Rock Cycle Route

Trace how rocks form and change.

S6E5.c "Construct an explanation of how to classify rocks by their formation and how rocks change through geologic processes in the rock cycle."

NAME _____ DATE _____

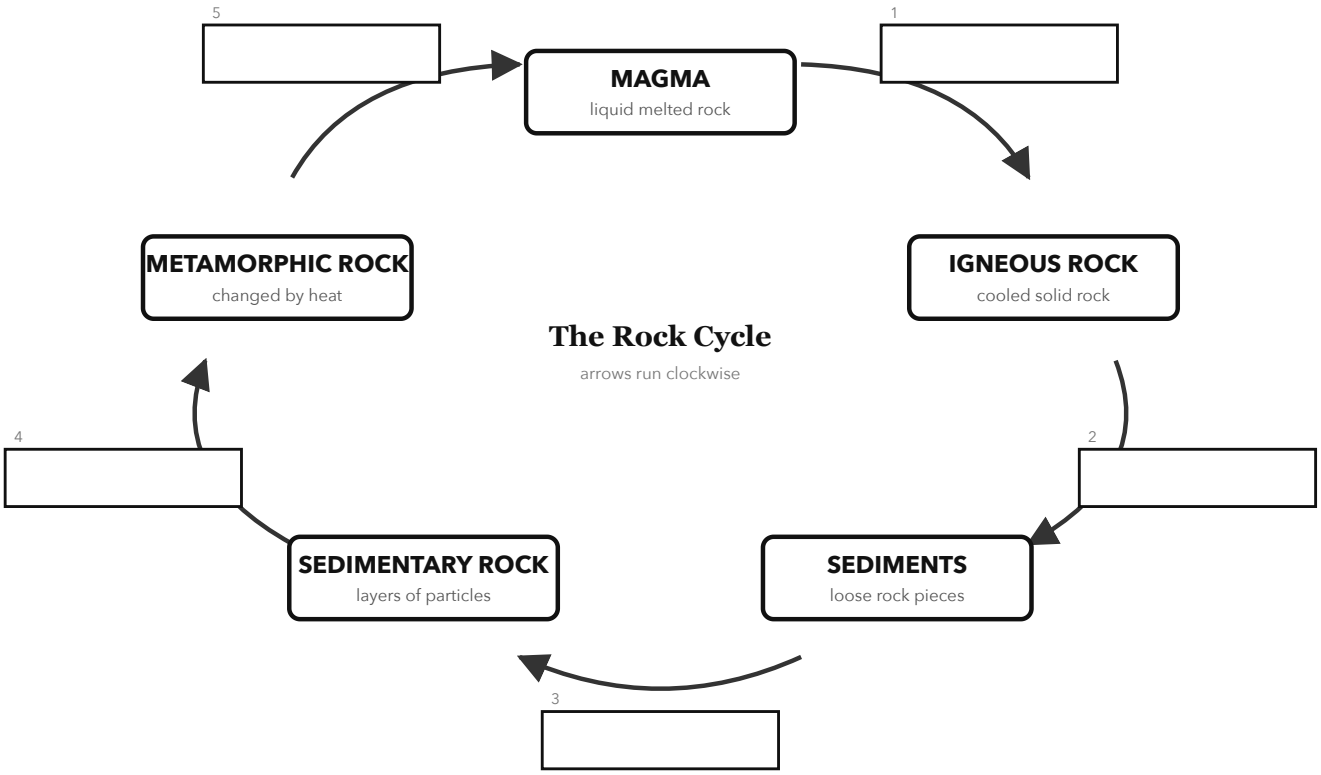
1 LABEL THE MODEL

Word bank below

Complete the cycle model. Write one process from the word bank in each numbered box on the arrow leading to the next stage.

WORD BANK

- compaction and cementation
- cooling and crystallization
- heat and pressure
- melting
- weathering and erosion



2 RUN THE MODEL

Use your finished diagram

1. Which process changes sediments into sedimentary rock?

2. What stage comes after metamorphic rock when melting occurs?

3. Which rock type forms when magma cools and crystallizes?

3 CHECK IT

Before you turn it in

- [ ] I can name rock-forming processes.
- [ ] I can trace the rock cycle.
- [ ] I can classify rocks by formation.

TEST THE MODEL

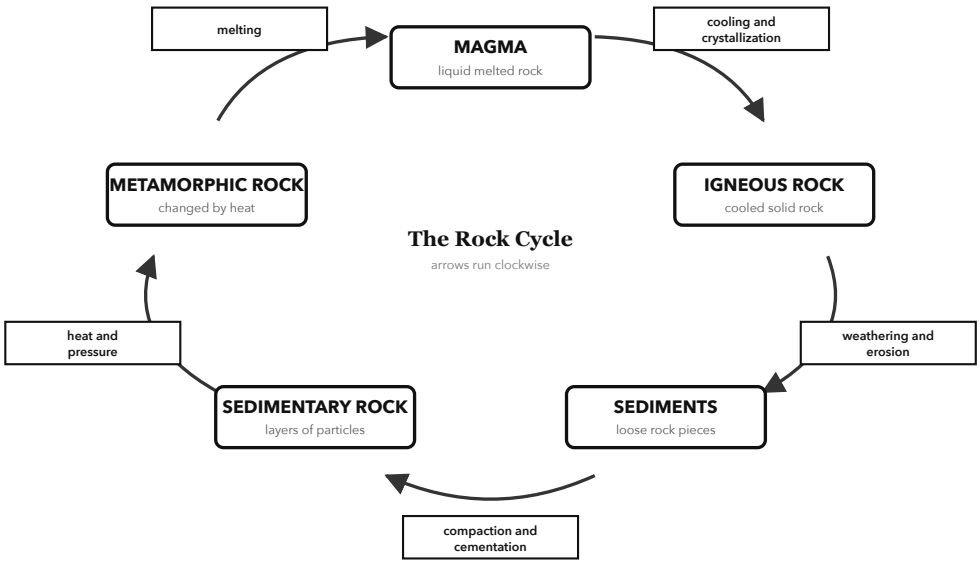
What is one way the real rock cycle can change that this model does not show?

ANSWER KEY

Rock Cycle Route

GRADE 6 · S6E5.c

PART 1 · COMPLETED MODEL



PART 2 · RUN THE MODEL

1. **Compaction and cementation.** (Which process changes sediments into sedimentary rock?)
2. **Magma.** (What stage comes after metamorphic rock when melting occurs?)
3. **Igneous rock.** (Which rock type forms when magma cools and crystallizes?)

TEST THE MODEL (SAMPLE ANSWERS)

- The model does not show sedimentary rock weathering into sediments.
- The model does not show metamorphic rock being uplifted and weathered into sediments.

Place the processes in order around the arrows: cooling and crystallization, weathering and erosion, compaction and cementation, heat and pressure, melting. Explain that real rocks can follow more than one path through the rock cycle.