

**Grade Level:** 2<sup>nd</sup> Grade

**Title of Lesson:** Butterfly Life Cycle

**Unit Title:** Life Cycles

**Performance Standard(s) Covered:**

**S2CS1.** Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

- a) Raise questions about the world around them and be willing to seek answers to some of the questions by making careful observations and measurements and trying to figure things out.

**S2CS4.** Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters.

- a. Identify the parts of things, such as toys or tools, and identify what things can do when put together that they could not do otherwise.
- b. Use a model—such as a toy or a picture—to describe a feature of the primary thing.
- c. Describe changes in the size, weight, color, or movement of things, and note which of their other qualities remain the same during a specific change.
- d. Compare very different sizes, weights, ages (baby/adult), and speeds (fast/slow) of both human made and natural things.

**S2CS5.** Students will communicate scientific ideas and activities clearly.

- a. Describe and compare things in terms of number, shape, texture, size, weight, color, and motion.
- b. Draw pictures (grade level appropriate) that correctly portray features of the thing being described.

**S2CS7.** Students will understand important features of the process of scientific inquiry.

- a. Scientists use a common language with precise definitions of terms to make it easier to communicate their observations to each other.

**S2L1.** Students will investigate the life cycles of different living organisms.

- a. Determine the sequence of the life cycle of common animals in your area: a mammal such as a cat or dog or classroom pet, a bird such as a chicken, an amphibian such as a frog, and an insect such as a butterfly.

**Essential Question:** What is the life cycle of a butterfly?

**Objective:**

Students will learn the life cycle of a butterfly and see the different forms of the butterfly in its life cycles using candy as a model. The students will know the different parts of the butterfly life cycle.

**Key Words and Terms:**

Egg, Larva, Caterpillar, Pupa, Chrysalis, Adult, Butterfly

**Learning Activity**

**Abstract (limit 100 characters):** Review the butterfly life cycle with the students. Ask the students to name the different parts of the life cycle. Proceed to make a flipbook with the students using candy to illustrate the different forms of the butterfly. Ask questions while making the flipbook about the butterfly and then at the end review to make sure they understood what you've just taught them.

**Materials Needed:**

Per student:

1 piece of construction paper

1 pair of scissors

1 Elmer's glue

2 jelly beans

2 gummy worms

2 fruit slice candy

3 bow tie pasta

Markers

(Any kind of candy works as long as its representative of the life cycle, these are just the ones I used for the activity)

**Safety Concerns:** Be sure to ask the teacher before giving the children the candy. It's best to try to get sugar-free candy! The students will be handling scissors to create the flipbooks. It's a good idea to take the scissors after they are finished using them.

**Procedure: (after reviewing the butterfly life cycle)**

- 1) Give each student a sheet of construction paper
- 2) Folding the construction paper to create flipbook (pictures for reference at bottom)
  - a. Ask them to fold it once top to bottom (paper in portrait style)
  - b. Then unfold and fold it top to bottom landscape style
  - c. Unfold it all again and place the paper portrait style again, fold from the top and bottom to the middle crease
- 3) Show students where to cut by placing a dot on where to stop, the students will cut from the middle of the bottom and top to the crease going across. (Picture at the end)
  - a. Pass out the scissors as you show them, it doesn't take long if you have a small group, or you can pass out the scissors beforehand but they may start cutting other things
- 4) Fold the flaps in and show their students that they've created a flipbook!
- 5) Pass out markers or let the students pick markers and Elmer's glue.

- 6) Tell students to put their name, the butterfly cycle, and the first part of the butterfly cycle on the top left flap of the flipbook (egg)
- 7) Ask them where you would find a butterfly egg. (Leaves)
- 8) Show them to draw a leaf or two underneath the first flap of the flipbook; then proceed to give them jellybeans. I gave my students two or three. They were allowed to eat one and to glue to others onto the leaf they had just drawn
- 9) Proceed by asking them what the next step in the cycle (Larva) and then ask them if they know what larva is. Explain if needed. Also, ask them to draw an arrow from the first flap to the next on the right.
- 10) Write larva on the flap to the right of the one that says egg
- 11) Ask them where you would find larva (leaves)
- 12) Draw a leaf under the flap and give the students two gummy worms. One to eat and the other to glue on the leaf they've drawn.
- 13) Draw an arrow from the larva flap (top right) to the one right below it (bottom left)
- 14) Ask the students what comes after the larva stage. (Pupa)
- 15) Write pupa on the bottom right flap and ask the students where they would find a pupa (branch, it hangs off the branch, does not lay on top of it)
- 16) Draw a branch under the flap of the pupa and give students two fruit slice candy. One to eat and the other to glue on the branch
- 17) Draw an arrow from the bottom right (pupa) flap to the bottom left flap
- 18) Ask students what comes after the pupa (Adult: butterfly)
- 19) Write butterfly on the bottom left flap
- 20) Ask students where they find butterflies (varying answers)
- 21) Allow them to draw wherever they please under the flap and give students bowtie pasta to decorate, glue, and use as butterflies
- 22) Lastly ask them to draw an arrow from the Adult to the Egg flap. Ask them why you did this. (Explain that it is a cycle and the butterfly does not turn into an egg but it lays them to start to cycle again)
- 23) Ask students to list the cycle again to be sure they know it

**Notes and Tips:**

The students will be eating and using glue so make sure to USE HAND SANATIZER frequently throughout this activity.

If you don't have a lot of time during class, it would help to create the flipbooks before hand so you can get straight into the lesson. The students in my class enjoyed creating the flipbook. I think it was a great way to get them interested and curious about what they were going to be doing with me!