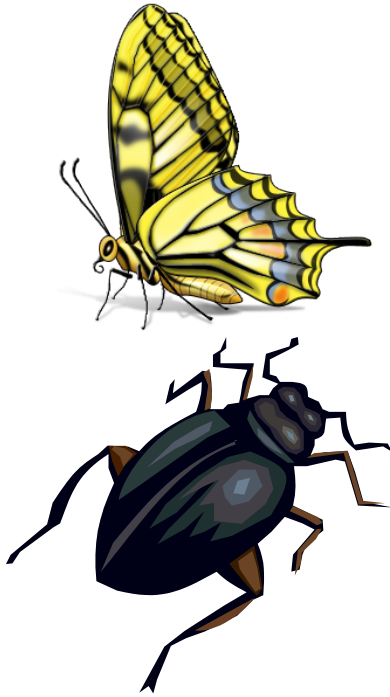


**Objective** sight words (life cycle, stages, oval, intended, enclose, transformation, structures, reproductive, mates, colonizes, metamorphosis, emerges); concepts (stages of growth)



Vocabulary	
life cycle	structures
stages	reproductive
oval	mates
intended	colonizes
enclose	metamorphosis
transformation	emerges

## The Life Cycle of Butterflies and Beetles

By: Sue Peterson

**Butterflies.** There are four separate stages in the life of a butterfly:

- **The egg.** The egg is a tiny, round or oval shape that gets attached by the female butterfly to a leaf, stem or other object. The egg is usually attached near the intended caterpillar food.



- **The caterpillar or larva.** The caterpillar or larva is the long, worm-like state of the butterfly. It sometimes has an interesting pattern of stripes or patches. It might have spine-like hairs. This is the feeding and the growth stage of the butterfly. As the caterpillar grows, it sheds its skin four or more times so it can enclose its rapidly growing body.



- **The chrysalis or pupa.** The chrysalis or pupa is the transformation stage. The caterpillar tissues are broken down to form the adult insect structures.



Usually the chrysalis is brown or green color to blend into the surroundings. Many times the chrysalis stage will remain this way over winter.

- **The adult or imago.** The adult or imago is the colorful butterfly that you see throughout the warmer months of spring and summer. The adult stage



is called the reproductive stage. These adults find their mates and lay more eggs. The adult stage also migrates or colonizes new places to live.

**Beetles**. The beetle has mouth parts to allow it to use a variety of solid foods in the environment. It has elytra which protect the hind-wings and give the beetle help in survival. Beetles undergo a change which is called “metamorphosis”. There are three stages before becoming an adult:

- **The egg.** The beetle larva hatches from the eggs in the female’s saclike structure after the eggs were fertilized.



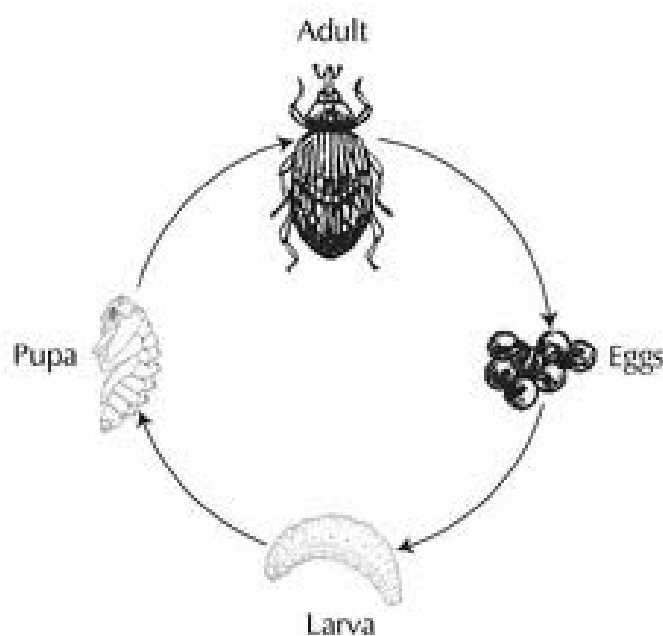
- **The larva.** The larva hatches and grows until its body splits the skin. The larva crawls out of the old skin and forms a new skin. This is called “molting”. Molting occurs several times until the larva is mature.



- **The pupa.** Wings develop and are seen in this stage.



- **The adult.** Within a month, the adult emerges from the pupa and searches for prey. The beetle feeds on plants and other insects. Its wings are full-size and the outer skeleton is now hard.



## Practice

### Language Work

A. Write the words.

life cycle

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stages

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oval

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transformation

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structures

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reproductive

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mates

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colonized

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B. Use each word in a sentence. Underline the word used.

intended

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enclose

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emerges

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metamorphosis \_\_\_\_\_

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C. Phonics work. The phrase “life cycle” is made of two words that both have a long “i” sound spelled with different letters. In the word “life”, the letter “i” is long because usually words that have the vowel “i” between two consonants with the word ending in a silent “e” have long “i” sounds. In the word “cycle”, the “y” in the first syllable sounds like a long “i”. Write **three** words for the long “i” sound that follow the pattern like the word “life”. Write **three** words for the long “i” sound spelled with a “y” as in the word “cycle”.

Long “i” words spelled with an “i”: \_\_\_\_\_,  
 \_\_\_\_\_ and \_\_\_\_\_.

Long “i” words spelled with a “y”: \_\_\_\_\_,  
 \_\_\_\_\_ and \_\_\_\_\_.

**Multiple-Choice Questions** (Put an X in front of the correct answer.)

1. Which does **not** describe a butterfly egg?
- a. tiny, round or oval
  - b. large, diamond-like
  - c. attaches to leaf, stem or other object
  - d. attaches near caterpillar food







## Answer Sheet

Answers for Matching, Multiple-Choice Questions, and Extended Response

### **The Life Cycle of Butterflies and Beetles**

#### **Multiple-Choice Questions**

1. b
2. c

#### **Extended Response (Accept reasonable answers.)**

1. **The student must explain the life cycle including stages and vocabulary from egg to adult.**
2. **The student must compare and contrast the life cycles of the butterfly and the beetle.**
3. **Free expression but the answer must clearly explain the reasons behind the author's use of "life cycle" in the title of the text and within the text.**