1. Define Continental Drift:

**The proposed idea from Alfred Wegner in 1800 that stated the continents were drifting away from each other**

1. What is Pangaea?

**245 million years ago the continents were joined in a single land mass**

1. How is fossil and rock formation evidence used to provide evidence of Pangaea? Describe discussing the image.

**Fossils of the same species were found on 2 different continents because those 2 continents were once connected**.

 

1. Define the Theory of Plate Tectonics:

**The idea that the lithosphere is broken into pieces called tectonic plates**

1. What are two pieces of evidence that support the theory of plate tectonics?

**Fossils and mountain ranges; same climate conditions**

1. Circle the correct answers, increases or decreases: As depth **increases / decreases** density, temperature, and pressure **increases / decreases**.
2. What is the difference between the physical and chemical layers of Earth?

 **Chemical: sorted by kinds of chemicals and amounts**

**Physical: sorted by physical traits (solid, liquid, rigid)**

1. What are similarities and differences between the crust and the lithosphere?

**Crust: upper most rigid layer; chemical**

**Lithosphere: upper most rigid; physical**

1. Describe Asthenosphere. Describe the Mesosphere.

|  |  |
| --- | --- |
| **Asthenosphere** | **Mesosphere** |
| **Plastic Rock** | **Middle Layer; Largest Layer** |
| **Consists of Mantle** | **Consists of Mantle** |
| **250 km** | **2,550 km** |

1. What causes the tectonic plates to move? Describe how that process works.

**Convection Currents in upper asthenosphere/mantle. Convection- warm; less dense matter rises.**

1. What is the difference between oceanic crust and continental crust?

**Oceanic: under oceans, thinner, more dense**

**Continental: under continents; thick; less dense**

1. Compare and Contrast the Inner and Outer Core.

**Inner core: Solid, denser, hotter**

**Outer Core: liquid, less dense, cooler**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  Name of layer -> | Inner Core | Outer Core | Mantle | Crust |
| **Temperature**  |  **4,000-5,000 ºC** | **3,000-4,000 ºC** | **\_\_1,000-3,000\_\_\_\_\_\_\_\_\_ºC** | **0-1,000 ºC** |
| **Density**  | **Densest** | **2nd most dense** | **2nd least dense** | **Least Dense** |
| **Composition**  | **Iron and Nickel** | **Iron and nickel** | **Magnesium, Aluminum, Sodium** | **Aluminum; Sodium; Oxygen** |
| **Physical Properties**  | **Solid** | **Liquid** | **Semi-solid molten rock** | **Rigid** |
| **Thickness**  |  km  | 2,200 km  |  km  | 5-70 km  |

**Free Space Below! - Write or draw anything else you remember about Earth’s Layers, Continental Drift, or Tectonic Plate!**