Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_ 4.2 Plate Tectonics Notes

**Scientist continued to research Wegner’s ideas:**

The idea that the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is divided into pieces called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that are always moving

and changing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Here is what they found…

1. There was a variation of \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_ on both sides of the Mid-Ocean ridge

2. The lithosphere is broken into \_\_\_\_\_\_\_ plates.

3. Movement results from activity at the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Energy comes from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\* \_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ magma rises and \_\_\_\_\_\_\_\_\_\_\_\_\_, more dense Earth \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*The constant push and pull of the rising and sinking magma forces plates to move*



**What is subduction???**

Types of subduction:

1. Oceanic-Continental-
2. Oceanic-Oceanic-
3. Continental-Continental-



**What is the evidence of plate tectonics??**

* Earthquake patterns
* Paleomagnetism: the Earth has different \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at the north and south pole and it is the natural remnant \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in rock bodies
  + - Normal polarity: when rocks show the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ magnetism as the present magnetic field
    - Reverse polarity: when rocks show the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ magnetism as the present magnetic field
    - Alternating \_\_\_\_\_\_\_\_\_\_\_\_\_ is some of the strongest evidence
* \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: Allowed us to see dating of ocean ridges forming
* Hot spots: maps seafloor \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and shows dating

**Challenge Questions-** Answer the questions on the board here:

1. 2. 3.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Plate Boundaries* | | | | |
| **Type of Boundary** | **Plate Movement** | **Effect on Lithosphere** | **Associated Land Formations** | **Real World Examples** |
| **Convergent Boundary** |  |  |  |  |
| **Divergent Boundary** |  |  |  |  |
| **Transform Fault Boundary** |  |  |  |  |