

Name _____

Fiery Giants: Volcanic Eruptions and Tectonic Plate Boundaries

Open-Ended Response Questions

1. Imagine you are a geologist studying volcanic eruptions and tectonic plate boundaries. Explain the differences in volcanic activity between divergent, convergent, and transform plate boundaries, providing specific examples for each.
2. Analyze the importance of volcanic islands in ecological terms, considering their formation and the unique ecosystems they support. Discuss the challenges and benefits of living on volcanic islands.
3. Explain how volcanic eruptions can impact global climate patterns and weather, both in the short term and over extended periods. Provide examples of historical eruptions that had significant climate effects.
4. Investigate the role of volcanic eruptions in the formation of valuable resources such as minerals, geothermal energy, and fertile soils. How do these resources contribute to human societies and economies?

