



Title: The Emergent Butterfly
Grade(s): 4
Subject(s): Science
Author: Morris, McCollum, Kemp, McCloud, Wade
Overview: During this lesson, students will recall events from a story and describe the life cycle of the butterfly. Students will use their imaginations, writing and computer skills to create the stages of the butterfly life cycle. The students will create the butterfly’s life cycle on Scratch.

Content Standards: SC4 5.4 Identify characteristics of organisms, including growth and development, reproduction, acquisition and use of energy, and response to the environment.
 TC(3-5) 1. Use input and output devices of technology systems.
 TC(3-5) 2. Use various technology applications, including word processing and multimedia software.

Local/National Standards:

Primary Learning Objectives: Students will correctly answer questions from class discussion and YouTube Video, “The Life Cycle of a Butterfly.” Students will describe and discuss the life cycle of a butterfly. Students will create Scratch animations to illustrate their knowledge of the different stages of the butterfly.

Additional Learning Objectives: Students will gain cooperative learning and writing skills through working in groups.

Approximate Duration of Lesson: 3 days (45 minutes each day)

Materials and Equipment: *The Very Hungry Caterpillar* by Eric Carle

Technology Resources Needed: Computer lab with Internet access and Scratch program downloaded

Background/Preparation: Students will need to be familiar with basic computer skills, how to use search engines on the Internet, and how to use Scratch. Prior to the lesson the teacher will review the life cycle of a butterfly and basic Scratch instructions.

Procedures/Activities: Step 1 Read Aloud: The Very Hungry Caterpillar by Eric Carle (ask students about prior knowledge regarding butterflies; discuss possible things the book might be about). During the reading, ask the class what they predict may happen next to the caterpillar.

Step 2 Discuss vocabulary terms that are used to explain the life cycle of a butterfly. Have the students write

down the terms and definitions such as the terms: cocoon, egg, larva, chrysalis, migration, and transformation.

- Step 3 Watch the video of a butterfly life cycle.
- Step 4 List the steps of a butterfly life cycle on the board.
- Step 5 Assign groups and proceed to computer lab.
- Step 6 Explain to the students that they will create their own animations of a butterfly life cycle using Scratch.
- Step 7 Groups will share their Scratch presentations of the butterfly life cycle in class.

Attachments:

[YouTube Video: *Life Cycle of a Butterfly*](#)

Scratch presentation: [Emergent Butterfly](#)

Assessment checklist

Checklist.

**Assessment
Strategies:**

Extension:

Remediation:

Students will write their own story about the life cycle of a butterfly.

Students who understand the concepts taught could help their peers who do not grasp the subject as well.

Checklist for *Emergent Butterfly* Scratch Presentation

1. Content:

All stages of butterfly life cycle are included _____

Illustrations of each stage are included _____

Text of each stage is included _____

2. Scratch Presentation:

Project was visually attractive _____

Scratch presentation went smoothly (no glitches in the scripts) _____

3. Student Work:

Student worked well with group _____

Student used presentation skills when introducing project _____