

Unit
3Handout
104*Lesson 12: Investigating Viscosity and Volcano Analysis***Purpose:**

Design an experiment to identify and compare how three different liquids flow, how liquids flow when mixed with a solid, and how their flow changes when heated.

Guiding**Questions:**

- How does the viscosity of a liquid affect its movement?
- How is the viscosity of lava related to the type of volcano formed?

1. Which room-temperature liquid flowed the fastest? _____
2. Which room-temperature liquid flowed the slowest? _____
3. What evidence do you have to support your answers to questions 1 and 2? Cite specific data to support your claim.

4. How did adding sand to each liquid change how it flowed? Support your answer with evidence.

5. How did heating each liquid change how it flowed? Support your answer with evidence.

6. What is the connection between the viscosity of liquid and how that liquid flows?

7. Write a definition of the term viscosity based on what you have learned in this activity.

8. Look at your volcano cards. What is the shape of a volcano that forms from fast-flowing lava? Which volcano cards show this type of volcano?

9. What is the shape of a volcano that forms from viscous, slow-moving lava? Which volcano cards show this type of volcano?