Title: The Edible Version of a Butterfly's Life Cycle

Grade Level: Second Grade

# **Standards Covered:**

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

S2L1a: 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.

## Materials:

A box of Gram Cracker stacks

Various types of candy (gummy worms, marshmellows, chocolate covered pretzels\*\*, fruit wedges\*\*, sweetarts chewy drops) \*\*Must buy

Green icing (icing + green dye, or pre-dyed icing)

Sandwich bags

Mini plates or paper towels

Power point and music capability

## Safety Concerns:

Make sure no one is allergic to green dye, nor has any health problems related to sugar consumption.

Make sure everyone is careful when eating their butterfly stage (no talking with mouthful or swallowing food whole) to be wary about choking.

## Procedure:

- 1) Preparation
  - a. Buy candies that resemble butterfly eggs (chewy sweetarts), caterpillars (gummy worms), pupas (fruit slices), and butterflies (pretzels)

- b. Buy a box of gram cracker stacks, icing (a tub) and dye to turn the icing green (or premade green icing).
- c. Make each student a sandwich baggie with miscellaneous candies (make sure each baggie at least has two pretzels and a few fruit slices).
- d. Go ahead and turn the icing green if you got dye and a tub of icing.
- e. Make up some dance moves for the butterfly stages, and apply them to this song (<u>https://www.youtube.com/watch?v=E5tXk1hclwQ</u>)
- 2) Get to your classroom about 10 mins early to put one gram cracker square on a plate/paper towel (one per student) and put green icing on top of cracker.
  - a. Leave at back of room until after dance.
- 3) Song/Dance Activity (<u>https://www.youtube.com/watch?v=E5tXk1hclwQ</u>) (10 min)
  - a. Teach the main dance moves to the class.
  - b. Ask the class to repeat the moves back to you, and then turn on the music.
  - c. Stand at the front of the class and do the dance moves so they can follow along.
  - d. Prepare a power point with the song lyrics so the students can follow along.
  - e. Have the students answer questions about the life cycle stages (i.e. What stage of the life cycle is this?) based upon pictures (on power point slides after lyrics).
    - \*Ask them to do the dance move with their answer.
  - f. Ask the class to see if they remember the stages, and let them do the dance without the music or your help.
- 4) Edible Activity (30 min)
  - a. After dance activity, explain the rules of the edible activity.
    - a.i. Each group of four must designate one person per one stage of the life cycle (one person does the eggs, another does the larva stage, another the pupa, and the last member of the group does the butterfly)
      - a.i.1. Allow them 3 minutes to figure it out.
    - a.ii. No eating any of the candy before the end of the activity, or extra time will be added to your overall time (therefore, you may not win!)
  - b. Explain activity.

- b.i. Be the first group to correctly put the life cycle stages of the butterfly in order (everyone in your group must raise their hand when you're team is finished).
- b.ii. Each member of the group must make their designated stage, and make it as creative as possible.
- b.iii. The group with the most creative butterfly cycle gets a prize and the group that puts the stages in order first gets a prize.
- c. Commence with activity.
  - c.i. Pass out a plate with frosted gram cracker and baggie of candy to every student (4 plates per group).
  - c.ii. Ask why they think the icing is green?

Because they're leaves!

- c.iii. Explain again that once you say go, each team member is to make their life cycle stage on the icing gram cracker, using the candies.
- c.iv. Make sure they remember that being super creative can get you a prize too!
- c.v. Make sure everyone understands the instructions.
- d. Count down and say, "Go!"
- e. As the activity progresses...
  - e.i. Walk around the room and make sure everyone is having fun ©.
  - e.ii. When a group raises their hand because they're finished, go over and make sure they have placed the plates in the correct order. Also, ask each student what stage of the cycle they made! They'll want to brag!
- 5) After activity finishes announce which team put their stages in the correct order first and which team was the most creative and why.
- 6) Explain: since everything is so sweet they don't have to eat all their candy and the graham cracker, and they can save some for later...announce that they can eat their stages!
- 7) After they finish their snack, there will probably be extra time (10 min)...ask them to draw a picture and label the life cycle of a butterfly in their science journals.

## **Modifications:**

This lesson takes a lot of preparation, and you definitely need to practice explaining the rules beforehand. My classroom LOVED this activity; however, I had an amazing teacher who made sure every student followed the rules. Moreover, my class was well behaved, and none of the students acted out after their sugary snack. I can see this being a problem in a different classroom and the students may pretend to have a sugar high right after eating the activity. Therefore, maybe this lesson can be modified to use veggies instead of candy!