



COAST TO CACTUS

IN SOUTHERN CALIFORNIA

Curriculum and Lesson Plan Resource Guide









Essential Question

How do animals get what they need from where they live?

San Diego has many diverse environments, from beaches to chaparral to mountains and deserts to urban areas. Different animals live in each of these different environments. Every animal that lives here gets what it needs—food, water, shelter—from its environment. In urban areas, humans affect the way animals live and what they eat.



Activity: Animal Bingo

In this activity, students use their observation skills to find animals in the Coast to Cactus in Southern California exhibition and make connections between animals and their environments.

Materials

- Copies of bingo cards
- Pencils, pens, crayons, or markers for chaperones
- Folder for teacher to collect completed bingo cards

This activity is designed for students to do during a visit to the Coast to Cactus in Southern California exhibition. Students can work with chaperones independently or in groups. (See Page 2 for activity instructions.)



Animal Bingo



Before the activity

- Print copies of bingo cards for students and chaperones.
- Schedule a field trip to the NAT. Reservations are required for all group visits. Please call 619.255.0349 to make your reservation or go online to sdnat.org/schoolprograms.

Before your Museum visit

Have a discussion with students about the essential question. Use some of the guiding questions.

What do animals need to live? Food, water, and shelter.
Where do animals live? Animals live in many different places.
Some live above the ground. Some live below. Some live in water.
Some live in trees. What do animals eat? Some animals eat plants, some animals eat bugs, and some animals eat other animals. What do you think birds like to eat? Seeds, fish, or bugs, depending on where they live. What about skunks? Skunks eat bugs, small animals, and even garbage made by humans.

In the Museum

- 1. Briefly revisit the classroom discussion about animals and natural resources.
- 2. Give each student or chaperone a bingo card.
- 3. Ask students to explore Coast to Cactus in Southern California and look for the animals on their card.
- 4. Have the chaperone check boxes when students find the animals on the sheet. Teachers and chaperones can ask students what they notice about what each animal is doing. Is it near the water? Is it in the water? Is it hiding in a hole underground? What is it eating? Is it eating food from nature, or food from people?

NGSS Alignment for Kindergarten

Performance expectation: K-ESS3-1

Science & Engineering Practices

Developing and Using Models

Disciplinary Core Ideas

ESS3.A: Natural Resources

Crosscutting Concepts

Systems and System Models

Interdisciplinary Common Core Connections: W.2.8





5. Students can give their completed bingo cards to the teacher so their hands are free while they explore the rest of the Museum.

Back in the classroom

- 1. Lead the class in a discussion about animals getting what they need from their environment. You can use these guiding questions.
 - What animals did you see at the Museum? Did you find any animals eating something? What were they eating? Use specific examples from the bingo sheet. Did you find the deer? Where does the deer live? What do you think it likes to eat?
- 2. You can use the *Explore Coast to Cactus* website to find images of and information about animals featured in the exhibition. Visit **coasttocactus.sdnhm.org** and search for skunks, deer, sheep, raccoons, or crabs.

Extension

Have your students pretend to be an animal from the bingo sheet.

What kind of sound does it make? How does it move around?

What will they learn?

Students learn to use their observation skills to find animals in the Coast to Cactus in Southern California exhibition. An animal's environment provides it with the food, water, and shelter it needs to survive. People have an effect on an animal's environment—raccoons eat our trash, skunks eat the food we give our pets, and our pet cats hunt birds.

Additional Resources

- Check out a specimen from our Nature to You Loan Library.
 Specimens related to this lesson include raccoons, skunks, and crabs. For more information visit sdnat.org/specimensearch or contact the Loan Library at loanprogram@sdnhm.org or 619.255.0236.
- Use the Explore the Region from Coast to Cactus website to learn more about the different habitats in the southern California region. Visit coasttocactus.sdnhm.org to journey through coastal areas, mountains, and deserts, and to learn more about San Diego's amazing diversity of plant and animal life.

Key words

Natural resource

Something that is found in nature and can be used by people or animals. People and animals need some natural resources to stay alive.

Environment

The conditions that surround someone or something; the natural world.

Food

Things that people and animals eat.

Water

A clear liquid that falls from clouds as rain; that forms streams, lakes, and seas; and that is used for drinking, washing, etc.

Eat

To take food into your mouth and swallow it.

Shelter

A place to live.

Animal

A living thing that is not a plant.

Habitat

A place where a plant or animal lives or grows.

Survive

To remain alive; to continue to live.

Urban areas

Areas where people live, such as cities, towns, or suburbs.



Coast to Cactus BINGO!

Name: _____

How many of these animals can you find? When you find an animal, place a check mark in the box. Hand this paper to your teacher when you have found all the animals!

