# Invent an Insect:

## Insect Explorations Post-Trip Activity

*Based on "Invent an Insect" by Ranger Rick's Naturescope and Project Wild Aquatic's "Fashion a Fish"*

**Objectives**

Students will:

- Draw make-believe insects in their habitats.
- Describe the insects' adaptations and how they fit the insects' habitats.

**Vocabulary**

- Adaptation - a structure (part of the body) or behavior (action) that helps a plant or animal survive or reproduce in its environment
- Habitat – the food, water, shelter, and space that an organism needs to survive

**Materials**

- Pictures of a variety of insects
- Index cards with descriptions (See "Lesson Preparation".)
- Paper and pencils
- Optional: markers or crayons

**Lesson Preparation**

Gather pictures of insects. Insect books with pictures or magazine photos work well. Write invention directions on index cards. You will need one index card per student, unless you plan to have students work in groups. The same directions may appear on multiple index cards. Some direction ideas are:

- Invent an insect that lives in a pond.
- Invent an insect that lives in the prairie.
- Invent an insect that lives in a tree.
- Invent an insect that lives in a cave.
- Invent an insect that lives in soil.
- Invent an insect that lives in an animal's fur.

You may also add adaptation specifics such as:

- you wouldn't want to touch,
- you can see through,
- could outrun you, or
- makes a loud noise.

**Procedure**

1. Ask students to recall some of the insects they saw during their field trip and where they saw them (in the water, on a tree, on a flower). List this information where students can see it.
2. Review the meanings of "habitat" and "adaptation". If you have a picture of an insect mentioned by a student, show the picture to the class. Ask students to name some adaptations each insect has that fit its habitat. (Possible answers are: long legs for jumping through the grass, hairs on legs for climbing, pincers for grabbing food that swims by, or large eyes for looking in many directions while flying.)
3. Show some of the remaining insect pictures, and ask students to describe a habitat where each insect might live. Ask them to name some adaptations that would fit those habitats. Display the insect pictures where students can reference them during the rest of the activity.
4. Tell students that they are going to be insect inventors today. Distribute the index cards, and have students answer the following questions on a piece of paper:
    a. What does your insect eat?
    b. What might try to eat your insect?
    c. How does the insect move and defend itself?
    d. What special adaptations does your insect have?
5. Then have each student draw a picture of his or her insect. Remind students that each insect needs 3 body parts (head, thorax and abdomen), 6 legs, and 2 antennae. You may have students label these body parts.
6. Have students name their insects and write the names on their drawings.
7. Instruct the students to draw habitats for their insects.
8. Display the insect drawings and their descriptions. Ask students to observe the class collection of insects and find some that:
    a. look similar to insects that really exist,
    b. don't look like insects,
    c. have the same habitat but look different from each other, or
    d. have different habitats but look similar to each other.

    Discuss their findings.

**Extension Ideas**

- Have students create three-dimensional models of their insects.
- Review metamorphosis, and have students draw their insects' life cycles.
- Middle school students can classify their insects into one of the major insect orders. (Since the insects are fantasy, a student might have to choose an order that best fits his or her insect.)