

Unit 3 Handout 100

Lesson 11: Investigating Lava and New Landforms Analysis

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. Describe the movement of the melted wax on the slope. How did that movement differ from the movement on the flat part of the waxed paper?

2. Describe the texture of the cooled wax. Compare this to the wax block.

3. How did the behavior of the cooling wax on the waxed paper compare with its behavior in the water?

4. How do you think lava forms rock?

5. How do you think volcanic mountains (such as Mt. St. Helens) and volcanic islands (such as Hawaii and Iceland) form?

6. Under what circumstances do you think lava flows into the ocean?
7. What happens to lava when it flows into the ocean or erupts onto the ocean floor?
8. Look at figure 11.11 on page 153. Read the caption. Describe what is happening in the figure and connect it to what you did in this activity.
9. Look at figure 11.12 on page 153. Read the caption and describe what is happening in the figure. Connect it to what you did in this activity.