**MAPPING VOLCANOES**

*Is there a pattern in the locations of volcanoes?*

**Directions:**

Use the information in the data table below to mark the locations of the volcanoes on the world map. Indicate each volcano with the letter V inside a circle.

|  |  |
| --- | --- |
| **Longitude** | **Latitude** |
| 150° W | 60° N |
| 70° W | 35° S |
| 120° W | 45° N |
| 61° W | 15° N |
| 105° W | 20° N |
| 75° W | 0° |
| 122° W | 40° N |
| 30° E | 40° N |
| 60° E | 30° N |

|  |  |
| --- | --- |
| **Longitude** | **Latitude** |
| 160° E | 55° N |
| 37° E | 3° S |
| 145° E | 40° N |
| 120° E | 10° S |
| 14° E | 41° N |
| 105° E | 5° S |
| 35° E | 15° N |
| 70° W | 30° S |
| 175° E | 39° S |
| 123° E | 38° N |

\*\* Hint – mark off each location as you go along to help keep you on track!

**Analyze and Conclude**

1. How are the volcanoes distributed on the map? Are they scattered evenly or concentrated in zones?

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1. From your data, what can you infer (conclude) about the relationship between volcanoes and tectonic plates?

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1. Suppose a new volcano erupted and you added the new location to the map. Do you think the overall pattern of volcanoes would change? Explain why you think the pattern would or would not change in at least 3 sentences.

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1. Name the three places (boundaries and nonboundaries) where volcanoes are created:
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Open your book to p. 455 and compare the locations of the volcanoes on your map to the zones located around the world. Which zone produced most of the volcanoes on your map? Explain in at least 3 sentences.

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