

5E Lesson Plan - Butterflies and the Environment

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| Your Name: Cecily Gutierrez | Your email address: cgutier6@stedwards.edu |
| Grade Level: Undergrad | Subject Area: Grade 5 Science |
| Lesson Title: Butterflies and the Ecosystem | Lesson Length: 50 Mins |
| THE TEACHING PROCESS | |

Lesson Overview (big ideas):

This lesson is designed to introduce students to the different relationships, systems, and cycles within environments. This also introduces students to observation and the importance of survival and adaptation within environments.

Lesson Background (misconceptions):

Teachers should know the four stages of the butterfly life cycle and their purposes. Teachers should have an understanding of how butterflies adapt, and their relationships within their environments, why they are important to ecosystems. A misconception to be explained would be how caterpillars become butterflies and the process.

Unit Objectives:

Students will be able to understand and describe the four stages of a butterfly's life.

Students will be able to understand how butterflies interact with other living/nonliving organisms in their environment.

Students will be able to understand how butterflies survive in their ecosystem.

Standards Addressed (TEKS or national):

Grade 5 Science TEKS:

(9) Organisms and environments. The student knows that there are relationships, systems, and cycles within environments. The student is expected to:

(A) observe the way organisms live and survive in their ecosystem by interacting with the living and non-living elements;

List of Materials:

- Journals
- Pencils
- Crayons
- Color Pencils
- Pictures of different environments
- Paper with an outline of butterfly

INSTRUCTIONAL SEQUENCE

Phase One: Engage the Learner

Read to the students the book "A Butterfly is Patient." Allow students to take a good look at all the colorful pictures. Once I'm done reading, I will ask them to write in their journal about their favorite part of the book. I will then ask if anyone will like to share what they wrote to the class.

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| <p>What is the teacher doing? The teacher is reading to class and making sure every student is engaged in the story and noticing the different pictures in the book.</p> | <p>What are the students doing? Sitting, listening, and watching the teacher as she reads the book to the class.</p> |
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Phase Two: Explore the Concept

10 Minutes: Take students outside to observe nature. Ask them to pay attention to how butterflies (or other bugs) interact with plants/anything else in nature. Allow them to take their journals so that they can draw what they see and write a description about it.

15 Minutes: Students will work together in groups of 4 to compare their observations and discuss if they saw anything like what they saw in the book "A Butterfly is Patient." Ask them to talk about why they think certain bugs interacted a certain way with plants and what they think was happening.

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| <p>What is the teacher doing? Walking around the class and listening to each group as they working together. Also keeping track of time.</p> | <p>What are the students doing? Observing and writing/drawing what they see in their journals. Then discussing their observations in their groups.</p> |
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Phase Three: Explain the Concept and Define the Terms

After students return to the classroom, I'll ask each group to explain to the class something they all had in common in their writings/drawings. I will then explain to them the four stages of a butterfly's life, how butterflies pollinate, and how butterflies adapt to their environments to survive, like they do in the book we read. I will then show a short video of the lives of butterflies and how they interact/survive in their environment.

Activity: Give each student pictures of different environments with colors of all sorts. Then hand out a black sheet of paper with an outline of a butterfly; ask each student to color the butterfly so that it could survive in the environment in the picture.

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| <p>What's the teacher doing? Explaining the four stages of the butterfly's life cycle and how they live in their environments.</p> | <p>What are the students doing? Listening to the teacher's lecture; working on their butterfly coloring.</p> |
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Phase Four: Elaborate on the Concept

Ask students to stay in their groups and elaborate on the following questions:

- Why do you think certain flowers attract certain butterflies?
- Why are the patterns on the butterflies' wings the way that they are?
- Why do you think the butterflies go through these four stages?
- Why are butterflies or other insects important to us?

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| <p>What's the teacher doing? Teacher walks around to each group to help students stay on task and helps them find resources to answer the questions.</p> | <p>What are the students doing? Students are researching the life cycle of butterflies and their relationships within environments.</p> |
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Phase Five: Evaluate Students' Understanding of the Concept

Hand out pictures of the four stages of the butterfly life cycle and ask students to label them. In addition, ask students to write and compare/contrast a butterfly's life to their own lives and how they survive in their own environments.

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| <p>What's the teacher doing? Teacher is explain and monitoring as the students work.</p> | <p>What are the students doing? Students are completing the assignment.</p> |
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