

Our blue planet: lesson 1 of 3

One big ocean

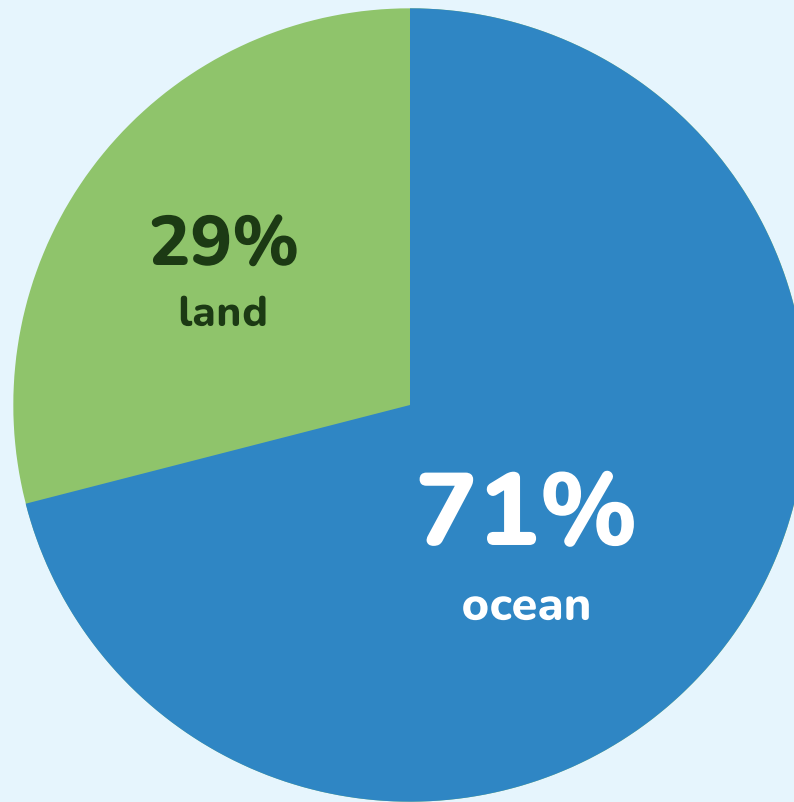
Why Earth is really a water planet



The coast of Negros Oriental from above. Photo: MCP

A water planet

From space, Earth looks blue. The ocean covers about 71% of its surface.



How we know: NOAA



Test it: the globe toss

1. Stand in a circle. Gently throw an inflatable globe or a ball with a world map on it.
2. When you catch it, look under your right thumb. Is it on water or land?
3. Record it with a tally mark on the board.
4. After 30 catches, work out the percentage that landed on water. How close did you get to 71%?

Scientists do this too

This is called random sampling. More catches usually means a better answer.



Where is all the water?

97%

of Earth's water is salt water in the ocean

3%

is fresh water, and most of that is frozen as ice



Water in a bottle

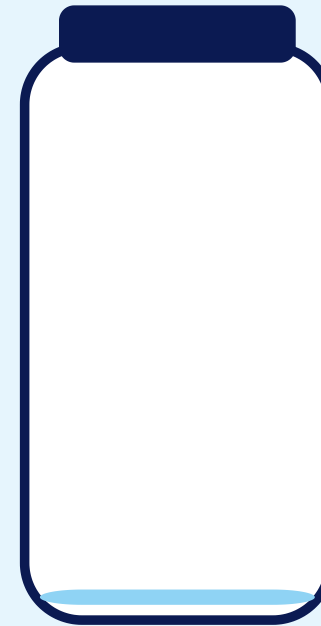
If all the water on Earth fitted in one big bottle, almost all of it would be salty.



All the water on Earth
100%



Salt water in the ocean
97%



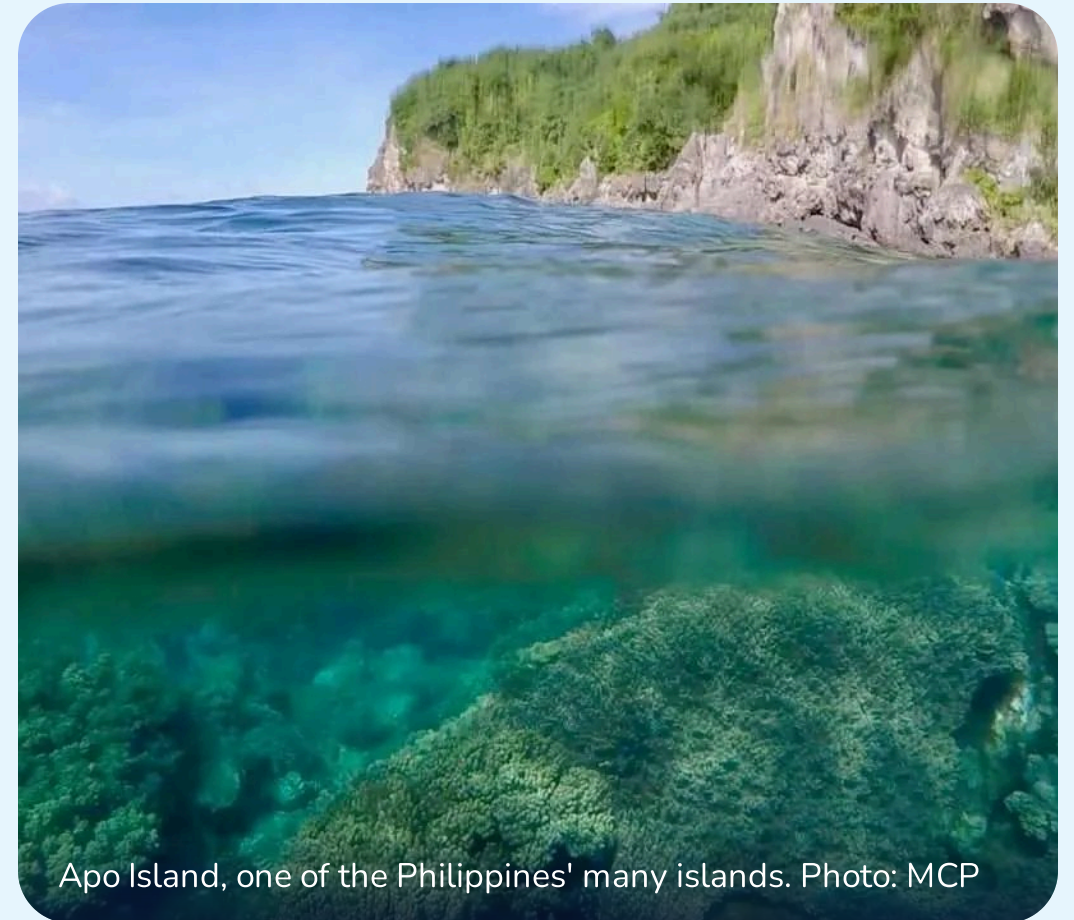
Fresh water
3%



One ocean, many names

We give the ocean five names: the Pacific, Atlantic, Indian, Southern and Arctic oceans. But they are all joined together. Water, animals and even rubbish can travel between them.

The Philippines sits between the Pacific Ocean and the South China Sea, with more than 7,600 islands. That's a lot of coastline!



Apo Island, one of the Philippines' many islands. Photo: MCP



Why is the sea salty?

Rain slowly wears away rocks on land. Rivers carry tiny bits of salt and minerals down to the sea.

When seawater evaporates to make clouds, the salt stays behind. Over millions of years, the sea has become salty.

Where does the fresh rain water come from, then?



Talk about it

Did your globe toss get close to 71%? Why or why not?

Why can't we drink seawater?

Which ocean is closest to your home?

Next time: down into the deep



Photos and sources

Photos: Negros coast and Apo Island by MCP. Drawings made for this lesson. All illustrations drawn for this lesson by Marine Conservation Philippines.

Sources:

- NOAA. How much of the ocean have we explored? and ocean facts.
- USGS Water Science School. How much water is there on Earth?

Full links are in the teacher reading. Free to use and share for education. Made by Marine Conservation Philippines. More free lessons: marineconservationphilippines.org/resources/teachers-resources/

