***Inside the Volcano* Worksheet: www.youtube.com/watch?v=Xznc78EkT0E**

Environmental Science Mr. Fuentes

Name: _____ Period: _____ Date: _____

Introduction and Overview

1. What is a volcano? (3:45)

2. What are signs of an impending volcanic eruption? (5:00)

3. How do volcanoes form at the following locations? (7:00 to 8:30)

Continental Margins	Hot Spots	Fissures (ocean ridge)	Island Arcs

4. What are the characteristics of the following types of eruptions? (9:00)

Hawaiian	Strombolian	Vulcanian	Plinian

5. How can dissolved gases like H_2O and CO_2 in magma affect the explosiveness of a volcano? (11:00)

Thera in 1600 BC (12:40)

6. What is a pyroclastic flow and what kind of damage will it cause? (15:00)

7. How did the eruption of Thera in 1600 BC affect the Minoans on Crete? (20:00)

8. Why was Thera's eruption so catastrophic? (21:00)

9. How did volcanic ash change the color of the Nile River in Egypt? (27:00)

Vesuvius in 79 AD (28:50)

10. Why was the eruption of Mt. Vesuvius in 79 AD so devastating for the cities of Pompeii and Herculaneum? (32:00)

11. How did the Ancient Romans and other primitive civilizations describe the causes of volcanic eruptions before science was employed? (34:00)

12. What is viscosity and how does it contribute to the explosiveness of a volcano? (38:50)

History Channel's *Inside the Volcano* Video Questions

Environmental Science Mr. Fuentes

Ring of Fire Volcanism: Tambora 1815 (48:10), Krakatau 1883 (52:20), Mt. St. Helens 1980 (56:00), Mt. Rainier 1820 (1:02:50)

13. What is the Pacific Ring of Fire? (46:00)

14. How can volcanic eruptions have worldwide impacts on climate? (50:00)

15. What kinds of things were monitored to predict the eruption of Mt. St. Helens in 1980? (59:00)

16. What are lahars and why are they so devastating? (1:04:10)

17. What are modern-day tools that are now used to aid in the prediction of volcanic eruptions? (1:06:00)

Hawaiian Volcanoes and Kilauea's Eruption from 1983 to the Present (1:08:30)

18. How were the Hawaiian Islands formed? (1:09:30)

19. What kind of volcano is Kilauea? Why doesn't its eruption take place from the original vent any more?

20. How can volcanoes be constructive for our environment instead of destructive? (1:13:00)

Iceland Volcanic Eruptions from 20 million years ago to the present (1:15:30)

21. How are Icelandic ocean ridge volcanoes formed? (1:16:30)

22. How can the volcanoes of Iceland be used to harness energy for producing electricity? (1:19:00)

Super volcanoes

23. What are super volcanoes? (1:24:40)

24. How do calderas like Toba and Yellowstone form? (1:27:00)

25. Should we be more concerned with Yellowstone and Long Valley Caldera super volcano-type eruptions which occur about every 600,000 years, or should we be more concerned about the many other volcanic eruptions around the Earth that occur more frequently? Explain. (1:28:00)