The Secret World of Elephants

BACKGROUND FOR EDUCATORS

Overview of Student Worksheets

Using worksheets in the exhibition, students observe and sketch life-size models of an African savanna elephant, a woolly mammoth, and a pair of dwarf elephants. Based on their observations, students then infer how the function of the physical traits of these animals help(ed) them survive in their habitats.

These observations will help students experience a natural phenomenon—that elephants and their relatives can have different body sizes, shapes of body parts, and amount of hair. This phenomenon should serve as an anchoring point in student exploration and discussion as they seek answers to the investigation question: How do the physical traits of animals relate to the places they live?

Extension Ideas

Back in the classroom, students can use their observations from the Museum as evidence to develop a model representing the relationship between the physical traits of elephants and the places they live.

Students can generate more ideas about how animals’ physical traits help them adapt to the places they live. For example, students could create a list of the physical traits that help the polar bear survive in the arctic (i.e. white fur for camouflage; black skin for warmth).

Correlation to Standards

This activity supports the following Next Generation Science Standards:

**Performance Expectations**

K-ESS3-1: Interdependent Relationships in Ecosystems
Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.

**Disciplinary Core Ideas**

LS1-A.P1: Structure and Function
All organisms have external body parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air.

**Crosscutting Concepts**

SYS-P1: Systems and System Models
Objects and organisms can be described in terms of their parts.

**Science & Engineering Practices**

MOD-P3: Developing and Using Models
Develop and/or use a model to represent amounts, relationships, relative scales (bigger, smaller), and/or patterns in the natural and designed world(s).