

SECTION 6: HOW ARE SEDIMENTARY ROCKS FORMED?

LAB

INTRODUCTION

Sedimentary: Rocks formed from debris that settles in lakes, streams, or oceans and is squeezed into rock by the pressure (weight) of the water of millions of years.

Limestone: Made up of calcium carbonate from ground-up shell deposits. Some limestone consists of shell fragments cemented together.

Fossiliferous Limestone: Has fossil shells that were not destroyed by erosion or weathering before the sediment became rock.

Chalk: composed of protists (tiny microorganisms) shells.

Conglomerate: A group of pebbles cemented together with pressure and chemicals in the water.

Shale: Compressed mud.

Coal: Deposits of carbon left by plants that decomposed millions of years ago, leaving carbon in the process.

Rock Salt (Halite): Salt left when water evaporated.

Fossils: Ancient remains of plants or animals preserved in rock. They are usually found in sedimentary rock.

ASSESSMENT ANCHORS ADDRESSED

- S4.A.2.2** Identify appropriate instruments for a specific task and describe the information the instrument can provide.
- S4.C.1.1** Describe observable physical properties of matter.
- S4.A.3.3** Identify and make observations about patterns that regularly occur and reoccur in nature.
- S4.D.1.2** Identify the types and uses of Earth's resources.

PURPOSE

Students will study how sedimentary rocks are formed and compare the differences between common sedimentary rocks such as, chalk, shale, conglomerate, and sandstone.

MATERIALS

For the Teacher:

1 tall jar

Sand

1 Sedimentator

Soil

Clay soil (red)

1 cup water

18 fossiliferous Limestone Rocks magnifier

*Teacher provides items marked with **

For Each Pair:

Red sandstone

Gray sandstone

Limestone

Chalk

Shale

Conglomerate