



Welcome to the reef

Lesson plan: what reefs are, where they grow, the Coral Triangle and a virtual dive with real dive signals



Ages	8 to 14
Time	60 minutes
Group	Up to 35 students
Where	Any classroom. No internet needed.
You need	The slides, one dive log per student, one set of From tiny to huge cards per group

What students learn

- A coral reef is built by tiny animals over a very long time, and supports a huge share of ocean life.
- Reefs need warm, clear, shallow water, and the Philippines sits in the Coral Triangle, the world's richest reef region.
- How scientists survey reefs, and why divers use hand signals.
- Real animals that live on reefs near MCP, and why reefs matter to people.

Before the lesson

1. Print one **Dive log** per student.
2. Print and cut out one set of **From tiny to huge** cards per group of four or five students.
3. Clear a little space so students can crouch and stand during the virtual dive.

The lesson

- 1 What is a coral reef? 10 minutes, slides 1 to 3.** Ask what students already know and who has seen a reef. Explain that reefs are built by animals, not plants or rocks, and that lesson 2 looks at those animals up close.
- 2 The Coral Triangle and our reefs 8 minutes, slides 4 and 5.** Point out the Philippines on a map if you have one. Explain that MCP divers survey local reefs so they can tell whether reefs are getting better or worse.
- 3 From tiny to huge 10 minutes, slides 6 and 7.** Groups put the five cards in order, smallest to biggest. Reveal the answer and ask what surprised them. Many students guess that the Coral Triangle is a kind of coral.
- 4 Dive signals 7 minutes, slide 8.** Practise each signal together. Stress that thumbs up means go up in diving, not 'good', which is a common and dangerous mix-up.
- 5 Virtual dive 20 minutes, slides 9 to 13.** Run the dive as a game: everyone signals OK, then go down, and crouches. Show each animal slide and read the facts. Students log what they see. Finish with the go up signal and a slow rise.

- 6** Why reefs matter **5 minutes, slides 14 and 15.** Link the reef back to people's lives, then discuss one or two questions.

Answers and what to listen for

From tiny to huge: zooxanthellae, coral polyp, coral colony, coral reef, Coral Triangle.

Dive signals quiz on the dive log: 1 OK, 2 go up, 3 go down, 4 stop, 5 something is wrong.

Making it easier or harder

- **Younger groups:** do the ordering activity together at the front with big cards, and show four dive animals instead of eight.
- **Older groups:** ask students to find the Coral Triangle countries on a map, and to research one more reef animal for homework.
- **Language:** coral reef is *bahura* in Filipino. Ask students for local names of the animals they know.

Safety and good practice

- During the virtual dive, keep enough space between students so nobody bumps heads when crouching.
- Remind students that on a real reef we never touch, stand on or collect coral.

Curriculum links

- **Science:** living things and their habitats, how animals are adapted to where they live.
- **Geography:** the tropics, the Philippines and the Coral Triangle.
- **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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