

Earthquake Pattern Project

Name: _____ (___ /10)

Instructions: After you finish labeling your world map with the 150 most recent earthquakes and 50 volcanoes complete the following steps.

1. On your map label the following mountain systems: Rocky, Alps, Andes, Himalayas, East African Mountains,. Use a map online if you need help.
2. Using the data points on the table below draw a dotted line for each of the mid ocean ridges. (Latitude, Longitude)

| Mid Atlantic Ridge | Pacific Antarctic Ridge | Central Indian Ridge | Southwest Indian Ridge |
|--------------------|-------------------------|----------------------|------------------------|
| 65, -18 | -49, 111 | 31, 33 | -50, -6 |
| 53, -34 | -50, 149 | 11, 45 | -52, 28 |
| 43, -28 | -64, 176 | 11, 58 | -36, 54 |
| 23, -46 | -56, -114 | 0, 70 | -27, 68 |
| 0, -25 | -48, -100 | -37, 79 | -49, 111 |
| -50, -6 | 0, -112 | -47, 97 | |
| | -27, -110 | -49, 111 | |

3. Using the earthquake and volcano data and the ridges that you just drew draw dotted lines where you think the plate boundaries are. When you are done check your work using the image linked below. You won't have all of them because you didn't have enough data.

<http://geology.com/plate-tectonics.jpg>

4. On your map circle and label an example of a divergent, convergent and transform boundary. For each example explain the evidence you used to get your answer.

Divergent Evidence: _____

There is more work on the back.

Convergent Evidence: _____

Transform Evidence: _____

5. Using the internet look up the term "Pacific Ring of Fire". Use your map and the information you found online to explain where that term came from.

6. Congratulations you're finished! When you get to this step turn your map and this sheet in to Mr. Korchnak.