Photosynthesis

How do plants make food?

Plants and animals both undergo cellular respiration. But only plants undergo photosynthesis. Photosynthesis is the process in which plants use carbon dioxide, water, and the energy from sunlight to make food (sugar).

During photosynthesis, plants produce sugar and oxygen. The sugar is the same sugar used by the plants themselves and by animals for cellular respiration. So, photosynthesis and cellular respiration go hand-in-hand.

Photosynthesis takes place in the chloroplasts of plant cells.

The carbon dioxide and water produced during respiration are used in photosynthesis.

The sugar and oxygen produced during photosynthesis are used in cellular respiration.

Photosynthesis and cellular respiration are connected.

Show What You Know

Fill in the missing terms to identify the processes summarized by the equations below.

1. ______________: Carbon dioxide + ______________ + Energy →

   ______________ + Oxygen

2. ______________: Sugar + ______________ → ______________

   + Water + Energy