



Sedimentary Rock Identification

Lab #19

Discussion: Sedimentary rocks result from the processes of w_____, e_____, and d_____. These sediments then need to be c_____ and/or c_____ together to form rock. The PS/ESRT treats sedimentary rock identification differently than mineral identification in the previous lab. The PS/ESRT divides sedimentary rocks into two broad categories, i_____ -_____ and c_____ formed or c_____ sedimentary rocks even if they are formed from biological processes. Both g_____ size and c_____ are considered when identifying sedimentary rocks.

Define the following terms:

1. Clastic – _____

2. Organic – _____

3. Evaporite/precipitate – _____

Objectives: Identify sedimentary rocks using as many observable facts as possible and by using page 7 of the PS/ESRT.

Purpose: Identify sedimentary rock specimens.

Hypothesis: Some minerals have some characteristics in common, but by using multiple observations it should be possible to identify any given mineral.

Theory: By considering as many observable characteristics as possible, it is possible to uniquely identify sedimentary rock samples.

Materials: sedimentary rock specimens



PS/ESRT

Method:

1. Obtain a specimen from the container.
2. Be sure your specimen number matches the correct identifying number on your data table.
3. Record grain size, composition, and/or other notable characteristics in the comments section.
4. Once you have collected your set of characteristic data, correctly name your specimen in the last column of the table.

Data Collection and Processing:

Number	Grain Size	Composition	Other Comments	Rock Name
1				
2				
3				
4				
5				
6				
7				

Conclusions:

1. How does sandstone differ from siltstone?

2. How does breccia differ from a conglomerate?

3. Which two sedimentary rocks will show a positive acid test?

4. How does the composition of shale differ from the composition of sandstone?

5. How is bituminous coal formed?

6. Describe a sequence of events that would result in the formation of rock salt.

7. Compare (tell how they are alike) and contrast (describe any differences) in the two types of limestone. (Hint: be sure to name the two types of limestone.)
