

# Lucy the Changing Ladybug

## Description

In this activity, students observe and describe the stages of development in the life cycle of the ladybug.

## Time Frame

2 lessons (45 minutes each)

## Correlation to Texas Essential Knowledge and Skills

During this activity, students will be exposed to the following Texas Essential Knowledge and Skills:

**Note:** Some TEKS statements below end with a ; or *and* and nothing thereafter—this indicates that further TEKS statements follow but are not included here.

**(K.7) Science concepts.** The student knows that many types of change occur. The student is expected to:

- (D) observe and record stages in the life cycle of organisms in their natural environment.

**Note:** The TEKS listed here are the main content TEKS for this activity; however, this activity may also cover additional content and process skills included in other TEKS.

## Materials

Green, orange, and black construction paper (1 sheet of each per student)  
Red and yellow construction paper (1 half-sheet of each per student)  
Wax paper cut into rectangles about the size of a half-sheet of construction paper (1 per student)  
Glue  
Student scissors (1 per student)  
A picture of the each stage of the ladybug life cycle  
“Lucy the Changing Ladybug” story (included at the end of this activity)

## Advance Preparation

1. Search the web for images of the ladybug or ladybird beetle life cycle: egg, larva, pupa, adult. Download the images for use during this activity.
2. To guide students in cutting, teachers may want to draw the shapes described below on the construction paper or provide patterns for students to follow.

**Procedures**

1. Read “Lucy the Changing Ladybug” aloud and, while reading, show students pictures of the ladybug life cycle.
2. Tell students that they are going to make a leaf, some ladybug eggs, and the characters from the story.
3. Give each student a piece of green construction paper. Guide students in cutting out a large leaf and numbering the leaf 1 to 4 in a circular pattern. Remind students of the beginning of the ladybug life cycle by asking where adult ladybugs lay their eggs. [*On green leaves.*]
4. Give each student a half-sheet of yellow construction paper. Guide students as they cut out four small yellow ovals to represent the ladybug eggs. Have students glue the eggs close together on the leaf beside the number 1.
5. Give each student a piece of black construction paper and guide them in cutting out a larva shape and six legs for the larva. Give them a sheet of orange construction paper and guide them in cutting out small circles from *half* of the orange paper. Show students the picture of a ladybug larva again and remind them that the legs must be attached near the front of the larva and must have the same number on each side. Have students glue a few orange circles on the larvae. Have students glue the larva on the leaf beside the number 2.

**Note:** The teacher can address the concept of symmetry during this activity by using the term and asking students to identify if the larva, pupa, and adult ladybugs they are creating are symmetrical. Ask students how they know if something is symmetrical.

6. Show students the picture of a ladybug pupa again and guide them in cutting out a pupa body shape from the other half of their orange construction paper. Ask students to cut out small black circles to glue on the back of the pupa. Have students glue the pupa on the leaf beside the number 3.
7. Give each student a half-sheet of red construction paper and a piece of wax paper to cut out ladybug wings. Have them stack the wax paper and construction paper and cut out a large circle and then fold it in half. Then they should cut along the fold, but stop before reaching the top of the circle. Have students glue the wax paper wings to the red wings, putting the glue just at the top so that the wings can flap separately.
8. Ask students to use their remaining black construction paper to cut out a black oval for the ladybug body. Students should glue the wings to the black oval body. Have the students cut legs and small circles out of black construction paper and glue the legs onto the black body and the circles onto the red wings. Finally, students should glue the adult ladybug on the leaf beside number 4.
9. Have the students retell the story of Lucy the Changing Ladybug using models they made. Make sure students identify the changes that take place during the story.

## Lucy the Changing Ladybug

One day a ladybug found a nice green leaf on which to lay her eggs. The eggs were tiny, yellow, and oval shaped.

Soon the eggs began to **change**. Inside each egg there was a little black larva. Out of one of the eggs popped a tiny little larva called Lucy the Ladybug Larva. Lucy the Ladybug Larva looked like a tiny little black worm, but she **changed** each day.

How do you think Lucy was **changing**?

She was growing bigger and bigger.

Lucy the Ladybug Larva stayed on the leaf to eat tiny little insects. She was **changing** every day as she ate more and more insects. Lucy the Ladybug Larva was soon so big that she did not look like a tiny worm. She had **changed** into a bigger larva with spots on her back. Lucy the Ladybug Larva also began to **change** colors. She **changed** from a tiny black worm to an orange worm with black spots.

Lucy the Ladybug Larva was about to **change** again. She attached herself to a leaf and **changed** into a pupa. I guess we will have to call her Lucy the Ladybug Pupa now. Many **changes** were happening to Lucy the Ladybug Pupa. She was **changing** so much she did not have time to eat. She did not have time to crawl around on her plant. She only had time to grow and **change**. She **changed** and **changed**. Finally, the **changes** were completed and Lucy crawled out of the pupa skin.

Now she was an adult ladybug, but she had light colored wings. These wings soon **changed** to dark red with black spots. This new **change** was wonderful. She was beautiful and she could fly.

Now everyone called her Lucy the **Changing** Ladybug, because she had **changed** so much.

Are you **changing**, too? How?