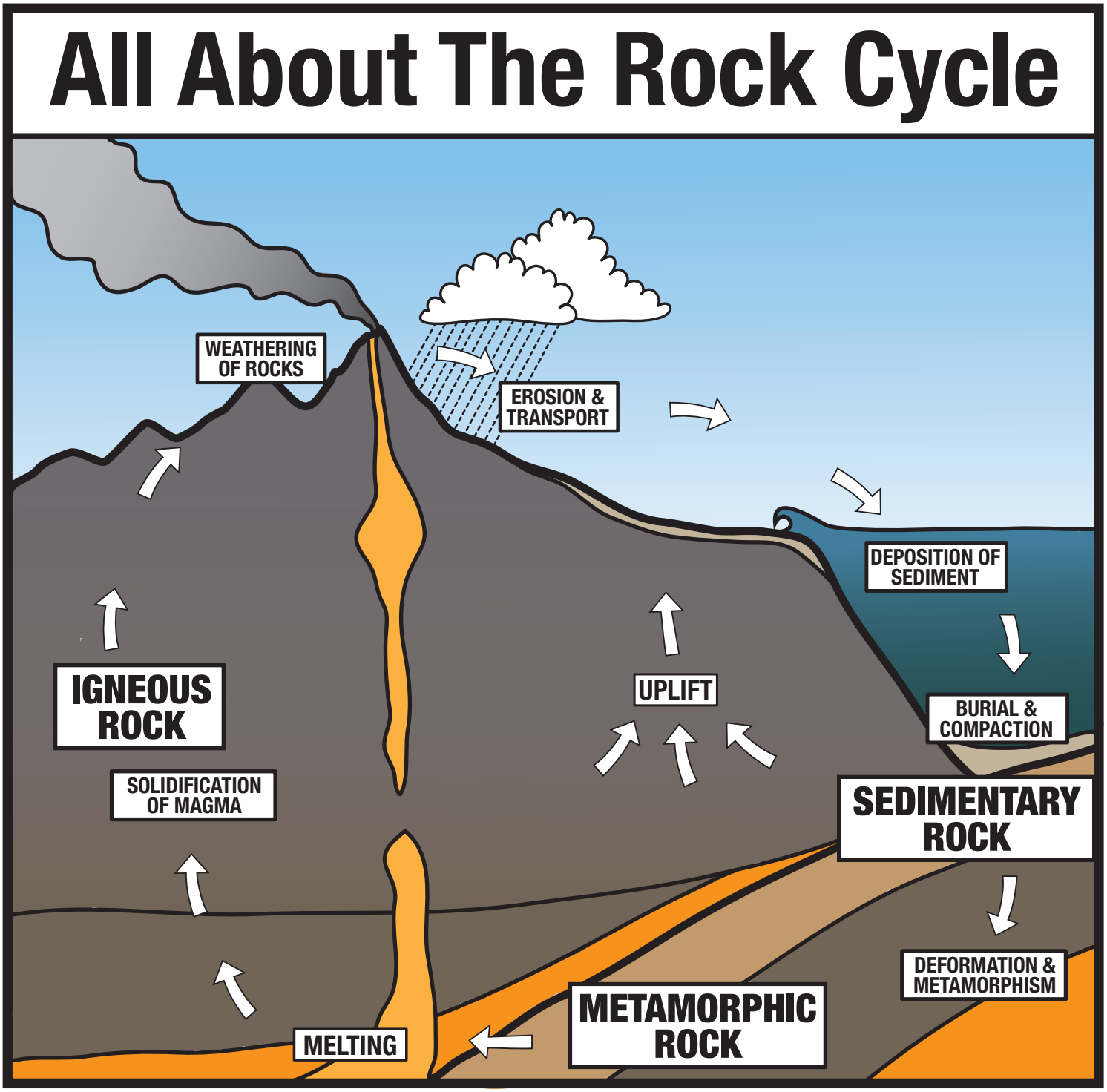
All About The Rock Cycle



The rock cycle describes the change and movement of materials on and inside the Earth. The cycle is essentially a loop; stating that materials are neither created nor destroyed, they only change form when the environment changes. Sediments eroded from solid rocks are transported to a new location; in this diagram, the sediments are carried into the ocean where they settle and compact. Sedimentary rocks are created at the end of this stage. As the sedimentary rocks are buried deeper and deeper, heat and pressure cause physical or chemical changes in the rock, and they change to metamorphic rock. When the rock is pushed deep into the Earth, they can melt into magma. Once this magma solidifies, either inside the crust or after being expelled by a volcano, they change to igneous rocks. Eventually the rocks are worn down through weathering, and the process begins anew with the erosion and transport of the new sediments.

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On page two of this worksheet, you will answer questions based on the information you read on page one.

Circle the best answer.

1. The Nile river carries sediments to the ocean. Over time, the sediments are compressed as more sediments are deposited on top of them. Which type of rock will be formed?

A. Sedimentary
B. Metamorphic
C. Igneous

2. The volcano Kilauea on the big island of Hawai'i is erupting and lava is ejected from the volcano vent. The lava solidifies to form what type of rock?

A. Sedimentary
B. Metamorphic
C. Igneous

3. Off the coast of the Pacific Northwest in the United States, the Pacific plate is being pushed underneath the North American plate in a subduction zone, caused by plate tectonics. As the rock from the Pacific plate is pushed under the North American plate, it is subjected to high temperatures and pressures. Which rock will be created from this process?

A. Sedimentary
B. Metamorphic
C. Igneous

4. In the Arizona desert, a sudden rainstorm washes sand and sediment into the Colorado river, which eventually deposits the sediments into the ocean. This process is called:

A. Erosion & Transport
B. Deposition
C. Weathering

5. In the desert, wind picks up and carries fine particles of sand and dirt. As the wind blows against the rocks, the particles rub against the rocks and wear them down in a process called:

A. Weathering
B. Transport
C. Erosion

6. Which one of the following is NOT one of the three types of rock?

A. Sedimentary
B. Lava
C. Metamorphic
D. Igneous

7. True or False? Magma is lava that has been ejected from beneath the Earth's crust through a volcano.

True
False