Ocean **Zones**

Scientists have studied the ocean for many years, and have divided it into five different zones, or layers. Each of the five zones receives a different amount of sunlight, from the lightest zone, near the surface of the ocean, to the darkest zone, at the very bottom of the ocean. Different creatures live at different depths in the ocean. The deeper zones are home to some very strange but amazing creatures.

The Sunlight Zone

The layer of the ocean nearest the surface is known as the Sunlight Zone, because this is the layer which gets the most light from the sun. The Sunlight Zone extends from the surface of the ocean to about 200 meters down. This layer has a wide range of temperatures from 40 to -2 degrees Celsius. Although the Sunlight Zone is the smallest zone in the ocean, it is home to the largest number of sea creatures and plants. Sharks, jellyfish, seals, stingrays, sea

Some of the creatures which live in the Sunlight Zone have counter-shading on their bodies. This means that the top part of their body is a dark color and the bottom part of their body is a light color. This helps to camouflage and protect them from predators. When a predator looks down on a countershaded creature, the creature's dark top side blends in with the dark waters of the ocean below. When a predator looks up at a counter-shaded creature, the creature's light underside blends in with the lighter waters of the ocean above.

The Twilight Zone

The Twilight Zone extends from about 200 meters below the surface of the ocean to about 1000 meters down. The light in this zone is not very strong. This zone is home to some of the ocean's bioluminescent creatures. Bioluminescent creatures use the chemicals in their bodies to produce light. Hundreds of species of ocean creatures have adapted to live in the darkness in this way.

The Midnight Zone

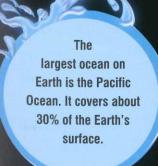
The Midnight Zone reaches from about 1000 meters below the surface of the ocean to about 4000 meters down. The only light in this zone is produced by the many bioluminescent creatures which live there. Although this zone is very dark with high water pressure, a large number of creatures manage to survive here. Most of these creatures are dark in color, so they are camouflaged in the water.



The Abyss extends from 4000 meters below the ocean's surface to about 6000 meters down. This zone is completely dark with temperatures close to freezing. Very few creatures can live at this depth. It is home to only some tiny species of squid and some other invertebrates. Although there is very little life here, this is the largest of the five ocean zones, and includes about three quarters of the ocean's water.

The Trenches

This is the deepest zone of the ocean. It stretches from about 6000 meters below the surface to the bottom of the deepest areas of the ocean. The deepest point in the Earth's oceans is in the Mariana Trench, which is in the Pacific Ocean, off the coast of Japan, and is around 11,000 meters deep. The temperature in this zone is just above freezing, and the water pressure is immense. However, some creatures, such as starfish and tube worms can still survive here.



The ocean is home to hundreds of thousands of creatures, but scientists believe that there are still many more species which have not been discovered yet. In fact, there could be millions of creatures living at the bottom of the ocean which we don't know about. Every ocean creature has evolved to have the best chance of survival in its habitat. Some of the creatures living in the ocean have strange and wonderful ways of surviving and completing their life cycle.

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