

5 How long have some of the coral reefs been growing?

6 What will stress Coral polyps?


10 How do corals get their nutrients?

1 Are polyps organisms?

2 What is the name given to the limestone skeleton?

3 What do the polys attach themselves to?

4 When do colonies become reefs?

 **Coral reefs**

1 Coral organisms, called polyps, can live on their own, but are primarily associated with the spectacularly diverse limestone communities, or reefs, they construct.

**Polyps, Colonies, and Reefs** Coral polyps are tiny, soft-bodied organisms related to sea anemones and jellyfish. At their base is a hard, protective limestone skeleton called a calicle, which forms the structure of coral reefs. Reefs begin when a polyp attaches itself to a rock on the sea floor, then divides, or buds, into thousands of clones. The polyp calicles connect to one another, creating a colony that acts as a single organism. As colonies grow over hundreds and thousands of years, they join with other colonies and become reefs. Some of the coral reefs on the planet today began growing over 50 million years ago.

10 **Color and Bleaching** Coral polyps are actually translucent animals. Reefs get their wild hues from the billions of colorful zooxanthellae (ZOH-oh-ZAN-thell-ee) algae they host. When stressed by such things as temperature change or pollution, corals will evict their boarders, causing coral bleaching that can kill the colony if the stress is not mitigated.

**Feeding** Corals live in tropical waters throughout the world, generally close to the surface where the sun's rays can reach the algae. While corals get most of their nutrients from the byproducts of the algae's photosynthesis, they also have barbed, venomous tentacles they can stick out, usually at night, to grab zooplankton and even small fish.

15 **Threats to Survival** Coral reefs teem with life, covering less than one percent of the ocean floor, but supporting about 25 percent of all marine creatures. However, threats to their existence abound, and scientists estimate that human factors—such as pollution, global warming, and sedimentation—are **threatening large swaths of the world's reefs.**

11 What percentage of marine creatures are supported by coral?

12 Identify three human factors which threaten coral reefs.

9 Why do corals live close to the surface?

7 What does the word mitigated mean?

8 Where do corals live?