

STANDARDS

- <u>CCSS</u>: RST.9-10.2, 4, 5, 7, 8, 9, 10; RST.11-12.2, 4, 8, 10; SL.9-10.4; SL.11-12.4
- **NGSS**: HS-LS1-1
- **OLP**: 5.C.22

ONLINE CONTENTS

- Coral Anatomy Quiz
- Coral Anatomy Interactive
 (at bottom of Coral Anatomy
 section) Use the interactive
 program to learn and explore
 more about the anatomy of a
 stony coral polyp.
- What Are Corals? Video
 Corals are animals. An individual coral's body, called a polyp, is mostly stomach, with a mouth on top. Its mouth is ringed with tentacles but these just aren't any tentacles, they're lined with stinging cells, some filled with venom (neurotoxins) that paralyze their prey.
- Form Fits Function Video
 Ever heard the phrase
 form fits function? It's when
 the shape of something is
 designed for the job it is
 supposed to do. When applied
 to sea creatures it means their
 body parts are a good match
 for their role in the animal's
 survival.

CORAL ANATOMY

This lesson is a part of the *Coral Anatomy* unit, which explains some of the characteristics and structures of corals, and how they function. Below is a summary of what is included in the entire unit.

UNIT CONTENTS

A. Background Information

- Coral Anatomy
- Form Fits Function

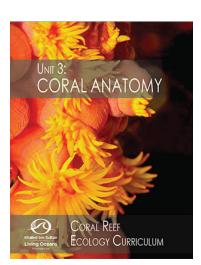
B. Lessons

Watch it! What Are Corals?

 A worksheet to accompany the What Are Corals? video

Watch it! Form Fits Function

 A worksheet to accompany the Form Fits Function video



Interactive Coral Polyp

 A worksheet to label the structures of a coral polyp and describe their function

Fitting the Function

A crossword puzzle to match the coral structures to their function

Coral Anatomy Quiz

A matching quiz to match the coral structures to their function

Coral Polyp Eco-Art

 An art project to design and build a coral polyp using recycled materials

Form Fits Function

 A lesson to design a poster of any plant or animal, labeling the parts and their functions

Read it! Swimming Among Soft Corals

 A worksheet to accompany the <u>Swimming Among Soft</u> <u>Corals of the Great Barrier Reef</u> field blog





LESSON 1A

INTERACTIVE CORAL POLYP

OBJECTIVES:

- Learn the structures of a coral polyp and the corresponding function(s).
- Label the anatomical structures of a coral polyp.

MATERIALS:

· Computer with internet connection

INSTRUCTIONS:

- 1. Go to the *Coral Polyp* interactive at the bottom of the *Coral Anatomy* tab at: http://www.lof.org/education/portal/course/coral-anatomy/.
- 2. Label the coral polyp below to represent the oral and aboral areas.
- 3. Write the function of each of the coral polyp's structures.
- 4. Fill in *Diagram 1* with the coral polyp's anatomical terms that are listed in the table below. The only one that will not be used is mucus.

Structure	Function(s)
Basal Disk or Plate	
Coenosarc	
Corallite	
Ectodermis	

Structure	Function(s)
Endoderm	
Gastrodermis	
Gastrovascular Canals	
Controveneular Cavity	
Gastrovascular Cavity	
Mesenteries	
Mesoglea	
Mouth	
Mucus	
Nematocysts	
Nomatocysts	
Oral Disk	
Septa	
Tentacles	
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