Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class:\_\_\_\_\_\_\_\_\_ **Rocks and Minerals Unit**

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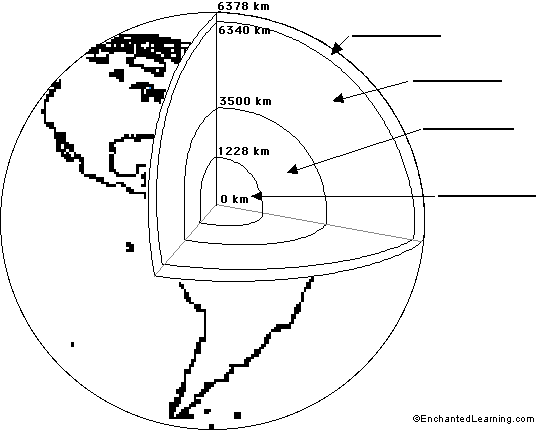
**Handout 1: Layers of the Earth**

**Do Now:** Identify two items in your life that have layers: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**The Four-Layer Model of Earth:** *As you go deeper inside the Earth, pressure, heat and temperature all increase!*

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| --- | --- | --- |
| **Crust** | * Where we live! * Very \_\_\_\_\_\_\_\_\_ in comparison to the other three layers.  1. Continental Crust -under \_\_\_\_\_\_\_ (continents) 2. Oceanic Crust - under the oceans  * The crust of the Earth is broken into many pieces called \_\_\_\_\_\_\_\_\_. |  |
| **Mantle** | * The mantle is the \_\_\_\_\_\_\_\_\_\_\_\_\_ layer of the Earth. * The mantle is made of hot, dense, liquid \_\_\_\_\_\_\_\_\_ called ***magma*.** |
|  |
| **Outer Core** | * \_\_\_\_\_\_\_\_\_\_\_\_ layer surrounding solid inner core * Composed of Iron and \_\_\_\_\_\_\_\_\_\_ * Convection (\_\_\_\_\_\_\_\_\_\_\_\_ of the liquid metal) in the Outer Core creates the *Earth’s magnetic field* |
| **Inner Core** | * A \_\_\_\_\_\_\_\_\_ metal ball * Made of an iron-nickel alloy |

**Turn and Talk:** *Which layer of the Earth would have the highest pressure?* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Label the diagram to the left.

**Word Bank:**

Mantle

Inner Core

Outer Core

Crust

|  |
| --- |
| **Directions: Use the words in the bank to fill in the blanks in the reading. Use each word only once.**    **Word Bank:** Temperature Mantle Crust Outer Core Magma Solid Pressure Liquid Metal  There are four layers in the Earth. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the top layer. It is made out of \_\_\_\_\_\_\_\_\_\_\_\_\_\_rock. This is where we live and the where the oceans are. It is very thin. The next layer is much thicker and called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It is made out of melted rock, also called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, that is moving at all times. The next layer of the Earth is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_. It is made out of very dense, super hot, melted \_\_\_\_\_\_\_\_\_\_\_\_\_. It is so hot that it is no longer solid but \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The very center of the Earth is called the Inner Core. Both \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ increase the deeper you through the Earth: the crust is the coolest and the core is under high temperatures and pressure. |

*In the space below, write a poem, story, rap, or comic strip about a journey to the center of the Earth.*

**Use the following terms: *Crust, mantle, outer core and inner core***