

is the process by which plants, algae, and some bacteria produce nourishment using energy from the sun. The process typically begins when the sun's energy is absorbed by chlorophyll, a pigment found in the plant's leaves. The energy is then used to create a chemical reaction in which carbon dioxide and water are broken down into simple sugars and oxygen. The sugars, the plant's primary energy source, are used to fuel growth, growth of flowers, and other forms of energy storage. The oxygen is released into the atmosphere, where it helps maintain the environmental balance needed for life.