Vocabulary: Plants and Snails

🗾 Vocabulary

- <u>Aerobic respiration</u> a chemical process in which oxygen is used to produce energy from glucose (a sugar).
 - The chemical equation for aerobic respiration is:

 $C_6H_{12}O_6 + O_2 \rightarrow CO_2 + H_2O + energy$

This reads: Glucose and oxygen react to produce carbon dioxide, water, and energy.

- Aerobic respiration occurs in plants and animals.
- <u>Bromothymol blue (BTB)</u> a chemical that changes color to indicate if oxygen or carbon dioxide is present in water.
 - When oxygen is present, BTB turns from green to blue.
 - When carbon dioxide is present, BTB turns from green to yellow.
- <u>Carbon dioxide-oxygen cycle</u> the exchange of carbon dioxide and oxygen between plants and animals.
 - During *photosynthesis*, plants take in carbon dioxide and water, producing oxygen and glucose.
 - During respiration, animals (and plants) take in oxygen and glucose to produce carbon dioxide and water.
- <u>Indicator</u> a chemical that can show if another substance is present, usually by changing color.
- <u>Interdependence</u> a relationship between living things in which both make something that the other one needs.
- <u>Photosynthesis</u> a process in which plants use energy from light to produce glucose and oxygen from carbon dioxide and water.
 - The chemical equation for photosynthesis is:

 $CO_2 + H_2O + light \rightarrow C_6H_{12}O_6 + O_2$

This reads: With light, carbon dioxide and water react to produce glucose and oxygen.

• Photosynthesis occurs in plants but not in animals.

