**The Internal Layers of the Earth**

**\*\*\*Read in the Textbook Eureka pages 289-291 and then answer the following questions and fill in the blanks to complete your notes on the Internal Layers of the Earth\*\*\***

Since no human has ever visited the centre of the Earth we cannot for sure say what is there. However

scientists have hypothesised what is there by studying **waves produced by earthquakes**.

Particularly, scientists believe there are **3** internal layers of the Earth including:

* + **Crust**
  + **Mantle**
  + **Core**

**Use the diagram below to write the names, depths, and temperatures of the layers and sub layers of the Earth** (hint: color the layers different to make them more distinct).

**Crust – 5 to 65 km (5 oC)**

**Upper Mantle – 670 km (1000 to 1800 oC)**

**Lower Mantle – 2885 km (1800 to 3700 oC)**

**Outer Core – 2270 km ( 3700 to 4500 oC)**

**Inner Core – 1216 km (Above 4500 oC)**

The layers of the Earth get hotter as they **get closer to the earth’s center**.

The total radius of the Earth is approximately **6400 Km**.

Although geologists can dig into the crust to study, it is presently impossible to dig beyond **12Km**.

**Describe what a GEOLOGIST studies:**

**- A person who studies the nature and history of the Earth’s crust.**

**- They study the composition and structure of the Earth**

**- They also analyze rocks, minerals, and plant & animal fossils**

**Use the following chart to summarize the main facts and characteristics of the three layers and their sub layers** (hint: color code the chart to match the colored layers in your diagram).

|  |  |  |  |
| --- | --- | --- | --- |
| **Layer Name** | | **Main Characteristics** | |
|  | | |  |
|  |  | |  |
|  | |  |
|  |  | |  |
|  | |  |

**Describe how the layers of the Earth were formed in your own words.**

When the Earth began it was liquid................

* **The Earth was liquid matter because of the energy In the solar system**
* **Heavy elements, like Iron (Fe) and Nickle (Ni), formed the core**
* **Lighter elements, like Silicon (Si), Oxygen (O), and Aluminum (Al) stayed at the surface forming the mantle and crust**
* **When the Earth got colder the crust solidified**

**An egg is a comparable example to the internal structure of the Earth. Why? Use the following diagram to help you explain the comparison.**

**Shell**

**Crust**

**Mantle**

**Albumen (White)**

**Core**

**Yolk**

**Why is it difficult to explore the Earth’s interior?**

**Temperature is too high (too hot)**

**\*\*\*Internal Structure of the Earth Assignment:**

**Make a foldable craft that contains the three internal layers of the Earth as well as the information you have written about them on the first two pages of your notes (similar to example shown in class). The information can be written onto its corresponding layer. Make sure to include your name, title, and class number. Due Date:**