

# Table of Contents

Coral Reefs Reading Comprehension

Pages 2 - 4

Scaffolded Questions

Pages 5 - 7

On-Level Questions

Pages 8 - 10

Extension Activity

Pages 11 - 13

Answer Key

Pages 14 - 16

# Coral Reefs

## Reading Comprehension

The reading passage introduces students to coral reefs. It gives a description of coral reefs, discusses coral reef plant and animal adaptations, and explains what threatens to destroy coral reefs.

This is a longer reading passage, particularly for younger grades. Support students as needed.

The pictures included in this reading passage are in color, but you can print them in gray scale to save ink.

Students will still be able to get the information necessary if you print the pictures in gray scale.

# Coral Reefs

Coral reefs are home to some of the most colorful, fascinating plants and animals in the world. In fact, coral reefs host more life than any other part of the ocean. Unfortunately, many coral reefs have been damaged beyond repair, and many others are in danger. The more we know about coral reefs, the better we can protect them.

## What are Coral Reefs?

Coral is made up of tiny, spineless animals called polyps. Thousands of the polyps live together, forming coral colonies. These polyps secrete layers of limestone. When coral die, the limestone skeleton remains. New polyps live on top of these limestone skeletons. Over the years, the coral reef grows.

Coral reefs need sunlight in order to survive, so they are usually found in shallow water near the coast. Also, coral reefs must have warm water temperatures. Because of this, coral reefs are usually found near the equator where the water temperature remains between 70 and 85 degrees Fahrenheit all year long.

## Types of Coral Reefs



### FRINGE REEF

A coral reef in shallow waters right next to the coast.



### BARRIER REEF

A coral reef separated from the coast by open water called a lagoon.



### ATOLL

A ring shaped coral reef away from the coast that surrounds a lagoon.

## Coral Reef Plants and Animals

Coral reefs are home to a HUGE variety of plants and animals because of the food and shelter they provide. Some animals spend their entire lives in coral reefs, protecting themselves from predators by hiding in the coral. Other animals travel throughout the ocean, but stop in coral reefs in search of food. Coral reefs are home to sea slugs, shrimp, clams, coral, plankton, seahorses,

sponges, scallops, eels, sea anemones, fish, sea urchins, lobster, jellyfish, and many other animals. Many of these animals actually look like plants (coral, sponges, sea anemones). But the main plants you will find in coral reefs are algae and seagrasses.

## **Plant and Animal Adaptations**

Fish have several adaptations to help them survive in coral reefs. For example, fish that spend their lives in coral reefs have flat bodies, making it easy for them to make sharp turns and maneuver around coral reefs quickly. Coral reef fish are also much more brightly colored than fish that don't spend their lives in coral reefs. Scientists believe that this adaptation helps them camouflage with the brightly colored coral, find mates, and protect themselves by warning predators away.

Other plants and animals have adapted to coral reefs by forming a symbiotic relationship. Symbiosis occurs when two different species help each other and are dependent on each other for survival. For example, goby fish and pistol shrimp work together. Pistol shrimp



**Coral reefs provide many hiding places for small fish seeking shelter.**

burrow into the ocean floor. This burrow provides protection as well as helps the shrimp find food. Gobies use the burrows that the shrimp dig for food and protection as well. In exchange, gobies are a lookout for the pistol shrimp, as these shrimp have terrible eyesight. If a predator is coming, the goby will warn the shrimp, and they both hide in the burrow!

Coral also have symbiotic relationships with microscopic algae called zooxanthellae that lives inside of coral. These algae plants provide much needed nutrients for the coral, while the coral offers protection for the tiny algae.

## **Threats to Coral Reefs**

It takes thousands of years for a coral reef to develop, but they can be destroyed very quickly. When hurricanes or cyclones occur, they produce large waves that can flatten an entire coral reef. Changes in water temperature can be devastating to coral reefs as well, since they require warm water temperatures. The biggest threats to coral reefs, however, are people. Pollution and irresponsible fishing have caused a lot of damage. Careless people can also hurt coral by trampling on the coral or taking fish and coral out of their habitats.

# Scaffolded Questions

The questions in this section are scaffolded to help you differentiate. This section will help support your lower level students or ELL learners.

There are two levels of scaffolding:

1. The question tells students which section to go to to find the answer.
2. Sentence starters are provided to help students when answering the questions.

Other than the two levels of scaffolding listed above, these questions are the same as the on-level questions.

The answer key on pages 14 – 16 applies to this section of questions as well as the on-level section of questions.

**Coral Reefs:**  
**Reading Comprehension Questions**

1. Look at the title, headings, and pictures. What is this reading passage mainly about?  
What clues helped you figure this out?  
This reading passage is mainly about \_\_\_\_\_. I know this because \_\_\_\_\_.
2. Reread the section with the heading “What are Coral Reefs?” Explain how coral reefs get bigger.  
Coral reefs grow by \_\_\_\_\_  
\_\_\_\_\_.
3. Reread the section with the heading “What are Coral Reefs?” Where are coral reefs found? Give two details from the passage.  
Coral reefs need sunlight, so they are usually found \_\_\_\_\_  
\_\_\_\_\_.  
Coral reefs also need warm water, so they are found \_\_\_\_\_  
\_\_\_\_\_.
4. Look at the diagram titled “Types of Coral Reefs.” What’s the difference between a fringe reef and a coral atoll?  
Fringe reefs \_\_\_\_\_  
\_\_\_\_\_ while coral atolls \_\_\_\_\_  
\_\_\_\_\_.
5. Reread the section with the heading “Coral Reef Plants and Animals.” Why do you think the author wrote the word “huge” in all capital letters?  
I think the author wrote the word “huge” in all capital letters because \_\_\_\_\_  
\_\_\_\_\_.



# Coral Reefs:

## Reading Comprehension Questions

6. Reread the section with the heading “Coral Reef Plants and Animals.” Use that information to fill in the chart below.

Animals Found in Coral Reefs	Plants Found in Coral Reefs

7. Reread the section with the heading “Plant and Animal Adaptations.” How does having a flat body help fish in a coral reef?

Flat bodies help coral reef fish by \_\_\_\_\_.

8. Reread the section with the heading “Plant and Animal Adaptations.” How do goby fish and pistol shrimp help each other?

Goby fish and pistol shrimp help each other by \_\_\_\_\_.

9. Reread the section with the heading “Threats to Coral Reefs.” How can hurricanes hurt coral reefs?

Hurricanes hurt coral reefs by \_\_\_\_\_.

10. Look at the photograph. Describe it. Why do you think the author included this?

The photograph has \_\_\_\_\_.

The author probably included this photograph \_\_\_\_\_.

# On-Level Questions

The questions in this section are more straightforward than the questions in the Scaffolded Questions section.

These questions and answers do not have any scaffolding to support students.

Students are given a question and expected to write a short answer in a complete sentence.

The answer key on pages 14 – 16 applies to this section of questions as well as the Scaffolded Questions section.



Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Coral Reefs:**  
**Reading Comprehension Questions**

1. Look at the title, headings, and pictures. What is this reading passage mainly about?  
What clues helped you figure this out?

\_\_\_\_\_

\_\_\_\_\_

2. Explain how coral reefs get bigger.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. Where are coral reefs found? Give two details from the passage.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. What’s the difference between a fringe reef and a coral atoll?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. Reread the section with the heading “Coral Reef Plants and Animals.” Why do you think the author wrote the word “huge” in all capital letters?

\_\_\_\_\_

\_\_\_\_\_

# Coral Reefs: Reading Comprehension Questions

6. Use the information from the reading passage to fill in the chart below.

Animals Found in Coral Reefs	Plants Found in Coral Reefs

7. How does having a flat body help fish in a coral reef?

---

---

8. How do goby fish and pistol shrimp help each other?

---

---

---

9. How can hurricanes hurt coral reefs?

---

---

10. Look at the photograph. Describe it. Why do you think the author included this?

---

---

---

# Extension Activity

This extension activity has students come up with words relating to coral reefs for each letter of the alphabet. Students must explain how each word relates to coral reefs.

A rubric is provided for easy grading.

A-Z Extension Activity

Page 12

Grading Rubric

Page 13

Coral Reefs:

A – Z Extension Activity

Try to come up with a word related to coral reefs for each letter of the alphabet! Write the word, and then explain how the word relates to coral reefs. An example is given.

A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P
Q	R	S Shallow - Coral reefs are found in shallow water.	T
U	V	W X	Y Z

# Coral Reefs:

## A – Z Extension Activity Grading Rubric

Student Name: \_\_\_\_\_

	<u>3 points</u>	<u>2 points</u>	<u>1 point</u>
<u>Completeness</u>	The student completed 20 – 24 of the boxes.	The student completed 12 – 19 of the boxes.	The student completed fewer than 12 of the boxes.
<u>Accuracy</u>	The student showed a thorough understanding of coral reefs. The facts about coral reefs were accurate.	The student showed some understanding of coral reefs. Some of the facts regarding coral reefs were inaccurate.	The student showed very limited understanding of coral reefs.
<u>Conventions</u>	There are very few errors in spelling, capitalization, punctuation, and grammar.	There are several errors in spelling, capitalization, punctuation, or grammar.	There are many errors in spelling, capitalization, punctuation, and grammar. Because of these errors, the paper is very difficult to read.

Total Points out of 9:

# Answer Key

This answer key applies to both the Scaffolded Questions (pages 5 – 7) and the On-Level Questions (pages 8 – 10).

Some of the questions encourage higher level thinking and do not have one correct answer. If that is the case, it has been noted that “Answers Will Vary.” When grading these questions, make sure students defend their thinking in a logical way.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## **Coral Reefs: Reading Comprehension Questions**

1. Look at the title, headings, and pictures. What is this reading passage mainly about?  
What clues helped you figure this out?

This reading passage is mostly about coral reefs. I know this because the title and most of the headings mention coral reefs. There are also pictures and diagrams of coral reefs.

2. Explain how coral reefs get bigger.

Coral reefs get bigger by secreting layers of limestone. As coral dies, new polyps grow on the limestone. Over many years, coral reefs get bigger.

3. Where are coral reefs found? Give two details from the passage.

Coral reefs are found in shallow water near the coast. They are also found near the equator where temperatures stay warm all year long.

4. What's the difference between a fringe reef and a coral atoll?

Fringe reefs are found right next to the coast. Coral atolls are ring-shaped and found away from the coast surrounding a lagoon.

5. Reread the section with the heading "Coral Reef Plants and Animals." Why do you think the author wrote the word "huge" in all capital letters?

I believe the word "huge" is in all capital letters because the author wanted to emphasize the variety of plants and animals.



# Coral Reefs:

## Reading Comprehension Questions

6. Use the information from the reading passage to fill in the chart below.

Animals Found in Coral Reefs	Plants Found in Coral Reefs
sea slugs scallops shrimp eels clams sea anemones coral seahorses plankton fish sponges sea urchins jellyfish lobster	algae seagrasses

7. How does having a flat body help fish in a coral reef?

Flat bodies help coral reef fish because it helps them make sharp turns and maneuver around the coral reefs more easily.

8. How do goby fish and pistol shrimp help each other?

Goby fish and pistol shrimp help each other by working together. Pistol shrimp dig burrows for protection. Goby fish use these burrows in exchange for keeping lookout.

9. How can hurricanes hurt coral reefs?

Hurricanes hurt coral reefs by producing large waves that can flatten coral reefs.

10. Look at the photograph. Describe it. Why do you think the author included this?

The photograph shows a coral reef with a lot of hiding places and a few fish. I believe the author included this photograph to show what coral reefs look like.