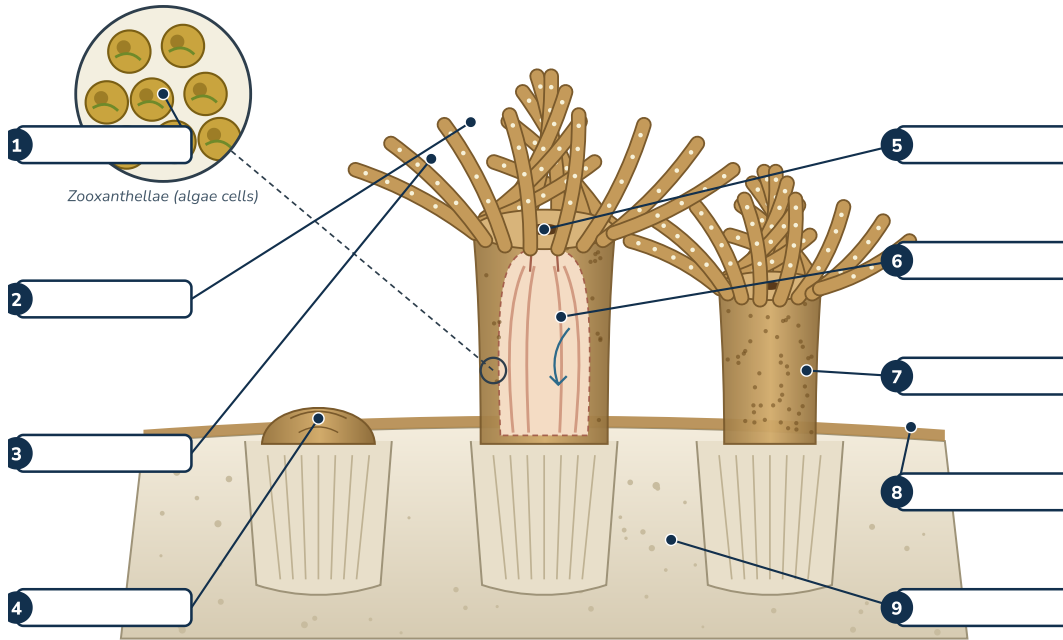


# Coral Polyp

Reef-building coral polyp (order Scleractinia)

Look at the diagram. Write the correct name from the word bank in each numbered box.

connecting tissue | gut cavity | limestone skeleton | mouth | polyp body | retracted polyp | stinging cells | tentacles  
| zooxanthellae



A coral polyp, greatly enlarged and cut away to show the inside. Close-up: zooxanthellae living in its tissue.

## Did you know?

- Coral is an **animal**, related to jellyfish and sea anemones.
- Up to **90%** of a coral's food can come from its algae.
- Reefs cover under **1%** of the sea floor but are home to about **25%** of ocean species.
- Most reef corals grow only **1 to 2 cm a year**.
- Bleaching can start when water is just **1 °C** warmer than usual for a few weeks.

## About Coral Polyps

A coral is a **colony** of thousands of tiny animals called **polyps**, joined by a thin sheet of living tissue. Each polyp has a mouth surrounded by a ring of **stinging tentacles** that catch plankton at night.

Polyps build a cup of **limestone** (calcium carbonate) beneath themselves. Over thousands of years these cups build up into reefs.

Tiny algae called **zooxanthellae** live inside the polyp. They use sunlight to make sugars and share them with the coral. The coral gives them shelter. This partnership is a **symbiosis**.

**Habitat:** warm (23 to 29 °C), clear, shallow, salty water, mostly within 30° of the equator.

## Coral bleaching

- Healthy:** algae inside, colourful, well fed.
- Too hot:** coral pushes algae out and turns white. Still alive, but starving.
- Stays hot:** coral dies and seaweed grows over it.

**Reef partners:** clownfish live safely in anemones' stinging tentacles; parrotfish graze algae off coral and turn limestone into sand.

| Functions of Each Part |          |
|------------------------|----------|
| Part                   | Function |
| Tentacles              |          |
| Stinging cells         |          |
| Mouth                  |          |
| Gut cavity             |          |
| Zooxanthellae          |          |
| Limestone skeleton     |          |
| Connecting tissue      |          |

Hint: use the diagram, the About box and the Did you know? panel to fill in the Function column.

## Answer the Questions

- Is coral an animal, a plant or a rock? Explain your answer.  
\_\_\_\_\_
- Describe how a coral polyp catches food at night.  
\_\_\_\_\_
- What do zooxanthellae and coral give each other?  
\_\_\_\_\_
- Give two conditions reef-building corals need to grow.  
\_\_\_\_\_
- Explain what coral bleaching is and what causes it.  
\_\_\_\_\_
- Stretch: explain why corals in muddy water may starve even when there is plenty of plankton.  
\_\_\_\_\_