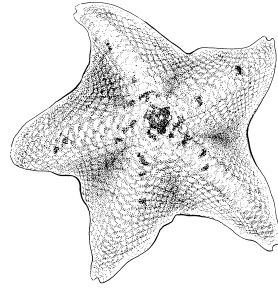


Colors and Prepositions



Topics

Prepositions,
Adaptations

Grades

PreK-2

Site

Indoors, Outdoors,
Aquarium

Duration

20 minutes

Materials

- Die-cut, colored animal preposition cards
- 3"x 5" file cards (one/student)
- Sticky dots (various colors)
- Crayons, colored pencils or markers
- Habitat "poster" (optional)
- Pocket chart
- Sentence strips

Vocabulary

adaptations, habitat, prepositions

National Science Education Standards

Science as Inquiry (K-4)

Ability to do scientific inquiry

Understanding of scientific inquiry

Life Science (K-4)

The characteristics of organisms

Organisms and their environments

Overview

What color are sea stars? Where do crabs hide? Students observe live animals or pictures of animals in books and look for different colors and locations with preposition cards. They collect data and share their findings.

Objectives

Students will be able to:

- Use prepositions to describe the location of objects and animals.
- Describe two adaptations that help animals survive in their habitats.
- Observe carefully and record their observation like scientists do.

Background

Observing plants and animals is a good way to introduce both colors and **prepositions** to students. Describing what color an animal is and whether an animal is "under," "on" or "behind" a rock or seaweed teaches parts of speech as well as science skills like observation and data collection.

Plants and animals live in homes called **habitats**. Animals have **adaptations** (behaviors and physical structures) that help them survive in their habitat. Some animals hide in their shells, others have specially adapted "feet" for sticking on rocks or digging into the sand. Fish may use fins to swim over objects. The location of animals in their habitat may serve as a protective strategy or be part of a feeding behavior.

Teacher Preparation

1. Use a die-cut machine and different colors of construction paper to cut out simple animal shapes, i.e., seahorses or sea stars. Make enough for each student to have at least three shapes. These will be students' "animal cards."
2. Print a **preposition** word on each animal shape card such as; on, in, under, inside or behind.



VOCABULARY

Adaptations: body parts and behaviors that help an animal survive

Habitat: a home for plants and animals that provides food and protection

Preposition: a part of speech that marks the relation of a noun to another noun or word



ELL TIPS

This activity is written with English Language Learners in mind. Actively practicing the preposition words in advance scaffolds the introduction of new grammatical structures. Looking for colors first gives the students a chance to practice making observations before the more difficult task of looking for animal behaviors based on prepositions.

3. If you won't be able to take students outside or to an aquarium to observe actual animals in their habitat, make a habitat poster with 3-D parts (e.g., a rock that lifts up, movable seaweed made of ribbon and so on) with animal pictures or shapes .

Procedure

1. **AS A WHOLE GROUP, REVIEW COLORS AND THE CONCEPT OF PREPOSITIONS.**
Point to or hold up items and have students name the items' colors. Next introduce prepositions by placing a preposition card in the pocket chart. Have students repeat the preposition with you, while imitating your hand gesture (for example, placing one hand behind your back for "behind").
2. **HAVE STUDENTS PRACTICE THE CONCEPT OF PREPOSITIONS.**
Ask a student to go stand "behind" (or "next to," "under" and so on) another student, desk, chair or other object. Ask the class, "*Where is she/he?*" Help the class to respond with a whole sentence, "*She/he is behind Sara*". Continue in this way for each of the prepositions. Give students an opportunity to direct each other.
3. **PASS OUT ANIMAL CARDS AND MAKE COLOR OBSERVATIONS.**
Give each student a 3" x 5" file card and a few animal preposition cards. Visit an aquarium or use the webcams at Monterey Bay Aquarium (www.montereybayaquarium.org/efc/cam_menu.aspx), go outside in the schoolyard, use nonfiction books or videos or your habitat poster if you made one. Have students first look for animals that are the same colors as their set of animal cards. For each color of animal discovered, give students a sticky dot that corresponds to the color found and have them put it on their file cards. These findings can be used later to create a class bar graph.
4. **AFTER OBSERVING COLORS, STUDENTS LOOK FOR PREPOSITION EXAMPLES.**
After finding animals with the same color as their card, have students look at the preposition on each card. Make sure they can read the words and discuss their meanings. Challenge students to find animals that are in locations matching their preposition cards (e.g., a sardine "above" the rest of the school, an abalone "on" a rock, a bird "in" a tree).
5. **STUDENTS USE PREPOSITIONS TO FORM COMPLETE SENTENCES DESCRIBING THEIR OBSERVATIONS.**
Use a pocket chart and sentence strips to practice the different prepositions. You may have each student write their own sentence or use language frames for students to complete (e.g., The seahorse is ____ the seaweed.).
6. **ADD ANOTHER LAYER OF DIFFICULTY TO STUDENT OBSERVATIONS.**
Now challenge students to deepen their aquarium or book investigations and find an animal that is the same color **and** follows the preposition direction that is on the card. For example, find a *green* fish that is *under* something.
7. **HAVE STUDENTS SHARE THEIR FINDINGS WITH THE CLASS.**
Pre-K: Students draw a picture of their animals within the habitat. Then they dictate a sentence about the animals they found and the preposition words that matched their locations. Share the pictures with the class.

Kindergarten: Students use phonetically spelled words to write about their animals and prepositions. For example, Tha crab iz undr tha rok.

1st: Students write a proper sentence using their prepositions to describe where their animals are located (e.g., My eel is hiding in the cave.).

2nd: Students write a simple poem using the prepositions to describe where the animals are located (e.g., An eel finds a cave to hide, where it waits for food inside!).

Extensions

- Create a bar graph with the number of students on one axis and colors on the other axis. The students can use their file cards with colored-sticky dots to determine who saw which color fish. The teacher can color in a bar for each student who saw the color. Older students can write their names on a sticky note and place it on the bar graph if they saw a particular color.
- Have students create a habitat poster for their animal cards then place the paper animals on the poster habitat to match the preposition labels.

Resources

Website

Monterey Bay Aquarium www.montereybayaquarium.org

Visit the Monterey Bay Aquarium website for information about and images of ocean animals. Use the animal webcams to observe live animals.

Books

Fish Colors. Zoller, Arthur David. Charlesbridge Publishing, 2000.

Fish Counting. Zoller, Arthur David. Charlesbridge Publishing, 2000.

Numbers Everywhere. Donovan, Barbara. Sadlier-Oxford, 2003.

Rooster's Off to See the World. Carle, Eric. Aladdin Books, 1999.

Standards

California Science Standards

Kindergarten: 2a; 4a, c, d, e

Grade 1: 2a, c; 4a, b, c, d

Grade 2: 2d; 4c, e, g

California Language Arts Standards

Reading

Writing

Written and Oral English Language Conventions

Listening and Speaking

(www.cde.ca.gov/re/pn/fd/documents/elacontentstnds.pdf)



CONSERVATION TIPS

Studies show that conservation-minded adults have something in common. As children, they visited nature in the presence of a caring adult. This activity is perfect for outdoors. You might not have access to a formal aquarium but everyone has access to a schoolyard. Take your students outdoors and be that inspiration!

Head Start Framework

- Shows progress in understanding and following simple and multiple-step directions.
- Understands an increasingly complex and varied vocabulary.
- Develops increasing abilities to understand and use language to communicate information, experiences, ideas, feelings, opinions, needs, questions and for other varied purposes.
- Builds an increasing understanding of directionality, order and positions of objects, and words such as up, down, over and behind.
- Begins to use senses and a variety of tools to gather information.
- Develops increased ability to observe and discuss common properties, differences and comparisons among objects.
- Expands knowledge of and abilities to observe, describe, and discuss the natural world and living things.

**THE MISSION OF THE
MONTEREY BAY
AQUARIUM
IS TO INSPIRE
CONSERVATION OF THE
OCEANS.**

