ERHS MARINE SCIENCE Name_____P__

VOLCANO PRODUCTS REVIEW

Directions: As you stop at each station, draw and describe each of the subjects shown. In some cases, a sample is there to be drawn, read about, and described. Not where the sample forms and how. In some cases a video clip is the sample. Describe what you watch. In some cases a book or image is found. Describe what you read.

BACKGROUND: Volcanoes are the result of tectonic activity along the boundaries. As convergent boundaries of oceanic crust subduct, hot rising magma burns through the crust above forming volcanoes. The type of volcano is dependent on the types and composition of the crust. A hot spot is different in that there is no subduction zone, but a steady plume of magma burns a hole in the plate above it. Hawaii offers a great study of volcanology as lava has been erupting continuously since the 1980s nonexplosively.

Write in a description of each of the things you observed today. Think of color, texture, formation, image.

St. Helens Eruption:	St. Helens Ash…Correlation of size & distance:	Yellowstone is what type of "boundary" & how explosive in the past?
Hawaiian Pahoehoe lava:	Hawaiian A'a lava:	Hawaiian black sand:
Hawaiian Pele's hair:	Hawaiian Pele's tears:	Hawaiian lava bomb:
St. Helens before & after:	Pangaea Video Clips:	Lahar…what is it?
Pyroclastic flow…what is it?	A'a flow…how fast?	

1. Write down a comparison of what happens at each of these boundaries: hot spot, ocean-ocean, and ocean-continental.

2. What type of eruptions do you expect at each: Mt. Fuji, Japan; Iceland; Mt. Etna, Italy?