

Language in the Sand



Topics

Language Arts,
Camouflage

Grades

PreK-2

Site

Indoors

Duration

20 minutes

Materials

- Tub, box or wet table containing fine sand
- Photos or images of sandy shore habitat and animals
- Sandy shore animal shapes made of sandpaper or construction paper
- Baggies or other small containers
- Blank paper
- Pencils
- Sentence strips

Vocabulary

camouflage

National Science Education Standards

Life Science (K-4)

The characteristics of organisms
Organisms and their environments

Language Arts Standards

see page 4

Overview

What is hidden in the sand? Students learn that animals are hidden, or camouflaged, at a sandy shore. Students then uncover animal shapes hidden in a classroom sand box and take part in language-art themed “camouflage challenges.” Challenges include working with a variety of letters, syllables and words.

Objectives

Students will be able to:

- Understand the concept of camouflage.
- Practice phonetic awareness, including decoding and vocabulary development, to increase comprehension.

Background

Integrating science concepts with language arts can be an effective and fun way to teach content. **Camouflage** is an adaptation that animals use to blend in and survive in their habitats. Many sandy shore animals depend on camouflage for protection. Some have coloration in shades of light browns, beige and tan that look similar to sand. Others depend on the ability to burrow or hide in the sand. Students can observe how camouflage works by looking for language arts challenges written on sandy-colored animal shapes hidden in a container of sand.

Language arts challenges can employ reading, writing, listening and speaking skills. All of these are interconnected elements of language development. Exposure to text and different language components aid students in learning to read. Practicing phonemes and other phonetics help students connect letter sounds with print. Decoding words and sounds allows students to recognize letter sounds and blend them to make words with increasing fluency. It also increases students' comprehension of what they read.



VOCABULARY

Camouflage: to blend in, match or hide in its environment

Teacher Preparation

1. Read the **Camouflage Challenge Instructions** described in this activity procedure and choose a few to do with students.
2. Make a number of construction paper or sandpaper sandy animal shapes. Look on the Monterey Bay Aquarium website (www.montereybayaquarium.org) for sandy shore animal ideas. Glue appropriate pictures or write words and letters on the back of each shape. Organize by challenge into baggies or other containers.
3. Fill a shallow box, tub or wet table with fine sand.

Procedure

1. INTRODUCE THE CONCEPT OF CAMOUFLAGE TO STUDENTS.

Tell students that many sandy shore animals are able to blend in, or camouflage, into their surroundings. This helps them hide from predators and even sneak up on prey. You may choose to show a picture of a beach and a sand dollar or other sandy shore animal to help students visualize this concept. Tell students they are going to find camouflaged animal shapes and then take a "Camouflage Challenge."

2. STUDENTS PARTICIPATE IN A CAMOUFLAGE CHALLENGE.

Have a student choose a Camouflage Challenge (i.e., one baggie or container of shapes) or select one for students. Bury the shapes in the tub of sand. Have students work in pairs or small groups and give the corresponding challenge instructions.

Camouflage Challenge Instructions

•PHONEMIC AWARENESS WITH LETTER SOUNDS

Write letters on the back of each paper animal. One student pulls out an animal from the sand. He or she says the sound the letter makes to their partner. His or her partner finds the letter on an alphabet list.

•PHONEMIC AWARENESS WITH BEGINNING OR ENDING SOUNDS

Write a letter and a short word (or glued picture) that begins or ends with that letter on the back of each paper animal. One student reads the letter and then the word that he or she found in the sand. The partner says whether the letter sound heard is at the beginning or end. (For example: dog, /d/ is at the beginning; bed, /d/ is at the end.)

•HIGH FREQUENCY WORDS

Write a high frequency word on the back of each paper animal. One student reads the word and uses it in a sentence. The partner then tries to write it or spell it out loud. Students check the word to see if it is correct.

•SYLLABLES

Write a multi-syllabic word on the back of each paper animal. One student reads it aloud. His or her partner guesses how many syllables are in the word and claps out each syllable. They then check the answer.



ELL TIPS

You can provide visual scaffolding for English Language Learners to develop new vocabulary. Post new vocabulary on a classroom word wall and be sure to include images with the new words.

•WORD FAMILIES

Choose two or three word families. Write a word from one family on the back of each card. Have students sort the words into the correct word families. (For example: pain, rain, train and bat, cat, that)

•NEW VOCABULARY

Choose two or three conceptual categories, such as living or nonliving. Write a word from one of those categories on the back of each animal shape. Have each student pair uncover five or six animal shapes and sort them into the categories. (For example: "sand" and "water" are nonliving; "fish" and "seaweed" are living.)

•PRACTICE LANGUAGE FORMS

Write one noun, verb or adjective on the back of each animal shape. Have each student pair uncover a few animal shapes and sort into language categories.

•PRACTICE COMPOUND WORDS

Put one half of a compound word on one shape and the other half of the word on another shape. Place several different word sets in the sand. Students must locate the two parts that create the compound word. For example: butter/fly, cup/board, school/bus, rain/coat, wrist/watch and book/mark. Students discuss why the compound word is made up of these two words.

•PRACTICE MAKING SENTENCES

Choose a selection of words that can go in simple sentences. Write one word on the back of each animal shape. Then write a simple sentence with a blank space on a sentence strip, such as "_____ have fins." Each student then tries to uncover a word that will fill in the blank. Students then write the new sentence.

Extensions

- Reuse **Camouflage Challenges** during center time or independent learning time.
- Explore the idea of camouflage using the Monterey Bay Aquarium curriculum activity *Disappearing Fish*.
- Make a sandy beach clam. Students decorate paper plates for the shell, put tissue paper inside for the body and attach a straw for a siphon. Put the clams into their "sandy home."

Resources

Website

Monterey Bay Aquarium. www.montereybayaquarium.org

Find more information about the sandy shore habitat and organisms that live there as well as other classroom activities.

Books

Eyewitness Books: Seashore. Parker, Steve. Alfred A. Knopf, 1990.

One Small Square: Seashore. Silver, Donald M. Learning Triangle Press, 1993.

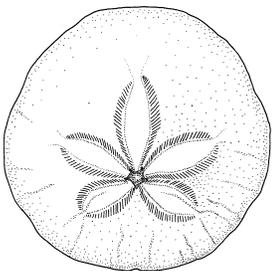


CONSERVATION TIPS

Include pieces of trash in your sandy tub. Have students clean their "sandy beach." Talk about how trash can be harmful to animals and why it is important to keep their homes clean. Discuss what can be recycled.



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



Standards

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)

California Science Standards

Grade K: 1a; 2a

Grade 1: 2a

Head Start Framework

- Understands increasingly complex vocabulary.
- Increases ability to identify sounds in spoken language.
- Shows awareness of beginning and ending sounds of words.
- Shows a growing ability to hear syllables in words.
- Progresses in associating letter names with their sounds.