

Sediment and Sedimentary Rocks

What processes turn sediment into sedimentary rock?

lithification =

compaction =

cementation =

- Define and describe the differences between clastic (detrital) and nonclastic (chemical) sedimentary rocks.

Clastic =

Non-clastic =

- How do you tell the difference between limestone and sandstone?

- How do you tell the difference between shale and mudstone (hint = describe fissility)?

- What are the four basic types of clastic sediment and how do you tell them apart?

- How can organic sedimentary rock form?

What are carbonates?

- How does chemical sedimentary rock form?

What are evaporites?

- What are the common cements in sedimentary rocks?

- How do graded bedding, cross bedding, ripple marks, and mudcracks form and what do they look like?

Graded bedding

Cross bedding

Ripple marks

mudcracks

How are these useful to geologists?

- How are sedimentary structures used to determine paleocurrent directions?