

Sedimentary Rocks Classification

Types of Sedimentary Rocks

Rock	Sediment Size	Other Features
Conglomerate	Large	Rounded
Breccia	Large	Angular
Sandstone	Sand-sized	
Siltstone	Silt-sized; smaller than sand	
Shale	Clay-sized; smallest	

Study Tip

“Conglomerate” sounds smooth and rounded, while “breccia” has a harsher “shh” sound that makes it easy to remember as being angular.

Chemical Sedimentary Rocks

- **Chemical Sedimentary Rocks:** Sedimentary rocks formed by the crystallization of chemical precipitates.
 - Dissolved ions in fluids precipitate out of the fluid and settle out.
- Sediments settle out of calmer water → form horizontal layers.
 - 1st layer is deposited first & other layer is deposited on top.
 - So each layer is younger than the layer beneath it.
 - Sediments harden and the layers are preserved

Biochemical Sedimentary Rocks

- **Biochemical Sedimentary Rock:** Rocks that form from materials created by living organisms removing ions from water and falling to the bottom to become sediments.
 - Form in the ocean or a salt lake.
 - Living creatures remove ions, such as calcium, magnesium, and potassium, from the water to make shells or soft tissue.
 - When the organism dies, it sinks to the ocean floor to become biochemical sediment.
 - May then become compacted and cemented into solid rock.

Common Sedimentary Rocks Chart

Picture



Rock Name

Conglomerate

Type of Sedimentary Rock

Clastic (fragments of non-organic sediments)



Breccia

Clastic



Sandstone Clastic



Siltstone Clastic



Shale Clastic



Rock Salt Chemical precipitate



Rock Gypsum Chemical precipitate



Dolostone Chemical precipitate



Limestone Bioclastic (sediments from organic materials, or plant or animal remains)



Coal Organic

Concept Check

- What determinants are used to classify sedimentary rock?
- What are chemical sedimentary and biochemical sedimentary? What are the differences between the two?

Supplemental Learning

Try to fill out this chart by memory:

Rock	Sediment Size	Other Features
Conglomerate		
Breccia		