

About the Book

Text Type: Nonfiction/Informative Page Count: 16 Word Count: 607

Book Summary

Insect Life Cycle introduces readers to different types of insects. It then gives the details of two different types of life cycles and describes the separate stages: egg, larva, pupa, nymph, and adult. Photographs with captions support the text.

About the Lesson

Targeted Reading Strategy

- Ask and answer questions

Objectives

- Use the reading strategy of asking and answering questions
- Identify the sequence of events in the book
- Identify *r*-controlled vowel *or*
- Recognize and use commas in a series
- Identify compound words

Materials

Green text indicates resources available on the website

- Book—*Insect Life Cycle* (copy for each student)
- Chalkboard or dry erase board
- [KWL/ask and answer questions, sequence events, compound words worksheets](#)
- [Discussion cards](#)



Indicates an opportunity for students to mark in the book. (All activities may be demonstrated by projecting book on interactive whiteboard or completed with paper and pencil if books are reused.)

Vocabulary

*Bold vocabulary words also appear in a pre-made lesson for this title on [VocabularyA-Z.com](#).

- Content words:

Story critical: **cocoons** (*n.*), **larva** (*n.*), **life cycle** (*n.*), **metamorphosis** (*n.*), **nymph** (*n.*), **pupa** (*n.*)

Enrichment: **adult** (*n.*), **egg** (*n.*)

Before Reading

Build Background

- Have students tell what they know about insects and their life cycles. Create a KWL chart on the board and fill in the first column (*K*) with things students know about the topic. Give students the [KWL/ask and answer questions worksheet](#) and have them fill in the *K* column with what they already know.
- As a group, brainstorm things students would like to know about the topic and have them fill in the second column (*W*) on their worksheet. To demonstrate the process, write some shared ideas on the class chart.

Preview the Book

Introduce the Book

- Give students their copy of the book. Guide them to the front and back covers and read the title. Have students discuss what they see on the covers. Encourage them to offer ideas as to what kind of book this is and what it might be about. (Accept any answers students can justify.)
- Have students preview the rest of the book. Point out the title page, photos, and captions.
- Show students the index. Review or explain that the alphabetized list and page numbers tell where they can find information about topics in the book. Ask students to tell what pages they would read to find more information about metamorphosis (pages 12 and 13).

Introduce the Reading Strategy: **Ask and answer questions**

- Discuss with students how asking questions about a topic before reading and looking for answers as they read will help them understand and remember what they read.
- Model using the table of contents to ask questions.
Think-aloud: When I don't know a lot about a topic, I can use the section titles in the table of contents to think of questions I'd like to have answered. For example, the fourth section is titled "Larva." This makes me wonder what a larva is. I'll write this question on the chart. I'd also like to know what larva have to do with the insect life cycle. I'll write this question on the chart, too.
- Encourage students to use the photos, captions, and other references to help think of questions to add to their KWL charts.
- Tell students that they can use the index to find the answers to some of their questions. For example, if one of their questions is about cocoons, they can find which page to check for information about them in the index. Have students tell the page number where they would find more information about cocoons (page 12).
- As students read, encourage them to use other reading strategies in addition to the targeted strategy presented in this section.

Introduce the Vocabulary

- As students preview the book, point out the content words (listed earlier), as well as any other vocabulary words you feel may be challenging for them.
- Remind students of the strategies they can use to work out words they don't know. For example, they can use what they know about letter and sound correspondence to figure out the word. They can look for base words, prefixes, and suffixes. They can use context clues within a sentence to work out meanings of unfamiliar words.
- Model how to apply word-attack strategies. Have students find the vocabulary word *metamorphosis* on page 12, then ask them to locate the pronunciation given within parentheses (*MET-ah-MORF-oh-sis*). Review or explain that when reading broken syllables aloud, the syllables that are written in all capital letters are meant to be read with more emphasis. Point out that each syllable has one vowel sound and is spelled out phonetically, to help readers pronounce the word correctly. Ask students why the third syllable (*MORF*) is spelled with an *F* instead of with a *PH* (because the *PH* makes the /f/ sound). Practice pronouncing the word *metamorphosis* with the class.

Set the Purpose

- Review the questions asked on the class KWL chart. As students read the book, have them look for answers to their questions about insects and their life cycles.


During Reading

Student Reading

- **Guide the reading:** Have students read to the end of page 10. Tell them to look for facts about insects and their life cycles that will answer their questions. Encourage those students who finish before everyone else to go back and reread.

Lesson Plan *(continued)*

Insect Life Cycle

- When they have finished reading, have students tell what each section is about and the interesting facts they found. Circle any questions on the class KWL chart that have been answered and add any new questions students have.
 - Model answering a question on the KWL chart and writing it in the final column (L).
Think-aloud: I wanted to know what a larva is and what it has to do with the insect life cycle. I found out that a larva is a worm-like stage of the life cycle that follows the egg stage. I will write this information in the L column of my KWL chart. I will keep reading to learn more about the next stages of the insect life cycle.
 - Ask students whether any of the questions on their KWL chart have been answered. Have them add any new questions they have to their KWL chart.
 - **Check for understanding:** Have students read to the end of page 12. Have them share answers they found while reading. Record their responses on the KWL chart written on the board, and instruct them to fill in the last column of their own KWL chart. Invite students to share additional questions they generated as they read the book.
 - Have students read the remainder of the book. Remind them to look for answers to their KWL chart questions. Encourage students to add new questions they might have to their chart as they read.
-  Have students make a question mark in their book beside any word they do not understand or cannot pronounce. Encourage them to use the strategies they have learned to read each word and figure out its meaning.

After Reading

- Ask students what words, if any, they marked in their book. Use this opportunity to model how they can read these words using decoding strategies and context clues.

Reflect on the Reading Strategy

- Ask students what questions they added to their KWL charts as they finished reading and what questions they answered. Discuss how asking and answering questions keeps them actively involved in the reading process and helps them understand and remember what they read.
Think-aloud: I wanted to know more about the other stages of the insect life cycle. I read in the book that once the larvae have grown, many become pupas, and that after the metamorphosis is complete, the pupas hatch as adults. I can write the answer on my chart. I will write the questions I'm still curious about on the KWL chart.
- Point out to students that all of their questions may not have been answered in this text. Brainstorm other sources they might use to locate additional information to answer their questions.

Teach the Comprehension Skill: **Sequence events**

- **Discussion:** Ask students what they think the author's purpose was for writing the book, and what they learned about insects and their life cycles that they didn't already know.
- **Introduce and model:** Review or explain to students that many books follow a specific sequence of events. Direct students to the table of contents. Explain that in this book the table of contents provides a chronological list of the stages of an insect's life cycle (the stages are listed in the order in which they occur). Ask students why they think the author chose to write the sections in this specific order. Ask why the sequence of events is important when telling the story of an insect's life cycle. Model using sequencing words as the class discusses the order of events (*first, next, then, finally*, and so on).
- Explain to students how identifying and understanding the sequence of events in a book, along with asking and answering questions about what they've read, can help them better understand and remember what the book is about.

- **Check for understanding:** Lead the class through a sequencing exercise. Have students turn to page 12. Ask them to identify four events on the page that could be listed in chronological order. Write them on the board as students tell about them. (*First*, the larva grows. *Next*, it spins a cocoon. *Then*, it does not eat or move much. *Finally*, its body changes its shape.) Point out that there are other events that can be listed in sequential order throughout the book.
- **Independent practice:** Introduce, explain, and have students complete the **sequence events worksheet**. If time allows, discuss their answers.

Build Skills

Phonics: **R-controlled vowel or**

- Write the word *born* on the board and say it aloud with students.
- Tell students that the letter *r* can affect the sound of the vowel before it. Reread the word *born* as you run your finger under the letters in the word. Ask students to identify the two letters that represent the vowel sound in the word *born*.
- Write the *or* letter combination on the board. Explain that the letters *o* and *r* together represent the vowel sound in the word *born*. Have students locate other words in the text that contain the *or* letter combination and write them on a separate piece of paper. Have them read their list to a partner.
- **Check for understanding:** Write the following words on the board that contain the *r*-controlled *or* letter combination, leaving out the *or* combination: *fork*, *shorts*, *orange*. Say each word aloud. Have students complete and write each word on a separate piece of paper. Have them use each word in a sentence and read their sentences aloud to a partner.

Grammar and Mechanics: **Commas in a series**

- Review or explain to students that whenever three or more items are listed, a comma is placed between the items. Listed items can be nouns, verbs, adjectives, or entire phrases or clauses. Remind students that this is only one of the many uses for a comma.
- Have students turn to page 6 and ask them to circle all of the commas on the page. Point out the listed phrases in the second sentence (*butterflies and beetles*, *fleas and flies*, *crickets and chiggers*). Talk about the location of the commas within the list.
- Have students turn to page 4. Ask them to find the list of four body parts (*a head*, *legs*, *arms*, and *a torso*). Ask them to circle the commas and notice that the last item is added to the list after the word *and*.
- **Check for understanding:** Have students work in pairs to find and circle the remaining lists of items that are separated by commas. Have them distinguish which are lists of phrases and which are lists of individual words. After everyone has finished, discuss their answers.
 - Page 5: *an egg*, *larva*, *pupa*, and *an adult*
 - Page 5: *born as an egg*, *hatches as a nymph*, and *changes into an adult*
 - Page 10: *caterpillars*, *grubs*, and *maggots*
 - Page 13: *wings*, *six legs*, and *three body parts*
 - Page 13: *eat*, *fly*, *hunt*, and *work*

Word Work: **Compound words**

- Write the words *wingspan*, *maybe*, and *butterfly* on the board. Ask students what these three words have in common (they are all compound words). Review or explain that two words can be combined to form a new word called a *compound word*. Ask volunteers to come up to the board and circle the two separate words within each compound word (*wing* and *span*, *may* and *be*, *butter* and *fly*).
- Write the words *everywhere*, *four-stage*, and *North America* on the board. Tell students that these are examples of different types of compound words. Each has two parts that make up one word meaning. Explain that some compound words are separated by *hyphens*, some are joined, and some are separate.

Lesson Plan *(continued)*

Insect Life Cycle

- Ask student volunteers to circle the two separate words that make up each compound word (*every* and *where*, *four* and *stage*, *North* and *America*).
- Discuss how knowing the meanings of the words *wing* and *span* can help them understand the meaning of *wingspan*. Explain to students that this is a good strategy they can use to help understand the meaning of an unfamiliar compound word.



Check for understanding: Have students turn to page 14 and find and circle three compound words (*three-stage*, *dragonfly*, and *underwater*). Tell them to divide the words into the two separate words that make up the compound word and to write the term *compound word* in the margin, in order to help them remember the terminology.

- **Independent practice:** Introduce, explain, and have students complete the **compound words worksheet**. If time allows, discuss their answers.

Build Fluency

Independent Reading

- Allow students to read their book independently. Additionally, allow partners to take turns reading parts of the book to each other.

Home Connection

- Give students their book to take home to read with parents, caregivers, siblings, or friends.

Extend the Reading

Writing Connection

Have students write a summary of what they learned while reading *Insect Life Cycle*. The summary should consist of at least two paragraphs. One paragraph should describe the process that an insect goes through during the four-stage life cycle, and another should describe the process that an insect goes through during the three-stage life cycle. Students can use their completed sequence events worksheet and their book to assure accuracy of information and spelling.

Science and Art Connection

Provide print and Internet resources for students to research the adult body of an insect of their choice. Have them draw the insect in detail, labeling the head, thorax, and abdomen. Post the drawings in the room or use them as covers for the summaries written in the Writing Connection (above).

Skill Review

Discussion cards covering comprehension skills and strategies not explicitly taught with the book are provided as an extension activity. The following is a list of some ways these cards can be used with students:

- Use as discussion starters for literature circles.
- Have students choose one or more cards and write a response, either as an essay or as a journal entry.
- Distribute before reading the book and have students use one of the questions as a purpose for reading.
- Cut apart and use the cards as game cards with a board game.
- Conduct a class discussion as a review before the book quiz.

Assessment

Monitor students to determine if they can:

- consistently ask relevant questions about the topic prior to and during reading; locate answers to the questions and write them on a worksheet
- accurately place events from the reading into sequential order during discussion and on a worksheet
- correctly identify *r*-controlled vowel *or* in words during discussion
- correctly recognize and use commas in a series
- correctly identify compound words during discussion and on a worksheet

Comprehension Checks

- [Book Quiz](#)
- [Retelling Rubric](#)