

Rock Cycle Route

Trace how rocks change over time.

6.10.C "describe how metamorphic, igneous, and sedimentary rocks form and change through geologic processes in the rock cycle."

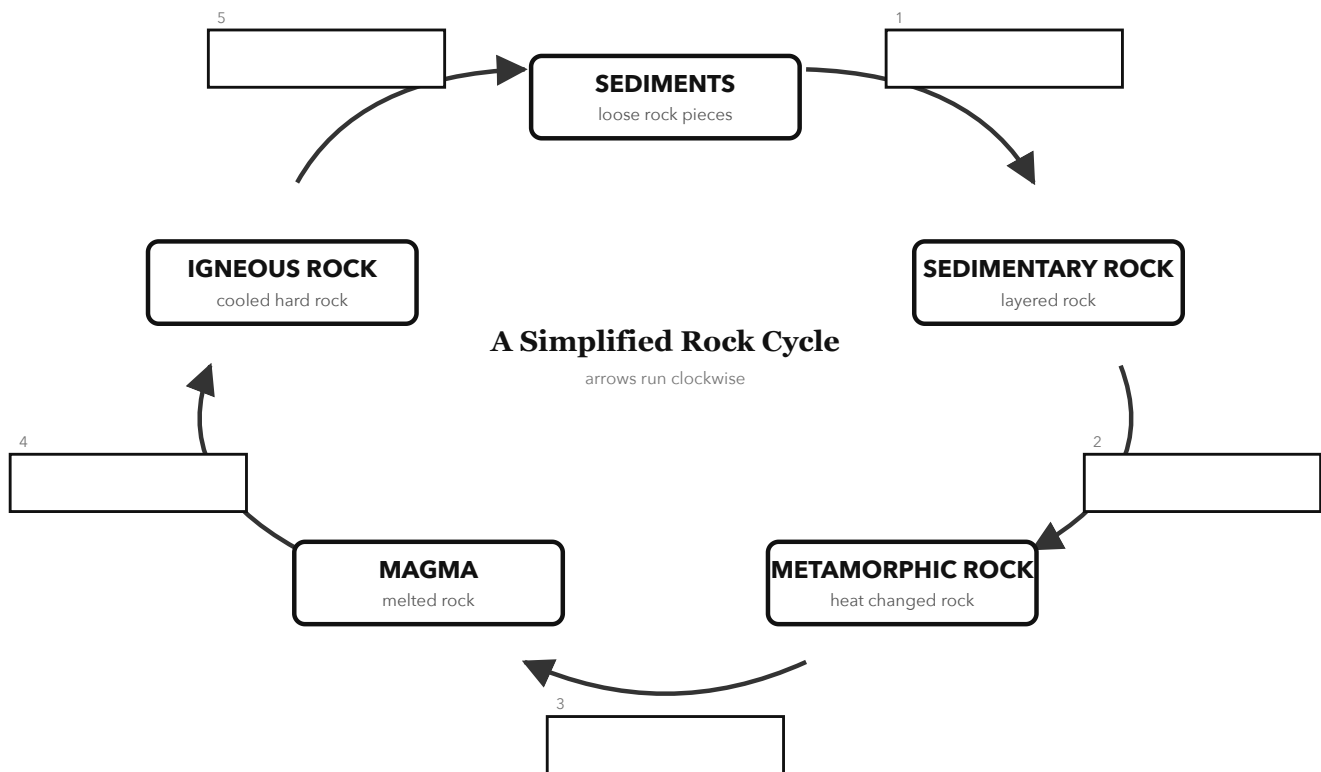
NAME _____

DATE _____

1 LABEL THE MODEL _____ Word bank below

Write one process from the word bank in each numbered box. Use each process once to show how one stage changes into the next.

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 METAMORPHIC ROCK into MAGMA?

2 After IGNEOUS ROCK is weathered and eroded, what stage comes next?

3 Which stage forms after compaction and cementation?

3 CHECK IT _____ Before you turn it in

☐ I used each process once.

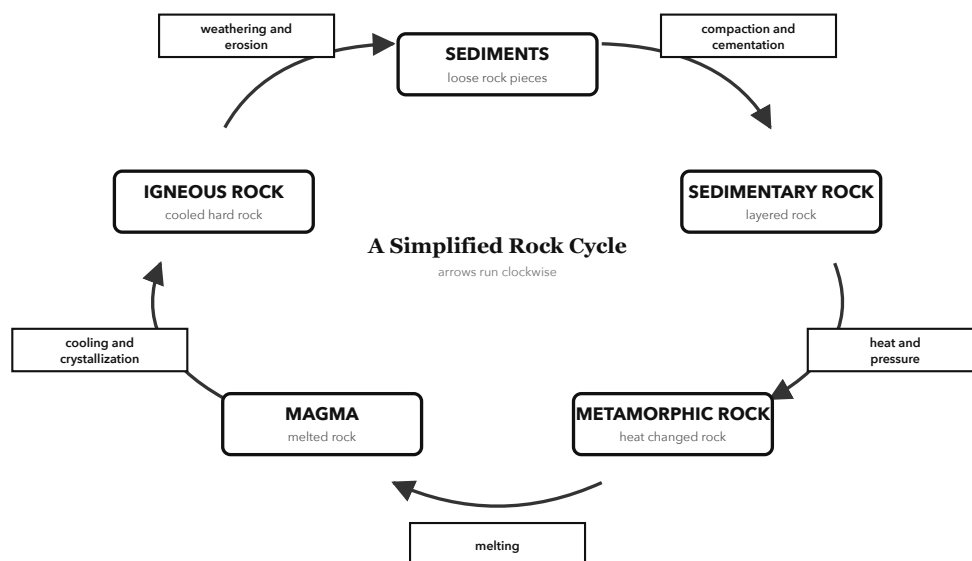
☐ I checked the direction of each arrow.

☐ I can trace the full cycle.

TEST THE MODEL

Name one rock change that this model does not show directly.

PART 1 • COMPLETED MODEL



PART 2 • RUN THE MODEL

1. **melting** (Which process changes METAMORPHIC ROCK into MAGMA?)
2. **SEDIMENTS** (After IGNEOUS ROCK is weathered and eroded, what stage comes next?)
3. **SEDIMENTARY ROCK** (Which stage forms after compaction and cementation?)

TEST THE MODEL (SAMPLE ANSWERS)

- Metamorphic rock can be weathered into sediments.
- Sedimentary rock can melt into magma.

Arrow order from SEDIMENTS is compaction and cementation, heat and pressure, melting, cooling and crystallization, and weathering and erosion. Accept equivalent scientifically accurate wording for each process.