

SNWA Goal 1 Objective 1.2

CCSD Curriculum Essentials Framework

It is expected that:

Science

(3)2.3 students will investigate and describe how plants and animals require certain conditions to survive. WCSD 6.3.3

(3)2.4 students will investigate and describe how various living things behave differently under diverse conditions. WCSD 7.3.1

(3)2.10 students will explain how particular features of plants and animals help them live in different kinds of places. WCSD 9.3.2

Purpose: The purpose of this activity is to focus students' awareness on a small area of the environment, noting the effect of the presence of water on plant and animal life.

Time: 1 hour

You will need:

- paper for class chart

For each group of four students you will need:

- string (4 meters)
- plastic bag (small)
- two small, clear vials or containers with lids or other small containers (film canisters work well)
- four 10-penny nails
- magnifiers

Each student will need:

- science notebook and pencil

Teacher Note:

Identify, in advance, areas around the school that show evidence of plant and/or animal life.

Introduction

1. Tell students that they will be looking closely at the environment to determine what, if any, plant and animal life they can find within a certain area.
2. Divide students into groups of four, giving each group a 4-meter piece of

string, a plastic bag, four 10-penny nails, and two small containers with lids.

Teacher Note:

Before you take students out on the school grounds, establish safety rules! Students will be using nails to gently dig out a sample of soil or specimens of small animals. Advise students not to pick up any animal until they check with you. They will also be storing their samples of soil and plants in plastic bags. Be sure to review proper handling of all materials.

3. Assign each group to an area of the school grounds within your visual range. Choose different environments if possible. The group should tie the ends of their string together and lay it in a circle on the ground. Students should observe whatever is inside their circle of string and then use words and drawings to record a description of that environment in their notebooks. They should look for evidence of plant and animal life, as well as evidence of the water needed to sustain life.

Making Discoveries

4. Allow about 10-20 minutes for students to establish their observation area and record observations. As they work, circulate among the groups, asking questions. “How many plants are growing here? How many different plants are growing here? What is the soil like? Have you found any animal life? With your nail, dig down into the soil. Is there any evidence of water?” Students should collect a small sample of each to place in the bag. (Animals go into the vials).
5. Return to the classroom and allow students to make more detailed drawings of their collection samples. (Distribute magnifiers as students need them.)

Closing

6. Have each group report to the class where they worked and what they found. As they share, record their findings on a class chart to remain posted as follows:

Location	Description of Location	Number of Plants Found	Number of Animals Found	Evidence of Water	Other

7. When all groups have reported, compare and contrast the areas. What was the same? What was different? Why do you think there were differences?
8. Return all living things promptly to the environment they were taken from.



Word Bank

The teacher should introduce or review the following vocabulary with the students within the context of this lesson.

animals: any of the various organisms of the kingdom Animalia

environment: surroundings

magnifier: a lens that makes things look larger

plants: any of the various organisms of the kingdom Plantae

