Earth Layers (Computer Lesson) Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_

1. On the internet, go to: <https://maggiesscienceconnection.weebly.com/layers-of-the-earth.html>
2. Click the link for **Structure of the Earth and start your exploration**
3. Roll your mouse over each layer, name each layer and composition of in the boxes below.
4. On the internet go to <https://maggiesscienceconnection.weebly.com/layers-of-the-earth.html> **“Earth’s Layer Details”** and write in the boxes the ***temperature, density, and thickness*** of each layer. *Answer the questions on the back of this handout.*

|  |  |
| --- | --- |
| Layer Name | Description |
| **Crust** | **Composition** What it is made of | **Oxygen, Silicon, Granite, Basalt** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **Temperature** | **0 to 1,0000C** 0C |
| **Density** |  **2.2 to 2.9 g/cm3** g/cm3 |
| **Thickness** |  35-70 km km |
| Mantle | **Composition** What it is made of | **Magnesium, Aluminum, Silicon** |
| **Temperature** | **1,000 to 3,5000C**  |
| **Density** |  **3.4 to 5.6 g/cm3** g/cm3 |
| **Thickness** |  **2,900km**  |
| Outer core | **Composition** What it is made of | molten nickel and iron |
| **Temperature** |  6100 to 4400 degree C 0C |
| **Density** |  **9.9 to 12.2 g/cm3** g/cm3 |
| **Thickness** |  2,200 km km |
| Inner core | **Composition** What it is made of | nickel and iron, solid due to pressure |
| **Temperature** | 5500 to 7000 0C |
| **Density** |  **12.8 to 13.1 g/cm3** g/cm3 |
| **Thickness** |  1,250 km km |



Answer the following question on the **Earth Layers** using the computer lab activity sheet.

|  |  |  |
| --- | --- | --- |
| 1 | The **hottest** | Inner Core |
| 2 | The **coldest** | Crust |
| 3 | The **densest** | Inner Core |
| 4 | The **least dense** | Crust |
| 5 | The **thinnest**? | Crust/Lithosphere |
| 6 | The **thickest** | Mantle |
| 7 | Made of **liquid metal** | Outer Core |
| 8 | Made of **solid metal** | Inner Core due to pressure |
| 9 | Made of **semi-solid rock and molten rock** | Mantle/Asthenosphere |
| 10 | Two layers that are made of **metals**? | Outer Core and Inner Core |
| 11 | Two layers that are made of **rocks**? | Crust/Lithosphere |
| 12 | List the Earth layers in order from the **hottest to the coldest**: Inner Core-Outer Core-Mantle-CrustOrInner Core-Outer Core-Mantle-Asthenosphere-Lithosphere-Crust |
| 13 | List the Earth layers in order from the **densest to the least dense**:Inner Core-Outer Core-Mantle-CrustOrInner Core-Outer Core-Mantle-Asthenosphere-Lithosphere-Crust |
| 14 | List the Earth layers in order from the **outermost to the innermost**:Crust -Mantle-Outer Core-Inner CoreOrCrust-Lithosphere-Asthenosphere-Mantle-Outer Core-Inner Core |

Website addresses (just in case):

1. <https://www.learner.org/wp-content/interactive/dynamicearth/structure/>

2. <https://maggiesscienceconnection.weebly.com/layers-of-the-earth.html>