




STRUCTURE & PLATE MOVEMENT, EARTHQUAKES, TSUNAMIS, VOLCANOES

THE POWER WITHIN

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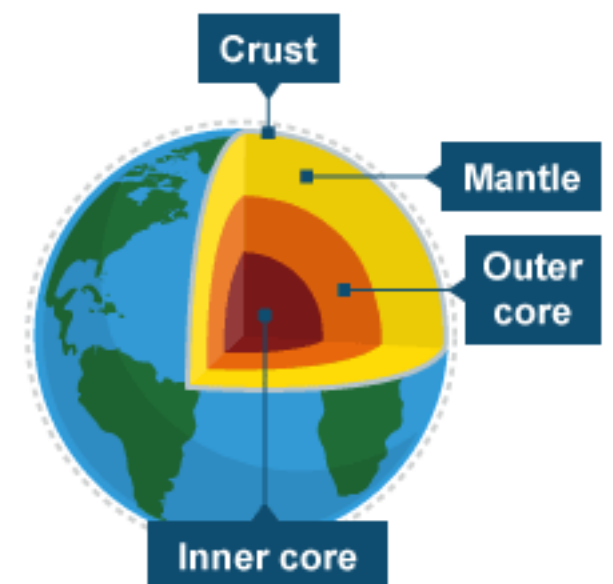
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THE EARTH'S STRUCTURE

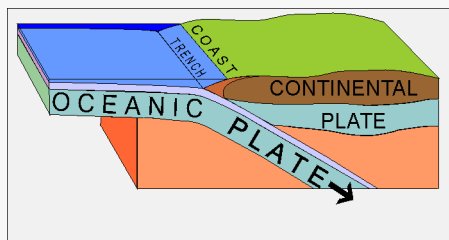
THE EARTH'S STRUCTURE AND PLATE MOVEMENT

The Earth has four main layers - the inner core, the outer core, the mantle and the crust.

- The inner core is $5,500^{\circ}\text{C}$ - extremely hot. It is a very dense solid made from iron and nickel.
- The outer core is 2,000 km thick and is a liquid.
- The mantle is *semi-molten* and about 3,000 km thick.
- The crust is the rocky outer layer. It is thin compared to the other sections, approximately 5 to 70 km thick. If the Earth was scaled down to the size of an apple, the crust would be about the thickness of the apple skin. The crust is made up of pieces called plates. There are two types of crust: oceanic and continental crust. The oceanic crust is found under the sea and is thinner and less *dense* than the continental crust.



THE POWER WITHIN EARTHQUAKES



WHAT IS AN EARTHQUAKE?

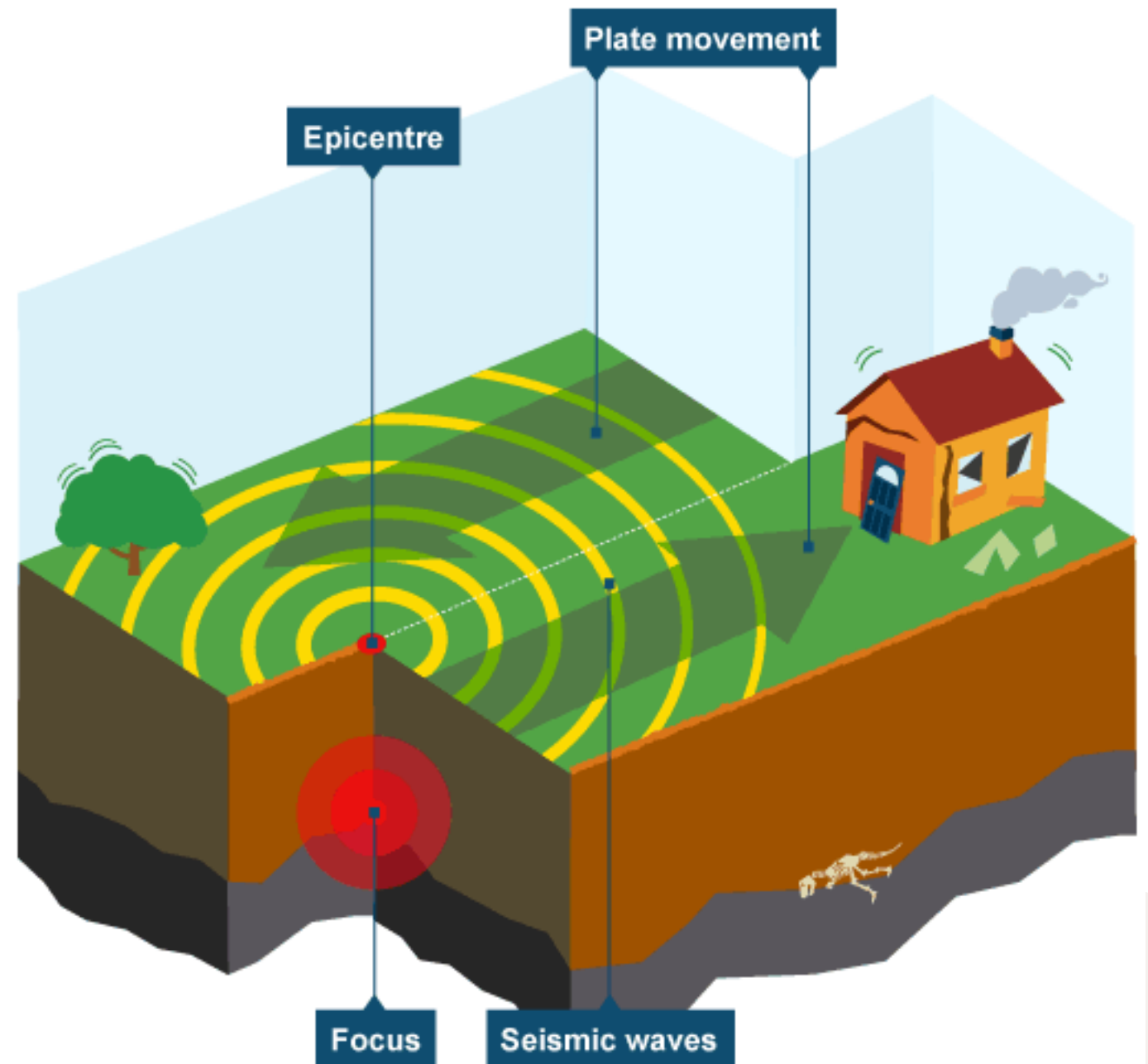
An earthquake is the result of a sudden release of energy in the Earth's crust that creates seismic waves.



WHAT IS AN EARTHQUAKE?

Large earthquakes are usually connected with plate boundaries. Earthquakes happen often but most are too small for us to notice. Seismometers record earth movements.

An **earthquake** is a sudden shockwave caused by rocks being under stress from the movements of plates at plate boundaries. Eventually the stress in the rock builds up enough to deform and reach breaking point. At that point, the stored up energy is released in the form of shockwaves.



By: <http://en.wikipedia.org/wiki/Earthquake>