

Name: _____

Activity 11B

Activity 11B: Identifying Sedimentary Rocks

For this section, you will need the following materials before you begin:

- Sedimentary rock samples (or kit) selected by your instructor,
- Glass plate, streak plate, and a hand lens (or magnifying glass)
- Bottle of diluted HCl (optional)

1. Using the kit provided, begin by separating the rocks into two piles, a clastic and a non-clastic pile. **Remember, sedimentary rocks must be categorized as either clastic OR non-clastic; a sample cannot be both.** For each sample number, indicate whether the sample is clastic or non-clastic by placing an X in the appropriate column below.

Table 11.6: Table to complete for Question 1 of Part A.

Sample Number	Place an X below for Clastic	Place an X below for Non-clastic

Name: _____

Activity 11B

Using the same samples, and your Answers from questions 1 & 2, fill out **Table 11.7** below.

2. *If the sample is clastic*, determine the **grain size**, **shape**, and overall **sorting**.
3. *If the sample is non-clastic*, indicate whether the sample is **organic (O)** or **chemical/biochemical (C/BC)**. Then determine the **dominant composition** of the rock.
4. Using the characteristics of each rock, identify each sample by name. Add the rock name to the final column of the table below.

Table 11.7: Table to complete for Question 2-4 of Part A.

Sample Number	<i>If the sample is clastic:</i>			<i>If the sample is non-clastic:</i>		Sedimentary Rock Name
	<i>Grain size</i>	<i>Grain shape</i>	<i>Sorting</i>	<i>organic (O) or chemical/biochemical (C/BC)</i>	<i>Dominant composition</i>	

Name: _____

Activity 11B

5. Chert and limestone are both fine-grained sedimentary rocks. What are two tests you can use to tell them apart?

6. What characteristic distinguishes sedimentary breccia from conglomerate?

7. How can sorting, rounding, and grain size be useful for understanding depositional environments? Use examples in your explanation.