

Butterflies

4th Grade

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References:

- Lila Levendoski, lesson planning

Benchmarks:

SLC 5: A.) Students will identify and explain events and cycles (i.e., phases of the moon, daily and seasonal orientation of the sun, life cycles of plants and animals, motion of gears etc.) and the next likely occurrences.

B.) Students will create charts and graphs to show patterns over time and predict the next likely occurrences.

Objectives:

Students will explore several different cycles including life cycles, the moon cycle and other sequences of events in daily life.

Materials:

- Caterpillars
- Butterfly house [or a “teepee” of sticks]
- Field trip to Franklin Park Conservatory
- Books about butterflies e.g.*****
- Chart paper
- Cards with each stage of the butterfly’s life

Initial Demonstration:

Take the students on a field trip where they will see and learn about butterflies.

Target Observations:

- Butterflies have 4 stages in their life cycle.
- In each part of the cycle they have different needs.

Target Model:

- Butterflies grow from eggs to larva to pupa to adults.

Procedure:

1. Separate the students into groups of 3-4
2. Give each group a set of stage cards, have each group put them in the proper order.
3. Give each group chart paper and a copy of the butterfly book. Instruct the students to use the chart paper to write down what they know about butterflies. Suggest that they put down the different life stages of the life cycle and then record details about the stages. These details should come from the books and from what they learned on the field trip.
4. Have each group come up to the front of the class and present what they learned and put on their poster.

There are lots of details about the butterflies that the students might put on their posters. Key ideas include: they eat the egg shell, some species come back and lay their eggs in the same place as where they were born, females often look different from males, they die soon after laying eggs, the best plants for egg laying lack leaves.

Discuss all the issues that the students put on their posters and bring up any that they do not come up with on their own. Compare this life cycle with the life cycle of any other animal that they know about [e.g. mealworms, humans, frogs].

Target Observations:

- Butterflies eat their egg shell
- Some butterflies return to their birthplace to lay eggs
- Female butterflies can look very different from the males of the same species
- Many butterflies die after they lay eggs

Target Revised Model:

- Butterflies have an interesting life cycle that consists of several stages: egg, larva, pupa, and butterfly.
- This life cycle is in some ways similar and some ways different from the life cycle of other animals, such as the frog.

Summary:

Students have observed real butterflies. They have learned about the life cycle of the butterfly, and should be able to compare it with the life cycles of other living organisms, such as human beings, or frogs.