Plate Tectonics Jigsaw Activity

**Purpose:** To use the cooperative learning "Jigsaw Technique" to learn about plate tectonic boundaries.

*Note: I will only need one chart per group turned in, so one person in your group is responsible for typing up the chart with the given information from their group members. Please put the names of every person in your group on the paper and which topic they were responsible for researching. In addition to printing a copy to turn in, print a copy for each member of your group to have as notes.*

**Procedure:**

1. Once you have been assigned a group, divide up and get into your group. This is your “core” group. Think of a creative name for your group related to rocks, plate tectonics, or some geomorphic process.
2. Appoint someone in your group as the “Plate Leader”. This is the person in charge of your group.
3. In your core group, the leader assigns one person to report on the characteristics of either 1) divergent, 2) convergent (ocean-ocean), 3) convergent (continent-continent), 4) convergent (ocean-continent), or 5) transform boundaries.  The king or queen takes an unclaimed boundary.
4. After everyone has been assigned a boundary, each person will have 10-20 minutes to research their assigned topic from different resources. ([EXPLANATION OF PLATE TECTONICS](http://pubs.usgs.gov/publications/text/understanding.html))- Here is one resource you can use. Read up on your particular assigned section to complete your section of the table found at the end of this handout.
5. After the assigned time return to the classroom, you will now be sit with an expert group, other classmates who have read the same section as you. You group will be given 5-10 minutes to prepare an oral report briefly describing
   1. Plate boundary characteristics
   2. Plate boundary location
6. At the end of the 5-10 minutes you will hear me say, “Time.” This is your cue to move back into your core groups.
7. Once back in your core groups you will have 20 minutes for each plate “expert” to present their particular plate boundary to the group; again each person is responsible for listing plate boundary characteristics and providing example of plate boundary location.
8. At the end of 20 minutes your group will have five to ten minutes to answer a question with the newly combined information from each group member.

Table 1--Data Sheet

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | divergent | convergent (ocean- ocean) | convergent (ocean-continent) | convergent (continent-continent) | transform |
| a) plate boundary characteristics |  |  |  |  |  |
| b) plate boundary location |  |  |  |  |  |
| Synthesis Question: Based on the location and characteristics of the plate boundaries and human settlement patterns, which type(s) of plate boundaries present the greatest threat to humans. Justify your answer with particular examples. |  | | | | |