

Plankton-“Drifters of the Sea”

Plankton are organisms that float freely in the ocean. They exist in huge numbers and come in a variety of shapes and sizes. They are important for the entire planet because they provide food for larger marine organisms.

Phytoplankton (*phyto=plant*) are microscopic single-celled plant-like organisms. Like all plants, they contain the pigment **chlorophyll** and they need sunlight, water, and nutrients to grow. They live near the ocean’s surface where they get plenty of sunlight. Phytoplankton are producers and they make up the base of the food pyramid in the ocean.



Diatoms are found in many different shapes, often connected together in long chains. Centric diatoms are round and pennate diatoms are rectangular, long, or skinny. Their cell wall forms a pillbox-like shell (frustule) with 2 overlapping halves. These beautiful glass shells give them the nickname “jewels of the sea.”



Dinoflagellates (*dinos=whirling, flagellum=whip*) move around using their long tails (flagella) and some even eat other plankton. They are usually round but some have spikes or tails.

Zooplankton (*zoo=animal*) are tiny animals or the immature stages of larger animals. They are weak swimmers so they drift along with the ocean current. They can live near the surface or hide out in deeper water during the day and migrate to the surface at night to eat phytoplankton. Zooplankton are consumers. They eat other plankton.



Copepods



Zoea (Crab Larvae)



Octopus Larvae

Producers include all green plants. Producers use energy from the sun to make food in a process called **photosynthesis**. Producers make up the biggest part of the food web.

Consumers are organisms that eat something else. They include herbivores (animals that eat plants), carnivores (animals that eat other animals), parasites (animals that live off of other organisms by harming it), and scavengers (animals that eat dead animal carcasses).