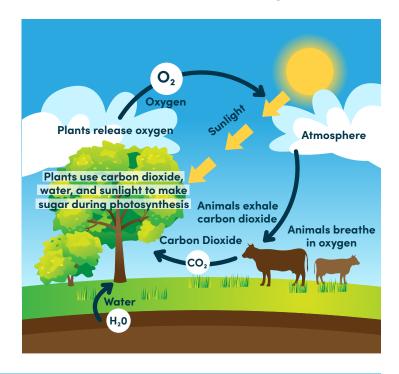
Photosynthesis: Cycling of Matter and Flow of Energy

Photosynthesis is the process through which plants, algae, and many microorganisms use energy from sunlight to make sugars from water and carbon dioxide. These sugars can be used immediately as a source of energy, or they can be stored for growth or later use. During photosynthesis, carbon dioxide is removed from the atmosphere and oxygen is released into it.

Even though animals don't conduct photosynthesis, photosynthesis is still important to them! Some animals eat photosynthetic organisms, such as plants. Those animals get energy that came from the sun and was converted into sugars by the plants. Even carnivores get energy that ultimately came from the sun because they eat animals who ate plants.

Animals also benefit from the oxygen that's released during photosynthesis. Animals breathe in oxygen and then breathe out carbon dioxide. That carbon dioxide is, in turn, needed for photosynthesis!



Answer the following questions about photosynthesis based on the passage you read above.

- 1. What do photosynthetic organisms need to conduct photosynthesis?
- **5.** What gas do animals release into the atmosphere?
- **2.** What do photosynthetic organisms produce through photosynthesis?
- **6.** Explain how animals and photosynthetic organisms depend on each other.

- **3.** Why do plants, algae, and many microorganisms conduct photosynthesis?
- **7.** Explain how all living things, even carnivorous animals, ultimately get their energy from the sun.

4. How do animals obtain energy?