



Amazing polyps

Lesson plan: coral anatomy, the coral and algae partnership, coral shapes, reef types and an edible polyp



Ages	8 to 14
Time	60 minutes
Group	Up to 35 students
Where	Any classroom. No internet needed.
You need	The slides, one polyp worksheet per student, and edible polyp materials or clay (see below)

What students learn

- Coral is an animal that lives in partnership with tiny algae and builds a stony skeleton.
- The parts of a coral polyp and what each part does.
- Corals grow in different shapes and very slowly, and form three kinds of reef.
- What coral bleaching is and why it happens.

Before the lesson

1. Print one **Polyp worksheet** per student.
2. For the edible polyp, each student needs: a cracker or plain biscuit, a marshmallow or a slice of banana, six thin strips of fruit or soft sweets, and a pinch of sprinkles or seeds. Check allergies with the class first, and have clay or playdough as a no-food option.
3. Paper plates and napkins, and somewhere to wash hands.

The lesson

- 1 **Animal, plant or rock? 5 minutes, slide 2.** Take a vote before the reveal. Most students pick rock or plant, which makes the answer more memorable.
- 2 **Meet the polyp 10 minutes, slides 3 and 4.** Go through each part. Students label the polyp on their worksheet as you go, using the word bank.
- 3 **Hard, soft and coral shapes 12 minutes, slides 5 to 7.** Students match the six shapes on the worksheet, then check against the answers.
- 4 **Slow builders and reef types 8 minutes, slides 8 and 9.** Stress how slowly reefs grow. This matters later, when we talk about damage and recovery.
- 5 **Bleaching 5 minutes, slide 10.** Explain that bleaching is a stress response, not instant death, and that lesson 4 looks at how often it is now happening.
- 6 **Edible polyp 15 minutes, slide 11.** Hand out materials. Students build, then name each part aloud before eating. Finish with one or two questions from slide 12.

Answers and what to listen for

Polyp labels: tentacles with stinging cells, mouth, stomach, zooxanthellae (tiny algae), limestone cup.

Coral shapes: 1 branching, 2 table, 3 massive, 4 encrusting, 5 mushroom, 6 soft coral.

Making it easier or harder

- **Younger groups:** label only three parts (tentacles, mouth, limestone cup) and skip the reef types.
- **Older groups:** discuss why hard coral tentacles come in sixes and soft coral tentacles in eights, and how scientists use this to classify corals.
- **Language:** coral is *korales* in Filipino and *bahura* is a coral reef.

Safety and good practice

- Check for food allergies and dietary needs before the edible polyp, and offer the clay version.
- Please don't bring real coral pieces into class. Collecting and trading coral is restricted in the Philippines, and the drawings do the job.

Curriculum links

- **Science:** animal body parts and their functions, living things that depend on each other, plants and photosynthesis.
- **Ocean Literacy Principle 5:** the ocean supports a great diversity of life and ecosystems.

The teacher reading has the science behind every slide, with links to the sources.

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