



Why does the world look this way?



Sticky Knowledge

- The Tropic of Cancer is an imaginary line of latitude that runs above the equator.
- Places north of the equator are in the northern hemisphere; places south of the equator are in the southern hemisphere
- The Tropic of Capricorn is an imaginary line of latitude that runs below the equator.
- The Arctic Circle is an imaginary line of latitude that runs around the top of the globe.
- The Antarctic Circle is imaginary line of latitude that runs around the bottom of the globe.
- The Earth's crust is made up of different sections called tectonic plates, which fit together like a puzzle.
- Mountain ranges are formed by tectonic plates pushing together and forcing the ground up where they meet.
- The 7 summits are the highest mountains of each of the 7 continents.
- The Earth is made of different layers: the core, the mantle and the crust.
- The constant motion of tectonic plates can cause cracks, known as faults, in the Earth's crust. Earthquakes occur when the crust moves suddenly near or on one of these fault lines
- Volcanoes are formed when the earth's plates move together or apart, causing magma to come up to the earth's surface
- Volcanoes erupt when enough magma builds up in the magma chamber and it forces its way up to the surface.

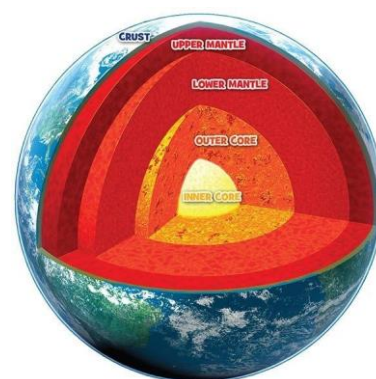
Tectonic Plates



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. The plates are constantly moving over this weaker layer.

Layers of the Earth

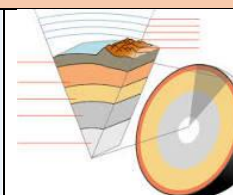
The Earth is made up of many rocky layers. The solid, outer layer is called the crust. Below the crust lies a layer of hot, almost solid rock called mantle. Beneath the mantle lies the core. The inner core is so deep within the earth that it's under immense pressure. So much pressure that, even though it is so hot, it is solid. The inner core is the hottest part of the Earth, and, at over 5000 degrees C, is about as hot as the surface of the sun.



Mountains, Earthquakes and Volcanoes

Subject Specific Vocabulary

Earth's crust



The Earth's crust is the outermost layer of our planet; it's a thin shell that surrounds the entire Earth.

Summit



The top of a mountain is called the summit. It means two different things to say how high a mountain is and how tall it is – measure from sea level to summit to find out how high a mountain is, and measure base to summit to find out how tall it is.

Himalayas



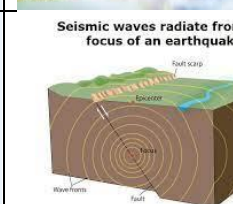
The highest mountains on Earth are found in the Himalayas. This great mountain system is in southern Asia. The peak of Mount Everest, stands at 8,849 meters above sea level, is the highest point on Earth.

Mount Fuji



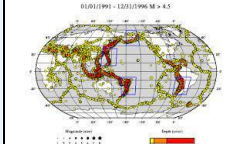
Mount Fuji is the tallest mountain in Japan, at 3,776 metres high. It is also a volcano. The last time it erupted was from 1707 to 1708.

Seismic waves



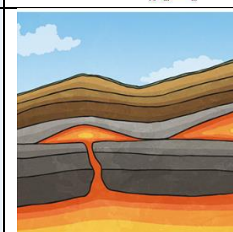
Seismic waves are vibrating movement of the ground. Seismic waves can be caused by underground explosions and volcanic eruptions. Seismic waves go through the Earth's layers.

Earthquake zone



Earthquake zones are located around tectonic plates that move around the surface of the Earth.

Magma



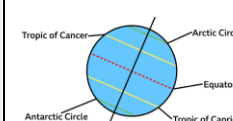
Hot, liquefied rock located deep below the Earth's surface is called magma. Magma is formed when temperatures within Earth's crust or mantle are very hot. When a volcano erupts or a deep crack occurs in the Earth, the magma rises and overflows.

Tectonic Plates



The Earth's surface is called the crust. It is made up of different rocky sections called tectonic plates, which fit together like a puzzle covering earth.

Lines of latitude



We use lines of latitude to find out how far north or south a place is. These lines run parallel to the Equator.