

# Arthropods

## Answer Key: Grades 7–8 Lesson Extensions

### Notes:

- This answer key should be used as a guide for basic responses to the questions and instructions found in the grades 7–8 lesson extensions. The children should be encouraged to make their student journals tidy, beautiful, and exceptionally well done.
- Encourage the children to write their answers in their own words, with definitions being a possible exception.
- There are two types of answers provided in this answer key:

**Sample answers:** Most questions are open ended, so the children’s answers will not match the provided text exactly or include everything provided in the sample answer. However, some answers should match more closely (for example, vocabulary word definitions, copied charts, etc.).

**Answers will vary:** This is used when there will be great variation in the children’s answers, which may be due in part to a lesson having more information provided than another lesson. Refer to the text in the lesson to check these answers.

### Lesson 1

2. Write the definition of detritivore.

**Sample answer:** A detritivore is a living thing that eats decaying organic matter.

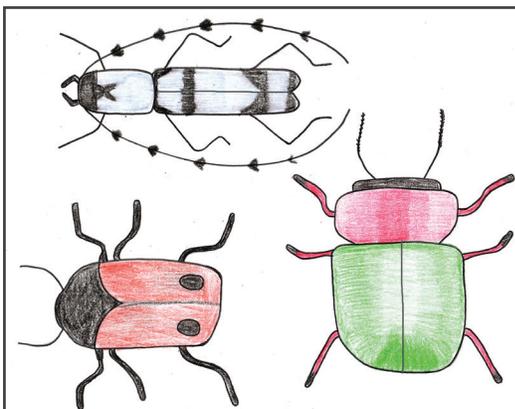
### Lesson 2

2. Find the definitions for the words iridescent and mandible and record them.

**Sample answer:** Iridescent things reflect light and seem to change colors at different angles. Mandibles are the parts of the jaw used to grab and cut food, to provide defense, or to attack enemies.

3. Choose at least one beetle to draw and color.

**Sample drawing:**



### Lesson 3

2. List 3–4 ways that scientists have used the capabilities of fireflies to improve technology or medicine.

**Sample answer:**

- to create more efficient light bulbs
- to help study genes
- to test for microbial contaminants in food
- to aid research on treatment for many medical conditions

3. Write a benefit you think could come from studying fireflies that is not listed.

**Answers will vary.**

### Lesson 4

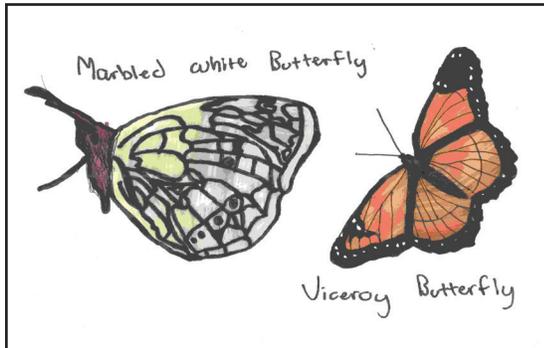
2. Write three to four sentences answering the question “Which insect or fact did you find most interesting and why?”

**Answers will vary.** Answers should reflect 3–4 sentences of information found in the lesson extension.

### Lesson 5

2. Copy the vein patterns of at least two butterflies.

Sample drawing:



3. Ponder and write about a time when you noticed that God cared about the details in your life.

Answers will vary.

### Lesson 6

2. As you read the article, take notes. You can include facts that are interesting to you, illustrations, or any questions that come to mind.

Answers will vary. Answers should reflect information found in the lesson extension.

### Lesson 7

2. Write 3–4 interesting ways that arthropods are used for medicinal purposes.

Answers will vary. Answers should reflect 3–4 pieces of information found in the lesson extension.

### Lesson 8

2. Take notes about each of the world records.

Answers will vary. Answers should reflect information for each of the world records found in the lesson extension.

3. Explain to a parent or another person what you learned.

Answers will vary. The child should have explained to a parent or another person about information presented in the lesson extension.

### Lesson 9

2. Create a “Q&A” in which you ask and answer five questions based on the information you read.

Sample answer: (Only five are required.)

- Q: What is one type of crustacean that does not move using legs?  
A: Barnacles
- Q: How long do barnacles attach themselves to their home?  
A: For life
- Q: How does a baby barnacle attach itself to its home?  
A: It uses a powerful glue-like liquid it secretes that hardens like cement.
- Q: What are a few benefits to barnacles’ shells being made of multiple pieces?  
A: They can hold tightly together to conserve moisture and open to let food in.
- Q: Can barnacles harm animals by attaching to them? What about boats?  
A: No, they do not harm animals they attach to. They can harm boats by increasing drag, which increases fuel consumption. They can also plug drains and ruin equipment on boats.
- Q: How do barnacles feed?  
A: They use their appendages to draw water into their shells. Then they strain food particles, or plankton, out of the water.
- Q: Do barnacles all grow to the same size?  
A: No, they vary in size, growing larger the more they eat.
- Q: What are some objects that barnacles attach themselves to?  
A: The undersides of boats, underwater pipes, turtles, whales, and manatees—almost any solid surface that gets covered with salt water
- Q: What can barnacles look like?  
A: Barnacles can be brown, pink, orange, green, yellow, or covered with stripes. The color of a barnacle usually matches the color of the habitat in which it lives, giving it good camouflage.

### Lesson 10

2. Choose an arthropod you have learned about in this unit and write a paragraph about it in Jean-Henri Fabre’s style.

Answers will vary. Answers should reflect information found in the lesson extension and be written in Jean-Henri Fabre’s lively, biographical style.