Lesson 1 Rocks and the Rock Cycle

Scan *Lesson 1. Read the lesson titles and bold words. Look at the pictures. Identify three facts you discovered about the rock cycle. Record your facts in your Science Journal.*

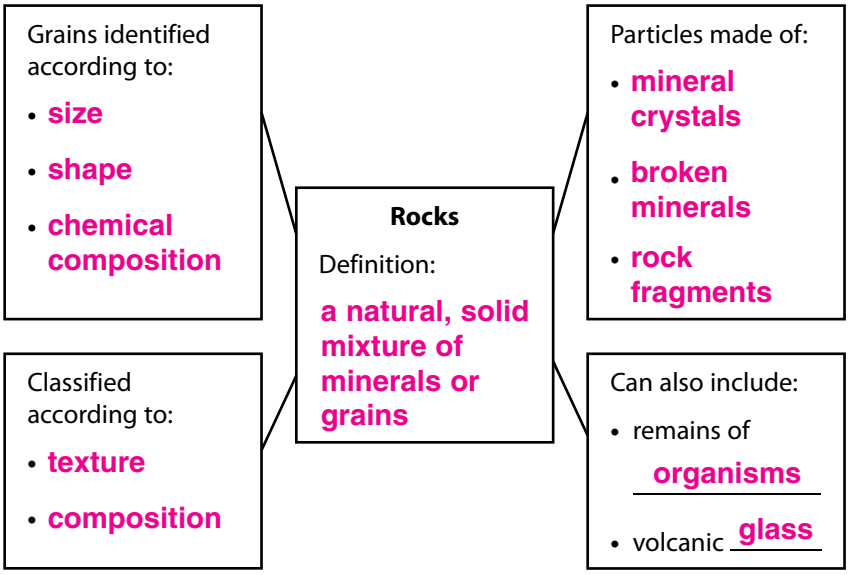
Main Idea

Rocks

I found this on page 111.

Details

Organize *information about* rocks.



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Point out *two observations scientists use to classify* rocks.

1. texture: grain size and the way grains fit together in a rock
2. composition: the type of grains present in a rock; gives clues as to where the rock formed

Three Major Rock Types

I found this on page 113.

Identify *the 3 major groups of* rocks.

1. igneous
2. metamorphic
3. sedimentary

I found this on page 113.

Sequence *how igneous* rocks *form.*

Magma or lava, or molten rock, cools.

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Mineral crystals form.

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The crystals become the grains in an igneous rock.

Main Idea

Details

I found this on page 113.

Point to *four forces that cause* rocks *on Earth's surface to break down.*

1. wind
2. running water
3. ice
4. gravity

I found this on page 113.

Explain sediment.

Sediment: rock material that forms where rocks are broken down into smaller pieces or dissolved in water as rocks erode

I found this on page 113.

Identify *the building blocks of sedimentary* rocks.

sediments, which include rock fragments, mineral crystals, or remains of organisms

I found this on page 114.

Analyze *the cause-and-effect relationships that cause metamorphic* rocks *to form.*

Cause	Effect
Preexisting rock exposed to: a. extreme temperature b. extreme pressure c. chemical fluids	Rock changes: a. composition b. textures

I found this on page 114.

Define rock cycle.

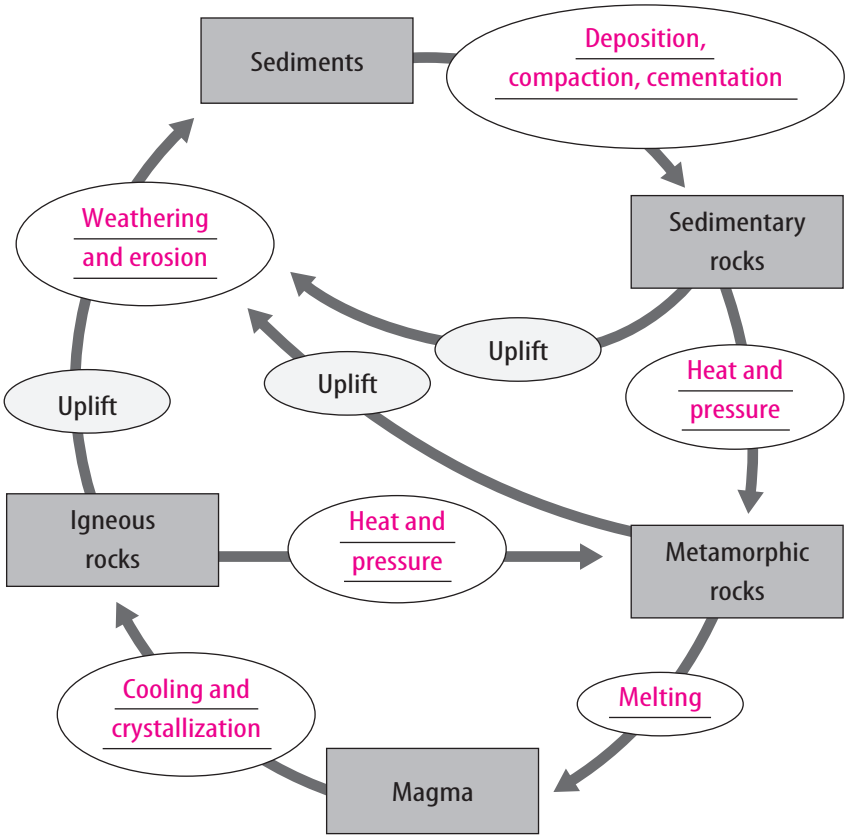
The rock cycle is a series of processes that change one type of rock into another type of rock.

Main Idea

I found this on page 115 .

Details

Label *the* rock cycle. *Identify and label the missing processes.*



Synthesize It Rocks are constantly undergoing processes that change them from one kind of rock into another. Explain, in your own words, how a metamorphic rock can change into an igneous or sedimentary rock.

Accept all reasonable responses. Sample answer: If a metamorphic rock is subjected to heating to the point of melting, it can become part of magma, which can cool, crystallize, and form an igneous rock. If the rock is exposed at Earth's surface over time, it will begin to erode and form sediments. Those sediments might form sedimentary rock.