

STANDARDS

- <u>CCSS</u>: RST.9-10.1, 2, 3, 4, 5, 7, 8, 10; RST.11-12.1, 2, 3, 4, 8, 10; SL.9-10.1, 6; SL.11-12.1, 6; HSN.Q.A.1; HSA. CED.A.1, 4
- NGSS: ESS 2.A, ESS 2.C, ESS 2.D, HS-LS2-2, HS-LS2-6
- <u>OLP</u>: 1.B.1, 1.C.1, 1.C.7, 1.C.8, 1.C.9, 1.C.11

ONLINE CONTENTS

- <u>Distribution Quiz</u>
- Where Are Coral Reefs
 Found? Video Although corals
 are found throughout the
 planet, most reef-building
 corals are found in the
 tropics and subtropics where
 thousands of animals make
 these reefs their home.

DISTRIBUTION

This lesson is a part of the *Distribution* unit, which explains the two major drivers of coral distribution: salinity and temperature. Below is a summary of what is included in the entire unit.

UNIT CONTENTS

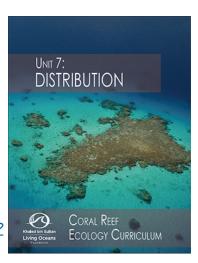
A. Background Information

- · Where are Corals Found?
- · What is a Current?
- · What is Density?
- Salinity, Temperature, and Ocean Circulation

B. Lessons

Watch it! Where are Corals Found?

 A worksheet to accompany the <u>Where are Corals Found?</u> video



Density 101

• A lab to calculate and compare densities of liquids

Inquiring about Density 1

• A lab to create a procedure to determine relative densities

Inquiring about Density 2

A lab to create a procedure to determine actual densities

Go With the Flow

 A worksheet to accompany a teacher demonstration on how salinity and temperature affect water density

Read it! Galapagos Ocean Currents

 A worksheet to accompany the <u>Galapagos Ocean Currents</u> field blog



WATCH IT! WHERE ARE CORALS FOUND?

INSTRUCTIONS: Watch Where are Corals Found? YouTube video (https://www.youtube.com/watch) and answer the following questions.

1.	What are the two main types of coral reefs?
	and
2.	Define distribution.
3.	List the environmental conditions that warm-water corals thrive in.
4.	In what geographic region(s) do warm-water corals live?
5.	How can corals thrive in the subtropics?
6.	Where do reef building corals thrive?





VIDEO SCRIPT:

Corals thrive in many marine environments around the world from warm tropical waters to deep cold waters.

But for now, we'll focus on warm water coral reefs, and where in the world they can be found.

Scientists call it their "distribution."

Coral reefs prosper where the water is clear, shallow, and of course warm.

For most reefs that means the tropics, the geographic region of the earth that extends from the Tropic of Cancer in the northern hemisphere, to the Tropic of Capricorn in the southern hemisphere.

Coral reefs are also found in parts of the subtropics.

They are able to thrive because of currents transporting warm water to regions including Florida, Japan, and The Bahamas.

Although corals are found throughout the planet, most reef-building corals are in subtropics and tropics where thousands of animals make these reefs their home.