



WHAT IS AN OCEAN?

An ocean is a term for the large expanse of saltwater that covers over 70% of the Earth's surface. Covering this much space, the ocean habitat is an important home for much of the animal and plant life on earth.

Although there is one world ocean, which is a sprawling, continuous mass of water stretching across each continent, each tectonic region has its own separate ocean.

Here are some Facts about the Ocean:

Top 5 facts about the oceans of the world for children

- Oceans hold around 98% of the water on Earth.
- The world's longest mountain chain lies under an ocean.
- Less than 5% of the world's oceans have been discovered.
- About 70% of the oxygen we breathe comes from the ocean.
- Below 3,300 feet, oceans are completely pitch-black as light cannot penetrate that far.

What are the 5 levels of the ocean?

- Sunlight Zone - Up to 200m below the surface of the ocean is warm because of the sun.
- Twilight Zone - Up to 1,000m below the surface of the ocean sun can't reach.
- Midnight Zone - Up to 4,000m below the surface of the ocean is pitch black.
- Abyss - Up to 6,000m below the surface of the ocean, only invertebrates live here.
- Trench - Up to 11,000m below the surface of the ocean the temperature is near freezing.

What is the smallest and coldest ocean?

The Arctic Ocean is the smallest and coldest ocean on earth - it is often completely covered with ice. Right now the Arctic Ocean is under serious threat from climate change. Although it is the coldest ocean, rising global temperatures are causing the amount of ice covering the Arctic Ocean to get smaller every year. *Polar bears live on the ice that covers the ocean and swim in the water - even though its surface temperature is near the freezing point of seawater! The warmer temperatures mean that polar bears have to spend more time on land, not hunting and risking fatal encounters with humans. It also means that the time they have to hunt on the ice is shorter. The loss of ice also means that it is harder for seals - the polar bear's main prey - to raise their pups.*

How do oceans form?

The oceans that we know today did not exist for the first few billion years of Earth's existence. Nor did they form quickly. The earth's ocean habitats took a long, long time to develop! This was because the temperature on our primitive planet was too high for liquids to function, and water remained a gas until it cooled down. It was only around 4 billion years ago when Earth reached a temperature below 100 degrees Celsius that this allowed water to condense and fall as rain. This process itself took millions of years as Earth began to 'degas'. The rain fell continuously for centuries until eventually settling on the molten rock of our planet's surface.

Why is the ocean salty?

Strangely enough, the ocean is salty because of geological processes on the land. The *salt* that is present in oceans is a chemical called *sodium chloride* that dissolves in the water. The reason that this chemical gets into the ocean is *acidic rainwater*. After picking up carbon dioxide from the Earth's atmosphere as it falls, this rain erodes rocks and washes mineral ions containing *sodium chloride* within them into the rivers leading to the ocean. While some minerals, such as *calcium*, tend to get largely filtered out by the ocean, *salt* mostly remains. More *salt* is provided by volcanic and hydrothermal activity under the waves.

What is the difference between seas and oceans?

Although the two terms 'sea' and 'ocean' can be used for similar or the same purposes, it's nonetheless important to know the geographical difference between the two. When you're talking about an ocean, this means you're referring to the large frame of water that stretches from continent to continent. A sea, on the other hand, is geographically much smaller and is typically contained by areas of land, or forms the body of water where land and ocean meets. You may choose to refer to an ocean as a very large area of water encompassing a sea, but not as a sea itself.

What wildlife is there in an ocean?

Out of all of the [habitats](#) that exist on Earth, there are none with greater biodiversity than ocean habitats. Among the thousands (potentially millions) of species living in the ocean, with many having yet to be discovered, are animals ranging from sea turtles, to blue whales, to jellyfish. Around [95% of creatures](#) living in the ocean are invertebrates: animals that do not have a backbone.

How deep is the Ocean?

The ocean has an average depth of 12,100 feet or just over 3500 meters. The deepest part of the ocean is Challenger Deep, which is near the southern part of the Mariana Trench and has been recorded at 36,200 feet deep, or 11,000 meters. *The Mariana Trench is so deep that if Mount Everest, the world's tallest mountain, was placed at the bottom it would still be over 2,000 meters below sea level. As previously mentioned, the only sea creatures that live in the Mariana Trench are invertebrates, as the high pressure at the bottom of the trench is too much for any vertebrate. No fish have been found further than 8,000m in depth, and some of the creatures that have been found at the bottom of the trench are very strange indeed. Shrimp-like creatures that are the size of rabbits are known to exist down there, as well as a large but single-celled organism called a Xenophyophore which look like coral. Because there is absolutely no light at the deepest points in the ocean, many of the animals that live there are transparent, and some, like the anglerfish, have evolved to produce their own light using bacteria that light up. This is called bioluminescence.*

What are the 5 oceans of the world?

The five oceans that spread all over [Earth's continents](#) are:

- Arctic Ocean: this ocean is located mainly in the North Polar Region. It's either completely or partially covered by ice.
- Indian Ocean: bounded by three continents, the Indian Ocean encompasses around three seas within its boundaries.
- Atlantic Ocean: covering around 20% of Earth's surface, the ocean lies between Europe and North America, as well as Africa and South America.
- Pacific Ocean: this is the biggest ocean by size and depth across the world. Its 63 million square miles of surface area runs from the USA to Australia. This not only makes it one-third of Earth's total surface, but makes it bigger than all of the land on our planet combined!
- Southern Ocean: also known as the Antarctic Ocean, this ocean encircles Antarctica and is the second-smallest of the divisions of the World Ocean.



Why Ocean Matters

The world's oceans – their temperature, chemistry, currents and life – drive global systems that make the Earth habitable for humankind. Our rainwater, drinking water, weather, climate, coastlines, much of our food, and even the oxygen in the air we breathe, are all ultimately provided and regulated by the sea. Throughout history, oceans and seas have been vital conduits for trade and transportation. Careful management of this essential global resource is a key feature of a sustainable future. However, at the current time, there is a continuous deterioration of coastal waters owing to pollution and ocean acidification, which has an adversarial effect on the functioning of ecosystems and biodiversity. This is also negatively impacting small scale fisheries. Marine protected areas need to be effectively managed and well-resourced and regulations need to be put in place to reduce overfishing, marine pollution and ocean acidification.

Celebrating its Importance

For all these reasons, it was necessary to create awareness through an Observance. That is why, by its [resolution 63/111 of 5 December 2008](#), the [UN General Assembly](#) designated [8 June as World Oceans Day](#). The concept of a 'World Oceans Day' was first proposed in 1992 at the [Earth Summit in Rio de Janeiro](#) as a way to celebrate our world's shared ocean and our personal connection to the sea, as well as to raise awareness about the crucial role the ocean plays in our lives and the important ways people can help protect it. Along with UNESCO, other UN agencies work to protect marine and coastal ecosystems to avoid significant adverse impacts: the [United Nations Environment Programme \(UNEP\)](#), as the specialized agency oversees environmental issues; [FAO](#), strengthens global governance and the managerial and technical capacities of members and leads consensus-building towards improved conservation and utilization of aquatic resources; [UNDP](#), manages biodiversity and human development projects; and the [International Maritime Organization](#), is responsible for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships.

