Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hr\_\_\_\_\_\_\_\_\_\_\_

**Plate Tectonics-Notes and Practice**

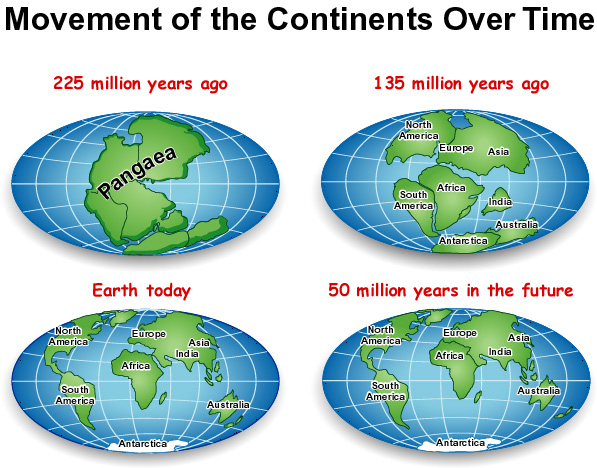
* The \_\_\_\_\_\_\_\_\_ of \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_ explains the movement of continents and other geological events like \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_.
* The term \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_means \_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* The theory of plate tectonics, stated in 1965, refers to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of giant pieces of solid rock on Earth’s surface called \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Continental Drift**

In 1915, \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ (1880-1930), a German meteorologist, wrote a book titled *The Origin of Continents and Oceans*.

* Wegener gathered evidence that supported his idea that \_\_\_\_the \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.





**Sea Floor Spreading**

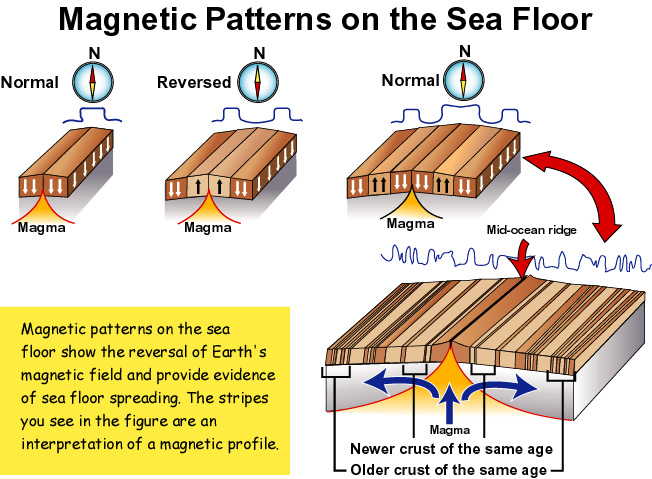
In the early 1960s, \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ (1906-69), a geologist and former commander of a Navy ship equipped with an echo sounder, used the profile of the sea floor to propose that it was \_\_\_\_\_\_\_\_\_\_\_\_\_\_ at the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_.

* Around the same time, Robert Dietz (1914-95), a scientist with similar ideas, coined the term \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_. Sea-floor spreading describes the \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ on either side of a mid-ocean ridge as \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_from the \_\_\_\_\_\_\_\_ & creating a \_\_\_\_\_\_ or \_\_\_\_\_.
* Hot fluid from the \_\_\_\_\_\_\_\_\_ (called \_\_\_\_\_\_\_\_\_\_) enters the rise or valley and \_\_\_\_\_\_\_, creating new sea floor (also called \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_).



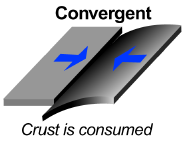
**Magnetic Patterns**

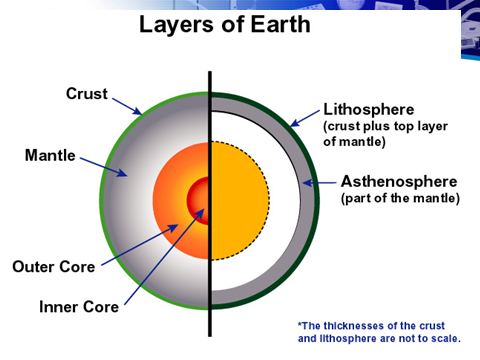
* Over geologic time, the \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ of Earth has switched.
* Scientists believe the poles switch because of a \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ between the planet’s \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_.
* In the 1950s and 1960s, scientists discovered that the rocks of the sea floor have a very interesting \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_.
* Stripes of rock with a \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ (normal) \_\_\_\_\_\_\_\_\_\_\_\_ with stripes of rock with a \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (reversed).



**Describing Plate Boundaries**

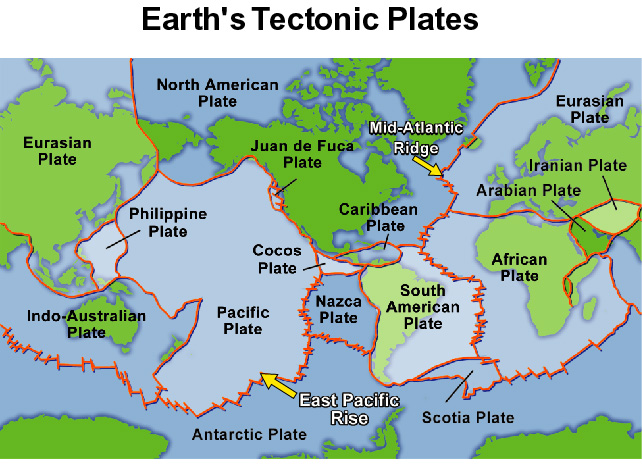
* There are \_\_\_\_\_\_\_\_\_ main kinds of \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_:

**-Divergent** **-Convergent** OR **-Transform** 



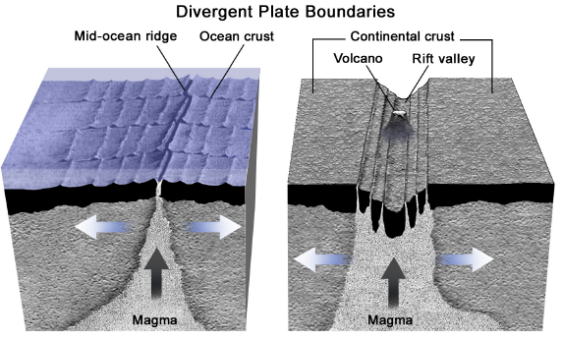
**Plate Tectonics**

* The \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ that cover Earth’s surface are pieces of the \_\_\_\_\_\_\_\_\_\_\_\_\_ that fit together and float on the \_\_\_\_\_\_\_\_\_\_\_\_ (a part of the mantle).
* There are a number of \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ on Earth’s surface, and smaller plates are being identified all the time.



**Divergent Plate Boundaries**

Diverging plates \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ and new crust forms.

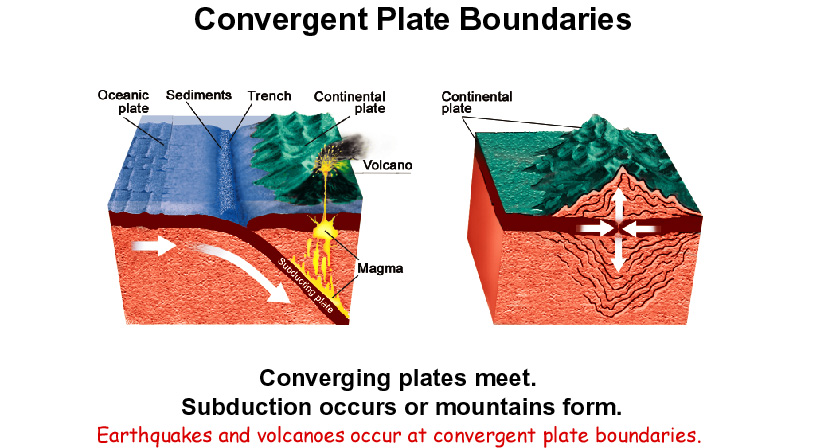


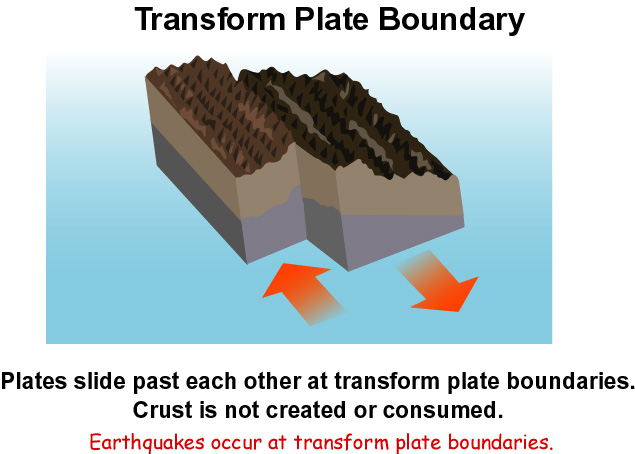
* \_\_\_\_\_\_\_\_\_\_\_\_\_ boundaries are sites of \_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ activity.
* \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ and associated \_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ occur at *divergent plate boundaries*.
* In effect, a mid-ocean ridge is like a very long \_\_\_\_\_\_\_\_\_\_\_\_.

**Convergent Plate Boundaries**

Convergent plate boundaries occur where \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ each other.

* One result of two plates converging is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* A deep \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ marks the boundary between a \_\_\_\_\_\_\_\_\_\_\_\_\_ and an overriding plate at a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ boundary.





**Movement of Plates**

The movement of tectonic plates is related to the distribution of \_\_\_\_\_\_ by \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ currents in the \_\_\_\_\_\_\_\_\_\_.



**Practice:**

1.List three pieces of evidence that Wegener used to support his idea that all the continents were joined into one in the past.

2. How does the change in the earth’s magnetic polarity support the idea of sea floor spreading?

3. What are the 3 main types of plate boundaries?

4. What is the main source of energy that causes the tectonic plates to move?