

Our Animal Neighbors Program Standards

The Museum's Education Department actively works on developing our curriculum and helping teachers to identify ways in which our programs support and relate to Common Core, CA History-Social Science Frameworks, and Next Generation Science Standards.

How to read this document: Below are charts that show the various standards that this program supports. This is by no means an exhaustive representation of the connections that can be drawn from our programs, but shows some of the strongest connections that teachers who use our programs make. After each standard is a brief description of what occurs within the program that supports the standard. At the bottom you'll find links to resources for understanding the standards.

Note: There are two standards charts, one Kindergarten standards and one for 2nd grade standards.

Program: Our Animal Neighbors

Grades: K-2nd

Topic: Through an interactive, inquiry-driven program using animal specimens and games, students learn how to identify native animals and discuss structures/forms that help them to survive in their habitats. By focusing on common native animals and accessible habitats, this program encourages students to connect with wildlife and builds awareness of the animals that live around us.

Next Generation Science Standards

KINDERGARTEN

Performance Expectations

<u>K-LS1-1</u>: Use observations to describe patterns of what plants and animals (including humans) need to survive.

- Students make observations about native animals' skulls and skeletons and notice patterns in teeth and skull features that help students identify them as carnivore, herbivore, or omnivore
- Students identify adaptations of several native animals and discuss how they help each animal survive

Science and Engineering Practices

Analyzing and Interpreting Data

Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations.

- Students share observations about native animals' skulls and skeletons.
- Students notice patterns in teeth and skull features that help them identify the skulls as carnivore, herbivore, or omnivore.

Disciplinary Core Ideas

LS1.C: Organization for Matter and Energy Flow in Organisms

All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow.

- Students use a venn diagram to explore how native animals' adaptations help them obtain their food, whether they are a predator or a prey, in the habitats of Santa Cruz
- Students make observations of skulls to determine if their animal was a carnivore, herbivore, or omnivore

Crosscutting Concepts

Patterns

Patterns in the natural and human designed world can be observed and used as evidence.

 Students observe patterns in the skulls and skeletons of different native animals and use their observations as evidence to support their claims that the animal was a carnivore, herbivore, or omnivore

English Language Arts Standards

W.1.8: With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

 Students are invited to recall what they know about animals to answer how they get food to survive.

Mathematics Standards

K.MD.A.2: Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference

• Students compare the skulls of carnivores, herbivores, and omnivores to see which skull has teeth that are more or less pointy, flat, bumpy, wide, etc and describe how they are different and what those differences indicate.

Next Generation Science Standards

2ND GRADE

Performance Expectations

- 2-LS4-1: Make observations of plants and animals to compare the diversity of life in different habitats
 - Students make observations of animals native to Santa Cruz (i.e. bobcat, red-tailed hawk, and black-tailed jackrabbit) to compare how different animals (i.e. predators and prey) have different adaptations to help them survive in their habitats

Science and Engineering Practices

Planning and Carrying Out Investigations

Planning and carrying out investigations to answer questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.

 Students investigate how adaptations can help animals survive in their habitats, especially in regards to predators and prey, through playing a series of games

Disciplinary Core Ideas

LS4.D: Biodiversity and Humans

There are many different kinds of living things in any area, and they exist in different places on land and in water.

- Students explore
 Museum exhibits that are
 arranged by habitat and
 notice that animals'
 adaptations differ from
 habitat to habitat
- Students study native animals that live closely and observe similarities and differences using a venn diagram

Crosscutting Concepts

English Language Arts Standards

- **W.1.8:** With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
 - Students are invited to recall what they know about animals to answer how they get food to survive.

Mathematics Standards

- **K.MD.A.2:** Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference
 - Students compare the skulls of carnivores, herbivores, and omnivores to see which skull has teeth that are more or less pointy, flat, bumpy, wide, etc and describe how they are different and what those differences indicate.

Resources

Next Generation Science Standards

Understanding the Standards
How to Read the Standards
Topic Arrangements of the NGSS
Common Acronyms used in NGSS

History-Social Science

HSS Framework

- <u>Kindergarten</u>
- 1st Grade
- 2nd Grade
- 3rd Grade
- 4th Grade
- 5th Grade

English Language Arts

ELA Standards
CCSS English Language Arts Resources
ELA/ELD Framework

Mathematics

Kindergarten Standards
1st Grade Standards
2nd Grade Standards
3rd Grade Standards
4th Grade Standards
5th Grade Standards