**Directions:** 1. Using the laminated map from Ms. Crownhart: find and label all FOURTEEN plates.

 2. LEAVE THE SEVEN SMALL PLATES WHITE!!!!!!!!! Color the SEVEN largest plates: use different colors.

Plotting Major Earthquakes and Volcanoes Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

You will be plotting Earth’s 20 worst earthquakes and volcanoes on your colored map. Predict if you think most of them will be located: (*where two plates meet)* or (*in the middle of plates)* ? **(circle one)**

 Use an X for Earthquakes, Triangle for Volcanoes, you will be using the number coordinate at the bottom of the map, and the letter coordinate at the left side of map, when you are finished plotting answer the following questions…

Earthquake table = X volcano table =

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Letter | Number |  | Letter | Number |
| W | 3 | Y | 3 |
| W | 4 | V | 5 |
| V | 4.5 | Q | 2.5 |
| T | 13 | R | 6 |
| U | 14 | M | 8 |
| T | 15 | Z | 11.5 |
| S | 5.25 | K | 22.5 |
| S | 17 | O | 11 |
| P | 8 | V | 14 |
| W | 23.5 | U | 15 |
| S | 22.5 | T | 17 |
| P | 19.5 | W | 23.5 |
| P | 6 | V | 22.5 |
| M | 20 | J | 24 |
| L | 23 | L | 21 |
| H | 17 | K | 20 |
| G | 5.5 | J | 17 |
| H | 8 | P | 15 |
| C | 8 | D | 8.5 |
| S | 18.5 | H | 8.5 |

1. Look at the Earthquakes you plotted. Are they found along the West AND East coastlines of EVERY continent? \_\_\_\_\_\_ why?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Why does California experience large earthquakes? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Most Earthquakes are located: \_\_\_\_\_\_

4. Most Volcanoes are located: \_\_\_\_\_\_

 **a.** *directly on top of the plate boundaries*

***b****. on either side of the plate boundaries*

5. What is the volcano located in the middle of the Pacific ocean? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. What is the Volcano at Z, 11.5? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. Why are there no volcanoes on the EAST side of South America? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Why does the East coast of the United States not have any earthquakes? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is the only mark (x or ) on your map that is NOT near a plate boundary? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Explain in detail why huge earthquakes DO NOT happen in the middle of plates. \_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Put 10 more stars ( ) on your map where you would predict a major earthquake or volcano could occur in the near future. (use a pen or marker if possible)
2. What is the Earth’s surface always doing? (two things) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Why are the volcanoes off to the sides of the plate boundaries? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_