



Counting fish like MCP divers

Lesson plan: how MCP divers count fish, a picture count with a bar chart, and what MCP's real surveys found



Ages	8 to 11 (grades 3 to 6)
Time	45 to 60 minutes
Group	Up to 35 students, in pairs
Where	Any classroom. No internet needed.
You need	The slides, one count sheet per student (colour printing), pencils, rulers

What students learn

- How scientists count fish on a reef, and why they repeat surveys.
- How to tally and draw a bar chart.
- Which fish are most common on reefs in Negros Oriental, from real MCP data.
- Why counting moving animals is hard, and why checking with a partner helps.

Before the lesson

1. Print one **count the reef** sheet per student, in colour.

The lesson

- 1 Counting underwater **8 minutes, slides 1 and 2**. Explain how divers count along a tape.
- 2 Count the reef **15 minutes, slides 3 and 4**. Students tally and draw the chart.
- 3 MCP's real counts **12 minutes, slides 5 to 7**. Compare the class poster with MCP's real results.
- 4 Wrap up **5 minutes, slide 8**. Discuss one or two questions.

Answers and what to listen for

Poster answers: Damselfish 14, Wrasse 7, Butterflyfish 5, Parrotfish 3, Grouper 2, Angelfish 4. Small differences between students are normal, and a good way into why real divers work in pairs.

Real data: from January 2022 to September 2026, MCP divers counted 2,080,674 fish in 2,923 completed surveys. The top five groups were Damselfish (1,311,115), Fusiliers (203,039), Wrasses (182,382), Anthias (92,346), Butterflyfish (36,527).

Making it easier or harder

- **Younger groups:** count three kinds of fish only.

- **Older groups:** work out what percentage of the poster fish were damselfish, and compare with MCP's 63%.
- **Link:** the Reef scientists and Reef data lab modules take fish counting further for older students.

Curriculum links

- **Science:** living things, scientific enquiry.
- **Maths:** tallying, bar charts, comparing data.
- **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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