

Rock Cycle Path

Trace how rock materials change over time.

6.10 "Earth and space. The student understands the rock cycle and the structure of Earth. The student is expected to: differentiate between the biosphere, hydrosphere, atmosphere, and geosphere and identify components of each system..."

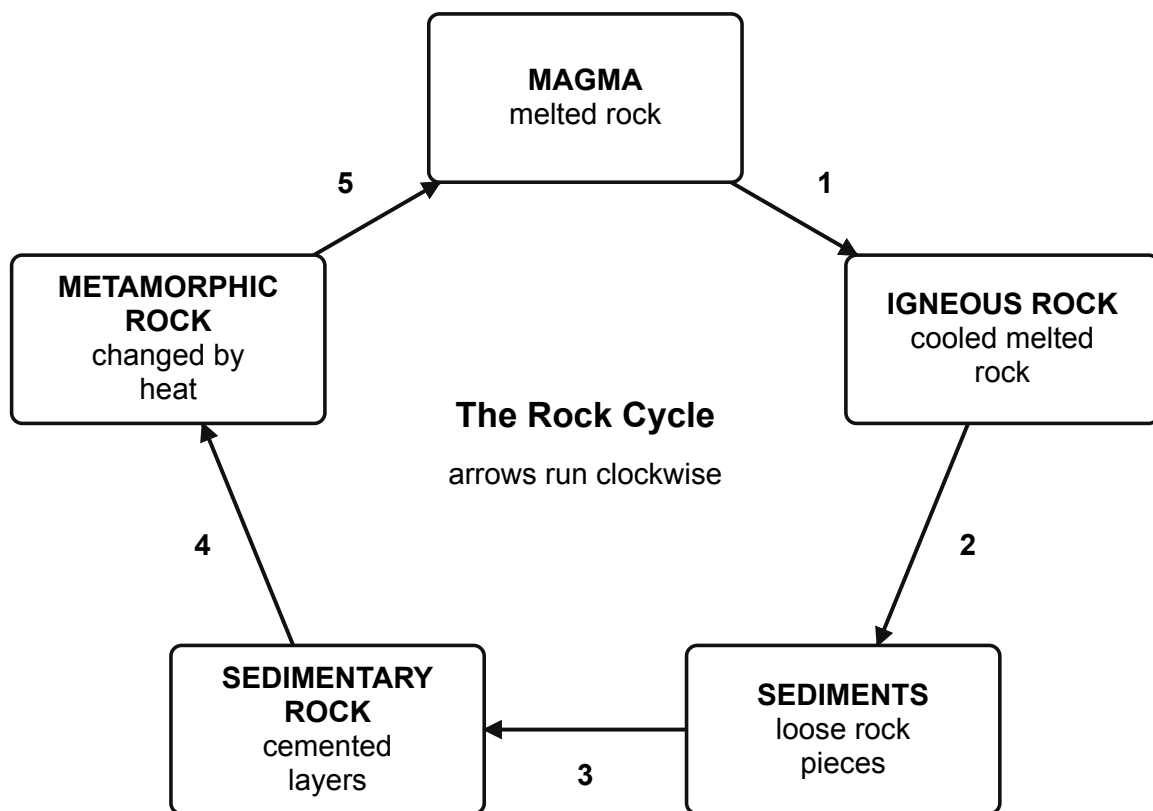
NAME _____

DATE _____

1 LABEL THE MODEL _____ Word bank below

Follow the arrows around the model. Write one process from the word bank in each numbered box.

WORD BANK	compaction and cementation	cooling and crystallization	heat and pressure
	melting	weathering and erosion	



Arrow numbers match the response boxes on the next student section.

Label the arrows

Use the word bank to write the process for each numbered arrow.

Arrow 1

Arrow 2

Arrow 3

Arrow 4

Arrow 5

2 RUN THE MODEL _____ Use your finished diagram

1 Which process changes sediments into sedimentary rock?

2 What process happens to metamorphic rock before magma forms?

3 Which type of rock forms after magma cools and crystallizes?



CHECK IT

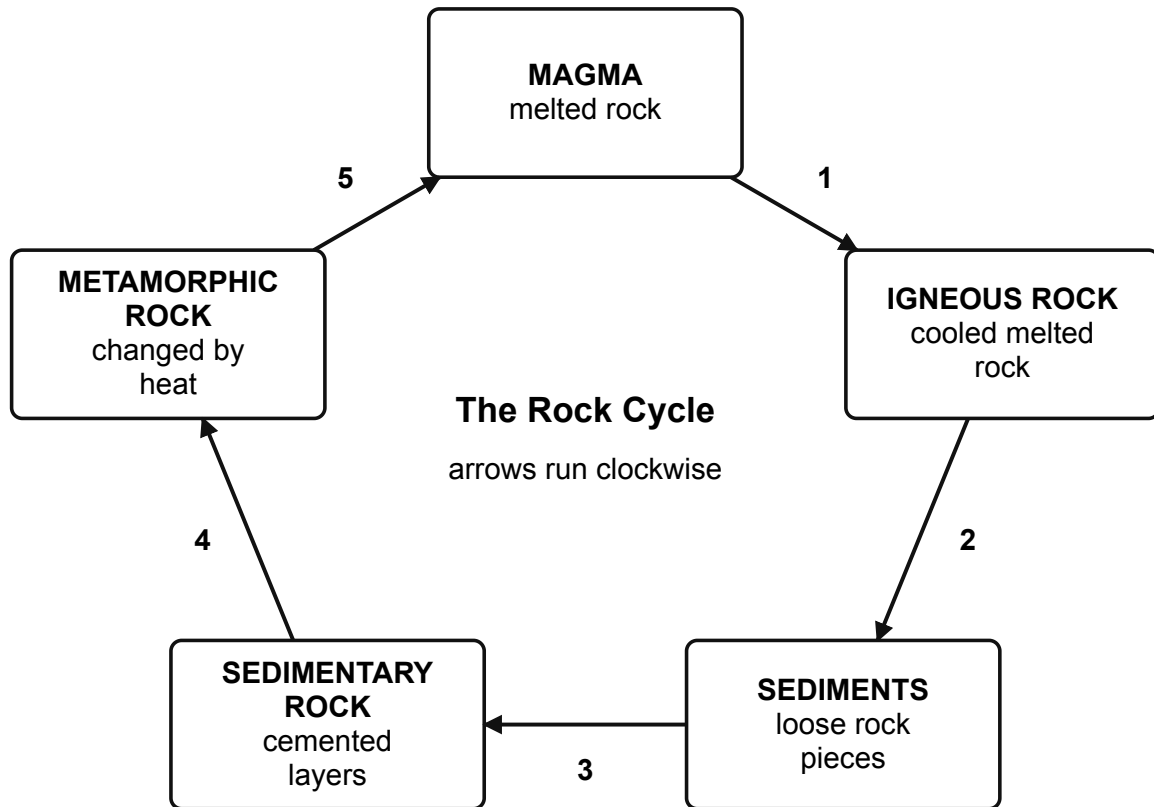
Before you turn it in

- ☐ I can trace the cycle in order.
- ☐ I can name each process on an arrow.
- ☐ I can explain how one rock type changes.

TEST THE MODEL

What is one way the real rock cycle can change that this model does not show?

PART 1 • COMPLETED MODEL

**Arrow 1**

cooling and crystallization

Arrow 2

weathering and erosion

Arrow 3

compaction and cementation

Arrow 4

heat and pressure

Arrow 5

melting

PART 2 • RUN THE MODEL

1. **Compaction and cementation.** (Which process changes sediments into sedimentary rock?)
2. **Melting.** (What process happens to metamorphic rock before magma forms?)
3. **Igneous rock.** (Which type of rock forms after magma cools and crystallizes?)

TEST THE MODEL (SAMPLE ANSWERS)

- A rock can weather into sediments from more than one stage in the cycle.
- Rocks can be moved by plate tectonics before they change.

The model shows one simplified path through the rock cycle. In nature, rocks can follow multiple pathways, and processes may occur over very long periods of time.