

## Focus on: Ladybug Life Cycle

This lesson is meant to support the unit on Structures and Functions of Living Organisms. It can be done to generate background knowledge prior to teaching the unit, during the unit to reinforce lessons, or as a follow up to the butterfly unit to meet the objective of comparing a variety of animal life cycles. How you guide your students will depend on the information you have already taught and the information you want to introduce. Please remember that many gardens run on a yearly cycle and it will be easier to find more animals in the garden during the peak growing season.

### Clarifying Objectives:

2.L.1.1 Summarize the life cycle of animals including:

- Birth
- Developing into an adult
- Reproducing
- Aging and death

2.L.1.2 Compare life cycles of different animals such as, but not limited to, mealworms, ladybugs, crickets, guppies or frogs.

2.L.2.1 Identify ways in which many plants and animals closely resemble their parents in observed appearance and ways that they are different.

### Key Vocabulary:

Definitions can be found at <http://learnersdictionary.com>

-Summarize  
-Life Cycle  
-Birth  
-Developing  
-Reproducing  
-Aging  
-Death  
-Compare  
-Plant Parents  
-Observed  
-Appearance  
-Variation  
-Individuals  
-Related  
-Egg  
-Larva  
-Pupa  
-Adult

### Focus Question(s):

How does the life cycle of a ladybug compare to the life cycle of a butterfly?

### Materials:

School Garden

Garden Gloves to wear while exploring the garden especially if touching plants, soil, lifting pots, etc.

Science Notebooks

### Activities:

1. Pass out the following article for students to read. (in groups or with partners) <http://kidsgrowingstrong.org/LadybugLifecycle>
2. Watch the following time lapse video to see the different life cycle stages: <https://www.youtube.com/watch?v=wqddneGYkc4>
3. Discuss the article and the videos and share findings.
4. Tell students we will be visiting the garden to look for the different life cycle stages of the ladybug. Remind students that the ladybug at all life cycle stages is VERY helpful to our school garden since it eats bugs such as aphids that eat our plants. Therefore, after we observe them, we will leave them be so they can keep helping our garden!
5. Ask: *What are some tips for helping us to find the most ladybugs?* (Move slowly, speak quietly, be patient, look closely, etc.) Remind students they will have to look VERY closely in the garden to find the life cycles. Encourage students to look on leaves, under leaves, on stems, everywhere! Hint: If you find aphids, you may find ladybugs! Aphids could be on almost any plant.
6. Head to the garden to search for ladybugs.
7. When one is found, there will be a rush of other students who want to see it too. Remind them to walk and take turns looking at it without pushing. We don't want to harm the people, the animals or the plants in the garden.
8. When students find a ladybug or one of the stages of its life cycle, they should sketch it in their science notebooks and write a bit about it.
9. When you return to the room, explore the following ladybug website to learn even more about the life cycle: <http://www.ladybug-life-cycle.com/>
10. Also, don't miss the section that shows that ladybug adults can come with lots of different colors and patterns: <http://www.ladybuglady.com/stripes.htm>
11. Discuss the website and the students' findings from their science notebooks from their visit to the garden. Use the Guiding Questions and encourage the use of the Key Vocabulary.
12. FYI Follow-Up: Ladybugs are not only red; they can be white, orange, yellow, and even black. (We have seen all colors in our garden!) They are great to have in the garden! They eat aphids, which are common garden pests. The larva stage can look scary and may make you want to get rid of it, but don't! They eat aphids and other bad bugs too.

### Guiding Questions:

- What stages of the life cycle did we find in the garden?
- What stages didn't we find?
- Where did you find them?
- What did they look like?
- What did you learn from the videos or article?
- In what ways are the different stages the same?
- In what ways are the different stages different?
- How does this life cycle compare to other animal life cycles?
- Is this animal beneficial to have in our school garden? Why or why not?