From Caterpillars to Butterflies: Life Cycles

Summary

Students will illustrate the life cycle of a butterfly and compare a butterfly's life cycle to that of a different insect or animal.

Time Frame

2 class periods of 30 minutes each

Group Size

Large Groups

Materials

- *The Very Hungry Caterpillar*
  by Eric Carle
- *The Butterfly Alphabet*
  by Kjell B.
  drawing paper
  drawing materials

Background for Teachers

Many insects go through either complete or incomplete metamorphosis. The butterfly is an example of an insect that undergoes complete metamorphosis. This type of life cycle is marked by significant changes in the shape and structure of the insect. As students think about other animals or insects, they will see similarities and differences in life cycles.

Intended Learning Outcomes

Develop vocabulary.
Make connections from content areas to application in real life.

Instructional Procedures

1. Read *The Very Hungry Caterpillar* and discuss the life cycle of a caterpillar.
2. View websites (listed below) as a class, or individually, to learn more about the life cycles of butterflies and moths. Discuss these terms:
   egg
   larva or caterpillar
   pupa, chrysalis, or cocoon
   adult butterfly
3. After observing the stages of the life cycle of the butterfly, instruct students to create their own illustrations of the butterfly life cycle and label each stage of development. (This could be done on the top half of a folded sheet of paper or on a paper plate divided into quarters.) Encourage use of the vocabulary terms listed above.
4. Ask students to compare the life cycle of a butterfly with the life cycle of an animal with which they are familiar: humans, a dog, cat, horse, frog, bird, etc . . . How are butterfly life cycles similar to the life cycles of other animals? How are they different? How many stages are found in the life cycle of a butterfly? a frog? a bird?
5. After this discussion, ask students to draw the life cycle of a different animal. (This could be done

on the bottom half of the sheet of paper or on a different paper plate divided into the appropriate number of stages.) Help them to label the stages of development.

Strategies for Diverse Learners

Sets of sequence cards for the life cycles of several animals (people, chicken, butterfly, frogs etc.) provide an opportunity for students who lack oral vocabulary skills to describe nonverbally the changes that occur over time. Pictures of people can be grouped or sequenced by age.

Extensions

Observe and collect data on butterflies in your area.
Write songs or sing songs about butterfly life cycles.
Using the melody of "Pop Goes the Weasel", sing:
I spin and spin my chrysalis
Then go rest inside.
When I come out, I've changed indeed.
Look I'm a butterfly.

Read *The Caterpillar* by Christina G. Rossetti:
Brown and furry
Caterpillar in a hurry;
Take your walk to the shady leaf or stalk.
May the little birds pass by you;
Spin and die,
To live again a butterfly.

What do caterpillars do?
Nothing much but chew and chew,
They just eat and by and by,
They turn into a butterfly!

Study symmetry in butterfly patterns. Cut out a symmetrical butterfly shape, fold it in half and let students place blobs of paint on one side. Fold the butterfly in half while paint is still wet to create symmetrically painted patterns on the butterfly.
The Butterfly Alphabet by Kjell B. Sandved has photos of actual butterfly wings that have alphabet shaped markings. Students delight in finding each letter of the alphabet. Each page is labeled with the name of the butterfly on which the markings may be found.

Assessment Plan

Assessment options: 1. Give the students an example of another insect that undergoes complete metamorphosis and ask them to describe the stages. 2. Evaluate the students' drawings of the life cycle of the butterfly. 3. Have students act out the life cycle of a butterfly.

Bibliography

1. *The Very Hungry Caterpillar* by Eric Carle. Putnam Pub Group Juv ISBN 0-399-21301-5.
2. Science Netlinks lesson *Butterfly 1: Observing the Life Cycle of a Butterfly*. URL: http://www.sciencenetlinks.com/lessons.cfm?Grade=k-2&BenchmarkID=11&DocID=6
3. Adapted from two lesson plans created by Kathleen Webb and Stevane Godina.

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