# Lesson 2: Geomorphology, Volcano Shape vs. Eruption Style

## Objective:

Students will be able to discern among different volcano shapes and be able to describe the characteristics of each volcano.

This lesson has students make observations of different types of volcanoes and, if possible, rock samples that come from each type of volcano. If possible, the use of photos/images can also be used.

## NGSC Standard:

ESS2.A: Earth Materials and Systems

## Essential Questions:

1. What types of volcanoes are on Earth?
2. How are volcanoes similar or different?

## Materials:

* Tactile models of different volcanoes (e.g., composite, shield, cinder cone, lava dome, caldera).
* Additional materials could include rock samples, photos/images, and additional handouts.

*Note*. APH’s “Earth Science Tactile Graphics” Kit may be helpful for this lesson. Available at: <https://www.aph.org/product/earth-science-tactile-graphics>.

## Directions:

1. Probe students to determine what they know about volcanoes. [Answers will vary.]
2. Allow students to observe the models and make conjectures on what type of volcano they are examining based on the presence of an edifice (mountain or cone that is the main portion of a volcano), steepness of the slopes, and the relative size of the volcano. After observing multiple models, compare and contrast the different structures and relate this information to make conjectures about the magma composition associated with each feature.

## Extension Activity:

This activity can be combined with rock samples to explore relationships between magma composition and geomorphology. Students could also be given a map of the Earth and information on what types of volcanoes exist at various locations on Earth.

Resources for the Extension Activity:

National Geographic Education. (n.d.). Earth’s major volcanoes. <https://education.nationalgeographic.org/resource/earth-major-volcanoes>

Databayou. (n.d.). World map of volcano types. <https://databayou.com/volcano/map.html>