collections & specimens

BIG IDEA

Collections and specimens can be used for research, education, and enjoyment and allow people to have an up-close look at something that they couldn’t otherwise access.

Collections are an essential part of a museum’s research and education functions and also serve an important role in environmental conservation efforts. Specimens—individual pieces from a collection—can be excellent tools for connecting people to a topic of study or interest, whether they’re displayed in a museum or used in educational programming. They also allow people to have an up-close look at something that they couldn’t otherwise access. Preserving and displaying specimens in different ways can tell us different things about the lives of the plants and animals in a collection.

Before the Trip

Have students share an example of something they collect (or something someone they know collects) and explain why they collect those things.

Review the idea that people collect for many reasons, including for enjoyment, to learn, to see change over time, or to preserve the past.

Ask students what the museums that they know of collect (e.g. art, living animals, fossils, wax figures, etc.) and why they think each museum collects what it does. Explain to students that they’ll be going to the Nature Museum where they’ll focus on how collections can be preserved and presented in different ways by looking at local animal specimens from the museum’s collections.

Enhance your field trip with a workshop! Turn to page 16 for more information.

At the Museum

Identify animal specimens from the museum’s collections that are preserved in different ways and evaluate what could be learned about the animals’ lives.

At group check-in, each class will be provided with a custom tour card to assist them on their self-guided visit through the Museum. The custom tour card will call attention to whole exhibits as well as specific exhibit components that best support the theme of the this focused field trip.

Attached and included in your e-mailed field trip packet is a worksheet best suited for students in grades 6—12 developed by Nature Museum educators. Please feel free to print this worksheet and have your students bring it on the day of your visit.

After the Trip

Have students collect natural objects from outside.

Students should develop a display for their collection that explains what can be learned from their collection and the way it has been preserved. Students should include identification information and date and location where each specimen was found.

Other students observing each collection should be able to answer the same question students answered at the museum, “What can you tell about the specimen and the way it interacted with its environment?”

Have students share their collections with the class or with other classes at school and discuss how preserving things in different ways can teach us different things about natural objects and their environments.

Next Generation Science Standards

NGSS: LS1.A – Structure and function
NGSS: LS2.A – Interdependent relationships in ecosystems
NGSS: LS3.2 – Variation of traits
collections & specimens worksheet

DIRECTIONS
Find at least one animal specimen from the Nature Museum’s collection that is preserved in each of the different ways described below. Draw and label the specimen and think about what we can learn about the life of each animal from the way it is preserved and displayed.

Animals prepared (taxidermied) as a MOUNT to look just like they did when they were alive:

Animals prepared (taxidermied) as a STUDY SKIN where the body lies flat so that many specimens can be kept together in a drawer:

What can you tell about the life of the animal and the way it interacted with its environment?

What can you tell about the life of the animal and the way it interacted with its environment?

Insects DRIED AND PINNED in a position where their body parts can be seen:

Bones preserved and put together to study what the inside structure of the animal looks like:

What can you tell about the life of the animal and the way it interacted with its environment?

What can you tell about the life of the animal and the way it interacted with its environment?

What are some differences between learning from real animals that are preserved and learning from real animals that are alive? What can you learn from a living animal, and what can you learn from a preserved animal?