

Standards Review

Rocks -S6E5. Students will investigate the scientific view of how the earth's surface is formed.

c. Classify rocks by their process of formation.

1. Which of these BEST describes the concept of the rock cycle?

- A. Sedimentary rocks may be re-melted several times
- B. Rocks move in circles on the earth as the earth rotates
- C. Rocks can be moved from place to place on the earth without changing
- D. Rocks are continually changing, and any type of rock may be transformed into another type by appropriate processes

3. Scientists learn about the temperature and pressure near the Earth's core by studying _____ rock.

- A. compacted
- B. igneous
- C. metamorphic
- D. sedimentary

2. . Most fossils are found in what type of rock?

- A. igneous
- B. lava
- C. metamorphic
- D. sedimentary

Rock Name	Description
Granite	Intrusive igneous
Pumice	Extrusive igneous
Phyllite	Foliated metamorphic
Marble	Unfoliated metamorphic

4. According to the table, the rock MOST LIKELY found floating in the water after the eruption of Krakatoa Volcano would be

- A. granite
- B. marble
- C. phyllite
- D. pumice

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1. Under what conditions can igneous rock be transformed into metamorphic rock?
 - A. If it is forced deep into Earth, where it melts into magma
 - B. If it is heated and put under pressure for long periods of time
 - C. If layers of sand accumulate over it and harden over a period of time
 - D. If it is exposed at the surface and is weathered over a period of time

3. Identify the next step in this sequence of events that occurs in the formation of rock: buried, compacted, heated and _____.
 - A. buried
 - B. eroded
 - C. deposited
 - D. recrystallized

2. Molten hot lava that cools very slowly can cause _____ in igneous rock.
 - A. Mineral layering
 - B. Glass-like formations
 - C. Settling of precious metals
 - D. The formation of large crystals

4. Describe how a metamorphic rock might become a sedimentary rock over time.
 - A. Metamorphic rock melts, cools, and undergoes recrystallization.
 - B. Metamorphic rock is intruded by igneous rock and it melts, cools, and becomes solid again.
 - C. Metamorphic rock undergoes weathering, erosion; the particles are deposited and undergo lithification.
 - D. Metamorphic rock is buried deep in the Earth. It undergoes recrystallization and is then uplifted to the surface.

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1. The process of deposition causes

- A. Rock and soil to slowly be lost.
- B. Rock and soil to quickly be lost.
- C. Rock and soil to slowly be gained.
- D. Rock and soil to quickly be gained.



2. Igneous rock is formed by the cooling and solidifications of molten Earth. Materials, Igneous rock forms when magma or lava cools. If igneous rock forms above ground after a volcanic eruption, it _____ forming _____ igneous rock, such as obsidian which is a naturally occurring volcanic glass.

- A. Cools quickly, extrusive
- B. Cools quickly, intrusive
- C. Cools slowly, extrusive
- D. Cools slowly, intrusive

3. The texture of an igneous rock is a very important to a geologist because

- A. The texture can be used to calculate the age to the rock.
- B. The texture can be used to predict future igneous activity
- C. The texture can be used to give a geologist clues to the rock's origin.
- D. The texture can be used to calculate the probability of seismic activity.

4. . Which of the following is the youngest classification of rock?

- A. igneous
- B. metamorphic
- C. mineralized
- D. sedimentary

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d. Describe processes that change rocks and the surface of the earth.

1. Limestone caves are MOST LIKELY formed by

- A. earthquake
- B. wind erosion
- C. small volcanoes
- D. Acidic groundwater

3. Small islands can form during the constructive process called

- A. erosion
- B. glaciation
- C. deposition
- D. weathering

2. Weathering is a process that helps make soil. All but one statement describes how rocks may be weathered. That is:

- A. Water fills tiny spaces inside a rock.
- B. Rock pieces are moved from place to place.
- C. Strong winds can blow small grains from the surface of rocks.
- D. Living things, like moss and lichens, chemically break down rocks.

4. A huge, jagged rock sits atop a windy cliffside. Over a period of many years, how will the rock MOST LIKELY change?

- A. It will become larger and smoother
- B. It will become smaller and smoother
- C. It will become bigger and less smooth
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1. Gravity can cause hillsides to crumble and fall. New landforms develop at the bottom of mountains and hills. What causes this new landform?

- A. earthquakes
- B. landslide
- C. volcano
- D. faulting

3. Describe the major processes of the rock cycle.

2. When you think of a volcano, you think about how they can be very destructive. They are, after all, natural disasters. However, volcanoes can have constructive consequences. One example of volcanoes as a constructive process would be a volcano eruption

- A. spewing hot lava.
- B. Forming an island.
- C. Starting an avalanche.
- D. Covering the land with ash.

4. How do rocks differ from minerals?

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3. Describe the major processes of the rock cycle.

Weathering breaks down rock; erosion and deposition transport and deposit the sediment, which is compacted and cemented into new rock; pressure and heat inside Earth change rock from one form to another. Magma from melting of preexisting rock solidifies to form igneous rock.

4. How do rocks differ from minerals?

Minerals are naturally forming occurring crystalline solids with definite chemical composition.

Rocks most often are mixtures of more than one mineral or other natural material.