

Zones of Life

The ocean is full of life, from huge whales to tiny creatures too small to see without a microscope. Different kinds of creatures are found in different zones of the ocean.

The Sunlit Zone (surface to 330 feet)

This is the brightest and warmest of all the zones. Plants and **algae** (AL-jee) can grow here, and it is home to a huge variety of animals. It's the shallowest of the zones, but it is more crowded with creatures than the other zones.

The Twilight Zone (330 feet to 3,300 feet)

Things get dimmer and colder as the water gets deeper. Plants and algae can't survive here, and the animals in this zone are specially adapted to living in darkness. Many have big eyes to help them see. Some animals are bioluminescent (BY-oh-loo-min-ES-ent), which means they can make light with their bodies. They may use the light to attract prey or send signals to mates.

The Midnight Zone (3,300 feet to 36,000 feet)

Brrr, you wouldn't want to visit the midnight zone. The temperature in this zone is close to freezing, and the water is pitch-black! Food is scarce and fewer animals live here. Ninety percent of the water in the ocean is in this zone.

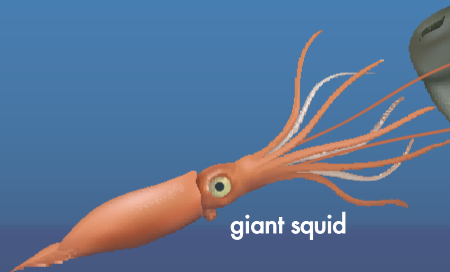


tiger shark



mahi-mahi

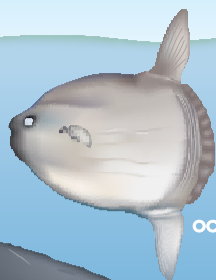
lantern shark



giant squid



angler fish



ocean sunfish



lionfish



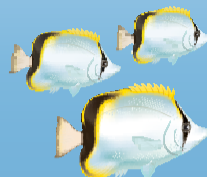
common dolphin



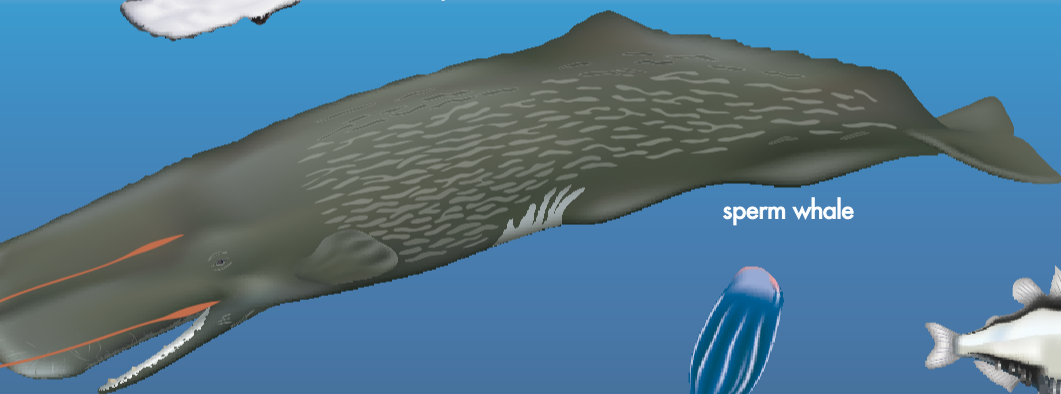
humpback whale



green sea turtle



reef butterflyfish



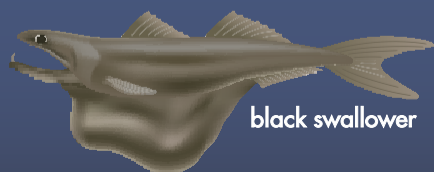
sperm whale



comb jelly



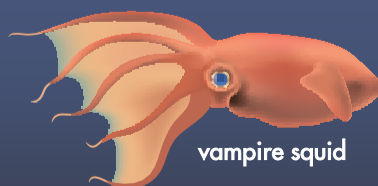
hatchet fish



black swallower



giant tube worms



vampire squid

The Ground Floor

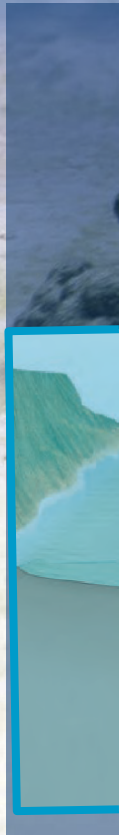
Talk About Pressure!

The deeper you go into the ocean, the more water there is above, pressing down on you. On parts of the ocean floor, this water pressure would feel like the weight of an elephant standing on your big toe—except that you'd feel that much pressure everywhere against your body!



Flat as a Pancake?

Which is flatter, this ray or the ocean floor? You might think both are fairly flat. But actually, a ray is much flatter than the bottom of the ocean. Though the ocean floor near the shoreline is mostly flat, it eventually drops off steeply. If the water were all drained away, you'd see that the bottom has the same features that are on land—mountains, valleys, cliffs, and deep canyons (see diagram at right).





Deeper than Deep

For a long time, scientists thought no life could survive in the deepest parts of the ocean. But then they discovered that vents, or cracks, in the ocean floor were home to hundreds of species, including special clams, shrimp, crabs, and the red *tube worms* shown on the left. Water heated deep in the earth rises through the vents and gives the animals a warm place to live.

At the Bottom of It All

The shallowest part of the ocean floor is called the **continental shelf**, which is like a ledge underneath the edge of the ocean. The deepest places are canyons called **trenches**. One of these, the Mariana Trench, is so deep that if Mt. Everest sat at the bottom, there would still be more than a mile of water above its peak!

