

**Lesson plan by:** Heather Terflinger

**Lesson:** 5-E Method- Butterfly Camouflage

**Length:** 30 minutes

**Age or grade level intended:** 5<sup>th</sup>

**Academic Standards:**

- 5.4.7-Explain that living things, such as plants and animals, differ in their characteristics, and that sometimes these differences can give members of these groups (plants and animals) an advantage in surviving and reproducing.

**Performance Objective(s):**

- The students will show understanding of physical characteristics of butterflies by orally explaining at least one correct reason of why the butterfly that they colored will survive in the wild.

**Assessment (Evaluate):**

- I will be looking for correct reasons of why the butterfly that each student colored will survive in the wild. Main answers are camouflage and warning. This will show me whether or not the students grasped the concept.

**Advanced Preparation/Materials:**

- The teacher will be working on a unit that deals with animals and their adaptations for survival. There will need to be plain cutouts of butterflies on hand-one per student. Markers, crayons, or colored pencils will need to be available so that the students can design and color their butterflies however they wish. It would also be good to show the students some pictures of butterflies in books and the Internet and if possible bring in dead or alive butterflies for the students to manipulate, as well as do an example of his/her own butterfly.

**Procedure:**

**Introduction/Motivation (Engage):**

- The teacher needs to be enthusiastic about the lesson. Ask the students if they have ever seen a butterfly, do they all look the same, what do they have in common. Briefly show the students different pictures of butterflies from books or the Internet. Ask the students how butterflies protect themselves from being eaten in the wild by birds or other predators. Give the students a few minutes to discuss their ideas/thoughts with people around them then ask for some people to share their thoughts.

**Step-by-Step (Explore/Explain):**

- Put the students into small groups and allow them to examine and look over different pictures of butterflies from books and also dead or alive butterflies that you have brought in. Encourage them to take a few notes about what they see. This is a time for the students to “play” so the teacher should walk around using formative assessment to gauge whether the students understand the concept by listening to conversations and reading any notes they may have taken.

- Ask the students what they saw; allow the groups to share their observations with the class.
- Based on formative assessment and from what the groups shared, the teacher should fill in any of the missing gaps with information he/she wants them to know from the text or other sources to ensure the students fully grasp the concept of camouflage and warning.
  - Discuss camouflage and warnings by butterflies

**Closure (Elaborate):**

- Explain to the students that they are going to do an activity that requires them to color their own butterfly in a way that it would be safe in it's environment. Remind them to recall how the butterflies they examined looked.
- Students spend time designing and coloring their own butterfly to put up in the room somewhere. (*Bloom's-Knowledge/Comprehension/Application*) (*Gardner-Intrapersonal*)
- Students cut out their butterflies-Each student will have a chance to explain why his or her butterfly is colored the way it is, he or she also needs to explain why it wouldn't get eaten by a predator. (*Gardner-Linguistic*)
- Students will place their butterflies around the room wherever it will blend in or scare away predators. (*Bloom's-Application*) (*Gardner-Spatial*)
- Class discussion about which butterflies would be most effective and survive the longest in this particular classroom. (*Bloom's-Synthesis/Evaluation*) (*Gardner-Interpersonal/Linguistic*)
- Transition to new subject

**Adaptations/Enrichments:**

- There might be some students in the classroom that cannot come up with reasons why they made their butterflies the way they did. It is okay to guide these students along and give them examples. Basically just go over what was said about camouflage and warnings that butterflies might use to protect themselves. Get them on track with a few ideas and that should spark some ideas. For students that are more advanced, encouragement to expand while they are telling about their butterfly would be great. (*Bloom's-Analysis/Synthesis*) They aren't really doing more work in this situation, they are simply elaborating on their newly created butterflies.