Inside Hawaiian Volcanoes Quiz

- 1) What is the name of the rock that Hawaiian volcanoes are made of?
- 2) If the active volcano Lo'ihi, now 914.6 meters (3000 feet) beneath sea level southwest of Kīlauea Volcano, has .3 meters (1 foot) of lava added to its summit each year, when will the volcano become an island?

3) Geologists know that the increasing weight of a growing volcano progressively depresses or pushes down the underlying sea floor. How will this process affect the time needed for Lo'ihi to become an island?

4) What is the geographic relationship between most active volcanoes and the boundaries of tectonic plates? Do the Hawaiian volcanoes conform to this general relationship? Why or why not?

6) Most Hawaiian volcanoes are called shield volcanoes because of their broad, gentle profiles. Why do you suppose this shape is so common for Hawaiian volcanoes, in contrast to shapes of such steep-sided cones as Mount St. Helens and other high volcanic peaks in the Cascade mountain range of the Pacific Northwest?

7) Which is older, the West Maui volcano or Haleakalā? Explain your reasoning.