



# 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?

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2. How does breccia differ from a conglomerate?

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

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

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5. How is bituminous coal formed?

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

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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.)

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