



## **Article Guide: Hawaii’s Hotspot Heats Up: What the recent Volcanic Activity on Kilauea means for the rest of the islands**

<http://scienceovereverything.com/2018/05/29/hawaii-hotspot/>

### **Part 1: What’s a hotspot?**

Directions:

- Read the section of the article titled “What’s a hotspot?”
  - Box vocabulary words or words that you have not seen before
  - Underline in the text where the focus questions are addressed
- Answer each focus question

Focus questions

1. What causes hotspot volcanoes to form?

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2. How do hotspots create chains of volcanic islands?

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3. How can we find the relative age of each of the Hawaiian islands?

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### **Part 2: So what’s causing all these eruptions?**

Directions:

- Read each understanding question
  - Think about what you would need to know to answer that question
- Read the section of the article titled “So what’s causing all these eruptions?”.
  - Box vocabulary words or words that you have not seen before
- Answer each understanding question

## Understanding questions

1. Titlemeters show changes in the slope of the ground, similar to a carpenter's level. What do you think would cause these changes in areas around a volcano? Why would this indicate an eruption could soon occur?

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2. What would cause fissures and cracks to form in the ground in the Eastern Rift Zone?

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## **Part 3: Global Impacts**

Directions:

- Read the section of the article titled "Global Impacts"
    - Box vocabulary words or words that you have not seen before
  - Discuss with a partner how you would address the extension questions.
    - Write a response to the extension questions
3. The United States Geological Survey (USGS) records data on earthquakes and volcanos around the world and works with geologists to help them conduct research. Imagine you were part of the USGS with the job of creating an early warning system for volcanic eruptions. What sort of data would show that a volcano is about to erupt? What kind of technology would you need to put into the field to make predictions on volcanic activity?

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