The ocean is full of fascinating and interesting creatures, but who lives in the deepest depths, and how? This slideshow will give you a comprehensive overview of how the ocean is split up into 5 different zones. Each zone has its own unique characteristics, with varying amounts of light and temperatures in each zone that support different species of sea creatures. Read on to find out more about these different zones and the life that inhabits them!

Epipelagic Zone (Sunlight Zone) Surface-200 meters

This is the zone of the ocean where most visible light exists. This layer is heated by the sun and accounts for the wide range of temperatures in the oceans across the globe. Changes in the position of the sun from summer to winter result in the changing temperatures of the ocean with the seasons. This layer can also be mixed by the wind, allowing for heat from the surface to be distributed throughout the layer.

Mesopelagic Zone (Twilight Zone) 200 meters – 1,000 meters

In this layer, sunlight is very faint, leaving the layer in constant near-darkness. This layer is also home to the thermocline. The thermocline is a region where water temperature decreases rapidly with increased depth due to the lack of water mixing from the wind. The depth and strength of the thermocline ranges with the season and the year, but it is always strongest in the tropics. This zone is also home to some unique looking sea creatures—bioluminescence begins to appear and the eyes of creatures are larger and directed upward towards the dim light.

Bathypelagic Zone (Midnight Zone) 1,000 meters – 4,000 meters

This zone is submerged in constant darkness. The only light at this depth comes from the bioluminescence of the animals that inhabit it. Organisms achieve bioluminescence by producing their own light through the process of chemical reaction in which an enzyme reacts with oxygen to create light. The temperature at this zone is constant, at 39 degrees Fahrenheit. This zone also has an extreme amount of pressure and can reach over 5,000 pounds per square inch at its deepest level.

Abyssopelagic Zone (Abyssal Zone)- 4,000 meters to 6,000 meters

Three quarters of the deep-ocean floor area lies in this zone. The water temperature is constantly near freezing (32 degrees Farenheit). Only a few creatures are able to survive at these depths due to the crushing water pressure found at this level, most of them are invertebrates like squids. In this layer, mud is made from the skeletons of small sea animals and can be more than a mile thick in certain areas.

Hadapelagic Zone 6,000 meters to 10,911 meters

This is the deepest zone of the ocean that reaches to the lowest recorded depth, 36,797 feet in the Mariana Trench off the coast of Japan. The water pressure at this depth clocks in at over 8 tons per square inch, which is equivalent of the weight of 48 Boeing 747 jets. However, life still exists at these crushing depths. Small single-celled organisms, a type of plankton, were discovered in a trench near Guam in the Pacific Ocean.

<http://www.srh.noaa.gov/jetstream/ocean/layers_ocean.htm> \*\*\*\*

<http://en.wikipedia.org/wiki/Marine_habitats> slide 1 pic

slide 3 pic <http://upload.wikimedia.org/wikipedia/commons/3/3a/Striped_anglerfish_(_Antennarius_striatus_).jpg>

slide 4 pic- <http://ocean.si.edu/census-marine-life>

<http://www.flickr.com/photos/natarajam/3429674763/>

<http://www.seasky.org/deep-sea/ocean-layers.html>

Epipelagic Zone - The surface layer of the ocean is known as the epipelagic zone and extends from the surface to 200 meters (656 feet). It is also known as the sunlight zone because this is where most of the visible light exists. With the light come heat. This heat is responsible for the wide range of temperatures that occur in this zone.

Mesopelagic Zone - Below the epipelagic zone is the mesopelagic zone, extending from 200 meters (656 feet) to 1000 meters (3281 feet). The mesopelagic zone is sometimes referred to as the twilight zone or the midwater zone. The light that penetrates to this depth is extremely faint. It is in this zone that we begin to see the twinkling lights of bioluminescent creatures. A great diversity of strange and bizarre fishes can be found here.

Bathypelagic Zone - The next layer is called the bathypelagic zone. It is sometimes referred to as the midnight zone or the dark zone. This zone extends from 1000 meters (3281 feet) down to 4000 meters (13,124 feet). Here the only visible light is that produced by the creatures themselves. The water pressure at this depth is immense, reaching 5,850 pounds per square inch. In spite of the pressure, a surprisingly large number of creatures can be found here. Sperm whales can dive down to this level in search of food. Most of the animals that live at these depths are black or red in color due to the lack of light.

Abyssopelagic Zone - The next layer is called the abyssopelagic zone, also known as the abyssal zone or simply as the abyss. It extends from 4000 meters (13,124 feet) to 6000 meters (19,686 feet). The name comes from a Greek word meaning "no bottom". The water temperature is near freezing, and there is no light at all. Very few creatures can be found at these crushing depths. Most of these are invertebrates such as basket stars and tiny squids. Three-quarters of the ocean floor lies within this zone. The deepest fish ever discovered was found in the Puerto Rico Trench at a depth of 27,460 feet (8,372 meters).

Hadalpelagic Zone - Beyond the abyssopelagic zone lies the forbidding hadalpelagic zone. This layer extends from 6000 meters (19,686 feet) to the bottom of the deepest parts of the ocean. These areas are mostly found in deep water trenches and canyons. The deepest point in the ocean is located in the Mariana Trench off the coast of Japan at 35,797 feet (10,911 meters). The temperature of the water is just above freezing, and the pressure is an incredible eight tons per square inch. That is approximately the weight of 48 Boeing 747 jets. In spite of the pressure and temperature, life can still be found here. Invertebrates such as starfish and tube worms can thrive at these depths.