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Living Oceans  
Foundation

## STANDARDS

- **CCSS:** 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](#)

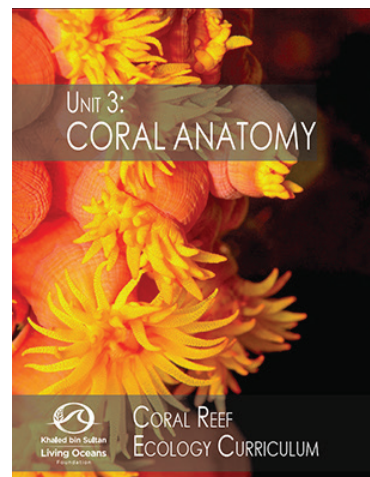
- An art project to design and build a coral polyp using recycled materials

#### [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 [Swimming Among Soft Corals of the Great Barrier Reef](#) field blog



# WATCH IT!

# FORM FITS FUNCTION

**INSTRUCTIONS:** Watch *Form Fits Function* YouTube video (<https://youtu.be/oDDaVcTh8ZQ>) and answer the following questions.

1. In your own words, define form fits function.

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2. Give two examples of form fits function from the video.

a. 

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b. 

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3. Give two of your own examples of form fits function.

a. 

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b. 

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# WATCH IT!

# FORM FITS FUNCTION

## VIDEO TRANSCRIPT:

Ever heard the phrase “form fits function?” It’s when the shape of something is designed for the job it’s 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.

Take a coral polyp for instance.

Most corals are sessile. That means they cannot move, so they can’t chase after food.

But they still need to eat.

That’s where tentacles come in.

Tentacles extend the coral polyps’ reach and catch food drifting by in the current.

Their form “fits” their function.

Sea lions are marine mammals whose ancestors lived on land.

Instead of feet, they have flippers, appendages perfectly adapted for life in the water.

Front flippers help propel and steer, while back flippers act as stabilizers.

Claws on the front flippers help make this creature truly amphibious, at home on land too.

In the sea lion’s perfect appendages, form fits many functions.

Now one more example, what marine animal is famous for its fearsome rows of serrated teeth on an expandable jaw?

No, not a clownfish, a great white shark.

A great white’s teeth are precision tools for ripping and cutting the flesh of large mammals and fish.

Sharks can’t chew, so expandable jaws mean they can swallow big bites of their prey.

And the more bites the better because large animals like great whites need lots of energy to survive.

Every part of the animal’s mighty mouth is adapted for its flesh-consuming job.

Its form perfectly fits its function.

# WATCH IT!

# FORM FITS FUNCTION

**INSTRUCTIONS:** Watch *Form Fits Function* YouTube video (<https://youtu.be/oDDaVcTh8ZQ>) and answer the following questions.

1. In your own words, define form fits function.

**Form fits function is when an organism's structure(s) are designed to perform a particular function(s).**

2. Give two examples of form fits function from the video.

a. **Corals can't move; however, tentacles (form) allow for corals to capture food (function).**

b. **Sea lions have flippers (form). Front flippers help propel and steer sea lions through the water (functions).**

c. **Great white sharks have multiple rows of serrated teeth (form), which helps them to rip and cut the flesh of their prey (functions).**

3. Give two of your own examples of form fits function. *Answers may vary.*

a. **Octopi have a tube-like structure called a siphon (form). They push water through their siphon to propel them through the water (function).**

b. **Lionfish have venomous spines (form) that are used to defend (function) themselves when threatened by predators.**