



## Explorer Learning Activities

Explore the coral reefs of Belize

### 2. What is a coral reef (part 2)?

*Requirements: your coral reef; paper or exercise book to draw your coral polyp*

*Exploration team: individually and as a team of 3-5 explorers*

*Curriculum: Science; Art and Design*

*Time: 20 minutes*

Coral polyps are tiny animals that form together in large colonies to make a coral reef. There are many types of coral polyps. Draw your coral polyp. Label the mouth, gut, tentacles, zooxanthellae.

Coral polyps fuse their skeletons together to form large coral colonies. These fused polyps are the basis for coral reefs. You can fuse your coral polyps to other learners' coral polyps and add more crinkly crackers to make a coral colony.



# Explorer Learning Activities

## Explore the coral reefs of Belize

### Teacher Notes:

Coral polyps reach their tentacles out from their skeleton to feed and bring them back into the skeleton for protection. Coral colonies can look very different depending on whether these tentacles are in or out. When coral polyps die, the calcium carbonate skeleton stays intact. You can often find pieces of white coral, the remains of former coral colonies, washed up on tropical beaches.

The tentacles bring food into the animal's one opening, which is used both to take in food and to get rid of waste matter.

Both the coral and the **zooxanthellae**, the tiny marine algae that live inside the coral, benefit from their relationship.

If coral is affected by an environmental stress such as increased temperature, the zooxanthellae leave the coral, and the coral turns white. This is called '**coral bleaching**'. The coral will then slowly starve. Coral bleaching can be deadly for the coral if the coral polyps do not get any more zooxanthellae. Coral bleaching is a big concern as sea surface temperatures rise due to climate change. You are going to hear a lot more about this!