

Rock Change Loop

Complete a model of rock transformations.

5.8.c "the rock cycle models the transformation of rocks;"

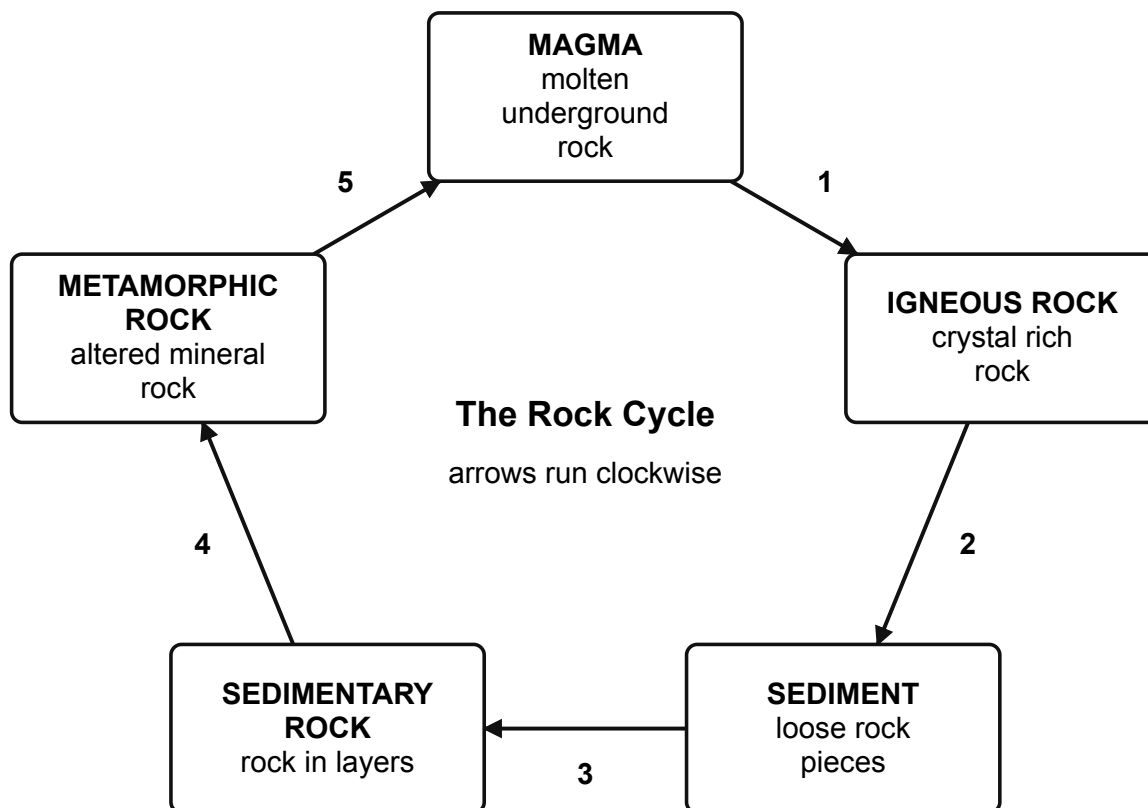
NAME _____

DATE _____

1 LABEL THE MODEL _____ Word bank below

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

WORD BANK	compaction and cementation	cooling and crystallizing	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 sediment into sedimentary rock?

2 What stage forms after heat and pressure?

3 Starting with magma, what are the next two stages in the model?



CHECK IT

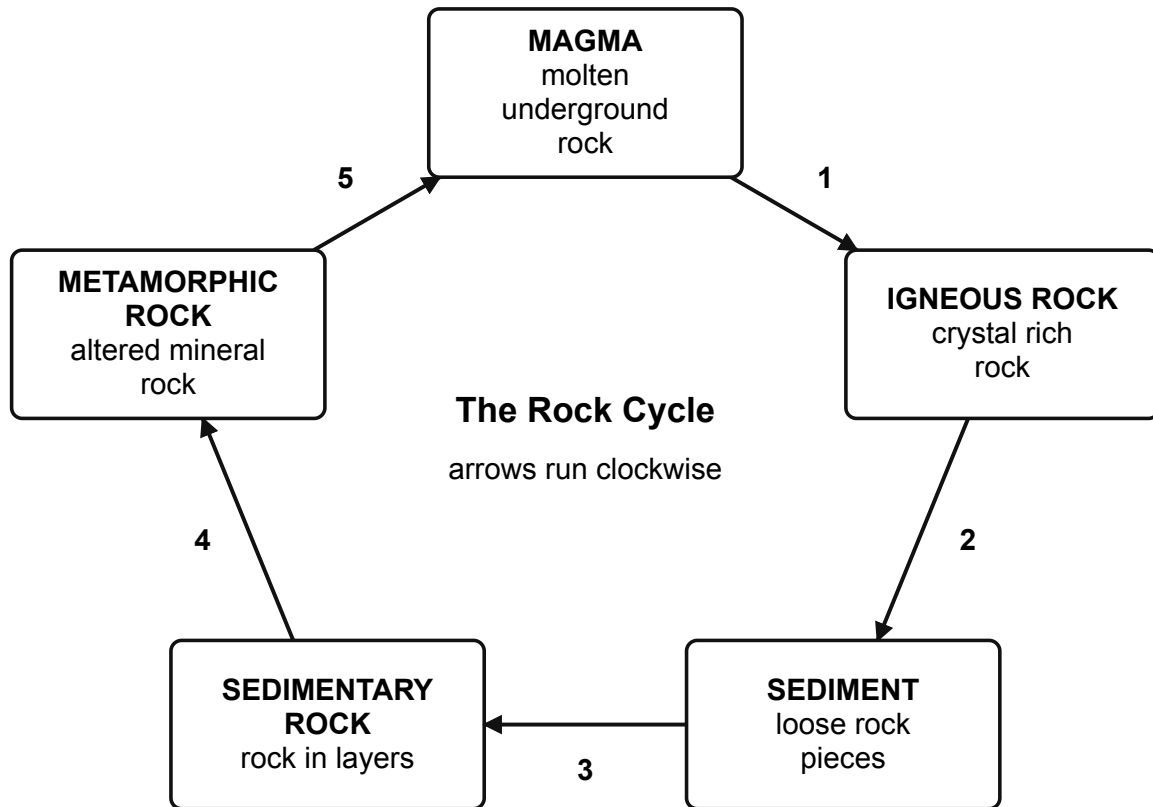
Before you turn it in

- ☐ I wrote one process in every box.
- ☐ I followed the arrows around the cycle.
- ☐ I checked that each process matches its stages.

TEST THE MODEL

What is one rock change or detail that this model leaves out?

PART 1 • COMPLETED MODEL

**Arrow 1**

cooling and crystallizing

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 sediment into sedimentary rock?)
2. **Metamorphic rock.** (What stage forms after heat and pressure?)
3. **Igneous rock, then sediment.** (Starting with magma, what are the next two stages in the model?)

TEST THE MODEL (SAMPLE ANSWERS)

- It leaves out igneous rock changing directly into metamorphic rock.
- It leaves out how water, wind, and ice move sediment.

Accept only the listed process on each arrow. The model is a simplified loop, while real rocks can follow more than one pathway.