

## Focus on: Cabbage Butterfly Life Cycle

This lesson is meant to support the unit on Structures and Functions of Living Organisms . It can be taught during the unit to reinforce lessons or as a follow up to the butterfly unit to reinforce concepts that were learned. How you guide your students will depend on the information you have already taught and the information you want to introduce. Also, in order to find the cabbage butterfly in all of its life cycle stages, you will need to have brassica plants growing in your garden (nasturtium, alyssum, wallflower, cabbage, collards, brussels sprouts, kale or mustard greens). If you do not have these plants growing in your garden, consider asking your garden coordinator if you can add them. It will be easier to find the cabbage butterfly life cycles in the garden when the brassica plants are well established (mid to late spring).

### 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  
-Adult  
-Reproducing  
-Aging  
-Death  
-Compare  
-Plant Parents  
-Observed  
-Appearance  
-Variation  
-Individuals  
-Related  
-Egg  
-Larva  
-Chrysalis  
-Pupa  
-Adult

## Focus Question(s):

How does the life cycle of the cabbage butterfly compare to the life cycle of the butterflies studied in class?

## Materials:

School Garden

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

Science Notebooks

Container to contain a few eggs, caterpillars or chrysalis to take back to the classroom.

## Activities:

1. Tell students they are going to find butterflies in our garden ecosystem to compare to the butterflies they have been studying in class.
2. The following website will give students a glimpse of what they will be looking for in the garden.  
<https://www.butterfliesandmoths.org/species/Pieris-rapae>
3. Take students to the garden to search for the different life cycle stages of the cabbage butterfly. Remind students they will most likely be found on the brassica plants such as cabbage. Also, if a cabbage butterfly lands on a cabbage plant, there is a good chance that the butterfly laid an egg in that spot.
4. Have students record their findings in their science notebooks.
5. Take a few eggs and/or caterpillars/or chrysalis back to the classroom to observe. You can contain them in a large plastic pretzel barrel with holes poked in the lid or in a butterfly habitat. Also, take back a few of the host plant leaves for the caterpillars to eat. You can get more in a few days to continue feeding them.
6. Once you return to the classroom, you can watch the following video that will show the life cycle in more detail.  
[https://www.youtube.com/watch?v=OL\\_3Hmaf3-I](https://www.youtube.com/watch?v=OL_3Hmaf3-I)
7. Students can work together to read the following article as well:  
<https://animals.mom.me/life-cycle-cabbage-white-butterfly-4168.html>
8. Discuss the Guiding Questions being sure to include the Key Vocabulary.
9. In class continue to observe the cabbage butterfly caterpillars that you collected. Since they were captured from the local environment, they may be released into the wild. (However, they are a BIG garden pest so it is not necessary to release them.)

## Guiding Questions:

- How is the cabbage butterfly similar to the butterflies we have been studying in class?
- How is the cabbage butterfly different to the butterflies we have been studying in class?
- What is the life cycle of the cabbage butterfly?
- What is the life cycle of the butterflies we have studied in class?
- How are the eggs of both butterflies the same?
- How are the eggs of both butterflies different?
- How are the larvae of both butterflies the same?
- How are the larvae of both butterflies different?
- How is the chrysalis of both butterflies the same?
- How is the chrysalis of both butterflies different?
- How are the adult butterflies the same?  
How are the adult butterflies different?