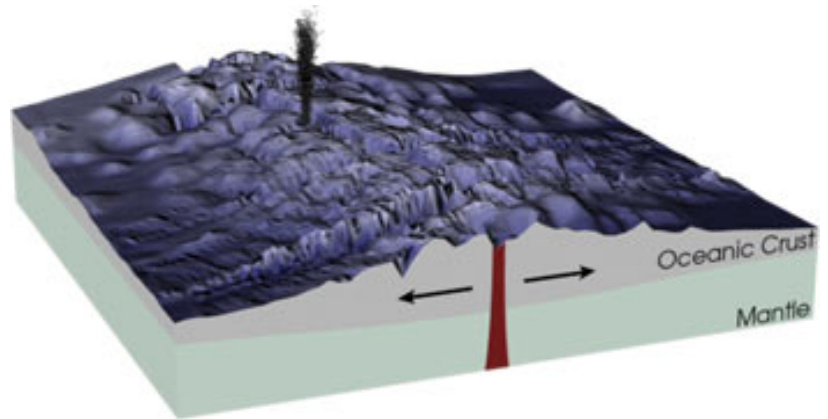


Geological Events - Volcanoes

A volcano marks a spot in the lithosphere where magma and gases reach the Earth's surface. Once it reaches the surface, magma is referred to as _____.

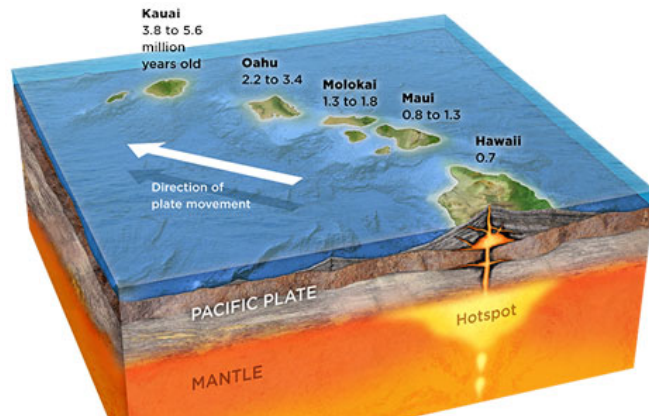
Volcanoes at Mid-Ocean Ridges

In areas of _____ oceanic-oceanic boundaries, the crust tears, relieving pressure from the mantle below, and magma extrudes to the surface



Hot Spots and Volcanic Island Chains

Hot spots are regions of very hot mantle, heated by a concentration of _____ substances near Earth's core. This creates columns of rising mantle, which bursts through a weakened lithosphere, forming a volcano. The hot spot remains _____ as the lithosphere moves over it. As the plate moves away from the hot spot, the volcano becomes _____. Eventually the hot spot forms a new volcano, thus creating a chain of volcanoes stretching away from the hot spot in the direction of the plate motion. Hot spots can be found beneath the ocean or on a continent.



Volcanic Belts and Island Arcs

At a subduction zone, the _____ plate pulls trapped water down into the mantle with it. The resulting steam softens magma and moves its way upward, creating a row of volcanoes roughly parallel to the boundary. A volcanic _____ or _____ of **inland** volcanoes is created on an overriding _____, parallel to a _____ boundary. A volcanic _____, or line of volcanic **islands** is created on an overriding oceanic plate parallel to an oceanic-oceanic boundary.

