



Sandy Shores

Concepts

Objects found on the sandy shore can be grouped into: evidence of plant life, animal life, humans, and non-living material.

HCPS III Benchmarks

SC 2.1.1
SC 2.1.2
SC 2.5.1
HE.K-2.5.1
PE.K-2.1.1
PE.K-2.2.1
PE.K-2.2.2
LA.2.6.1

Duration

1 hour

Source Material

MARE Sandy Shores
PRISM

Vocabulary

Beach
Beach drift
Marine debris
Currents
Tides
Waves
Sand

Exploring Hawaii's Beaches

Summary

Students will observations and identify the different types of things that can be found on the sandy shores of Hawaii. They will learn how to properly group or classify the different things they observe during the activity.

Objectives

- Students will explore and identify different materials that are typically found on the sandy shore and record those observations.
- Student will learn about the steps involved in the classification process

Materials

Activity 2: On the Beach "I Spy"

For each group of students:

- 4 different photos or pictures of beaches
(HINT: try to have different pictures for each group so you get a broad range of observations from the students)
- 4 "I Spy" datasheets

Making Connections

Students may recall personal experiences when they have visited Hawaii's sandy shores. They will learn how to become good observers by recalling those experiences and using pictures to identify different types of things they might see or find on the sandy shore.

Teacher Prep for Activity

Activity 2: On the Beach "I Spy"

Set up four stations in a section of the room with 4 different beach pictures and 4 "I Spy" datasheets per station.

Background

A **beach** is made of very small particles that cover part or all of the shore. It is made up of everything that has been washed onto it from the land or the sea. The sandy shore is made up of **biotic** and **abiotic** materials. Rocks and minerals are carried from the land to beaches from streams, rivers, and other water sources. Plant material and animal parts can be washed up onto the beach. Waves and wind push sediment and beach drift from the water onto the beach. **Beach drift** is anything that is living or nonliving that washes up onto the beach.



Marine debris is garbage that can be found in the ocean or on the sandy shore. Garbage made of plastic, glass, metal, and other materials can all become marine debris. Visitors who leave their garbage on the beach add to the amount of marine debris found on the sandy shore. Humans can also dump marine debris into the ocean from the land or sea.

Currents and **tides** move marine debris throughout the ocean. **Waves** crashing against the shoreline break and grind it up into fine pieces. These pieces become smooth and rounded over time and form into tiny grains of sand. This **sand** is washed up on the shore and creates the sandy shore.

Procedure

Activity 1: Partner on Parade (This should take no longer than 15-20 minutes)

1. Ask the students to come to the front of the room or another large open space and have them form two lines facing each other – BE SURE each student has a partner across from them
2. Explain to the students that they will be working in teams of two and they will need to cooperate with their partner, follow directions, and talk quietly with one another. Remind the students that to be a good listener they should never interrupt your partner and always look directly at them when talking. Explain that to have a good discussion each person must be a good listener and speak clearly when it is his or her turn.
3. Tell the students that you will be asking questions or giving them a topic to talk about with their partner. They will be given about 1-2 minutes to discuss after they have been given the question or topic – YOU will say GO, to start the discussion! Their discussion with their partner should stop when they are tapped lightly on the shoulder by the person in front of them. YOU will facilitate the end of each discussion by tapping the first two students in line.
4. Pose questions or topics from the following list one at a time:
 - When was the last time you visited the beach?
 - What do you think of when you hear the word “sand?”
 - Describe different places that you might find sand.
 - Where do you think sand comes from? What is it made of?
 - How do you think sand gets to the beach?
5. At the end of each 1-2 minute discussion period tap the first two students and wait until the last two students stop sharing.
6. Ask the students to share (one at a time) what they talked about with their partner.
7. Have the last student in the right line move to the front of the line and all other students move down one to the next partner.
8. Repeat steps 4-7 for each of the remaining questions.
9. At the end of the activity, ask the students to count off by 4 (may need to use a larger number for bigger classes) to establish four working groups for the next activity.

Activity 2: On the Beach “I Spy” (This should take ~30 minutes)

1. Read the background information aloud to the students. Read, define, and add the new vocabulary words to your sandy shores vocabulary list.
2. Ask each group to move to their numbered station and wait quietly for directions.
3. Explain that each group should have four different pictures of beaches in Hawaii. They should each take one “I Spy” worksheet and put their name on the top.



4. Read the directions at the top of the worksheet out loud to the students. Explain that they will be making and recording the things they see on the beach in their pictures on their
5. Move around to each group and facilitate good observations by pointing out important aspects of the pictures they may have missed or overlooked. Allow about 7-10 minutes to complete their observations.
6. At the end of the observation period, give the students 2-3 minutes to finish recording their observations on their worksheet.
7. Once they have finished their worksheets, ask the students to raise their hands and share their observations. Make a list on the board of all the things they observed.
8. At the end of the activity, congratulate the students on their good listening and group work skills.

Assessments

Predictions Made

Worksheets Completed

Resources

For pictures of Hawaii's beaches:

Calendars, Google Images, Magazines, Hawaii brochures and other educational materials

Literature Connections

Flotsam by David Wiesner

This book can be used to introduce this lesson. The book (picture book) is about a boy who finds a camera on the beach and has excellent pictures of both living and non-living things that you might find on the beach or sandy shore. This is an excellent opportunity for the students to begin thinking like a scientist and making good observations. The book contains only pictures therefore the students also gain practice at making an observation and discussing or recording what they see. You could ask them to describe and record on a worksheet or blank piece of white paper what they see as you work through the book together.



STUDENT NAME _____

"I Spy" Datasheet



On the beach I can see.....

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____









