

RESOURCE LIBRARY
ACTIVITY : 45 MINS

Land, Water, and Animals on a Map

Students determine the colors for land and water on a map. They read a map and create a chart of animals that live in water and on land.

GRADES

Pre-K, K, 1

SUBJECTS

Geography, Physical Geography

CONTENTS

5 Images, 3 PDFs

OVERVIEW

Students determine the colors for land and water on a map. They read a map and create a chart of animals that live in water and on land.

For the complete activity with media resources, visit:

<http://www.nationalgeographic.org/activity/land-water-and-animals-map/>

DIRECTIONS

1. Build background about Earth's land and water.

Project the image of land and water, and explain that Earth has both land and water. Invite a volunteer to point to the land and then point to the water in the image. Ask students if they live on water or land. Show the image of homes on land and on water. Ask: *Do you think that more people live on land or on water? (on land) Why do you think more people live on land*

than on water? (It's easier for humans to live on land.) Ask students what kinds of water they have visited. Show the Bodies of Water chart with images of the ocean, the lake, the river, and the bay. Ask: *Which bodies of water are close to our town?*

2. Show the map of Duck Lake.

Project the map of Duck Lake. Explain that a map can show Earth's land and water. Point to the map key and ask students what they think the green and blue mean. Have a volunteer point to the land, and then point to the water on the map. Point to Mill Road and ask students what they think it is. Ask: *What color would you use to show a river on a map? An ocean?* (blue)

3. Show the map of Duck Lake with animals.

Project the map of Duck Lake with animals, and ask students to name the animals they see. Ask: *Which do you think live on land? Which do you think live in water?* Point out that while many land animals can swim, their permanent home is on land. Ask: *What water animal cannot live on land?* (fish) *What animal can move on land, water, and in the air?* (duck)

4. Practice the language of location.

Practice positional language to build students' spatial skills. Ask: *Which animals are near the lake?* (skunk, rabbit, bear) *Which animals are across the road?* (deer, squirrel)

5. Create a chart showing land and water animals.

Explain to students that they will create a chart showing the animals on land and water. A chart is another way to show information. Give each student a copy of the Animal Cutouts and Sort the Animals worksheets. Have students cut out the nine animal shapes. Keep the map of Duck Lake projected, and have students read the map and glue each animal in either

the land animals or water animals column on the Sort the Animals two-column chart depending on where they are found on the map. Project the final chart and have students check their answers.

Modification

Have students practice cardinal directions using the Duck Lake map. Ask questions such as “The deer wants to go to water. In which direction should it walk?”

Tip

Point out that color is often used as a symbol on maps. Mapmakers use different colors to show different information.

Informal Assessment

To review and assess students’ ability to distinguish land and water on a map and as habitats for different animals, have them complete the Animals on the Map worksheet. Give each student the worksheet, crayons, scissors, and glue.

Extending the Learning

- Have students draw their own map and chart of land and water animals. Have them show two other animals that live on land and two others that live in the water.
- Provide blue and green clay and a container such as a baking pan. Have students make land with green clay and water with blue. Have them place plastic toy animals or drawings attached to wood craft sticks on the land or in the water to show where they live. Then have students draw simple 2-D maps of their 3-D models. Model how this is done for students by working through the process on the whiteboard. First draw the shape of the baking pan. Ask: *Where is the water located in the pan? Where should we draw it on the board?*
- Have students look at an atlas map of the world and observe and discuss the colors that mapmakers have used for the land and water. Although the water is likely to be blue, the land is not likely all green. Usually continents or countries are shown in different colors. Mapmakers use different colors to show different information.
- For a math connection, make a two-column chart titled “Our Pets.” Label one column “land” and the other “water.” Have students name the pets they have at home and state whether

they are land or water animals. Have students count the number of land pets and water pets. Discuss which group is larger and which is smaller and why this might be the case.

OBJECTIVES

Subjects & Disciplines

Geography

- Physical Geography

Learning Objectives

Students will:

- use a map to identify land and water
- use a map to identify and sort animals that live on land and animals that live in water

Teaching Approach

- Learning-for-use

Teaching Methods

- Discussions
- Information organization
- Visual instruction

Skills Summary

This activity targets the following skills:

- 21st Century Student Outcomes
 - Learning and Innovation Skills
 - Communication and Collaboration
- Critical Thinking Skills

- Understanding
- Geographic Skills
- Organizing Geographic Information

National Standards, Principles, and Practices

NATIONAL COUNCIL FOR SOCIAL STUDIES CURRICULUM STANDARDS

- Theme 3:

People, Places, and Environments

NATIONAL GEOGRAPHY STANDARDS

- Standard 1:

How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information

- Standard 3:

How to analyze the spatial organization of people, places, and environments on Earth's surface

COMMON CORE STATE STANDARDS FOR ENGLISH LANGUAGE ARTS & LITERACY

- Reading Standards for Informational Text K-5:

Key Ideas and Details, RI.K.2

- Reading Standards for Informational Text K-5:

Integration of Knowledge and Ideas, RI.1.7

THE COLLEGE, CAREER & CIVIC LIFE (C3) FRAMEWORK FOR SOCIAL STUDIES STATE STANDARDS

- Geographic Representations: Spatial Views of the World: D2.Geo.2.K-2:

Use maps, graphs, photographs, and other representations to describe places and the relationships and interactions that shape them.

- Geographic Representations: Spatial Views of the World: D2.Geo.3.K-2:

Use maps, globes, and other simple geographic models to identify cultural and environmental characteristics of places.

Preparation

What You'll Need

MATERIALS YOU PROVIDE

- Crayons
- Glue
- Paper
- Atlas map of the world (optional)
- Blue and green clay (optional)
- Container such as a baking pan (optional)
- Plastic toy animals or animal drawings attached to wood craft sticks (optional)
- Safety scissors

REQUIRED TECHNOLOGY

- Internet Access: Required
- Tech Setup: 1 computer per classroom, Projector

PHYSICAL SPACE

- Classroom

GROUPING

- Large-group instruction

BACKGROUND & VOCABULARY

Background Information

Maps help children to understand that Earth is made up of both landmasses and bodies of water. Students learn that maps can show many types of information—in this case that different animals live on land and water. Distinguishing between land and water on maps is a

basic map-reading skill.

Prior Knowledge

["cardinal directions"]

Recommended Prior Activities

- None

Vocabulary

Term	Part of Speech	Definition
land	noun	solid part of the Earth's surface not covered by water.
map	noun	symbolic representation of selected characteristics of a place, usually drawn on a flat surface.
map skills	noun	skills for reading and interpreting maps, from learning basic map conventions to analyzing and comprehending maps to address higher-order goals.
water	noun	chemical compound that is necessary for all forms of life.

For Further Exploration

Books

- Leedy, Loreen. *Mapping Penny's World*. New York: Square Fish, 2000.
- Sobel, David. *Mapmaking With Children: Sense of Place Education for the Elementary Years*. Portsmouth, NH: Heinemann, 1998.

Picture Books

- Hutchins, Pat. *Rosie's Walk*. New York: Simon and Schuster Books for Young Readers, 1968.

