



Trace the number

Lesson plan: vote on twelve ocean claims, learn four moves for checking them, and follow three real source trails



Ages	13 to 18 (grades 8 to 12)
Time	60 minutes
Group	Up to 36 students, in groups of three or four
Where	Any classroom. No internet needed: the trails are printed.
You need	The slides, one claims sheet per student, one trail card per group

What students learn

- Why precise-sounding numbers spread even when they have no good source.
- Four moves for checking a claim: stop, investigate the source, find better coverage, trace it back.
- How to follow a claim back to where it started, and spot where the evidence breaks.
- Why accurate numbers matter even when the cause is good.

Before the lesson

1. Print one **twelve claims** sheet per student. Keep them: students vote again in lesson 3.
2. Print the three **trail cards**, one per group. Several groups can have the same trail.

The lesson

- 1 **Twelve claims 10 minutes, slides 1 to 3.** Students vote on every claim without discussing. Don't reveal any answers yet.
- 2 **Why shaky numbers spread 7 minutes, slides 4 and 5.** Introduce the four SIFT moves.
- 3 **Follow a trail 20 minutes, slide 6.** Groups work through their trail card and decide where it breaks.
- 4 **Report back 13 minutes, slides 7 and 8.** Each trail group shares. Stress that the underlying problems are real.
- 5 **Wrap up 5 minutes, slide 9.** Discuss one or two questions.

Answers and what to listen for

Where the trails break: coconuts at step 3 (the source is a press release, not research); plastic and fish at step 3 (the fish figure was abandoned by its own author); plastic bottle at step 3 (no credible source for any of the numbers).

Making it easier or harder

- **Younger groups:** do one trail together as a class.

- **Older groups:** give students a claim from current news and ask them to trace it online, recording each step.
- **Link:** the Plastic pollution lesson 1 uses the plastic bottle chart as a starter for younger students.

Curriculum links

- **English and media literacy:** evaluating sources, argument.
- **Science:** the nature of scientific evidence.
- **Philippine senior high school:** research skills and Effective Communication.
- **Ocean Literacy Principle 7:** the ocean is largely unexplored, and our knowledge keeps changing.

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

Free to use and share for education. Made by Marine Conservation Philippines. More free lessons:
marineconservationphilippines.org/resources/teachers-resources/ Photo by MCP. Updated September 2026.