

The Earth's surface makes up only a tiny fraction of our planet which we call the crust but do you know what lies beneath it to get an idea a Peach has three layers thin hard skin on the outside thick layer of yellow flesh and a stone on the inside like this Peach Earth is also made up of several layers the crust the mantle and the core can you see how thin the crust is compared to the rest of Earth's layers understand lithosphere below the mantle lies the core which can also be divided into the outer core and inner core the outer core is made of iron and nickel but because temperatures are so high here you find these metals in their molten liquid form this is the hottest part of the Earth with temperatures as high as the surface of the Sun the inner core stays solid because Earth's gravity is so strong the metals cannot melt despite how hot it is if you took a look at a world map it would be easy to think that the Earth is always looked like this and always will most of these changes happen in the lithosphere Earth's lithosphere is divided into many tectonic plates that are different in shapes and sizes fit tightly together like a jigsaw puzzle there are seven large key plates this supercontinent existed 335 million years ago and we call it Pangea over millions of years the tectonic plates which hold the continents moved around smashing into each other and then pulling apart if you look closely you can see some of the edges of the continents line up like the edges of Africa and South America fossils of animals that couldn't swim or fly have been found on different continents were previously connected so how did the plates manage to move the continents to where they are today find out we'll have to look at what lies under the plates within the Earth there is tremendous heat and pressure and this drives slow circular movements called convection currents within the mantle layer which in turn cause the plates to move different tectonic plates this movement forms a gap between plates which allows magma to seep through and cool to form new geological features such as volcanoes the Mid-Atlantic Ridge under the Atlantic Ocean is an example of a con What lies under the plates within the Earth there is tremendous heat and pressure and this drives slow circular movements called convection currents within the mantle layer which in turn different plates which known plate margins. Different tectonic plates meet each other at their boundaries which are known which known plate margins