Click® Teacher Guide: October 2017

Creepy-Crawlies

Meet the bugs! Small critters come to life in a big way through engaging articles about spiders and insects.

CONVERSATION QUESTION

How do small insects and spiders live in a big world?

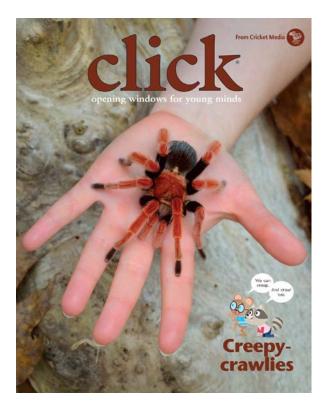
TEACHING OBJECTIVES

• Students will learn about the traits of insects and spiders

- Students will learn how insects and spiders live
- Students will obtain and evaluate information

• Students will integrate content presented in diverse formats

- Students will communicate information
- Students will create diagrams with informative text
- Students will write informative text to accompany a photograph



In addition to supplemental materials focused on core STEM skills, this flexible teaching tool offers vocabulary-building activities, questions for discussion, and crosscurricular activities.

SELECTIONS

What Is It?
Narrative Nonfiction, ~550L
Fran the Fire Ant
Narrative Nonfiction, ~550L

Self-Defense for Bugs

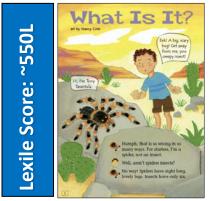
Expository Nonfiction/Photo Essay, ~550L

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What Is It?

pp. 8–12, Narrative nonfiction

This article presents an informative conversation between a boy and a spider. Use it to help students learn the different traits of spiders and insects.



RESOURCES

 How Are Insects and Spiders Different? Organizer

OBJECTIVES

- Students will read and analyze a nonfiction science article
- Students will obtain and evaluate information
- Students will create diagrams with informative text

KEY VOCABULARY

- thorax (p. 9) the middle section of an insect's body
- *abdomen* (p. 9) the rear part of an insect's or spider's body
- antennae (p. 9) thin feelers on the head of an insect
- palps (p. 10) mouth parts of some insects and spiders, used to hold things

ENGAGE

Conversation Question: How do small insects and spiders live in a big world?

Give students close-up pictures of insects and spiders to analyze. Ask them to examine the photos closely to determine how the spiders and insects are different. List their observations on the board. Then tell them to read to find out if any of the differences they noticed are described in the article.

INTRODUCE VOCABULARY

Read aloud and display the vocabulary words. Next, display a T-chart with the headings "Insect" and "Spider." Explain that the vocabulary words name body parts of insects, spiders, or both. Discuss with students where in the chart each vocabulary word belongs.

READ & DISCUSS

Have students pair up to read the article as a reader's theater, with each partner reading the part of the spider or the boy. After students have finished reading the article, use these prompts in a class discussion:

- What was the spider trying to teach the boy?
- What is the same about a spider and an insect?
- What is different?
- Is a spider an insect? Why or why not?

SKILL FOCUS: Obtain and Evaluate Information

INSTRUCT: Distribute the *How Are Insects and Spiders Different?* organizer to each student. Guide students to look in the article for facts that explain the differences between spiders and insects and record what they find in the organizer chart.

ASSESS: Use the graphic organizer to assess whether students recorded facts that correspond correctly to spiders and insects.

EXTEND

Language Arts/Writing Have students draw a line down the center of a blank piece of paper. On one side have students write the title "Insects" and draw examples of two different insects. On the other side have them write the title "Spiders" and draw pictures of two different spiders. Tell students to label the different body parts of their insects and spiders.

How Are Insects and Spiders Different?

Read the article to find facts about how spiders and insects are different. Write facts in the chart below. Two facts have been added for you.

Page	Spider	Insect
8	8 legs	6 legs

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Fran the Fire Ant

pp. 14–17, Narrative Nonfiction

Fran tells about her life as a fire ant and describes how she takes care of eggs and larvae. Use this article to help students learn about the life cycle of an ant.



RESOURCES

• Ant Life Cycle Worksheet

OBJECTIVES

- Students will read and analyze a nonfiction science article
- Students will integrate content presented in diverse formats
- Students will communicate information

KEY VOCABULARY

- *larvae* (p. 14) insects in a very young form that look like worms
- molt (p. 14) to lose a covering of skin, scales, or feathers as an animal grows
- *pupae* (p. 14) insects that are in the stage between larva and adult

ENGAGE

Conversation Question: How do small insects and spiders live in a big world?

Ask students to share what they have seen ants do in the outdoors. Ask questions to pique curiosity about how ants live:

- Where do ants live?
- What do they do underground?
- What kinds of things do ants carry?
- How do they grow?

INTRODUCE VOCABULARY

Read aloud the vocabulary words and definitions. Then direct students' attention to the ant growth cycle diagram on page 15. Have them examine the pictures associated with the vocabulary words *larvae* and *pupae*. To introduce the word *molt*, explain that insects shed their skins as they grow much the same way snakes do.

READ & DISCUSS

Have students listen carefully as you read the story aloud. Then reread the story, pausing to discuss these questions:

- Why do ants have different jobs?
- How do ants help each other?
- What was most surprising to you about the way ants live?

SKILL FOCUS: Use Graphic Features

INSTRUCT: Distribute a copy of the *Ant Life Cycle* worksheet to each student. Explain that the article uses pictures and words to tell about the stages of the ant life cycle. Ask volunteers to point out examples of this from the article. Then work with the class to complete the first section of the worksheet.

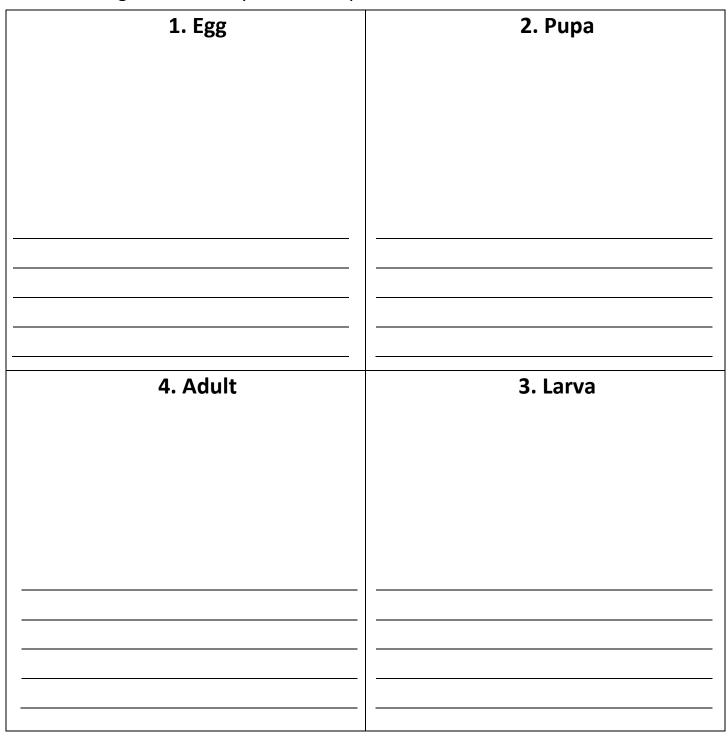
ASSESS: Have students work in pairs to complete the last three sections of the <u>Ant Life Cycle</u> worksheet. Then go over responses with the class.

EXTEND

Language Arts/Speaking & Listening Have students draw and cut out an ant figure to use with pages 16–17. Students should work in pairs or small groups to take turns moving their ant characters through the underground tunnels, from Start to Finish. At each chamber, students should stop to explain what their ants are doing. Encourage students to have their ants talk to each other as they make their way from the nursery to the queen's room.

Ant Life Cycle

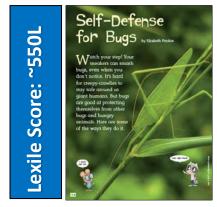
For each stage of the life cycle, draw a picture and write a fact.



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Self-Defense for Bugs pp. 18–21, Expository Nonfiction/ Photo Essay

This article explains how small insects protect themselves from dangers. Use it to support the skill of communicating information.



OBJECTIVES

- Students will read and analyze a nonfiction science article
- Students will communicate information
- Students will write informative text to accompany a photograph

KEY VOCABULARY

- disguise (p. 19) to hide or pretend to be something else to avoid being seen or noticed
- venom (p. 21) a poison an animal uses to kill or injure through biting or stinging

ENGAGE

Conversation Question: How do small insects and spiders live in a big world?

Ask students to imagine being a tiny insect. How can they stay safe? Have students brainstorm ways they think insects might protect themselves.

INTRODUCE VOCABULARY

Write the vocabulary words where they are visible. Ask volunteers to explain the meanings of each word. Discuss how they think an insect might use venom or disguise for protection.

READ & DISCUSS

Read the article together, stopping to ask questions to help students be better observers. Encourage students to point to what they see in the photos and use descriptive language to explain how the insects are using self-defense to protect themselves. Use the following as prompts to further discussion:

- What do you notice about where insects live that use disguise?
- Which insect defenses have you seen for yourself?
- Which insect defenses work best as protection from people?

SKILL FOCUS: Communicate Information

INSTRUCT: Assign students to one of the article sections: "Wear a Disguise," "Get Tricky," or "Fight Back." Explain that they will become experts on their assigned sections. Have students reread their sections and study the photograph and captions in them.

Next, organize students into groups of three, with one representative from each article section in each group. Groups members should take turns explaining the defense strategy on their page and how insects use this strategy to keep safe.

ASSESS: Walk around the room as groups share information to see how well students are following directions and to provide guidance as needed.

EXTEND

Language Arts/Writing Explain that the article contains photographs of all the different insects it mentions. Have students search at home or at school for an insect and take a digital photo of it. Have students write a description of their bug. Combine the photos and paragraphs into a class insect book.