Photosynthesis

\[ 6\text{CO}_2 + 6\text{H}_2\text{O} + \text{SUN} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 \]

Photosynthesis is the process that plants and other producers use to make food. In photosynthesis, carbon dioxide and water are the starting materials. Sugar and oxygen are the end products. The sugar, shown above as \( \text{C}_6\text{H}_{12}\text{O}_6 \), is stored in the plant as starch. Plants use starch when light is not available for photosynthesis. The oxygen is released into the air.

The number 6 before the formulas for carbon dioxide, water, and oxygen means that 6 molecules of each material take part in the process.