

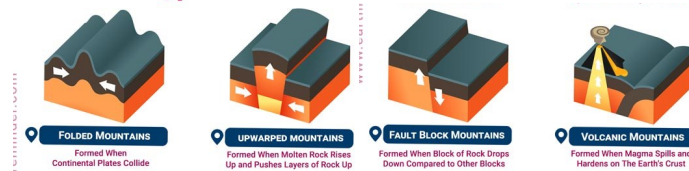
# Year 5: Mountains, Volcanoes, and Earthquakes

## MOUNTAINS:

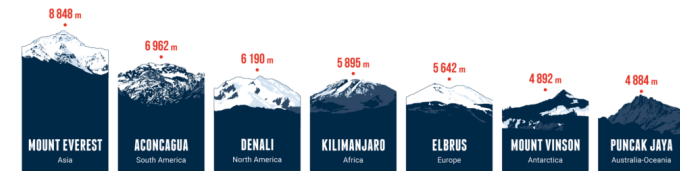
A mountain is a landform that rises prominently above its surroundings. It will generally have steep slopes, a confined summit and considerable height.

There are lots of different types of mountains and each of them are formed differently.

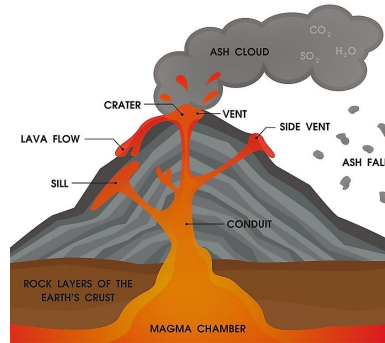
### 4 Different Types of Mountains



The Seven Summits are the highest mountains in each of the seven continents, and climbing them is regarded as a mountaineering challenge.



## VOLCANOES:



Volcanoes form when magma reaches the Earth's surface, causing eruptions of lava and ash.

Magma rises through cracks or weaknesses in the Earth's crust. When pressure builds up the volcano erupts.

Volcanoes are usually located along the edges of tectonic plates.

The word volcano originates from the name of the Roman god of fire - Vulcan.

Sometimes when a volcano erupts under the sea an island can form.

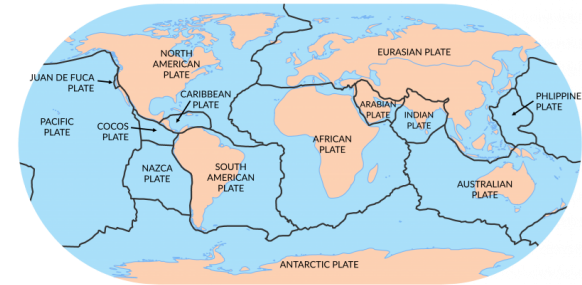


Pompeii was a port city in Italy that was in a good location for trade. It was a popular Roman holiday destination and between 10,000 and 20,000 people lived there.

In 62AD there was a huge earthquake that destroyed many buildings in Pompeii.

On August 24, 79AD Mount Vesuvius erupted - some people managed to escape but most didn't. It is estimated 16,000 people died.

## EARTHQUAKES:



The crust and upper mantle of the Earth are divided into large tectonic plates that 'float' on the liquid rock beneath them.

This means that they move very slowly, often a few cm every year.

Earthquakes occur along the plate boundaries and the center of an earthquake is called the epicenter.

The strength of an earthquake is measured on the magnitude scale from 0-10 - it used to be called the Richter Scale.

The strongest recorded earthquake happened in Chile in 1960 and measured 9.5 on the Magnitude Scale.

## KEY VOCABULARY



**ACTIVE VOLCANO:** a volcano that has erupted within the last 10,000 years or has shown recent signs of activity.



**ALTITUDE:** the height above a given level, usually sea level.



**CRUST:** the outer rocky layer of the Earth.



**DORMANT VOLCANO:** a volcano that has been inactive for a period of time.



**EPICENTRE:** the point on the surface of the Earth immediately above the focus of the earthquake.



**ERUPTION:** when hot rocks, ash and lava are forced out of a volcano.



**EXTINCT VOLCANO:** a volcano that has been proven to be incapable of erupting.



**FAULT:** a crack in the surface of the Earth.



**INNER CORE:** the innermost geologic layer of Earth. It is a solid ball, believed to be made up of iron.



**IRON:** a strong, hard, magnetic silvery metal.



**LAVA:** liquid rock that flows out of a volcano.



**MAGMA:** liquid rock inside a volcano.



**MAGNITUDE:** the great size, extent or strength of something.



**MANTLE:** the most solid bulk of the Earth's interior, found between the core and outer layer.



**OUTER CORE:** a fluid layer about 2260km thick, composed mostly of iron and nickel.



**RICHTER SCALE:** a numerical scale for expressing the magnitude of an earthquake.



**SAN ANDREAS FAULT:** a famous tectonic fault that runs through California, USA.



**SEISMOGRAPH:** a machine that is used to detect earthquakes and tremors underneath the Earth's surface.

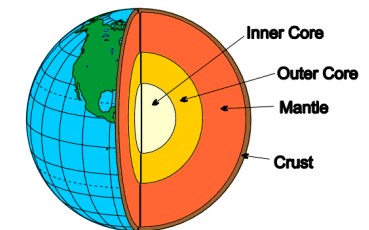


**TECTONIC PLATE:** massive rocky slabs, often as big as a continent, making up the Earth's crust.



**TSUNAMI:** a catastrophic ocean wave, caused by an underwater earthquake, volcanic eruption or meteorite fall.

## THE EARTH:



The crust is a layer of rock on the Earth's surface.

The mantle forms about half of the inside Earth and is a layer of rock underneath the crust.

The upper mantle is hard but there is a magma beneath.

The core is mostly made of iron which is in the center of the Earth - temperatures reach 5500°C.