creating more space for people, farms and shops.
- Deep within volcanoes there are precious metals like gold and silver.
- Tourism from people wanted to view the volcano brings money to the area.
- Beautiful places to live with natural beauty.

**Cons:**

- If the volcano erupts, homes and businesses can be destroyed, leaving thousands homeless, jobless or they could be killed.
- Wildlife can also die and their habitats destroyed in the case of an eruption.
- People can suffocate on ash and poisonous gases, which can also ruin farm areas so crops don't grow.