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**PLANKTON**

Most living things are found in the ocean in the sunlight zone. Plankton are organisms that float at the surface of the water. They move with the ocean currents (***continuous, directed movement of sea water both on the surface and deep within the ocean***) and tides (***the rise and fall of sea levels caused by gravitational forces of the sun, moon and rotation of the earth***). These organisms can be very, very small or they can be large.

*Phytoplankton* is one type of plankton. Phyto- comes from the Greek work meaning plant. Phytoplankton are drifting or wandering plants. These organisms are one-celled and normally microscopic. Like land plants, phytoplankton use photosynthesis to make their own food. Therefore, phytoplankton are autotrophs since they make their own food. Phytoplankton are the foundation of the [aquatic food web,](https://earthobservatory.nasa.gov/Features/Phytoplankton/page2a.php) the primary producers, feeding everything from microscopic, animal-like zooplankton to multi-ton whales. Small fish and invertebrates also graze on the plant-like organisms, and then those smaller animals are eaten by bigger ones.

*Zooplankton* are animal plankton. They cannot make their own food. Zooplankton are heterotrophs since they cannot make their own food. Many of these types of plankton have long appendages (limbs) with attached hairs to help them grab their prey and stay afloat. They can also store fats and oils in their bodies to help them float. Zooplankton must consume (eat) phytoplankton as sources of nutrients and energy.

*Photosynthesis* – a process by which plants and other organisms convert light energy from the sun into chemical energy that can later be used to provide energy for that organism’s activities.

*Carbon Dioxide in Photosynthesis* – in cellular respiration, carbon dioxide is emitted (released) as a waste product that is used by photosynthesizing cells to make food for the plants.