

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 science 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.

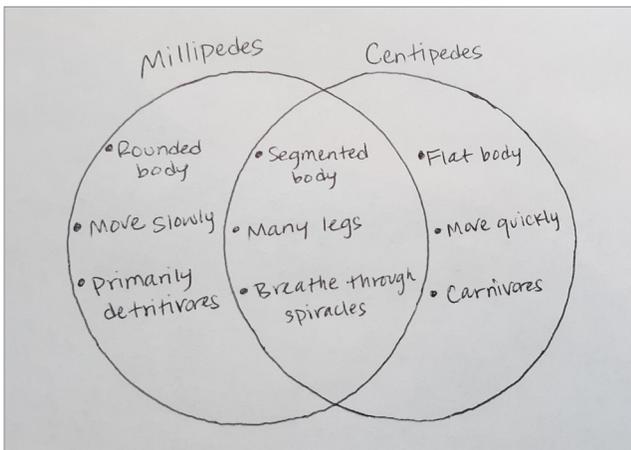
Lesson 1

1. Study the “Classification of Phylum Arthropoda” chart. In your science journal, ask and answer five questions based on the chart (e.g., Q: Are wingless insects and winged insects in the same class? A: No.).

Answers will vary. Questions and answers should reflect five pieces of information found in the extension lesson.

2. In your science journal, create a Venn diagram comparing the similarities and differences between millipedes and centipedes.

Sample diagram:



3. In your science journal, define and illustrate the word *DETRITIVORE*.

Sample answer:

A detritivore is a living thing that eats decaying organic matter.

Lesson 2

1. Read the articles “Inestimable Insects” and “Ticks” and copy the drawing of a tick into your science journal.

Answers will vary.

2. As you read the articles, write 3–4 questions that you would like to research. You will use these questions in the last lesson. Put a box around the questions in your journal and draw a question mark in or above the box.

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

Lessons 3–4

1. Find the definitions for the words *IRIDESCENT* and *MANDIBLE* and record them in your journal.

Sample answers:

Iridescent means something is showing rainbow-like color.

Mandibles are the parts of the jaw used to grab and cut food, for defense, or to attack enemies.

2. Read the article “Beetles” and take notes in your science journal.

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

3. Choose at least one beetle to draw and color in your science journal.

Answers will vary.

Lesson 5

1. Read the article “Lighting Engineers.” In your science journal, take notes and illustrate them.

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

2. As you read the article, write at least 3–4 different questions that come to mind. You will use these questions in the last lesson. Put a box around the questions in your journal and draw a question mark in or above the box.

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

Lesson 6

1. Create an “Arthropod in My Area” journal page. Find any type of arthropod outside your home, at a park, etc. Study the arthropod for at least 20 minutes.

Answers will vary. Example given in the extension lesson.

2. Take a picture, if desired. Illustrate the arthropod. Observe and write about the arthropod’s behavior.

Answers will vary. Example given in the extension lesson.

Lesson 7

In your science journal, create a “Q&A” in which you ask and answer five questions based on the information you read. Put a box around the questions in your journal and draw a question mark in or above the box.

Answers will vary. Questions and answers should reflect five pieces of information found in the extension lesson.

Lesson 8

Choose three sentences about the life cycle of the field

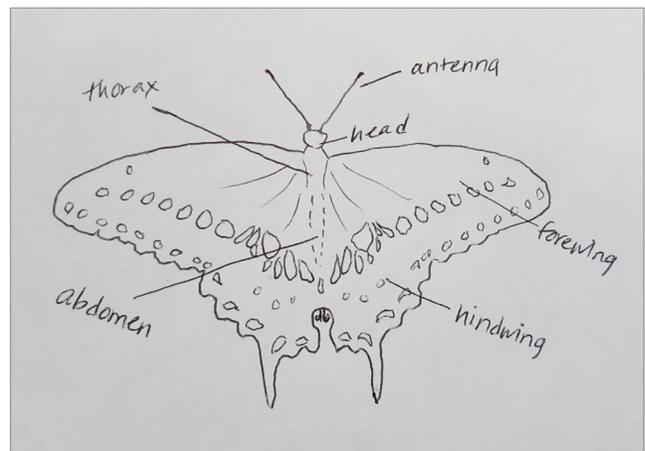
cricket and copy them in your science journal with space underneath. Imagine you are Jean-Henri Fabre and you wish to convey the beauty of the cricket in a factual, yet interesting way. Rewrite the sentences you chose in a way that would capture the interest of a casual reader.

Answers will vary. Answers should reflect three pieces of information about the life cycle of the field cricket found in the extension lesson as well as those sentences rewritten to capture the interest of a casual reader.

Lesson 9–10

In your science journal, record the key information you will need to identify eastern black swallowtails. Include information such as host plants, physical markings, and size. Then trace the butterfly at the bottom of this extension and label its different parts.

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



Lesson 11

1. Read the article “The Wonders of an Ant Colony.” In your science journal, take notes and illustrate them.

2. As you read the article, write at least 3–4 different questions that come to mind. You will use these questions in the last lesson. Draw a box around the questions in your journal and draw a question mark in or above the box.

Answers will vary. Notes, illustrations, and at least 3–4 different questions should reflect information found in the extension lesson.

Lesson 12

1. Read both of the articles below. Using the internet or

Arthropods



reference books, research an arthropod that may have a medicinal use other than what is mentioned in the first article.

2. In your science journal, write 3–5 sentences reporting on the arthropod you found and how it can be used for medicinal purposes.

Answers will vary. Answers should reflect 3–5 pieces of information not found in the extension lesson.

Lesson 13

1. Read the article “Spider World Records.”

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

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

Lesson 14

1. In several extension assignments for this unit, you wrote questions that you would like to research. Choose one of the questions you wrote down, or think of another question about arthropods that you would like to research.

2. With the permission of a parent, research online and/or in books, and then write a journal page that answers that question.

Answers will vary. An example is given in the extension lesson.