

## Monitoring Volcanoes Scavenger Hunt

### Overview:

As students navigate the “Monitoring Volcanoes” unit of the *Ola Ka Honua: Volcanoes Alive* multimedia and video playlist, 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* multimedia and video playlist.

### Materials:

- *Ola Ka Honua: Volcanoes Alive* multimedia and video playlist
- Student Worksheet: “Monitoring Volcanoes Scavenger Hunt”



### Activity Procedure:

Distribute the *Ola Ka Honua: Volcanoes Alive* multimedia and video playlist and the Student Worksheet: “Monitoring Volcanoes Scavenger Hunt.” Ask students to complete the worksheet by navigating through the playlist.

### Answers to Student Worksheet:

1. Iono
2. Princess Ruth Ke'elikōlani
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)

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**Directions:** Use Unit 7 of the *Ola Ka Honua: Volcanoes Alive* multimedia and video playlist 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 tiltmeter 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?  $\text{Depth} \times \text{Width} \times \text{Velocity}$   
\_\_\_\_\_
10. What computer software compiles GPS data to create maps of lava flows?  
\_\_\_\_\_