

Documentary

Volcanoes and Earthquakes – Inside the Volcano

Name: Answer Key Class: _____ Date: _____

1. The three layers of the Earth are the core, mantle, and crust.
2. Islands form when magma erupts under the ocean floor. These volcanoes are called Hot Spot volcano. An example of this is Hawaiin Islands.
3. When the Earth's plates move apart, magma rises in between the plates. These volcanoes are called Ocean ridge. These cause long ridges.
4. The volcanoes of Indonesia are examples of Island Arc Volcanoes. They form a Chain of volcanoes.
5. There are different types of eruptions:
 - a. Gentle flowing: Hawaiin.
 - b. Lava flying into the air: Strombolian.
 - c. Release of gas and ash: Volcanian.
 - d. Loud burst of ash, gas and rocks: Plinian.
6. The soft white rocks that come out of volcanoes are called pumice.

7. How did the eruption in Santorini have an impact on the Minoans and culture?

- The eruption of Théra caused fast flowing ash and pumice to be thrown out at 100 m/hr in a "pyroclastic flow".
- The peaceful Minoans (farmers) thought that they had done something wrong
- Their fields and the waterways were all covered / blocked by pumice so they couldn't grow or trade
- Over 50 years, they eventually disappeared.

8. Why are legends and myths still important to science today?

- Vulcan - a god who lived in volcanoes
 - he made loud bangs that caused eruptions
- Many legends discuss giants who lived under the surface and fought, causing volcanic eruptions and earthquakes
- Plinian recorded his observations about the Mt. Vesuvius eruption
 - this gave evidence to begin volcanology
 - the study of volcanoes
- Pelé' - goddess of fire / volcanoes
 - brought her sister with her (she regenerated life)
- Legends and myths gave us a starting point for scientific research. Early observations provided a base for theories.