Sci 8 **Plate Tectonics package Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. What is the Continental Drift Theory?
2. What is Pangaea and how did it fit into the Continental Drift Theory?
3. Why was Wegener’s Continental Drift hypothesis rejected?
4. Which continents were easiest to fit together from your Pangea Puzzle? Explain why.
5. Were there any pieces of Pangaea that you found difficult to place? If so, what other evidence would have helped you place these pieces?



**Evidence for Continental Drift**

Describe why the following were considered evidence for continental drift.

1. Matching Fossils
2. Climatic Evidence
3. Geologic Features (Rocks and Mountain Ranges)
4. Coal Deposits

**Describe how the following are further Evidence for Continental Drift**

1. Sea floor spreading
2. Paleomagnetism
3. Hawaiian Hot spots

**Layers of the Earth**

**Draw** and **Label** a diagram of the layers of the earth including: **crust, mantle, outer core, inner core**.

|  |
| --- |
|  |

|  |  |  |
| --- | --- | --- |
| **Layer** | **Description:***What is it made up of?* | *How thick is it?* |
| Crust |  |  |
| Mantle | Lithosphere |  |  |
| Asthenosphere |  |
| Lower mantle |  |
| Core | Inner Core |  |  |
| Outer Core |  |

|  |
| --- |
| **How are the structures of an Avocado and Earth similar? (list at LEAST 5 similarities)** |
|  |
| **How are the structures of an Avocado and Earth different? (list at LEAST 5 differences)** |
|  |

1. Tectonic plates are composed of which parts of Earth’s layers?
2. What are two types of tectonic plates? Describe two features of each.
3. Name the two types of crust found on the Earth’s surface.
4. What happens to the temperature as you go deeper into the Earth?
5. What do you think happens to the density as you go deeper into the earth? Why?
6. What is the difference between the Theory of Continental Drift and the Theory of Plate Tectonics?

**Plate Motion**

1. Describe how convection currents cause tectonic plates to move.

**Plate Boundaries**

1. What geological features help us determine where plate boundaries are?
2. **Draw** and **describe** the three types of plate boundaries and give an example of each:

|  |  |
| --- | --- |
| Description | Drawing |
| Divergent (Ocean-Ocean)Example:  | Symbol:  |
| Convergent (Ocean-Continent)Example:  | Symbol:  |
| Convergent (Continent-Continent)Example:  | Symbol: |
| Convergent (Continent-Continent)Example:  | Symbol: |
| TransformExample: | Symbol: |

1. How are mid-ocean ridges formed? Explain in detail.
2. Explain why subduction does NOT occur in Continental-Continental Plate Convergence.
3. What are all the things that the theory of Plate Tectonics explains? Answer in list form.
4. Describe the process that results in a volcanic island arc.