

Name: _____ Date: _____ Period: _____

The Rock Cycle Practice Worksheet

Instructions: Read each question carefully. For multiple choice, circle the letter of the best answer. For short answer, write your response in the space provided. For labeling, use the diagram as directed. Show all work where applicable.

1. Which of the following is NOT one of the three main types of rocks?
 - A. Igneous
 - B. Sedimentary
 - C. Metamorphic
 - D. Volcanic

2. What type of rock is formed from the cooling and solidification of magma or lava?
- A. Sedimentary
 - B. Igneous
 - C. Metamorphic
 - D. Fossilized

3. Describe how sedimentary rocks are formed. Include the role of weathering, erosion, deposition, compaction, and cementation in your answer.

4. Which process changes sedimentary rock into metamorphic rock?
- A. Melting and cooling
 - B. Weathering and erosion
 - C. Heat and pressure
 - D. Compaction and cementation

5. Label the rock cycle diagram below with the following terms: **Igneous Rock, Sedimentary Rock, Metamorphic Rock, Magma, Weathering & Erosion, Heat & Pressure, Melting, Cooling, Compaction & Cementation.**

[Diagram Placeholder: Draw a circular diagram with arrows]

Write your labels here (list the term next to the correct arrow or box number):

6. What is the process called when rocks are broken down into smaller pieces by wind, water, or ice?
- A. Deposition
 - B. Erosion
 - C. Weathering
 - D. Melting

7. True or False: Metamorphic rocks can only form from sedimentary rocks.

8. Explain what happens to a rock during the process of melting in the rock cycle. Where does this typically occur?

9. Which of the following is an example of an igneous rock?

- A. Limestone
- B. Granite
- C. Marble
- D. Shale

10. List the three main types of rocks and give one example of each.

Answer Key

1. **D. Volcanic** — The three main types are igneous, sedimentary, and metamorphic. Volcanic is not a rock type; it describes a process or origin.
2. **B. Igneous** — Igneous rocks form from the cooling and solidification of magma (underground) or lava (above ground).
3. **Sedimentary rocks form through weathering (breaking down rocks), erosion (transporting particles), deposition (settling), compaction (layers pressed together), and cementation (minerals bind particles).**
4. **C. Heat and pressure** — Heat and pressure deep underground change sedimentary rock into metamorphic rock.
5. **Labels (clockwise from top): Magma → Cooling → Igneous Rock → Weathering & Erosion → Sediment → Compaction & Cementation → Sedimentary Rock → Heat & Pressure → Metamorphic Rock → Melting → back to Magma.** (Accept reasonable variations.)
6. **C. Weathering** — Weathering is the breaking down of rocks. Erosion is the movement of broken pieces.
7. **False** — Metamorphic rocks can form from any rock type (igneous, sedimentary, or other metamorphic rocks) when subjected to heat and pressure.
8. **Melting occurs when a rock is heated to a high enough temperature to turn into liquid magma. This typically happens deep within the Earth's crust or mantle, often near tectonic plate boundaries or hotspots.**
9. **B. Granite** — Granite is an igneous rock. Limestone is sedimentary, marble is metamorphic, and shale is sedimentary.
10. **Igneous (e.g., granite), Sedimentary (e.g., limestone), Metamorphic (e.g., marble).** (Accept other correct examples.)