

Part 1: Archaeology and the Rock Cycle

Introduction

Deposition is the process in which sediment is transported and settles in a new place. In this part of the activity, you will model this process by reading a story that transports you through time. Your story will describe different depositional events and provide some insight into the people living in the area. In addition to creating **strata**, or layers of sediment, you will deposit some of the objects people used, called **artifacts**.

Materials

- Deposition Story Flipbook
- Container
- 6-in Ruler
- Sediment – 4 Colors
- Artifacts

Lab Procedure

1. Get all the necessary materials for your group.
2. Read the Introduction of your Deposition Story.
3. Read through each Event and deposit sediment and artifacts as directed.
 - a. *Note that not all layers will have artifacts!*
4. Once you have completed your Deposition Story, you should have four distinct layers of sediment, each a different color.

Reflection

1. Sketch a diagram of the strata you created.
 - a. Color each layer
 - b. Label them with how they were deposited (e.g. flood, ice, etc).
 - c. Label the layers from youngest to oldest.
2. Your story outlined a few ways sediment can be deposited. Describe two other ways deposition can happen.
3. Deposition is just one part of the rock cycle. Write or sketch how the sediment that was deposited in your story can move through the rock cycle over time and become each type of rock.



Part 2: Archaeology and the Rock Cycle

Introduction

Archaeology is the study of the human past through material remains. Archaeologists examine objects humans of the past leave behind, known as **artifacts**. They can gain insight into how people lived in the past by examining artifacts and their context. In this part of the activity, you will **excavate** an archaeological site, catalogue artifacts you find, and make inferences about the people who left them behind.

Materials

- Archaeological Site Container
- Trowel
- Tweezers
- 6-inch Ruler
- Brush
- Artifact Tags

Lab Procedure

1. Before beginning your excavation, sketch and color a diagram of the strata in your container.
2. With your trowel, carefully scrape sediment and place it in a cup, on a plate, or a paper towel.
 - a. *Note that you are not digging but scraping a very thin layer at a time.*
3. When you find an artifact, use your tweezers to pick it up and place it to the side.
4. Use your brush to dust any sediment from the artifact.
5. Label the layer from your sketch with the artifacts found in it.
6. Using your ruler, measure how deep the artifact was buried from the top of the container. Note the depth on your sketch.
7. Continue excavating and remove a whole layer (color) before moving into the next.
8. Once you have excavated the entire site, complete an Artifact Tag for each artifact you found.

Reflection

1. Which artifacts are likely the oldest? Youngest? How can you tell?
2. What can you infer about the way of life of the different people who lived here over time? Provide specific examples for each layer in which you found artifacts.
3. Choose three artifacts and describe what you think they were used for.
4. Not every layer has artifacts. Why do you think this is?



Artifact Tags

Artifact Sketch

What is it?

Stratum Color:

Depth:

Description:

Artifact Sketch

What is it?

Stratum Color:

Depth:

Description:

Artifact Sketch

What is it?

Stratum Color:

Depth:

Description:

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Depth:

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