**Plate Boundaries and Their Locations**

***Procedure****:*

1. Using maps on page 262 in the Earth Science text locate and label the different plates on the accompanying map (major plates are in bold).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Australian-Indian** | **Nazca** | **Antarctic** | **North American** | **African** |
| **Philippines** | **Pacific** | **Eurasian** | **South American** | Juan de Fuca |

1. Using a **blue** pencil, go over the lines on the map that indicates divergent plate boundaries.
2. Using a **red** pencil, go over the lines that indicate convergent plate boundaries.
3. Using a **green** pencil, go over the boundaries that indicate transform plate boundaries.
4. Using a **brown** pencil, shade in all the land masses.
5. Refer to page 262 and 744 and The World Map in front of the room to **locate and label these mountain ranges:**

|  |  |  |  |
| --- | --- | --- | --- |
| Himalayas | Andes | Cascade Range | Rocky Mountains |
| Alps | Appalachians |  |  |

1. **Locate and label the following ridges/rises**:

|  |  |  |  |
| --- | --- | --- | --- |
| East Pacific Rise | Mid Atlantic Ridge | Mid-Indian Ridge | East African Rift |

***Analysis*** - answer the following questions in sentences and on your own sheet of paper:

1. The largest plates have the fastest velocity creating the greatest seismic activity (earthquakes). Therefore, which plate has the most earthquakes?
2. According to how plates move in relation to one another, is the Pacific Ocean getting smaller or larger? Explain
3. Is the Atlantic Ocean getting larger or smaller? Explain
4. What is the relationship between the labeled mountain ranges and their location to plate boundaries (use the Himalayas as an example)?
5. Tectonically speaking, how are trenches formed?
6. Why is there a relationship between the islands in western Pacific Ocean and plate boundaries?
7. Along which type of plate boundary will oceanic crust form?
8. Along which type of plate boundary will oceanic crust be destroyed?
9. List the two plates that form a transform boundary in western North America? Why are earthquakes common in this area?
10. Explain how the Cascade Range was formed (discuss plates and type of boundary)?