

All living organisms, including plants, receive their energy required for their survival from a chain of chemical reactions called respiration. The process of respiration requires glucose to start the reactions which are later converted into energy and hence producing carbon dioxide and water as by-products.

Photosynthesis	Respiration
Photosynthesis occurs only in chlorophyll-containing cells of plants.	Respiration occurs in all animal and plant cell.
It synthesizes foods.	It oxidizes foods.
It stores energy.	It releases energy.
Photosynthesis is an anabolic process.	Respiration is a catabolic process.
It requires cytochrome.	It also requires cytochrome.
Endothermal process.	Exothermal process.
It is comprised of products like sugar, oxygen, and water as products.	It is comprised of products like hydrogen and carbon-dioxide.
During this process, radiant energy is converted into potential energy.	During this process potential energy is converted into kinetic energy.
It takes place only in the presence of sunlight.	It takes place continuously throughout the life process from birth to death.