

## One Ocean and Four – or Five – Basins

The ocean is the lifeblood of Earth, covering more than 70 percent of the planet's surface, driving weather, regulating temperature, and ultimately supporting all living organisms. Throughout history, the ocean has been a vital source of sustenance, transport, commerce, growth, and inspiration. Yet, we've barely scratched the surface of the sea, a place that an estimated one million species of animals call home. The ocean is a mystery that still has so much discovering waiting to happen.

Earth has one global ocean that is divided into four named ocean basins: the Pacific, Indian, Atlantic and Arctic Oceans. Most countries now recognize the Southern (Antarctic) as the fifth ocean basin. The Pacific is the largest, covering 30 percent of Earth. At its widest point, from Indonesia all the way to Colombia, the Pacific Ocean is wider than the moon, by quite a lot. This expanse of ocean is 12,300 miles across, which is more than five times the diameter of the moon.



In the colder parts of the ocean, one finds massive icebergs. So big, in fact, that one iceberg can supply a million people with drinking water for five years. In the deepest parts of the ocean, the water temperature may be only 35–39 degrees Fahrenheit (2–4 degrees Celsius), with the exception of water coming out of hydrothermal vents in the seafloor. The water released from these vents can reach up to 750 degrees Fahrenheit (400 degrees Celsius). It's the intense pressure at these depths — the same pressure that will crush you — that keeps the water from boiling.

Only 5 percent of the ocean has been explored, which leaves up to 95 percent of the ocean that is unknown. This includes volcanoes, canyons, life and an estimated three million shipwrecks spread across the ocean floor. We have a more detailed map of Mars than we do of our own waters.

Did you know that most of our gold is in our world's oceans? According to the National Ocean Service, there is an estimated 20 million tons of gold suspended in the normal seawater. But this gold is spread throughout the normal mineral content of seawater to the tune of “parts per trillion.” Each liter of seawater contains, on average, about 13 billionths of a gram of gold. There are also gold deposits within the seafloor, but profitably mining them is far beyond our current abilities.

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