Earth's Layers Interactive Lab

This activity is linked to Google Classroom to complete the online portion.

Record data and Observations:

| Data: (When collecting your five different pieces of data make sure to say if it's temperature or pressure).  1- Crust Temperature 16%  2- Upper Mantle Temperature 1,200 to 1,520  3- Transition Zone Temperature 1570 to 1620  4- Lower Mantle Temperature 1681 to 2,450  5- Outer Core Temperature 3559 to 4712 | Observations: (Be specific about your observations)  1- Crust Solid Rock  2- Upper Mantle Semi Solid Rock  3- Transition Zone Solid Rock  4- Lower Mantle Solid Rock  5- Outer Core Slow Flowing Liquid |
| --- | --- |

**Analyze and Interpret Data**

1. **Apply Scientific Reasoning** What are the states of matter for the outer core and the inner core? Which data that you collected in the virtual lab could help explain this difference? Explain your reasoning. **I do not know what you mean.**
2. **Analyze Data** Using your experience during the interactive, describe the general trends for temperature and pressure as a function of depth. **During my experience the temperature gets even hotter and the pressure increases each 100 km.**
3. **Connect to Nature of Science** The deepest hole on Earth is only about 12 km deep. So, you should know that most of the data you collected in this virtual lab are actually scientific inferences, and not factual data. Do you think any of this information will change in your lifetime? Why or why not? **Yes because overtime scientists will find more ways to dig deeper and the data will eventually change.**

**Conclude**

1. **Construct Arguments** Do you think taking trips to the Earth’s core will ever be possible? Use scientific reasoning along with the data you collected in this activity to support your response. **No because it is so hot plus you would have had water and a very heat resistant fireproof suit and the temperature could kill you.**