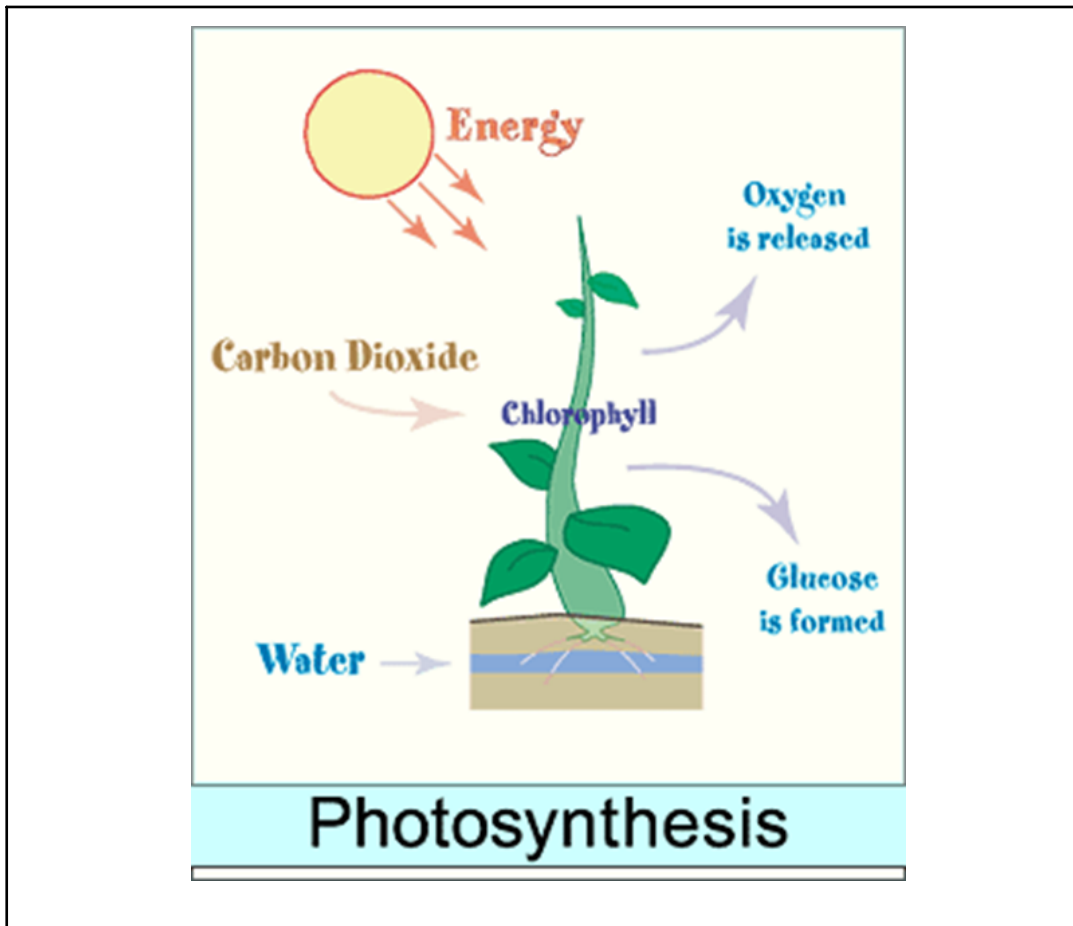


	Plant Processes
Photosynthesis	<ul style="list-style-type: none"> • plant captures light energy • plant uses that energy to make food • provides oxygen back into the atmosphere which many organisms need • chloroplasts- contain chlorophyll which captures light energy • stomata- open and close to release oxygen and absorb carbon dioxide

Jan 28-2:36 PM

What happens?	<ul style="list-style-type: none"> • Sunlight is used to provide energy • Plants use carbon dioxide gas from the air and water taken in through the roots to make glucose • Oxygen is created then released through the stomata • Chemical equation $6\text{CO}_2 + 6\text{H}_2\text{O} \xrightarrow{\text{light energy}} \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$ • carbon dioxide and water combine in the presence of light to produce glucose and oxygen
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Respiration

- break down glucose from photosynthesis
- Oxygen from the air combines with glucose
- Then broken down into carbon dioxide and water
- Energy is released which is used by the plant
- Carbon dioxide and water are released by the plant

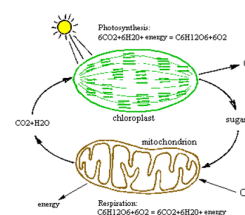


Figure 16. With the photosynthesis, the solar energy is cumulated by the chloroplasts as sugar molecules. With the glycolysis and the respiration, made by mitochondria, the energy is liberated and supplied to the cell for its biochemical processes.

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Transpiration

- loss of water in a plant through its leaves
- Plants are able to slow down transpiration
- Guard cells open and close stomata controlling how much water is released



Credit: Ming kai College, Hong Kong

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