



About the Book

Text Type: Nonfiction/Informational Page Count: 16 Word Count: 283

Book Summary

Extreme Insects provides basic facts pertaining to insects that have extreme ways of protecting themselves—including their size, color, and weapons. The book provides students with interesting information about how insects constantly protect themselves from their many enemies. Photographs support the text.

About the Lesson

Targeted Reading Strategy

- Summarize


Objectives

- Use the reading strategy of summarizing to understand and remember information in nonfiction text
- Identify main ideas and details
- Manipulate initial sounds
- Understand and recognize *r*-blends
- Identify commas used to separate items in a list
- Understand and match synonyms

Materials

Green text indicates resources available on the website

- Book—*Extreme Insects* (copy for each student)
- Chalkboard or dry erase board
- Sticky notes
- Thesauruses
- Main idea and details/summary, *r*-blends, commas, synonyms worksheets
- Discussion cards

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

Vocabulary

- High-frequency words: *are, as, have, like, many, their, them, these, they*
- Content words: *caterpillar, enemies, extreme, insects, poison, protect, traits, weapons*

Before Reading

Build Background

- Have students brainstorm the names of insects they are familiar with as you write them on the board. Prompt students to discuss traits that insects may have developed to protect themselves.
- Ask students about other nonfiction books they've read. Ask: *Were the books divided into sections? Did any of the books include a table of contents, glossary, or index?*

Preview the Book

Introduce the Book

- Show students the front and back covers of the book and read the title with them. Ask what they think they might read about in a book called *Extreme Insects*. (Accept all answers that students can justify.)
- Show students the title page. Discuss the information on the page (title of book, author's name).

Introduce the Reading Strategy: **Summarize**

- Explain to students that one way to understand and remember information in a book is to write a summary, or a brief overview, of the most important information in the text. Point out that a summary includes the main idea and one or two supporting details. It often answers the questions *who, what, when, where, why, and how*.
- Model how to summarize.
Think-aloud: As I read this book, I am going to stop every now and then to remind myself about the information I have read so far about extreme insects. Doing this helps me remember what I'm reading and makes me think about new information. When I finish reading the book, I will be able to tell, in my own words, some of the information from each section about extreme insects that I have read about.
- As students read, encourage them to use other reading strategies in addition to the targeted strategy presented in this section.

Introduce the Comprehension Skill: **Main idea and details**

- Write the following list of words on the board: *beetles, bumblebees, ladybugs, and horseflies*. Ask students to describe what these words refer to (insects). Point out that the definitions of these words help to identify a main idea. (Many different insects live in our world.) The words *beetles, bumblebees, ladybugs, and horseflies* are all details that support this main idea.
- Explain that sometimes the amount of information about a topic is so large that it is grouped into sections, and each section of the book has its own main idea.
- Model using the table of contents to infer supporting details in the text.
Think-aloud: When I look at the table of contents on page 3, I see the word Size. I already know that insects come in all different sizes, so some information about the sizes of these insects is probably a supporting detail in the book. When I read, I know that I will find out even more details about extreme insects. As I read, I will pause after a few pages to review in my mind the important details I've read about. This strategy will help me make sure I understand what I'm reading. I know that good readers do this when they read, so I am going to look for supporting details as I read this book.
- Have students turn to the table of contents and list some of the supporting details about extreme insects ("Look-Alikes," "Weapons," and so on).

Introduce the Vocabulary


- As students preview the book, ask them to talk about what they see in the pictures. Reinforce the vocabulary words they will encounter in the text.
- Write the following words from the content vocabulary on the board: *enemies, insects, poison, and protect*.
- Give groups of students a large piece of blank paper. Have them divide the paper into four sections. For each word, have them write or draw what they know about the word. Require group collaboration, encouraging students to listen to other students' ideas. Have groups discuss and create a definition for each word using prior knowledge.
- Review or explain that the glossary and a dictionary contain words and their definitions. Model how students can use the glossary or a dictionary to find a word's meaning. Have students locate the glossary in the back of the book. Invite a volunteer read the definition for *protect* in the glossary.

Lesson Plan *(continued)*

Extreme Insects





- Have students compare the definition with their prior knowledge of the word. Then have students follow along on page 6 as you read the sentence in which the word *protect* is found to confirm the meaning of the word. Repeat the exercise with the remaining vocabulary words.

Set the Purpose

-  Have students read the book to find out more about extreme insects. Encourage them to underline or write on a separate piece of paper the important details in each section as they read.

During Reading

Student Reading

-  **Guide the reading:** Give students their copy of the book. Ask them to place a finger on the page number in the bottom corner of page 4. Have them read to the end of page 7, using their finger to point to each word as they read. Encourage students who finish before others to reread the text. Remind them to underline the important details in the book as they read.
- Model identifying the main idea and details.
Think-aloud: *As I read the second section ("Extreme Size"), most of the sentences mentioned something about the size of the insects. I read that Goliath beetles can grow as long as a pen and weigh as much as a banana. Their size and hard cover protects them from their enemies. I will underline this information in the book. I also read that a titan walking stick can grow as long as a new pencil. Its size frightens smaller insects away, and animals don't eat it because they think it's just a big stick. I will underline all of this information, too. Based on what I've read and underlined, I think the main idea of the section is: Insects have certain traits that help protect them from enemies. For instance, some insects grow very long and heavy. A large insect's size frightens smaller insects away and tricks animals into thinking it's not food.*
- Write the main idea on the board. Ask students to identify details that support this main idea (Goliath beetle, extreme size and a hard cover, one of the largest insects in the world, titan walking stick, grow longer than a new pencil, and so on). Write these details on the board.
- Model summarizing the main idea and details from the second section.
Think-aloud: *To summarize, I decide which information is most important to the meaning of a section. To do this, I can identify the main idea and important details and then organize that information into a few sentences. When I look at the main idea and details on the board, a summary of this section might be: Insects have certain traits that help protect them from enemies. A Goliath beetle can grow to be as long as a pen and weigh as much as a banana. Its size and hard cover protect it from enemies. A titan walking stick can grow longer than a new pencil. Its size frightens smaller insects away and tricks animals into thinking it's a stick so it won't be eaten.*
- Write the summary on the board. Have students identify the main idea and details within the summary. Discuss how you used your own words to create the summary.
-  **Check for understanding:** Have students move their sticky note to page 10 and continue reading (pages 8 through 10). Invite them to share the important details they underlined in the section titled "Extreme Look-Alikes." Write these details on the board. Divide students into groups and have them work with their group to identify the main idea from the details of the section. Discuss their responses as a class and write a main idea on the board.
- Ask each group to use the main idea and details of the section to write a brief summary on a separate piece of paper. Have them share what they wrote.
-  Have students read the remainder of the book. Remind them to continue to underline important details in the book as they read.
-  Have students make a question mark in their book beside any word they do not understand or cannot pronounce. These can be addressed in the discussion that follows.

After Reading

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

Reflect on the Reading Strategy

- Discuss how stopping to review the important details of each section helped students remember the facts and better understand the information in the book.
- Invite students to share the important details they underlined while reading the introduction on pages 4 and 5. Write these details on the board. Divide students into small groups. Have each group work together to identify the main idea from the details and write this information on a separate piece of paper. Discuss their responses as a class.
- **Independent practice:** Introduce and explain the [main-idea-and-details/summary worksheet](#) to students. Have them write a main idea and supporting details for the section titled “Extreme Weapons” (pages 11 through 14). Encourage them to also include information from the captions. If time allows, discuss their responses.

Reflect on the Comprehension Skill

- Review with students how the main idea and details from each section can be used to develop a summary. Discuss with them the benefits of summarizing information they read (to understand the main point of a larger piece of writing). Invite students to share instances of when summarizing might be helpful.
- Review the details written on the board from pages 4 and 5. Invite students to return to their small groups. Have each group work together to write a summary for the introduction on a separate piece of paper. Discuss their responses as a class.
- **Independent practice:** Have students complete their main-idea-and-details/summary worksheet by writing a summary for the section titled “Extreme Weapons.” If time allows, discuss their responses.
- **Enduring understanding:** In this book, you read about different types of insects and the many traits they possess that help keep them alive. Now that you know this information, why do you think it’s so important for insects to have these traits? Do you think they would need to if they didn’t have so many natural enemies?

Build Skills

Phonological Awareness: **Manipulate initial sounds**

- Tell students that you are going to say a word and then change part of the word to make a new word. Ask students to listen carefully to figure out which part of the word was changed. Say the word *size* and then the word *prize*. Point out that the beginning of the word was changed from *s* to *pr*. Write the two words on the board.
- **Check for understanding:** Write different words on the board, one at a time, and ask students to change the initial sound of the word to make a new word: *look* (*cook, book, shook*); *stick* (*brick, wick, flick*); and *big* (*wig, rig, dig*).

Phonics: **R-blends**

- Write the word *trip* on the board. Say the word aloud, stressing the /tr/ blend. Have students say the word aloud. Explain that when two consonants are next to each other, they blend together to make one sound. Circle the *tr* in *trip*. Point to the word *trip* on the board and have students pronounce it aloud.
- Write the word *extreme* on the board. Ask students where the blend is in the word and what sound the blend makes. Circle the *tr* in *extreme*. Point out that blends can be located at the beginning, in the middle, or at the end of a word.
- **Check for understanding:** Write the word *ground* on the board and ask students to read it aloud. Ask what blend sound the *gr* makes. Circle the *gr* in *ground*. Repeat the exercise with the words *entrance* and *proud* for additional practice with *r*-blends.

Lesson Plan *(continued)*

Extreme Insects

- **Independent practice:** Introduce, explain, and have students complete the [r-blends worksheet](#). If time allows, discuss their responses.

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

- Explain to students that whenever a list of three or more items is made, a comma must be 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 5. Read the following sentence aloud: *These traits include size, looks, and weapons.* Explain that when the sentence is read aloud, the commas create a pause between the words. Point out the list of items, the commas used to separate the items, and the use of the word *and* before listing the last item.



Have students turn to page 9 and circle all of the commas on the page. Point out the listed words in the second sentence (*leaves, flowers, stems, or even thorns*). Talk about the location of the commas within the list. Point out that the last item (*thorns*) is joined to the list by the words *or even* following the comma.

- **Check for understanding:** Direct students to page 15 and ask them to identify the list with commas (*size, color, and weapons*).
- **Independent practice:** Introduce, explain, and have students complete the [commas worksheet](#). If time allows, discuss their responses.

Word Work: **Synonyms**

- Write the word *big* on the board. Ask students to suggest a word that means almost the same thing (*large, huge*). Review or explain that a word that means the same or almost the same as another word is called a *synonym*.
- Have students turn to page 15. Write the following sentence on the board: *Insects have many ways to protect themselves.* Ask students to find the word that tells how insects act (*protect*). Ask them to suggest a word that means the same or almost the same as *protect* (*defend, guard, look after, shelter, shield, watch over*).
- Show students a thesaurus. Use the above example to explain how a thesaurus is used as you write synonyms for *protect* on the board.
- **Check for understanding:** Give pairs of students a thesaurus. Ask them to find the word *danger* and name the synonyms listed. As needed, provide additional practice using a thesaurus.
- **Independent practice:** Introduce, explain, and have students complete the [synonyms worksheet](#). If time allows, discuss their responses.

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. Have them practice summarizing different sections of the book with someone at home.

Extend the Reading

Informational Writing Connection

Have students use Internet resources to research other insects that are extreme in size, color, or weaponry. Instruct them to find out what each insect looks like, why it possesses the trait, and how the trait helps keep the insect alive. Have students write a paragraph on their chosen insect. Encourage them to add photographs and/or illustrations to their final copy. Allow time for them to read their completed project aloud to a small group.

Visit [Writing A-Z](#) for a lesson and leveled materials on expository writing.

Science Connection

Find a book from the library about defense mechanisms among wild animals (including mammals, birds, reptiles, amphibians, fish, and insects). Share the book aloud and then lead a discussion on the importance of these traits and how they relate to animals' daily survival. Ask students to brainstorm some human traits that may have been developed for survival.

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:

- identify the main idea and supporting details to better understand the text in discussion and on a worksheet
- accurately use main-idea statements and supporting details to write a summary in their own words
- understand that words can be changed by manipulating the initial sounds
- identify and recognize *r*-blends
- recognize and use commas in a list during discussion and on a worksheet
- understand and match synonyms in discussion and on a worksheet
- understand how to use a thesaurus

Comprehension Checks

- **Book Quiz**
- **Retelling Rubric**