

Forms Matter!

Hawai'i Volcanoes National Park Quarter Grades Kindergarten and One



OBJECTIVE

Students will identify the three forms of matter.



SUBJECT AREA CONNECTIONS

- Science
- Language Arts



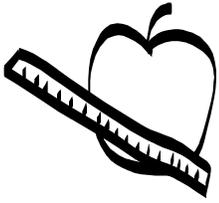
SUMMARY

1. Display and examine the Hawai'i Volcanoes National Park quarter design. Locate this site on a class map. As background information, explain to the students that the United States Mint began to issue the quarters in the America the Beautiful Quarters® Program in 2010. By the time the program ends in 2021, there will be a total of 56 designs on the back of the coin. Each design will focus on a different national site—one from each state, territory, and the District of Columbia.
2. Focus the students' attention on the volcano on the quarter image. Discuss the different parts of a volcanic explosion (steam rising, lava flowing, rock flying, etc.). Display an ice cube. Discuss how an ice cube feels (hard). Lead the students to determine that the ice cube is water that is solid. Ask students to predict what would happen to the ice cube if it was left out of the freezer. Discuss what a liquid is. Display water that has been heated and discuss what steam is.
3. Read a text that gives information about the three forms of matter (solid, liquid, and gas). Discuss with the students examples of the three forms of matter. Visit the Kamoamoa Fissure Eruption video (link below) and identify the three different forms of matter found at the volcano eruption. Using the "Form Matters!" worksheets, have the students create a volcano, labeling the elements. You can display the quarter design as an example.
4. Make gelatin with the class, identifying the gelatin mix (solid), boiling water (liquid), steam (gas), and congealed gelatin (solid).



ASSESSMENT IDEAS

- Review completed and labeled volcano diagrams for understanding of the lesson objectives.
- Have students present the volcano project to a partner from a different class.
- Have students draw and label the gelatin ingredients as solid, liquid, or gas.



Forms Matter!



RESOURCES

- “Hawai’i Volcanoes National Park Quarter” page
- “Form Matters! Pictures” worksheet
- “Form Matters! Words” worksheet
- America the Beautiful Quarters® Program: www.usmint.gov/kids/teachers/lesson-Plans/atb/
- National Park Service: www.nps.gov
- Hawai’i Volcanoes National Park: www.nps.gov/havo/index.htm
- Kamoamoa Fissure Eruption video at Hawai’i Volcanoes National Park: www.nps.gov/havo/photosmultimedia/napau.htm (QuickTime Link)
- Hawai’i Volcanoes National Park volcano image: www.nps.gov/havo/planyourvisit/lava2.htm

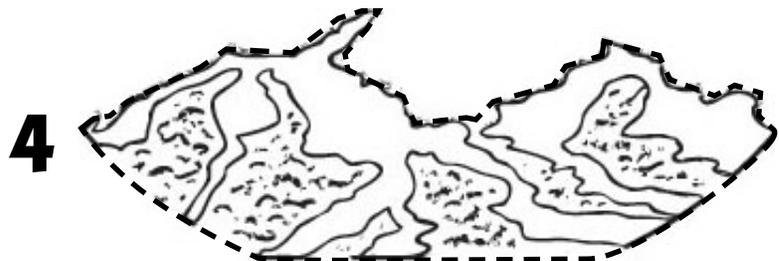
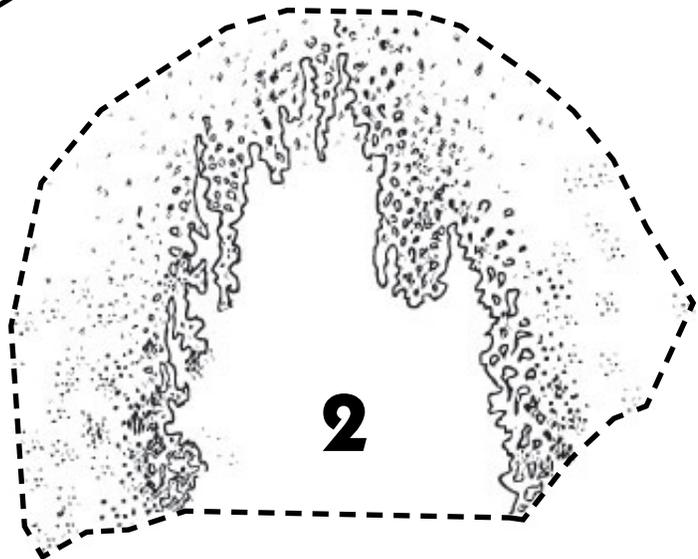
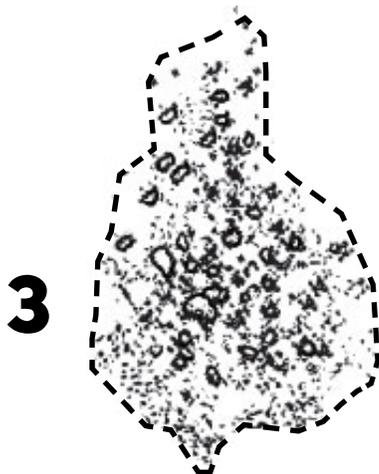
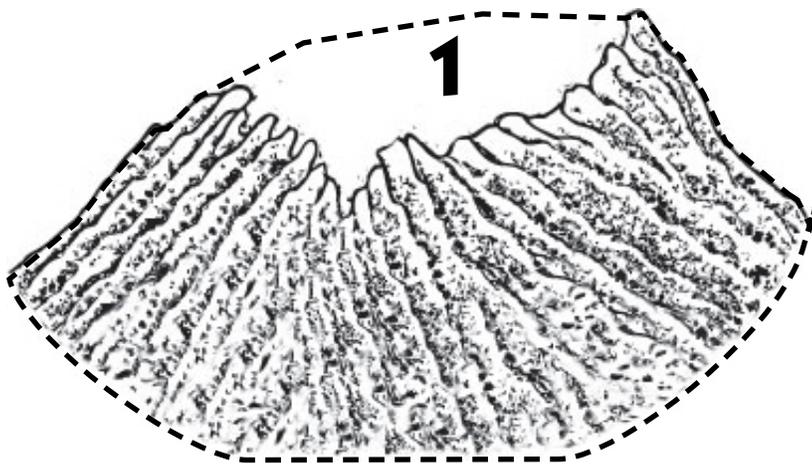


Name _____

Form Matters!

Pictures

Directions: Color and cut out each picture below. Paste the pictures onto a separate piece of paper in order to make a volcano. Then trace the words and forms of matter on the other worksheet and paste them near their pictures.





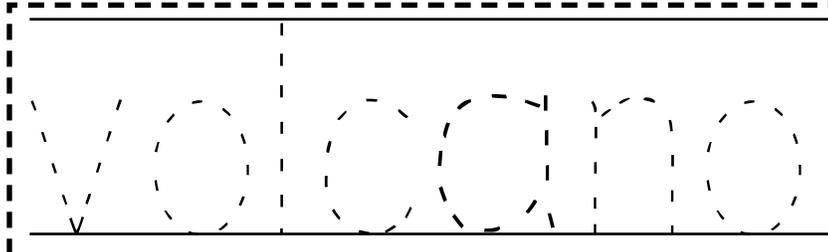
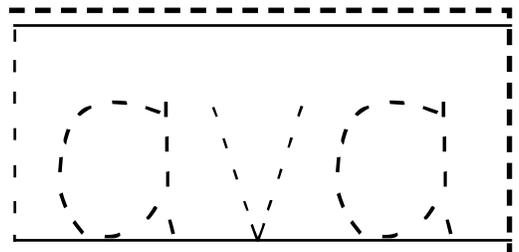
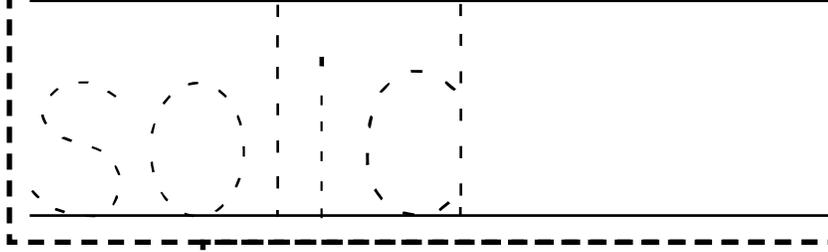
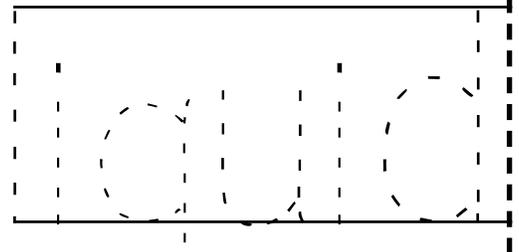
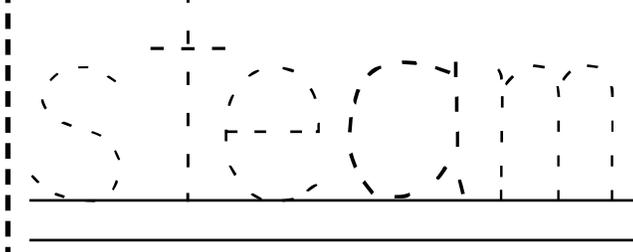
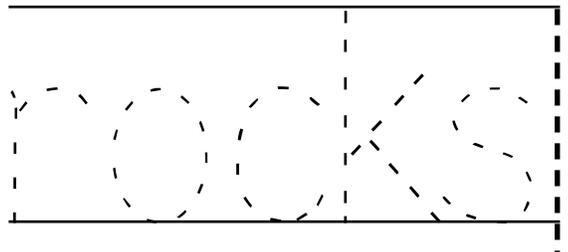
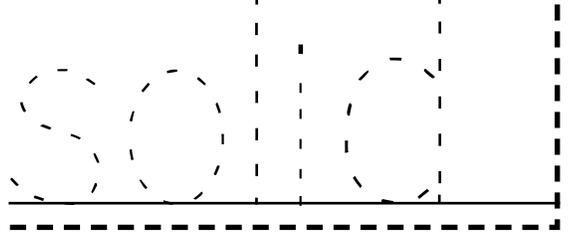
Name _____

Form Matters!

Words

Directions: After you color and cut out the pictures on the other worksheet and paste them onto a separate piece of paper to make a volcano, trace the words and forms of matter below and paste them near their pictures.



 volcano	 volcano
 solid	 solid
 solid	 solid
 solid	 solid



Hawai'i Volcanoes National Park Quarter



The United States of America

