

Teacher's Guide - Multilevel Script



Coral Reefs



For book *Coral Reefs*, Levels N, Q, U Script Levels: Grade 2 (Middle), Grade 3 (Early), Grade 4 (Early) Word Count: 788

Script Summary:

Coral reefs are massive undersea communities where one quarter of all plants and animals in the ocean make their homes. Readers are invited to explore the diverse but fragile world of the coral reef. The script explains more about why these unique communities are in need of our protection.

Objectives and Assessment

Monitor students to determine if they can:

- consistently read their lines with appropriate rate and accuracy
- consistently read their lines with appropriate expression, including pause, inflection, and intonation
- follow along silently and listen for spoken cues

Using the Scripts:

- Each role is assigned a reading level according to the syntactic and semantic difficulty encountered. Feel free to divide roles further to include more readers in a group.
- Discuss vocabulary and encourage readers to practice their lines to promote fluent delivery of the script.
- Have readers highlight their lines on the scripts, and encourage them to follow along as everyone reads.

Vocabulary:

Story words: atoll, barrier reef, crevices, crustaceans, erosion, fringing reef, lagoon, polyps, runoff, tentacles

Cast of Characters:

Grade 2 (Middle)	Grade 3 (Early)	Grade 4 (Early)
Scuba diver 1	Scuba diver 3	Ship captain 1
Scuba diver 2	Scuba diver 4	Ship captain 2
All		Ship captain 3



Script



Cast of Characters:

Parts		
Scuba diver 1	Scuba diver 3	Ship captain 1
Scuba diver 2	Scuba diver 4	Ship captain 2
All		Ship captain 3

Scuba diver 1:

Dive into the ocean with me to look at **corals**. Corals look like rocks or plants, but are really groups of tiny animals.

Scuba diver 2:

These animals are called **polyps**. Most polyps are smaller than a pea.

Scuba diver 3:

Polyps have a sac-like body and a mouth surrounded by tiny **tentacles**.

All:

Polyps like to eat!

Scuba diver 4:

At night a polyp's tentacles stretch out to catch food.

Scuba diver 1:

There are two main kinds of coral. One kind is hard or stony, and it has a hard skeleton.

Scuba diver 2:

The second main kind of coral is soft coral. Soft corals bend with the tides.





Scuba diver 3:

Hard or stony corals live with nutritious plants called algae, which provide food for the corals.

Scuba diver 4:

When hard coral polyps die, they leave millions of skeletons behind! The skeletons help to build a reef.

All:

Coral reefs!

Ship captain 1:

Hundreds of types of corals live on coral reefs in the oceans. Some kinds of soft coral are poisonous and will sting if you touch them.

Ship captain 2:

On just one branch or mound of coral, you can find thousands of tiny, pea-sized polyps.

Ship captain 3:

Some varieties of coral are named for what they look like. Can you guess why stony brain corals have that name?

All:

They look like brains!

Ship captain 3:

That's right! Elkhorn corals look like the enormous horns of an elk. Soft sea whip and sea pen corals look like long whips and pens, and sea fan corals branch out wide.





Scuba diver 1:

Coral reefs are colorful. So are the fish that swim near the reefs.

Scuba diver 2:

Thousands of fish live around coral reefs. Fish need the reefs for food and safety.

Scuba diver 3:

Reefs provide food to **crustaceans**, such as shrimp, lobsters, and crabs.

Scuba diver 4:

Clams and other small shellfish hide among the coral, where starfish find them and eat them.

Ship captain 1:

Waving sea anemones, which look like graceful flowers, hide in shallow **crevices**, and moray eels live and hide in large holes in reefs. No space is wasted on a bustling reef.

Ship captain 2:

Coral reefs need living conditions that are just right to stay healthy. The depth of water is important so sunlight can help algae grow. Some corals are found below the depths where algae grow, and there the corals eat other organisms.

Ship captain 3:

Most coral grows best and stays healthy in warm, tropical water between 21 and 29 degrees Celsius.

All:

Coral reefs need clean water, too.





Scuba diver 1:

Dirt can clog coral reefs. So can debris. Fresh water from rivers can even kill them.

Scuba diver 2:

Heavy waves from large storms can hurt coral reefs, too. The waves can break the reefs apart.

Scuba diver 3:

Coral grows very slowly, so a reef takes a long time to expand its size or recover from damage.

All:

There are three kinds of coral reefs. They are **fringing reefs**, **barrier reefs**, and **atolls**.

Scuba diver 4:

Fringing reefs sit close to the shoreline at the "fringe" of the land. Barrier reefs have a larger **lagoon**, or area of water, between the reef and the shore.

Ship captain 1:

An atoll forms a pattern like a circle around an old sinking island or aging island volcano.

Ship captain 2:

As the island ages and sinks more and more, a lagoon forms in the middle of the circle.

Ship captain 3:

The largest atoll is in the western Pacific and measures over 60 miles across.





Coral Reefs

All:

That's a mighty big atoll!

Scuba diver 1:

Coral reefs are fragile. Diseases and humans can hurt reefs.

Scuba diver 2:

Bad bacteria cause white and black band diseases. These diseases can kill a big coral reef in weeks.

Scuba diver 2:

Other bacteria attack algae. Algae are most corals' main food. If corals can't eat they will starve.

Scuba diver 3:

If the bacteria are stopped, the coral can recover. If they are not, the coral will die.

Scuba diver 4:

Humans cause most coral reef damage. Activities such as fishing with poisons and explosives destroy reefs.

All:

What else hurts coral reefs?

Ship captain 1:

Construction creates soil **erosion** and pollutes freshwater **runoff.** Lots of other human activities hurt reefs too, such as when ships break off parts of reefs or gas and oil from ships leak and poison reef life.



Ship captain 2:

Sometimes divers exploring a coral reef aren't careful enough and drop a boat anchor directly on a reef. They might even stand in the coral or break off pieces to take home as souvenirs.

Ship captain 3:

Coral reefs are not only beautiful, but also an important natural resource too.

All:

How are reefs important?

Scuba diver 1:

Reefs help protect coasts from storms and floods.

Scuba diver 2:

Medicine comes from the reefs. It can be made from reef plants and animals.

Scuba diver 3:

Many countries have laws that help protect the reefs. All countries should have laws to protect coral reefs.

Scuba diver 4:

Almost 25 percent of the world's reefs have been destroyed, and nearly 60 percent are damaged.

All:

How can we help?







Coral Reefs

Ship captain 1:

Never throw anything in the water.

Ship captain 2:

The coral reefs can stay lovely for many years to come.

Ship captain 3:

They can stay a natural wonder.

All:

We will all do our part!