Monitoring Volcanoes Scavenger Hunt

Overview:

As students navigate the "Monitoring Volcanoes" unit of the *Ola Ka Honua: Volcanoes Alive* interactive DVD, they will identify key information by finding the answers to questions on the Student Worksheet: "Monitoring Volcanoes Scavenger Hunt."

Objectives:

The student will research information by interacting with the *Ola Ka Honua: Volcanoes Alive* interactive DVD.

Materials:

- *Ola Ka Honua: Volcanoes Alive* interactive DVD
- Student Worksheet: "Monitoring Volcanoes Scavenger Hunt"

Activity Procedure:

Distribute the *Ola Ka Honua: Volcanoes Alive* interactive DVD and the Student Worksheet: "Monitoring Volcanoes Scavenger Hunt." Ask students to complete the worksheet by navigating through the DVD.

Answers to Student Worksheet:

1. lono
2. Princess Ruth Keʻelikōlani
3. Thomas Augustus Jaggar, Jr.
4. b) Electronic Distance Measurement (EDM)
5. a) Global Positioning System (GPS)
6. slope
7. seismometers
8. true
9. lava supply
10. GIS (Geographic Information System)

Name: _____ **Student Worksheet**

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Directions: Use Unit 7 of the *Ola Ka Honua: Volcanoes Alive* interactive DVD to help you answer the questions below.

1. What is the name of an ancient oral report used to describe volcanic activity, such as lava flows, with detailed observations?_____

2. What female relative of Kamehameha traveled to Hilo when a lava flow threatened the town?

   _____

3. Name the scientist who founded the Hawai'i Volcano Observatory.

   _____

4. Which instrument is used to measure the time it takes for a laser beam to travel across a caldera and be reflected back is:

   a) Global Positioning System (GPS)
   b) Electronic Distance Measurement (EDM)
   c) Correlation Spectrometer (COSPEC)
   d) Seismometer

5. This type of receiver calculates the width of a caldera by receiving sensitive radio signals from a system of satellites.

   a) Global Positioning System (GPS)
   b) Electronic Distance Measurement (EDM)
   c) Correlation Spectrometer (COSPEC)
   d) Seismometer

6. Scientists use tiltmeters to determine how changes in magma chamber volume affect the volcano surface. Specifically, a tilmeter is used to measure changes in _____.

7. Earthquake vibrations are recorded by this instrument buried in the ground.

   _____

8. _____ are special charts or records of Earth vibrations.

9. What does the following formula measure? Depth x Width x Velocity

   _____

10. What computer software compiles GPS data to create maps of lava flows?

    _____

