Menu

- Igneous rocks form from molten rock that cools and crystallizes.
- Sedimentary rocks form from compaction and cementation of sediments or evaporation and crystallization of minerals dissolved in water.
- Metamorphic rocks form from exposure of existing rocks to high pressures, temperatures, or the addition of chemical fluids.

Lesson 1: Rocks and the Rock Cycle

- There are three major rock types—igneous, sedimentary, and metamorphic. Geologists study rock texture and mineral composition to identify rocks of each type.
- Rocks can melt or recrystallize. Rocks exposed on Earth's surface can break down due to forces such as water, ice, wind, and gravity. New rocks form under changing temperature and pressure conditions or the addition of chemical fluids.

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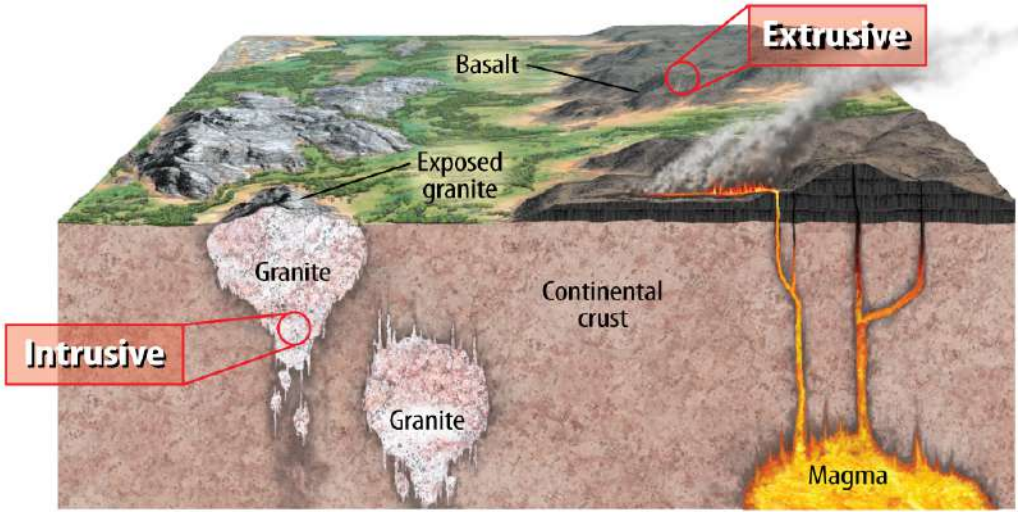
Lesson 2: Igneous Rocks

- Igneous rocks form when volcanic material cools and crystallizes.
- Crystal size is dependent on how quickly the magma or lava cools.
- Igneous rocks range in color from light to dark, depending on their mineral composition.



Lesson 3: Sedimentary Rocks

- Weathering, erosion, transportation, deposition, compaction, cementation, and crystallization are the important processes in the formation of sedimentary rocks.
- A sedimentary rock's texture and mineral composition depends on where it formed and the forces that created it.

National Geographic/Getty Images

Lesson 4: Metamorphic Rocks

- Metamorphic rocks form from a parent rock that has been exposed to increases in temperature, pressure, or the addition of chemical fluids.
- Some metamorphic rocks have foliated textures and are deformed. Others are composed of coarse and blocky crystals that are uniform in color.

Chapter Review

Which term refers to the series of processes that change one type of rock into another type of rock?

A. metamorphoses

B. sediment deposit

C. rock cycle

D. rock deposit

Chapter Review

Geologists can determine if an igneous rock is extrusive or intrusive by studying its composition and which of these?

A. size

C. weight

B. color

D. texture

Chapter Review

Which type of rock is sedimentary rock that was formed by organisms or contains the remains of organisms?

A. chemical

C. carbonate

B. biochemical

D. clastic

Chapter Review

Which process occurs when minerals dissolved in water crystallize between sediment grains?

A. cementation
B. compaction
C. crystallization
D. erosion

Chapter Review

Which type of rocks contain parallel layers of flat and elongated minerals?

A. igneous

B. foliated

C. nonfoliated

D. sedimentary

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Which term refers to magma that erupts on Earth's surface?

A. sediment

B. metamorphic rock

C. lava

D. crystals

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When magma or lava cools and crystallizes, it creates which type of rock?

A. igneous

B. sedimentary

C. metamorphic

D. mineral

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An igneous rock is classified as extrusive if which part is difficult or impossible to see without a magnifying glass?

A. minerals

B. crystals

C. holes

D. grains

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Which term refers to any process that affects the structure or composition of solid rock?

A. chemical reaction

B. plastic deformation

C. foliation

D. metamorphism

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Which process refers to the formation of metamorphic rock bodies that are hundreds of square kilometers in size?

A. cementation

B. regional metamorphism

C. contact metamorphism

D. plastic deformation