

# SCHOOLYARD ECOLOGY

Grades 3-6

Teacher's Guide

LAWRENCE HALL OF SCIENCE UNIVERSITY OF CALIFORNIA AT BERKELEY

LHS GEMS



# Activity 1

## What You Need

### For the class:

- 4 wide-tipped felt markers, in black, blue, and two other colors
- an overhead projector
- several blank overhead transparencies
- overhead transparency pens in several colors
- 1 large (about 3' x 4') piece of white butcher or chart paper

### For each student:

- an 8 ½" x 11" piece of cardboard or manila folder
- 2 small binder clips or large paper clips
- pencil
- an 8 ½" x 11" student map of study site (made by the teacher; see "Getting Ready")\*
- a journal or lined paper to become part of a journal

# Activity 2

## What You Need

### For the class:

- the large map of the site (made in Activity 1)
- a wide-tipped, colored felt marker—in a color different than previously used on class map
- 1 spray bottle filled with water
- (optional) approximately 100 ½"-diameter self-adhesive dots, all one color
- (optional) stories about spiders to defuse anxiety (see the "Resources" and "Literature Connections" sections on pages 81 and 99)

### For each pair of students:

- (optional) 1 copy of the Spider Web Identification Key (master on pages 76–80)

### For each student:

- clipboard (from Activity 1)
- pencil
- 1 student map of study site (made in Activity 1)
- 2–4 Animal ID Cards (master on page 30)
- a journal

## Activity 3

### What You Need

#### For the class:

- the large map of the site (made in Activity 1)
- a wide-tipped, colored felt marker—in a color different than previously used on class map
- a large piece of chart paper or a blank overhead transparency
- a few magnifying lenses
- a dispenser of transparent adhesive tape (to repair shake boxes in the study area)
- (*optional*) field guides for common insects and invertebrates

#### For each pair of students:

- 1 shake box (see "Getting Ready")
- 1 pair of scissors for the sorting activity

#### For each student:

- clipboard (from Activity 1)
- pencil
- 1 student map of study site (made in Activity 1)
- a page of Animal ID Cards (master on page 30)
- a journal

## Activity 4

### What You Need

#### For the class:

- the large map of the site (made in Activity 1)
- 1 cafeteria tray or box lid to carry foods outside
- 4 types of ant food: 1 tablespoon jelly or jam, a few ounces of apple juice or non-diet soda, a graham cracker, and a small can of cat food
- 1 sponge (clean and free of soap)
- 1 ziplock sandwich bag
- a spoon or popsicle stick
- grocery bag
- (*optional*) a few magnifying lenses

#### For each group of 4 students:

- 4-5 flat wooden toothpicks
- 1 lid (any size—frozen juice can or yogurt container lids are fine)

#### For each student:

- clipboard (from Activity 1)
- pencil
- 1 student map of study site (made in Activity 1)
- 1 copy of the Ant Challenges student sheet (master on page 48)
- a journal

# Activity 5

## What You Need

### For the class:

- the large map of the site (made in Activity 1)
- a selection of wide-tipped, colored felt markers
- a few magnifying lenses
- about 100 yards of string or yarn to make loops

### For each student:

- clipboard (from Activity 1)
- pencil
- 1 student map of study site (made in Activity 1)
- a string loop\*
- a small piece of cardboard or a stick (to wrap string around)
- 1 piece of white unlined paper
- 1 piece of white lined paper
- a journal
- (*optional*) a page of Animal ID Cards (master on page 30)
- (*optional*) a paper or plastic bag or newspaper to sit on at study site