EARTH'S LAYERS

COMPOSITIONAL

Chemical components of each layer

1

2

3.



MECHANICAL

Physical properties of each layer

1.

2.

3.

4

5.

Where do geological processes happen?

Earthquakes happen when tectonic plates move past each other. The energy released during this process causes seismic waves and shaking in the **Earth's crust**.

Erosion is a natural geological process in the **Earth's crust** that involves the gradual wearing away and removal of materials, such as soil, rock, and sediments, by natural forces.

Volcanic eruptions happen when molten rock called magma, coming from the **Earth's mantle**, rises up through volcanoes or cracks in the **surface**.

CORE
mostly iron and nickel

MESOSPHERE
up to 2900 km thick; forms the lower mantle

MANTLE
more iron and magnesium than the crust

INNER CORE
up to 1250 km thick; a solid ball due to intense pressure

LITHOSPHERE
averages to about 100 km thick; crust and top portion of the mantle; where tectonic plates are found

OUTER CORE
up to 2200 km thick; only true liquid layer of the Earth and responsible for its magnetic field

CRUST
made up mostly of oxygen and other common elements such as silicon and aluminum

ASTHENOSPHERE
averages to about 140 km thick; a plastic layer of the mantle that flows but is not

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