

IN MY OWN BACKYARD

CONCEPT

Students will explore the soil and vegetation found in their home and/or school environment and map a familiar area.

STEP-BY-STEP INSTRUCTIONS

1. Provide each student with two small plastic food storage bags and ask them to fill one bag with soil from their yard at home and one with vegetation or any other object of interest that they find near the spot where they dig the soil.
2. Once students have gathered their samples, give each the opportunity to tell classmates where the sample was gathered (“under the big tree in my yard, etc”) and to share any observations they made as they were gathering their samples. (“This came from the part of the yard where I like to build forts when I play with my friend.”) Ask questions that encourage students to talk about the locations where they gathered their samples.
3. Divide students into groups and take the class outdoors to the schoolyard or an outdoor classroom. Assign each group a section of the schoolyard and have the groups draw maps of their assigned places and gather soil and vegetation samples. Dry the samples on newspapers for a day or two, then have students glue the samples to the maps to decorate them. Have students put their maps together to form a large map of the school yard or outdoor classroom.

GRADE LEVEL

K-3

NATIONAL GEOGRAPHIC THEMES

Location, Place,
Human-
environment
interaction

SUBJECTS

Geography,
Language Arts,
Science

MATERIALS NEEDED

Small plastic
bags, glue

RESOURCES

The Learning Web
[www.usgs.gov/
education](http://www.usgs.gov/education)

4. Ask students if they noticed any insects, birds or animals as they were drawing their maps. Were any of the critters eating? Where did they get the food? What about shelter? Where did they go to get the materials that provided them with shelter? Share the background material provided with this lesson. Ask students to think about where they get their food and shelter. If necessary, would they be able to find all they need to survive in their own backyard? What kinds of things did they find in their yards that they could eat or use as shelter?. Explain that just as insects and birds depend on the soil, so do we depend on agriculture to provide us with the things we need to live.
5. Have students write or tell stories describing how they would survive for a day or two on materials they find just in the schoolyard or their yards at home.

BACKGROUND

Without the soil we would have no food, no clothing, and no shelter. From gardens and farms we get vegetables and the grains we use to make cereal and bread. Fruit grows on trees and vines that grow in the soil. Trees also give us lumber. The wood can also be used to make paper, paints and other products.

The food we feed our animals comes from the soil, too. Cows eat grass, hay, silage and grain to produce milk and meat. Plants grow in the soil. Besides food, animals also supply us with leather and with by-products used in paints, camera film, pet food, rubber, crayons, lotions, soaps, leather, medicines and much more.

EXTENDED ACTIVITIES

Get permission to make a mud hole in the school yard, and have students dress in old clothes one day and, as a class, make a relief map of the school yard in the mud.