

MARINE BIOLOGY

3-8 Science Unit Study



MARINE BIOLOGY

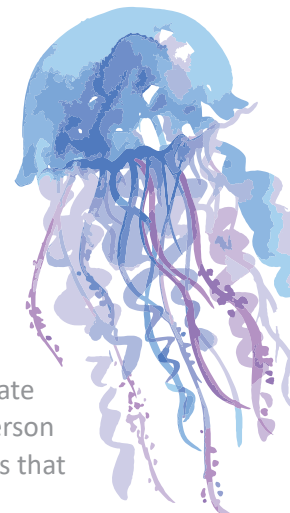
CREATED BY THE GOOD AND THE BEAUTIFUL TEAM



Table of Contents



Unit Information	ii
Read-Aloud Book Pack and Correlated Books	iii
Grades 7–8 Lesson Extensions	iv
Supplies Needed	v
Vocabulary	vii
Lesson 1: Ocean Characteristics	1
Lesson 2: Ocean Zones	7
Lesson 3: Tides and Intertidal Zones	12
Lesson 4: Marine Life	15
Lesson 5: Coral Reefs	17
Lesson 6: Marine Invertebrates, Part 1.	24
Lesson 7: Marine Invertebrates, Part 2.	29
Lesson 8: Marine Reptiles	33
Lesson 9: Fish.	39
Lesson 10: Sharks	43
Lesson 11: Marine Mammals, Part 1	50
Lesson 12: Marine Mammals, Part 2	54



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UNIT INFORMATION

Science Journal



All The Good and the Beautiful science units include activities in a student journal. Each student should have his or her own student journal, and the parent or teacher will direct the student regarding when to complete the activities as directed in the lessons. Science journals can be purchased by going to goodandbeautiful.com/science and clicking on the Marine Biology unit link.

Science Wall



All The Good and the Beautiful science units include vocabulary words to be placed on your science wall, which is a wall or trifold presentation board in your learning area to which you can attach the vocabulary words and other images. **Cut out the vocabulary word cards at the beginning of the unit.** The course will indicate when to place them on the wall.

Lesson Preparation

All The Good and the Beautiful science units include easy-to-follow lesson preparation directions at the beginning of each lesson.

Activities and Experiments



Many of The Good and the Beautiful science lessons involve hands-on activities and experiments. An adult should always closely supervise children as they participate in the activities and experiments to ensure they are following all necessary safety procedures.



Experiment Videos



Go to goodandbeautiful.com/sciencevideos and click on the *Marine Biology* link or use the Good and Beautiful Homeschool app to see videos of experiments used in this unit. This is a convenient way to watch experiments that may be more complicated. Children often learn best through hands-on experience; therefore, this unit includes a supply list and instructions for all experiments, and you may choose to do as many as you wish.

Unit Videos



Some lessons include videos that were created by The Good and the Beautiful. Have a device available that is capable of playing the videos from goodandbeautiful.com/sciencevideos or from the Good and Beautiful Homeschool app.

Content for Older Children



Some lessons include extra content that is more applicable for older children (grades 7–8). Parents or teachers may choose to skip this content if instructing only younger children.

Content for Younger Children



Some lessons include extra content that is more applicable for younger children (grades 3–6). Parents or teachers may choose to skip this content if instructing only older children.

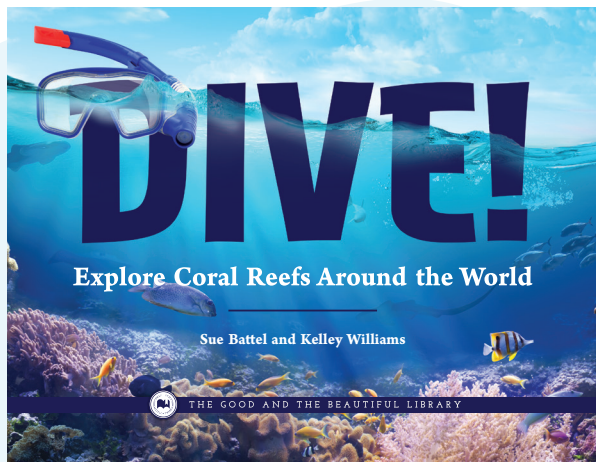
Versions

New discoveries in marine biology are being made on an ongoing basis. This course is reviewed and revised periodically to keep the information as up-to-date as possible. This version is the third edition of this unit.



READ-ALoud BOOK PACK

The two books below are optional read-aloud books that complement this unit. These books can be purchased as a book pack by going to goodandbeautiful.com/science and clicking on the *Marine Biology* link.



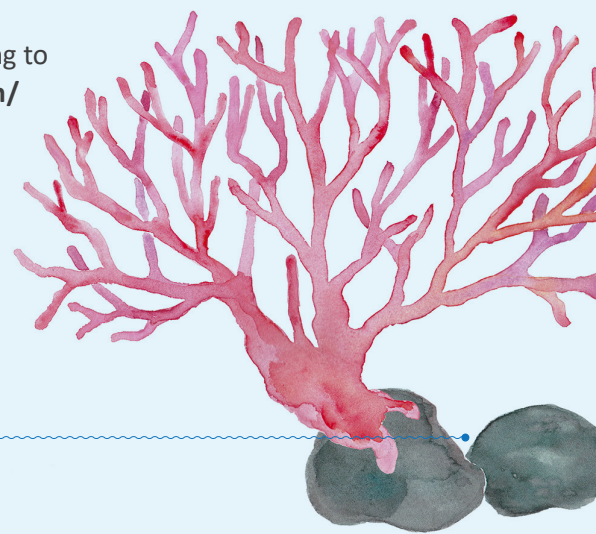
Dive! Explore Coral Reefs Around the World
by Sue Battel and Kelley Williams



Dangerous Sea Creatures
by The Good and the Beautiful Team

CORRELATED BOOKS

The Good and the Beautiful Library has several books that correlate well with the *Marine Biology* unit. It can be a wonderful experience for children to read books on their levels related to the subjects they are learning in science. The library includes both fiction and nonfiction books that are organized according to reading level. Find these correlated books by going to goodandbeautiful.com/science and clicking on the *Marine Biology* science unit product page.



LESSON EXTENSIONS

How the Extensions Work

Each lesson has an optional lesson extension for children in grades 7–8. Complete the lesson with all the children, and then have the older children complete the self-directed lesson extension. These extensions are located in the *Grades 7–8 Marine Biology Student Journal*.

Answer Key

The answer key for the lesson extensions can be found on the free Good and Beautiful Homeschool app in the science section. Visit goodandbeautiful.com/apps for information on accessing the app. The app can be accessed from a computer, phone, or tablet.

Flexibility

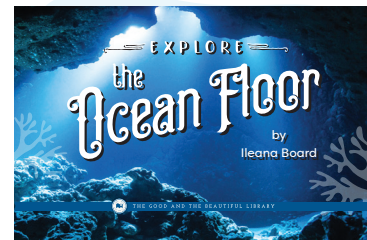
The amount of time it will take to complete each lesson extension will vary for each child. The average time is about 10–15 minutes per extension. Parents/teachers and children may choose to omit parts of the lesson extension if desired. Encourage the children to stretch their capabilities, but also reduce work if needed.

Taking Notes

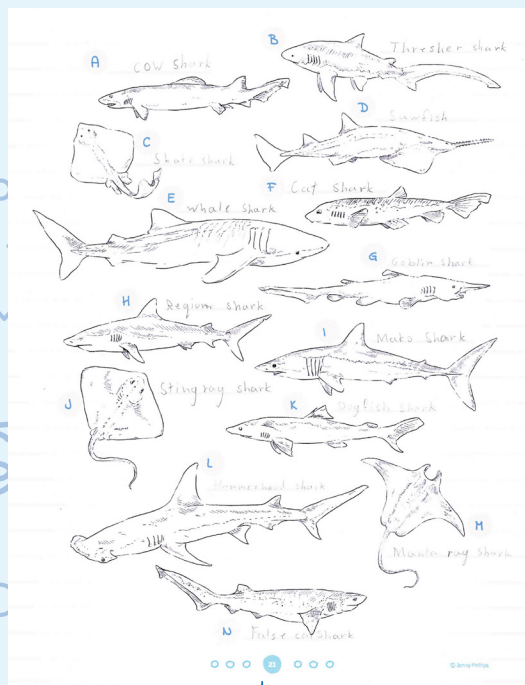
Some of the grades 7–8 lesson extensions have the children summarize the material read. Teach the children to look for key information, summarizing the most important points. Students can also add notes with their thoughts and the facts that are most interesting to them.

Optional Grades 7–8 Reading Book

We recommend *Explore the Ocean Floor* by Ileana Board as extra reading for students in grades 7–8. This book can be purchased by going to goodandbeautiful.com/science and clicking on the *Marine Biology* unit link.



Explore the Ocean Floor
by Ileana Board



SUPPLIES NEEDED



This section is divided into supplies needed for **activities** and supplies needed for **experiments**. If you would prefer to watch the experiments instead of performing them, you can watch all the experiments at goodandbeautiful.com/sciencevideos. The activities, however, are not filmed.

Lesson 1

NOTE: Before beginning this lesson, fill a pitcher with tap water. Add 2–3 drops of blue food coloring. Pour the mixture into an ice-cube tray and freeze for 3–4 hours.

- Globe or map
- Pitcher
- Blue food coloring
- Ice-cube tray
- 9"x13" glass baking dish
- 3 tall glasses or jars
- 8 Tbsp salt
- 8 Tbsp sugar
- Spoon
- 3 fresh eggs
- Dry-erase marker
- Water (including warm tap water)

Lesson 2

- Glue stick
- Scissors

Lesson 3

- 15 unlined index cards for each child
- Crayons, pens, markers, or other drawing materials
- Stapler or binder clip
- Variety pack of seashells (with starfish and sand dollars, if possible), available at craft stores or online

Lesson 5

- Colored pencils or crayons

Lesson 6

- Colored pencils or crayons

Lesson 7

- “My Marine Invertebrates Booklet” in the student journal from the previous lesson
- Colored pencils or crayons

Lesson 8

- Scissors

Lesson 9

- Glue stick
- Scissors

Lesson 10

- Scissors
- Glue stick (optional)
- 1 small can of tomato juice or bottle of lemon juice
- Tablespoon and teaspoon measuring spoons
- Permanent marker
- 8 paper cups
- Water

Lesson 11

- Water
- About 2 c ice
- About 2 c shortening
- 4 quart-sized zipper bags
- Large mixing bowl
- Timer/stopwatch
- Spoon
- Permanent marker





SUPPLIES NEEDED

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(CONTINUED)

Lesson 12

- Skein of yarn or sidewalk chalk
- Measuring tape (optional)
- Scissors
- Glue stick
- Hair comb
- Water
- Small bowl
- Cup
- Handful of cereal, grapes, raisins, or other small food items

