

HOW RUDE!

10 REAL BUGS WHO WON'T MIND THEIR MANNERS



By **Heather L. Montgomery**
Illustrated by **Howard McWilliam**
Teachers Guide

 SCHOLASTIC

How Rude! Real Bugs Who Won't Mind Their Manners

presents factual information in a fun, accessible manner. The behavior of each insect is presented in both a sassy, irreverent voice (complemented by humorous illustrations) and a more direct, informative voice (complemented by a photo). We hope that this guide will help you take advantage of this unique presentation to help students use critical thinking skills while enjoying reading.

About the Author:

Heather L. Montgomery uses yuck appeal to engage young readers, inspire reluctant writers, and empower scientific thinking. Heather has published twelve nonfiction books for kids on topics ranging from snakes (Capstone) to scientific discoveries (Scholastic). Heather has a BS in Biology, an MS in Environmental Education, and awards for her educational programs. She resides on the Tennessee/Alabama border. Learn more at www.HeatherLMontgomery.com.

About the Illustrator:

Cartoonist Howard McWilliam has illustrated numerous picture books (including nonfiction such as *What If You Had Animal Teeth?*) and several dozen children's novels. His first children's picture book, *I Need My Monster*, won six state young readers' awards and has been turned into an animated short. Howard also illustrates for a wide range of magazines and newspapers. He lives in Cheltenham, UK, with his wife and two sons. Learn more at www.howardmcwilliam.com.

Pre-Reading

- Looking at only the front and back cover, ask the students to predict what the book is about. Do they think it will contain fictional or factual information? Will it contain artwork or photographs?
- Read page 3 aloud. Have the students study the illustrations on pages 4–5. Ask them to predict which insect will be the winner. You can project the image onto a screen and have each student add a sticky note to indicate their vote.
- Preview pages 28–29. Which insect's hometown is closest to you? Note: the locations listed represent only one city within their range.

During Reading

- Have students partner to read the book. Note: "Real Deal" text is more advanced.
- Split the class into ten small groups. Each group reads about one insect and creates an advertisement for the services that their insect provides. After a group shares their advertisement, the class can read the pages about that insect.
- Ask students to identify three fun facts for each insect in the book—one fact from the photo, one from the introductory text, and one from the "Real Deal" text.

Post-Reading

- On pages 26–27, the illustrator depicted the life cycle of the American burying beetle. Have students study that illustration and reread page 3 to determine if the burying beetle experiences complete or incomplete metamorphosis. (Complete) Have students draw and label an example of incomplete metamorphosis.

Note: this will require research beyond this book to find visual references for the egg and adult stages.

- Have students read the author's note, "True Confessions," on page 32. Ask them which bug they would select as the winner of the "Battle for the Grossest." Have them write a paragraph with evidence to support their response. They may submit it to www.HeatherLMontgomery.com. Extension: have them redraw pages 4–5 with their choices (including bugs from the book or otherwise).
- Allow students to create a skit reenacting the insect behaviors.
- In small groups, have students select a behavior. Ask them to brainstorm and then research other animals with similar behavioral adaptations.



Which Pic?

Overview:

Students study a photograph and an illustration of the same insect, write a sentence based on each, and compare to the text in the book.

Grades: 3–8

Objectives:

Students will:

- Write a sentence to demonstrate their interpretation of information presented visually.
- Use information presented in illustrations and text to gain a better understanding.
- Compare and contrast information provided through three media.

Common Core:

Reading Standards for Informational Text #7: Integrate and evaluate content presented in diverse media.

Materials:

1 copy of *How Rude: Real Bugs Who Won't Mind Their Manners*

Instructions:

1. Instruct students to study the photograph of the American burying beetle on page 19. Block the text and other illustrations from their view.
2. Ask them to write a sentence about the insect based on their observation of the photograph.
3. Have students study the artwork illustrating that same insect (page 18). Block the text and photo from their view.
4. Ask them to write a sentence about the insect based on the illustration.
5. Inform the students that the images depict the same insect. Ask them to compare and contrast the two sentences they wrote.
6. In pairs, allow the students to discuss the following:
 - Which image do you prefer? Why?
 - Was the information you chose to include in each sentence impacted by the type of image? If so, how?
 - Was the voice/tone/style of your sentence impacted by the type of image? If so, how?
7. Read the text from the book and ask students how the voice/style/tone of the introductory text and that of the "Real Deal" are complemented by the two types of images.



Be a Bug-ineer

Overview:

Students design their own insect with form and function in mind.

Grades: 2–8

Objectives

Students will:

- Create a model of an insect.
- Design an imaginary insect to meet specific needs.
- Evaluate evidence from visuals and text.

Common Core:

Reading Standards for Informational Text #1: Cite textual evidence to support analysis.

Next Generation Science Standards:

- Cross Cutting Concepts: Structure and Function; Patterns
- Core Ideas: ETS1.B: Developing Possible Solutions; LS1.A: Structure and Function; LS4.C: Adaptation
- Practices: Developing and Using Models; Designing Solutions; Engaging in Argument from Evidence

Materials:

- Classroom set of *How Rude: Real Bugs Who Won't Mind Their Manners*
- Images of a leaf, wood, carrion, insects

Instructions:

1. Instruct students to sketch the body of an antlion. They may use the photo on page 12 as well as additional sources as reference.
2. Ask them to read the text on pages 12–13.
3. Instruct students to study each body structure on their sketch, to guess its function, and to label each part with a potential function. Lead a group discussion about their ideas, prompting students to consider many survival functions: obtaining food, protecting body, movement, sensing the environment, etc.
4. List or project images of other insect foods (a leaf, wood, carrion, other insects, etc.).
5. Instruct the students (individually, in pairs, or in groups) to engineer, sketch, and label an insect designed to eat one of those foods. Allow them to create a physical model (with pipe cleaners, papier-mâché, reused objects, etc.). Remind them to consider all body parts, not simply the structure of the mouth.
6. Post models around the room and conduct a gallery walk, encouraging students to guess the intended food type. Instruct them to post questions about the body parts based on the evidence presented in the models.
7. Inform the students that insects in *How Rude* consume leaves, wood, carrion, and other insects. Challenge students to discover which insects in the book eat those foods. Ask them to compare the structures of real insect body parts to those of their created creatures.

Extension:

For an extra challenge, provide a list or images of potential habitats. Students must design their insect to eat one particular food and to survive in one particular habitat.

