

AMAZEMENT IN THE BASEMENT: CURATOR FOR A DAY ACTIVITY

GRADE LEVEL: K-5



Standards Connection

- SEPs: Analyzing and Interpreting Data, Constructing Explanations and Designing Solutions
- DCIs: LS1.A, LS3.B, LS4.C, LS4.D
- CCCs: Patterns, Systems and System Models, Structure and Function

Objectives

- Students will analyze specific specimen features (e.g., adaptations in bones, coloration) that help organisms survive
- Students will curate their own collection based on chosen features
- Students will justify their selections by identifying patterns in adaptations

Key Vocabulary

- Specimen: Any object (animal, plant, or non-living) that is preserved for scientific use; can be whole or incomplete and can include skeletons, skins, flowers, fossils, etc.
- Natural history collections: Specimens collected and grouped by type. They are like a library for biodiversity, supporting the work of our researchers as well as the needs of visiting scholars, government agencies, and conservation organizations
- Curator: Directs research and collections within their department's specific discipline
- Collection Managers: Oversees the long-term preservation of the research collection
- Trait: A feature of a plant or animal, like its size, color, or body parts
- Adaptation: A trait that helps a plant or animal live in its habitat
- Biodiversity: The variety of living things in a given place

Materials

- Exhibit panels and displays featuring specimens
- Two worksheet printouts: one with sentence frames and another with open response lines to support different learning approaches.
- Pencils and/or colored pencils

INSTRUCTIONS

We recommend completing the Introduction section in the classroom or as a group prior to entering the Museum. The Discussion and Wrap-Up section can then be conducted back in the classroom following your field trip.

Introduction (15 minutes)

- Begin by leading a discussion on museum collections. Ask students:
 - Do you collect anything? How did you choose to collect that?
 - Museums have collections as well. How do you think a personal collection is similar to or different from a museum collection?
 - How do you think museums decide what to include in their collections?
 - Do museum collections need someone to take care of them? Why or why not?
 - What do you think would happen if no one maintained a museum's collection?
- After students share their thoughts, explain that the people who take care of museum collections are the curator and collection manager.
 - What do you think curators and collection managers do in museums?
 - Why do you think museums have collections?
 - How do curators and collection managers decide what to include in the museum collection?
 - What might be the challenges of being a curator or collection manager?
- Explain that in the exhibit, they will become curators and create their own collection based on observed specimen traits.
- Discuss how organisms have unique adaptations that help them survive in their environments. Ask students, what are some adaptations that you can think of?
 - Here are a few examples:
 - » Camouflage helps animals hide to avoid predator
 - » Beak shapes in birds help them eat specific foods
 - » Leaf shapes in plants help conserve water
- Introduce the term 'biodiversity' and explain that The Nat's collections help us understand the variety of life in Southern California and the Baja California Peninsula.

Exploration (20 minutes)

- Distribute a worksheet and pencil to each student. This activity can also be done in small groups.
- Instruct students to explore the exhibit and observe different specimens.
- Encourage them to choose a specific feature (e.g., color, size, specimen type, adaptations) as the focus for their collection.
 - Younger students: Guide them to pick an easy feature, such as specimens that are all the same color (e.g., blue), the same size (e.g., small), or the same type of animal (e.g., birds).
 - Older students: Challenge them to choose more complex features, such as grouping by similar coverings (fur, feathers, exoskeletons), or selecting specimens that share a specific adaptation or habitat
- Ask students to choose specimens that have their chosen feature and record them by either drawing or writing their names in their collection drawer.
- Students can name their collection and write a brief statement explaining the focus of their collection.

Discussion and Wrap-Up (10-15 minutes)

- Have students share their collections with the class or in small groups.
- Ask guiding questions during share-out:
 - Why did you choose these specimens?
 - How do their features help them survive?
 - How does your collection show biodiversity (or a variety of life)?
- Conclude by reinforcing the idea that museum collections help people learn about and appreciate the natural world.

Extension Ideas

- Have students create a poster or digital version of their collection. Then, host a “mini museum,” where other classes at your school can come and see the collections that your students curated.
- Take a nature walk and have students create a photo collection that shows the biodiversity of your local habitat.

Name _____

Date _____

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Directions: Walk around the exhibit and look closely at the specimens, noticing things like color, size, or shape. Choose a feature to focus on for your collection, give it a name, then draw and label your specimens in the collection drawer below.

Collection Name: _____

Draw and Label Specimens in Collection:

Mission Statement: What trait(s) do the specimens you picked have in common? Why did you choose to put these specimens in your collection?

All of the specimens in my collection have _____ (trait)

because _____

_____.

Name _____

Date _____

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