

Name: \_\_\_\_\_

Minerals and Rocks

Date: \_\_\_\_\_ Period: \_\_\_\_\_

Earth Science

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## Lab Activity: Sedimentary Rocks

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### INTRODUCTION:

Sedimentary rocks are formed from an accumulation of sediments at or near Earth's surface. Typically, the individual characteristics of the sediments and method of lithification determine the classification. Some sedimentary rocks are formed chemically or can be composed of former living things.

### OBJECTIVE:

Learn how to identify sedimentary rocks based on their properties.

### VOCABULARY:

Clastic -

Crystalline -

Bioclastic -

Lithification -

Sediments -

### PROCEDURE:

1. For each unknown sedimentary rocks, identify the key observable characteristics.
2. Determine the name of the sedimentary rock based on the observed characteristics and the Earth Science Reference Tables.

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Texture	Texture	Observations	Rock Name
<input type="checkbox"/> Clastic	<input type="checkbox"/> Various sizes <input type="checkbox"/> Sand sized: 0.006 - 0.2 cm <input type="checkbox"/> Silt sized: 0.0004 - 0.006 cm <input type="checkbox"/> Clay sized: less than 0.0004 cm		
<input type="checkbox"/> Crystalline	<input type="checkbox"/> Fine to coarse		
<input type="checkbox"/> Bioclastic	<input type="checkbox"/> Microscopic to very coarse		
Method of Lithification: <input type="checkbox"/> Burial and Compaction <input type="checkbox"/> Burial and Cementation <input type="checkbox"/> Precipitation / Evaporation			

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## DISCUSSION QUESTIONS:

1. What is the maximum and minimum size of a cobble?
2. How can you distinguish a clastic rock from that of a bioclastic rock?
3. Describe the sequence of events in the lithification of sandstone?
4. Why are sedimentary rocks only found on or close to Earth's surface?
5. Why does the sedimentary rock limestone react with HCl acid?

**CONCLUSION:** On what basis are sedimentary rocks classified?