

# **MARINE BIOLOGY**

## **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. Refer to the text in the lesson to check these answers.

#### Lesson 1

2. Pretend you are a reporter writing about the cargo spill. Write a newspaper headline about it.

Sample answer: Plastic Bath Toys Swim Around the World!

3. List 3–5 facts about the spill and what scientists learned from it that you would include in a newspaper article.

Sample answers: Decades after the spill, some of the toys are still traveling the ocean. The wreckage of a ship or cargo that is floating in the water is called flotsam. Whenever water, air, or energy flows in a specific direction, a current occurs. It takes three years to orbit the North Pacific Gyre.

## Lesson 2

2. Practice saying each technical name aloud.

No written answer necessary. It is helpful to have a parent or guardian check for accurate pronunciation.

3. Copy the root words and their meanings.

Sample answers: Epipelagic: *epi* = upon; *pelagos* = sea; Mesopelagic: *meso* = middle; *pelagos* = sea; Bathypelagic: *bathy* = deep; *pelagos* = sea; Abyssopelagic: *abyssos* = bottomless; *pelagos* = sea; Hadopelagic: *hado* = Greek god of the underworld; *pelagos* = sea

#### Lesson 3

2. Study each of the vocabulary words and definitions on the right side of the page.

No written answer necessary. It is helpful to have a parent or guardian check for mastery.

3. Write a paragraph to answer this question: Why are ocean waves important?

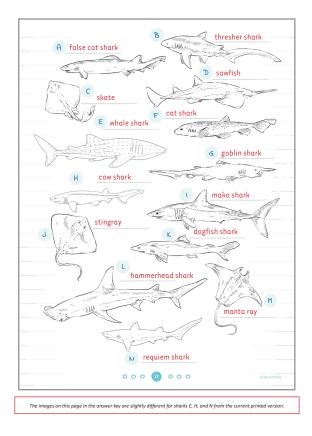
Sample answers: Waves are a force that brings life to the ocean. Waves move food around the ocean and bring water to areas that need water replenished. They provide oxygenation by adding oxygen to water. Crashing waves create habitats for marine life. If waves did not exist, much of the marine life would perish.



## Lesson 4

2. Follow the directions and, using the "Shark and Ray Family Dichotomous Key," read the descriptions to see which shark or ray family fits that description. Write its name next to the correct picture. Refer to "Parts of a Shark" as needed.

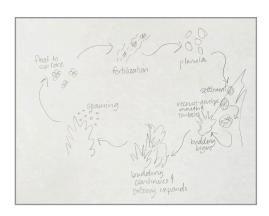
## Sample answers:



## Lesson 5

2. Sketch a copy of the spawning coral life cycle. Label each stage.

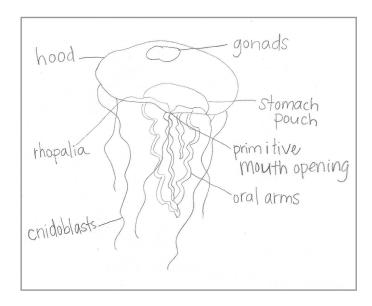
## Sample answers:



## Lesson 6

2. Study the jellyfish anatomy diagram. Trace or sketch a jellyfish, labeling the parts.

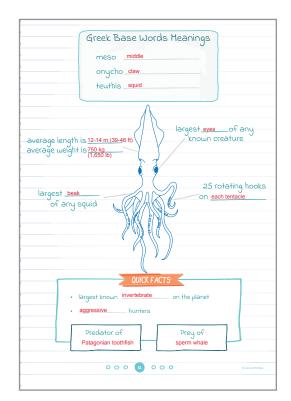
## Sample answers:



## Lesson 7

2. Fill in the infographic on the next page.

## Sample answers:





## Lesson 8

2. Choose one of the organisms and tell a family member 2-3 facts you learned about it.

#### Sample answers:

Anglerfish: 1. A female has a protrusion sticking out of the top of her head resembling a piece of worm.

- 2. The "worm" has bacteria on it that make it luminescent.
- 3. A male attaches to a female and becomes a permanent parasite and mate.

## Lesson 9

2. Read the clues in the "Fishy Clues" section to find the species of fish described. Use the chart to help you.

No written answer necessary. It is helpful to have a parent or guardian check for comprehension.

3. Once you find the correct fish, write its name and also write which of the three types of fish it is.

## Sample answers:

- 1. Manta Ray; Cartilaginous Fish (Chondrichthyes)
- 2. Sea Lamprey; Jawless Fish (Agnatha)
- 3. Atlantic Salmon; Bony Fish (Osteichthyes)

### Lesson 10

2. In your science journal, write 2-3 questions that you would ask him about sharks or marine conservation if you could.

#### Sample answers:

- 1. Have you ever been bitten by a shark?
- 2. Do sharks always have to be moving to breathe?
- 3. What is the largest shark you have ever studied in the wild?

3. Copy the definitions into your science journal.

Sample answers: Answers should reflect information found in the lesson extension.

## Lesson 11

2. Label the seahorse parts in your science journal, including one interesting fact about each part.

## Sample answers:

Snout: can suck up food like a vacuum cleaner

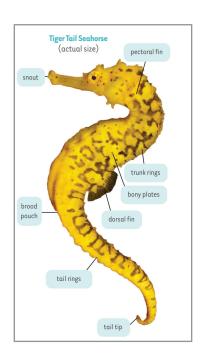
Pectoral fin: helps the seahorse steer

Trunk rings/bony plates: located under a thin layer of skin

Dorsal fin: small fin that flutters quickly and propels the seahorse forward

Brood pouch: only found in males and holds the eggs after mating

Tail rings/tail tip: holds onto plants or coral while catching prey



3. Record the seahorse fact that you found most interesting.

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



## Lesson 12

2. Create a Venn diagram comparing how toothed vs. baleen whales make and use sounds.

## Sample answers:

