

## Build Your Own Bugs – 2 Lessons for Kindergarten or First Grade

### Recommended for small groups of 6-8

Objective: Students come to understand what makes an insect different from other creatures and how they are all the same. Students think creatively about what makes creatures similar yet unique.

### Kindergarten

There are many creatures in our garden. While Kindergarten explores ladybugs as part of their science curriculum, this lesson will help students recognize what makes a creature an insect while they compare ladybug structure to other garden creatures.

### Prepare for Kinder

Gather ink pads, paper (or individual science journals) and pencils. Gather stamps and the book Build your own Bugs. Provide the students with stamps from at least 3 complete insects and the spider. (avoid the butterfly as it doesn't show 6 legs). Read the book section about *what is an Insect* pg6-7 and the pages correlating with the insect stamps you chose in preparation.

### Action for Kinder

Ask students if they are now learning about Ladybugs? Do they know if Ladybugs are a type of insect? Ask students how many different insects can they name? You may need to help them with some other insects. They look very different don't they? What makes each of these animals an insect? Let's find out what all insects have in common. (3 minutes)

Read a simplified version of pages 6 and 7 emphasizing the main characteristics of an insect (6 legs and 3 body parts and 2 antennae) and the last section about the diversity of insects. Show pages 8 and 9 Relatives of insects. Why are they not insects? Read pg 14-15 about Ladybird beetles. (4 minutes)

Ask students to watch while you demonstrate using stamps to create an insect. It is an insect because it has 3 body parts, 6 legs and 2 antennae. The insect stamps have 2 or 3 body parts on one stamp so there won't be 3 stamps/body. (1 minute)

Give each student a piece of paper or their science journals and show them the stamps. Ask them to create an insect (a creature with 3 body segments, 6 legs and two antennae, which are already on the head stamp). They can, but don't have to use the stamps to create bugs exactly as they appear in the book. They can create new insects that haven't been discovered yet. (4 minutes)

If time permits have them create a creature that is not an insect– maybe it has more or less than 6 legs. . Take a look at some creatures and decide if they are insects or not and why.

## First Grade

While first grade learns about organisms, they can use this lesson to create their own imaginary creature and define what makes their creature special.

Teachers could use this lesson in a writing exercise linked to science concepts by having students write a story about their imaginary creature by answering some questions that help categorize any creature:

1. What does your creature eat?
2. What does its mouth look like? (which would depend on what they eat)
3. Do the young look like the adults or different? Baby grasshoppers look like miniature adults, but caterpillars and butterflies look very different as do ladybug larvae and the adult ladybug.
4. How long do they live?
5. How do they defend themselves from other creatures?
6. Do they live in a colony or alone?
7. Are they nocturnal? Or do they like to be out during the day?
8. Where do they like to rest?
9. What is their shelter like?
10. What temperature do they like to live in?
11. Can they survive cold temperatures? How?