

Purpose: Model the movement of molten rock through fractures in the lithosphere, over the earth's surface, and under water.

Guiding Questions:

- How does molten rock cause and affect landforms?
- How does molten rock respond to environmental factors?

Instructions. Answer the following questions. Use your observations from the previous handout to assist you.

1. What signs in the soil indicated that magma was moving under the ground?
2. How might the signs help scientists predict a volcanic eruption?
3. How does rising magma affect land with no hard rock above it?
4. What happened when the room-temperature model magma reached the surface of the soil?
5. How did the flow of the room-temperature model magma differ from the flow of the heated model magma?

6. What happened to the soil when you drained the heated magma from it?
7. Look at figure 11.7 on page 150. Apply what you have learned in this activity to that image. Read the caption. Describe how that formation was created. (Tip: think about the "cold" magma vs. the "hot" magma we used in the model.)
8. Look at figure 11.10 on page 152. Just as you did in question 7, read the caption and connect this to what we did in class. Describe how that formation was created.