



Khaled bin Sultan
Living Oceans
Foundation

STANDARDS

- **CCSS:** 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
- **OLP:** 1.B.1, 1.C.1, 1.C.7, 1.C.8, 1.C.9, 1.C.11

ONLINE CONTENTS

- [Distribution Quiz](#)
- [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 [Where are Corals Found?](#) 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](#)

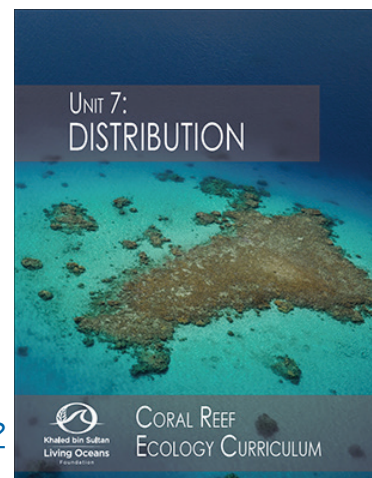
- A lab to create a procedure to determine actual densities

[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 [Galapagos Ocean Currents](#) field blog



LESSON 2B

INQUIRING ABOUT DENSITY 2

OBJECTIVE: Now that you know the *relative* densities of each solution (**Lesson 2A**), how can you be more precise in your comparison of the solutions' densities?

BRAINSTORMING IDEAS:

METHODOLOGY:

RESULTS: Once you have been given approval, test your methods and fill in the results in the table below.

LIQUID	DENSITY
Unknown 1	
Unknown 2	
Unknown 3	
Unknown 4	

CONCLUSIONS: Write your conclusions based on your results in the space below.

DRAW: Draw a diagram of how each of these solutions would look at a molecular level.

UNKNOWN 1



UNKNOWN 2



UNKNOWN 3



UNKNOWN 4



1. Were your results the same in Part 1 and Part 2? If they were not, why do you think they were different?
2. Would you do anything differently in Part 1?
3. Would you do anything differently in Part 2?
4. Do you think it's important for scientists to use the same methodology? Why or why not?

