The Rock Cycle: Energy Flow

Show what you know about the rock cycle by answering the questions below.

1. Label the Diagram: Use the word bank to label the diagram below. You will write each of the vocabulary terms from the word bank once.

Crystallization Melting Metamorphism Weathering Weathering Weathering Weathering Sedimentation Sedimentation Metamorphic Rock Metamorphism Metamorphism

Sample Answers:

Word Bank

Crystallization

Sedimentation

Metamorphism

Metamorphic Rock

Sedimentary Rock

Igneous Rock

Weathering

Melting

- 2. Which processes in the rock cycle are powered by Earth's internal heat? Explain how you know.

 Melting, crystallization, and metamorphism are all powered by Earth's internal heat. Heat from
 the Earth's core causes magma to circulate under Earth's surface. This heat and movement is
 responsible for making all of these processes occur.
- 3. Several processes in the rock cycle, such as weathering and erosion, are not powered by Earth's internal heat. Where does the energy for these processes ultimately come from? Explain how you know.

 Processes that cause weathering and erosion, such as wind and rain, are powered by the sun.

The uneven heating of Earth's surface causes air to flow as wind and water to move through the water cycle. Wind and precipitation break down rock and move the pieces to different locations.