

Sedimentary Rocks Lab. Use the unknown **clastic sedimentary rock** samples and fill in the following table:

Sample Number	Sediment Size in mm ("too small to tell" is an option)	Grain Shape	Sorting	Matrix composition + % (If you can tell)	Composition and % of Visible Minerals and Fragments	Color Of sediment	Structures	Rock Name	Depositional environment
S1								Conglomerate	Dark sample: Shallow Marine. Shoreline, Glacial Light sample: Braided River
S2								Sandstone	Shoreline, shallow marine, deltas, floodplains, Aeolian
S3								Arkose (Pink/red Sandstone)	Beach, Desert or Arctic Rivers, Aeolian Dunes
S4								Siltstone	Settling and accumulating on the ocean floor, riverbeds or lagoons and lake bottoms
S5								Mudstone or shale	Shoreline, Shallow Marine, Deltas, Floodplains

Q2. Use the unknown **allochemical, organic, and orthochemical sedimentary rock** samples and fill in the following table:

Sample Number	Texture <i>Skeletal or crystalline</i>	Type of fossil preservation	Structures (Bedding, Massive)	Colour	Composition (Minerals, Fossils or Chemical make up)	Rock Name	Origin
S6		Body fossils				Fossiliferous Limestone	Deposition of shelly material in warm shallow sea.
S7		Body fossils (mud sized) or Recrystallization				Micrite	Chemical precipitates or lithified biochemical ooze of microscopic calcium carbonate grains.
S8		Carbonization				Coal	Compressed and lithified plant material from a swamp.
S9		Recrystallization				Chert	Replacement of limestone by silica.
S10		Recrystallization / Carbonization				Dolomite	Deposits of calcium carbonate combined with magnesium carbonate
S11		Crystalline					Evaporation of seawater, or lake water in a desert.

Q3. What are three different things you notice about the various layers of bedding in sample 12. What do you suspect could have caused each of these differences?

1:

2:

3: