Name _____

Date _____

Lesson Quick Study

Lesson 3 - How Do Movements of the Crust Change Earth?

1. Inquiry Skill Practice–Model

You can simulate a volcano with slow-flowing lava by using maple syrup. What would you use to simulate a fast-flowing lava volcano? Circle the best answer. Explain your reasoning.

The orange juice would be best because it flows quicker.

molasses
whipped cream
orange juice
glue

2. Use Vocabulary

Match the clue to the simple machine.

B	a break in Earth's crust	**A.** lava
A	molten rock that flows out of a vent and arrives at Earth's surface	**B.** fault
D	the point on Earth's surface that is directly above where an earthquake's energy is released	**C.** magma
C	molten rock under Earth's surface	**D.** epicenter

3. Focus Skill Reading Skill Practice–Cause and Effect

Read the selection. Describe the cause and effect.

Plates surrounding the North American plate moved toward each other. These plates pushed together with enormous pressure. This pressure snapped a block of rock in the middle of the North American plate. Then this rock was forced straight up from the flat, surrounding land and became the mountain peak we now call the Grand Teton.

Cause: Plates pushed together with enormous pressure.

Effect: A block of rock in the middle snapped and rose up.

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4. Cause and Effect

Complete the graphic organizer below.

Cause	Effect
Plates on Earth's crust push together or scrape past each other.	A Energy is suddenly released, and an earthquake occurs.
B Magma rises to the surface and flows out of a vent.	A volcano forms.
Plates push together.	C Gradually, mountains form.
Pressure is put on the sides of a plate.	D Mountains form in the middle of the plate.

5. Critical Thinking and Problem Solving

Suppose earthquakes happened for seven days in a row. The first reached 2.5 on the Richter scale. The remaining earthquakes rose on the scale by 0.3 each day. What did the last earthquake measure on the Richter scale? How did you get your answer?

The last earthquake measured 4.3. Possible answers: The first reached 2.5. There were six remaining. Multiply 6 by 0.3 and add 2.5, or add 0.3 six times to 2.5.

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