Khaled bin Sultan Living Oceans Foundation

STANDARDS

- **CCSS**: RST.9-10.1, 2, 3, 4, 5, 7, 8, 9, 10; RST.11-12.1, 2, 3, 4, 7, 8, 9, 10; W.9-10.2, 4, 7, 8, 9; W.11-12.2, 4, 7, 8, 9; SL.9-10.4, 6; SL.11-12.4, 6
- **NGSS**: HS-LS4-1
- **OLP**: 4.B.1, 4.B.2, 5.C.22

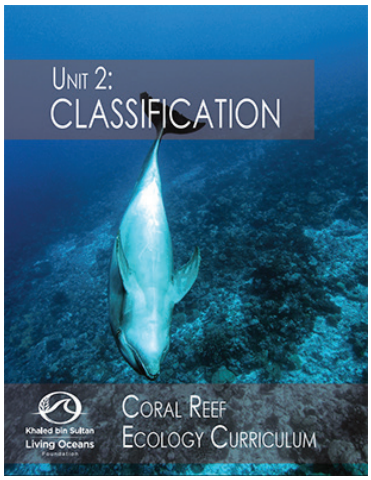
ONLINE CONTENTS

- Classification Quiz
- *What Clade R U?* Interactive (at bottom of *How To Build A Cladogram* section) Use the interactive program to learn and explore more about the anatomy of a stony coral polyp.
- *What Are Corals?* Video Classification helps scientists tell species apart. This educational video explains modern biological classification categories from the most general (domain) to the most specific (species).

CLASSIFICATION

This lesson is part of the *Classification* unit, which explains how to organize the millions of organisms on Earth. Below is a summary of what is included in the entire unit.

UNIT CONTENTS



A. Background Information
   - How Do We Classify Organisms?
   - Linnaean Naming System
   - Coral Classification
   - Modern Classification
   - Understanding Cladograms
   - How to Build a Cladogram

B. Lessons

Watch It! Naming Nature
- A worksheet to accompany the *Naming Nature* video

Classify This!
- A worksheet to classify an organism and identify its characteristics

Rules, Rules, Rules
- A worksheet about scientific names

"Taxing" Corals
- An activity to classify corals based on their characteristics

In Light of New Evidence
- A writing assignment on an organism that has been reclassified

The Key to ID
- An activity using a dichotomous key for sea stars

And Then There Was One
- An activity to create a dichotomous key for corals

Cladograms 1
- A lesson on creating and interpreting a cladogram

Cladograms 2
- A lesson on creating and interpreting a cladogram (with traits already included)

Read It! Troubling Taxonomy
- A worksheet to accompany the *Troubling Taxonomy* field blog

Read It! Blue, You Say?
- A worksheet to accompany the *Blue, You Say?* field blog

Name: _____ Date: _____

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LESSON 1B

RULES, RULES, RULES

PART A:

INSTRUCTIONS: Use the rules of binomial nomenclature to write each scientific name in its formal form.

1. dasyatis Americana _____
2. carcharhinus leucas _____
3. amphiprion perideraion _____
4. carcharhinus melanopterus _____
5. epinephelus tauvina _____

PART B:

INSTRUCTIONS: Answer the following questions (#1-3) using the scientific names above. Then answer #4.

1. Which organisms are the most closely related? Why?

2. How many different genera are represented? _____

3. How many species are represented? _____

4. Why is binomial nomenclature important? List two reasons.