# Earth’s Interior

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| How can you explore inside Earth?  What evidence can we find from rock samples?  What evidence can we find from seismic waves?  What are the layers of Earth?  What is the temperature inside Earth?  What is the pressure inside Earth?  Describe the crust.  Describe the mantle.  What are the layers of the mantle?  What is the lithosphere?  What is the asthenosphere?  What is the lower mantle?  What is the core?  What is the difference between the outer core and inner core?  What creates Earth’s magnetic field? | Geologists use direct evidence from rock samples and indirect evidence from seismic waves.  Since the rocks were formed deep inside Earth, geologists use them to make inferences about inside Earth.  Speed of seismic waves and the path they take reveal the structure of the planet- layers!  The 3 main layers of the crust, mantle, and core.  It gets hotter until you reach the molten core.  The deeper you go, the greater the pressure.  The crust is a layer of solid rock that includes dry land (made of granite) and the ocean floor (made of basalt).  The mantle (below the crust) is made up of solid but very hot rock.  The layers of the mantle are the lithosphere, asthenosphere, and lower mantle.  The lithosphere is the combination of the crust and the upper mantle.  Asthenosphere is a softer layer beneath the lithosphere. It is hotter and has more pressure.  Lower mantle is solid material extending from asthenosphere to the core.  The core is made of iron and nickel.  Outer core is molten (liquid) metal and the inner core is solid metal.  Movements in the liquid outer core create the magnetic field responsible for the poles. |

Summary: