

Activity 2 - Coral Polyps



Lesson Overview

Coral reefs are built by coral polyps. A coral polyp is a small animal that are related to jellyfish and sea anemones. They have a soft body with tentacles that can sting. They can live on their own or in colonies. At their base they form a protective hard cup shape made out of calcium carbonate. Hard corals build their skeleton on the outside of their bodies.

Coral have a symbiotic relationship with a marine algae called zooxanthellae. These algae help the coral polyps to survive but also give them their colour.

Inquiry questions

You could ask these questions before you begin and then again at the end.

- What is coral polyp?
- What are zooxanthellae?
- What is a symbiotic relationship?

Ocean Literacy Principles



Watch this video to learn more about what Ocean Literacy is.



Principle #5

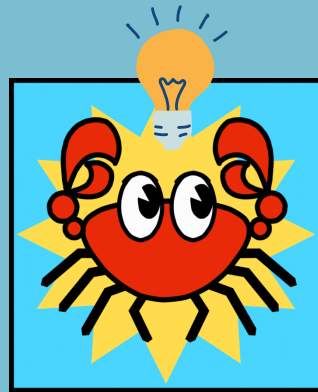
The ocean supports a great diversity of life and ecosystems.

These activities connect to Principle 5. To learn more check out this website

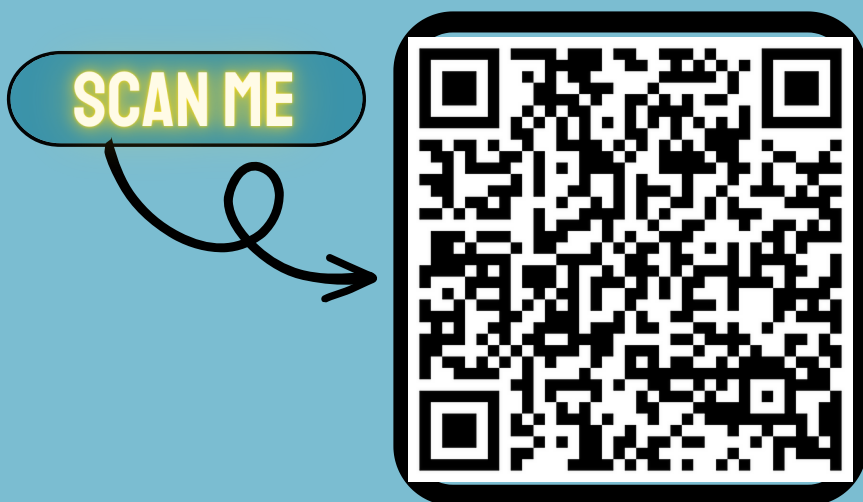


Activity - What is a coral polyp?

Get children starting with a visible thinking routine at the start of these inquiry ideas into coral polyps. Get them to draw/write down all they think they know about coral polyps. Then at the end they can add on what they now understand.



Zoom in closer with these 2 fantastic videos that explain clearly what a coral polyp is in an eye catching way!



To help kids learn more about coral polyps have them make their own coral polyp and learn about the different parts of the polyp.

Encounter Edu is an awesome website filled with lots of different fun lesson ideas about the Ocean



A non edible polyp craft activity

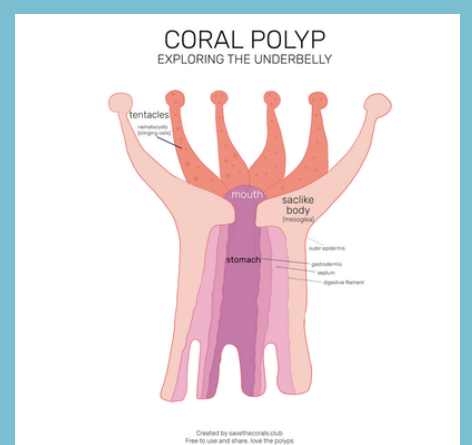


Encounter Edu have also made a fun game to also help kids learn about coral polyps and how they feed. Watch the video as they explain and demonstrate the game.

Coral polyp game



Get children to draw or make a collage of a coral polyp and label the different parts.



Activity - What is a symbiotic relationship?

Learn about what symbiotic relationships are and the 3 main types.

SCAN ME

Watch this Jonathan Bird video to learn more about what a symbiotic relationship is



SCAN ME

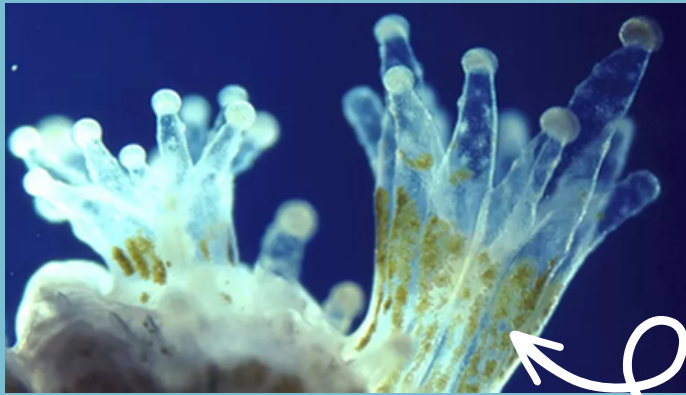
Read about the 3 main types of symbiotic relationships

A fun way I have introduced symbiotic relationships with younger children is by reading Sharing a shell by Julia Donaldson



SCAN ME

Coral polyps have a symbiotic relationship with an marine algae called zooxanthellae. Find our a bit more about this marine algae.



This is a clear coral polyp with the green algae zooxanthellae inside it



Watch this great video that shares the amazing relationship between these 2 species



Coral polyps and zooxanthellae have a mutualistic symbiotic relationship - how do we know this? Can you discuss and write down what each species gets from their relationship.

CORAL POLYPS

What do coral polyps get from their relationship?

Answers:

- Oxygen
- Food
- Waste removal

ZOOXANTHELLAE

What do zooxanthellae get from their relationship?

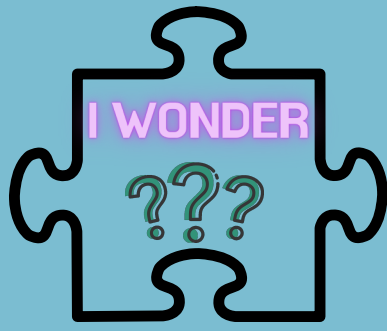
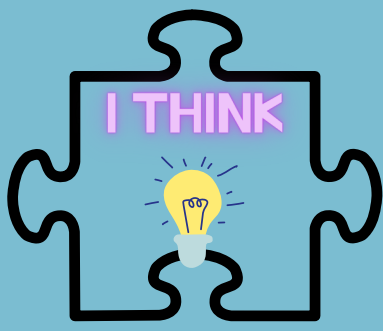
Answers:

- Carbon Dioxide
- Waste removal
- Protection



Activity - What is a sybiotic realtionship

Look at each picture and complete an I see, I think, I wonder visible thinking routine. Older students can also think about what type of symbiotic relationship it is.

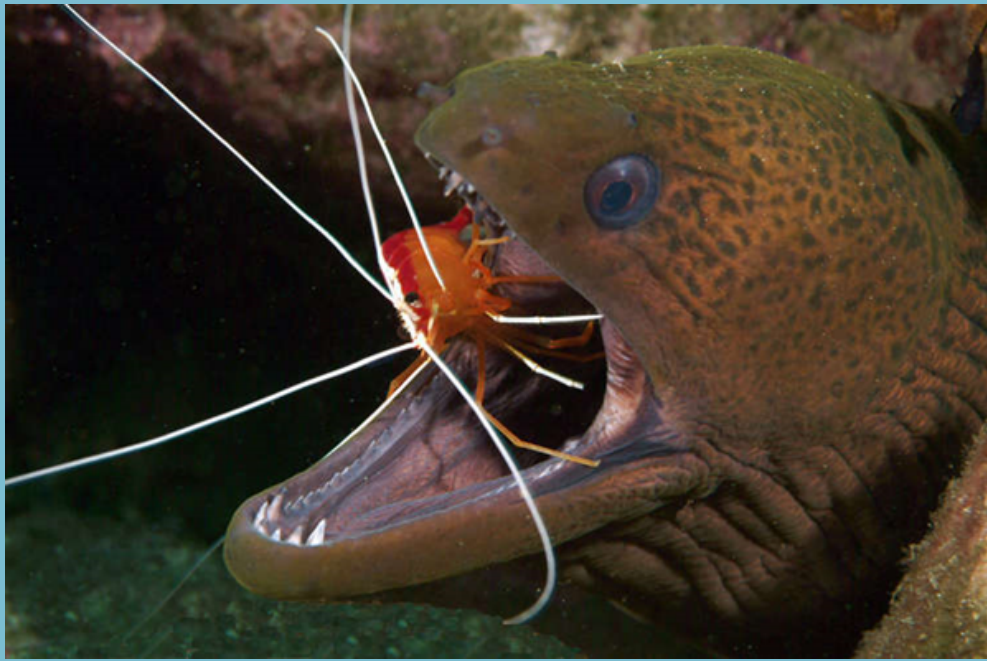


GOBI FISH & SHRIMP



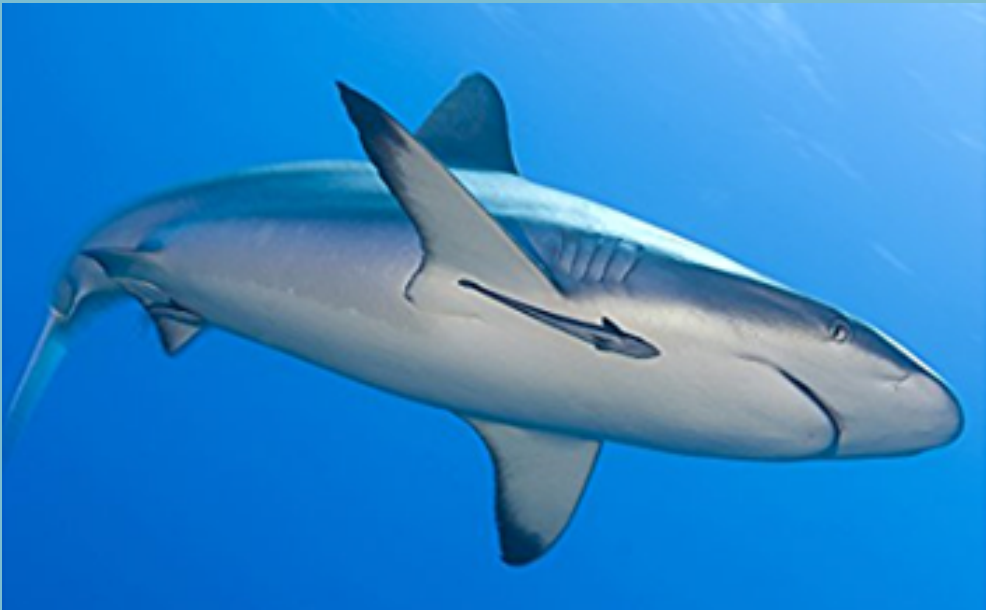
the goby and the pistol shrimp are buddies and truly contented cohabitants. They occupy holes together dug by the shrimp and protected by the goby. The relatively blind shrimp rely on their strong-sighted goby door guards to signal them about when it is safe to move. The gobies, in turn, rely on the burrowing shrimp to have a safe place to hide and sleep.

EEL & SHRIMP



The cleaner shrimp climbs into the open mouths of sharp-fanged eels to dig around for food. It's an ancient tradition of cleaning. These shrimp congregate at 'cleaning stations' in big numbers.

SHARK & REMORA



Remoras eat scraps of prey dropped by the shark. They also feed off of parasites on the shark's skin and in its mouth. The remora get a free ride and protection from the shark.

ANENOME & CLOWN FISH



The clownfish is virtually the only species of fish that seems able to resist the toxic effects of sea anemone poison, moving through them unharmed. The anemones protect them and they eat the leftovers from fish on the anemone