

# Sedimentary Rock Lab

Geology 1P

Mr. Traeger

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

## Introduction/Purpose

This lab is intended to familiarize the student with various samples of sedimentary rock. Sedimentary rocks come in 3 basic varieties. The first is known as **detrital (sometimes referred to as clastic texture)**. These rocks are formed when *inorganic* sediment is transported, deposited, and processed by lithification (cementation and compaction). The second variety is known as **chemical**. Chemical sedimentary rocks form when materials that are carried in solution precipitate (water evaporates or is removed). A third sub-type, usually classified under chemical rocks, is known as **organic or biochemical**. These rocks form when material (skeletons) from organisms that were once living deposit and come together to form sedimentary rock.

## Materials

- various sedimentary rock samples
- hand lenses
- metric ruler for measuring grain size
- pages 127-131 and page 702 in text

## Procedure

1. Working with a partner, your task is to make an attempt to identify at least 10 of the rock samples at the front of the room.
2. Go through the accompanying chart and go through the steps to identify the rocks. The %Scheme for Sedimentary Rock Identification+chart at the back of your book on page 702 will help you.
3. Answer the questions and write a conclusion.

## Data Collection/Analysis

See identification chart.

## Questions

1. Fill in the following chart with the appropriate names and rock types that belong to each group.

_____ rock	_____ rock	_____ rock
Fragments of other rocks that are cemented and compacted together create this type of rock.	Rocks that are formed when minerals dissolved in water precipitate, or fall out of solution, form this type of rock.	Rocks that are formed from sediments consisting of the remains of plants and animals.
Common examples are:	Common examples are:	Common examples are:

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2. What was the easiest way to tell the difference between the rocks?
  
3. How do fossils form in some sedimentary rocks? Describe the process.
  
4. Where do you think that most of the rocks formed (what type of environment)?
  
5. How do the sizes of fragments (clasts) change as you go from a river to a beach to the middle of a lake/ocean?
  
6. How did the pebbles in conglomerate become rounded before it was cemented into a sedimentary rock?
  
7. What is sorting? Were most of your rocks well sorted or poorly sorted?
  
8. What is the basic set of processes that cause sedimentary rocks to form?
  
9. What is the easiest way to tell if you have a sample of limestone?

**Conclusion:** What did you learn in this lab?



