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# Activity 1

## I Spy

### Investigation

*Collecting insects and other small animals.*

### Skills

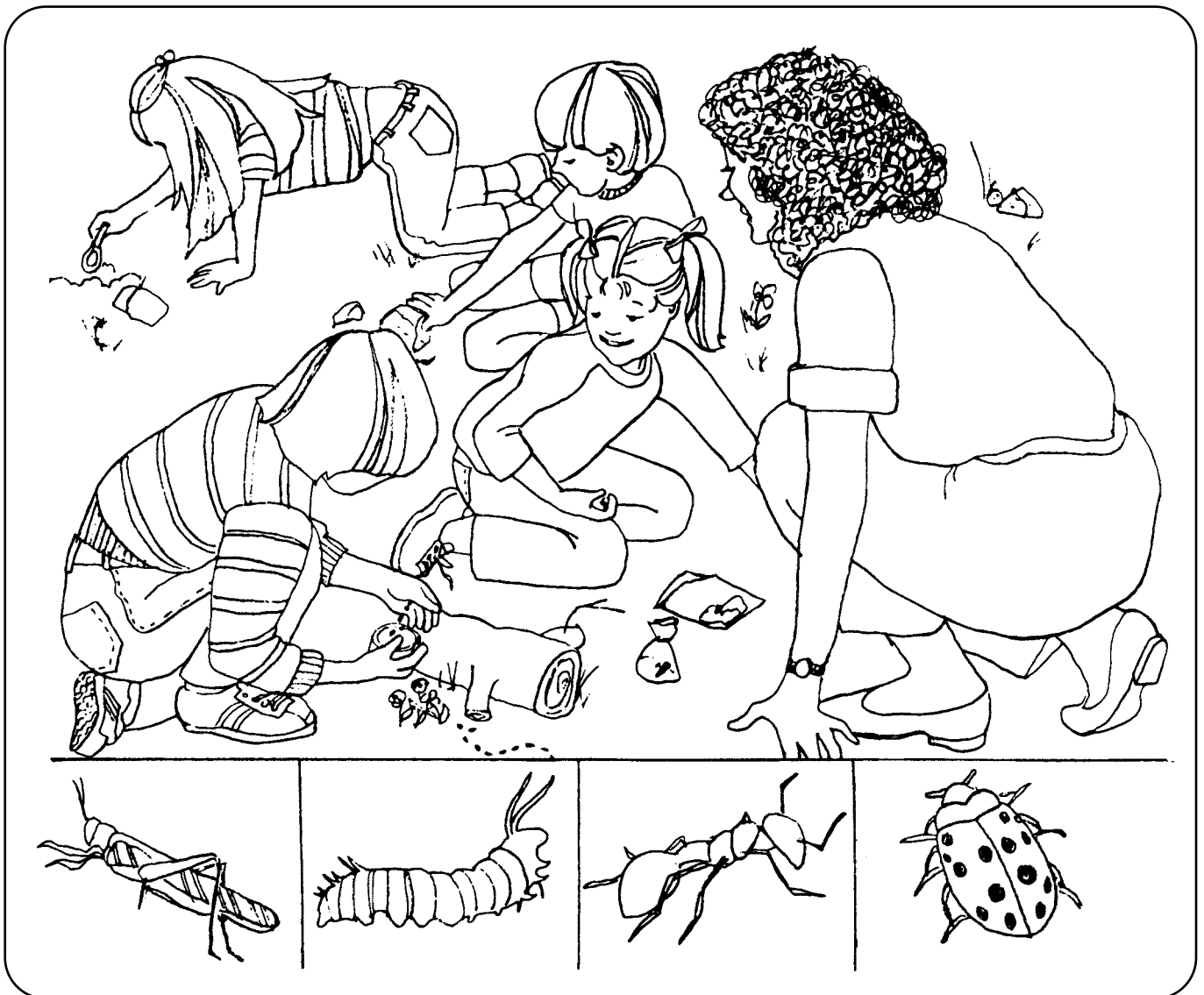
Observing differences ⇄ Labelling

### Materials

Plastic bags or jars with lids; adhesive-backed labels; spoons or butterfly nets.

### Setting Up

You will be going on a walk with the children to look for insects. Take plastic bags or jars, spoons and/or butterfly nets with you. Use a needle to poke air holes in the bags or hammer air holes in the jar lids with a nail. Have the labels ready for use when you return to the classroom.



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## Starting Out

Go on a walk with the children. Assign groups of children to an area and have each group search for insects and other small creatures in the area assigned to them. Encourage them to look under logs, leaves, rocks and so on for small animals. Some of the animals you can expect the children to find are: ants, ladybirds and other kinds of beetles, centipedes, millipedes, spiders, earthworms, and caterpillars. Discourage children from using their fingers to pick up insects as some of them may bite.

As you help the children find small animals in the environment, be sure to model a caring and respectful attitude toward all living creatures. Encourage gentleness in collecting specimens.

## Guiding Children's Actions

1. As the children find insects and other crawlers, have them collect only types that are different from the ones they already have. This will require comparing each new species they discover with the ones they have already found.
2. The safest way for the children to collect insects and other small animals is to use a spoon or butterfly net. Warn the children not to use their hands to pick up unfamiliar animals as some, including many species of spiders, can bite.
3. As the children scoop up the specimens and place them in the containers, have them include some of the soil, leaves and plants they find in the environment immediately around the animal (unless you are planning to let the animals go immediately). This will provide the basis for food and habitat needs of the species for at least the time being.
4. Help the children to label the bags or jars with the date and the location (under a log near the swing set, for example).
5. At the end of the nature hunt, ask questions like these:
  - Where did you find the greatest number of small animals?
  - How many different kinds of creatures did you find?
  - Did your group find an animal that the other groups did not find?
  - Where was the best place to look for insects and other crawlers?
  - What were the creatures doing when you found them?
  - Which ones were difficult to catch? Why?
  - Did you find any dead creatures?

## Stretching their Thinking

If a child finds an object that they are unsure is an animal, bring it to the attention of the class. Ask the children how they can tell the difference between animals and plants. How can they tell the difference between living and nonliving things? The children may point out that living animals move, breathe, grow, eat and so on.

## Activity 2

# Bug Sort

### Investigation

*Classifying insects and other crawlers.*

### Skills

Comparing ✧ Classifying ✧ Describing categories  
✧ Interpreting data

### Materials

Plastic bags or jars with lids; magnifying glasses; insects and other crawlers; sorting mat and sorting mat labels, *Wings* and *No Wings*, (see page 74 for labels); box lids; pictures of insects, spiders and other arthropods.

### Setting Up

Poke air holes in the bags with a needle and hammer air holes in the jar lids with a nail. You can do this activity outside where you found the insects or in the classroom. Use the insects the children found in Activity 1. Have the magnifying glasses and sorting mat and labels ready to use in studying the creatures.



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## Starting Out

You could do this sorting activity as a follow-up to Activity 1. The sorting can be carried out either in the field or back in the classroom. Be sure each animal is in a separate jar or bag as described in Activity 1 and provide some magnifying glasses for the children to use in examining the creatures. Ask the children how they are alike and different.

## Guiding Children's Actions

1. One of the first differences the children may notice is that some of the creatures have wings and others do not. Introduce the sorting mat and labels.
2. Have the children place the jars or bags in the appropriate columns. Encourage the children to take great care in handling the animals.
3. When the animals have been sorted this way, ask:
  - In which of the creatures are the wings hidden?
  - Which of the winged insects fly? Which do not fly?
  - How many wings does each winged insect have?
4. Then ask the children to think of other ways the animals can be sorted. They may name differences such as their shape (worm-shaped versus insect-shaped), their size (small, medium and large) or whether they have legs or antennae.
5. Relabel the mat (you may need more than two columns) according to the categories named by the children and have them place the animals in the appropriate columns as described above. Work through each classification as a group effort.

## Stretching their Thinking

Have the children sort the small animals into categories depending on the kind of environment in which they were found. (In Activity 1, the bags or jars were labelled with this information.) The categories might include: under a stone or log, on a branch or leaf, on the ground and so on. When the children have sorted the animals, ask them where they are most likely to find insects and other small animals.

As a follow-up to the above activities, set up a science centre with some box lids and pictures of different kinds of insects and other arthropods, such as spiders, centipedes, millipedes and so on. Let the children sort the pictures in any way they wish. When they have finished, ask them to describe the categories.