



# Lesson 13: Bug Safari

## Key Concepts:

- Insects are a diverse and abundant.
- Insects live in a variety of habitats.
- Insects share some common features.
- An invertebrate is an animal that does not have a backbone.
- Invertebrates are important in natural systems/food webs. They provide food, help decompose to make soil, and pollinate plants.

## Skills:

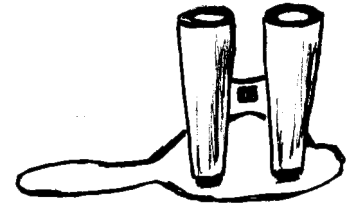
- Make observations
- Compare and contrast

## Materials:

- Zip-lock bags
- Small containers w/lids
- Plastic spoons
- One trowel per group
- Extra adults for supervision
- Field guides
- Non-fiction related to insects, spiders, worms, and other invertebrates

## Objective

One of the greatest things about studying insects is that you can find them in every environment. In this lesson, you take your students on a school yard “safari” to illustrate how diverse insects are.



## Background

Insects and other invertebrates are diverse and abundant. They will be by far the most common type of animal in your schoolyard! This lesson introduces a class to the concept of invertebrates, including where they can be found and how diverse they can be.

## Procedure

1. Tell the class that you are going to lead them on a safari. Ask them to tell you what a safari is, and what they expect to find. (Initially the responses will be birds, salamanders, and other vertebrates).
2. Ask students to point to their vertebrae. Discuss what a back bone is. Sort the animals they have suggested above into “have a backbone” and “don’t have a backbone”. Introduce the term *invertebrates*. Ask them to think of some invertebrates they might find. Tell them that these are what you are searching for today on your safari. When you feel your students have an idea of what is ahead, brainstorm a list of where students think they will have the most success discovering insects, bugs, worms, and other invertebrates.
3. Before going outside, discuss what constitutes good work. List the characteristics a good field scientist would have. Be sure to emphasize the importance of being respectful to each other as well as the animals and plants found on safari. Discuss expectations.
4. Divide the class into teams of 2 or 3, with each team selecting one of the habitats included on the list. Have student groups collect one sample of as many invertebrates as they can find. Provide collection jars, trowels, spoons and any other supplies you think they will need.
5. While in the field encourage the teams to work together and to think like an insect.
6. Back in the classroom help teams put each organism they found into a clear film canister or pill bottle (from most science kits). Have groups sort their invertebrates.
7. As a whole group, discuss how groups sorted. Help students sort into categories of insects, worms, spiders, and other invertebrates. Tell

students that larvae are not actually worms, but young insects that recently hatched from eggs and will grow into adult insects. Sit in a large circle and pass around samples, sorting and identifying (if you know them) as you go. Discuss where each specimen was found and how it was behaving when found.

8. If desired, you may work to identify all of the specimens and record what you have found as a class collection.
9. Release the insect back to the spot where it was collected.



## Extension

Create a schoolyard field guide to insects and other invertebrates. Have your students each choose one of the specimens they found to study further. You may wish to choose all insects. Assign each child one species, and identify it for them. Help gather resources, both print and from the Internet, that teach about the species you have collected.