# Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pd:\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Reverse Questioning

Use the following answers and your reading to create corresponding questions to each answer. Be sure to write questions that address each part of the answer provided. For additional information refer to ***Chapter 6, Section 4*** in the science textbook. Write your questions in the boxes provided.

A1. Both are a mixture of rock material, gases, and water. The difference is that one is found beneath Earth's surface, while the other reaches the surface during volcanic activity and can form solid rock.

A2. A major volcanic belt that forms along the plate boundaries that surround the Pacific Plate.

A3. Along divergent boundaries and convergent boundaries where subduction occurs.

A4. At the mid-ocean ridge, the plates are moving apart at the divergent boundary. Here, magma pushes past the surface and cools to form new crust and build mountains.

A5. At the subduction zone, where the more dense plate is sinking some of the rock begins to melt and become magma. This magma breaks through the crust, creating volcanoes.

A6. Japan is an example of an island arc that was created as a plate subducted beneath another, creating magma that pushed its way up toward the surface and created a chain of volcanoes.

A7. Hawaii is an example of chain of volcanoes at a hot spot. These islands formed as magma erupted through the oceanic crust and over time the Pacific plate drifted, which caused the chain to get longer.

A8. While they are both island chains formed by volcanoes, however, Japan formed along a plate boundary Hawaii formed in the middle of the plate itself, at a hot spot.