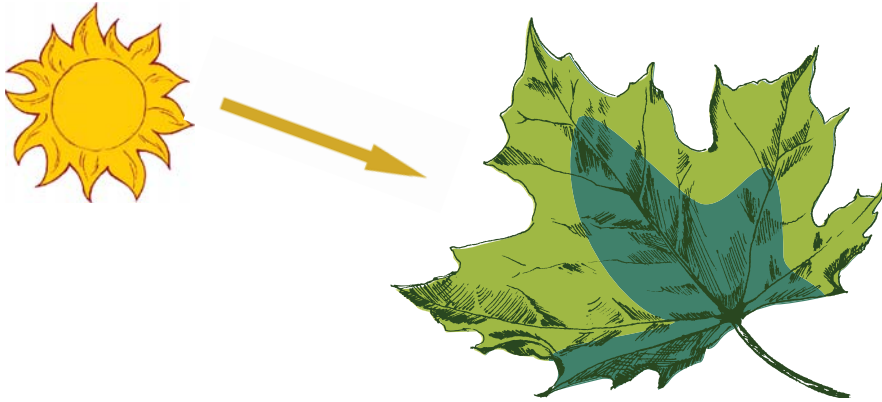


Fun with Photosynthesis

Plants are amazing because they can make their own food. While we are running out to get a sandwich, the trees around us are photosynthesizing to make their own sugars. How on Earth do they do that?

Sunlight is pure energy, but it cannot be directly eaten or stored. Photosynthesis is the process by which green plants change the energy in sunlight into a form of energy that can be stored for later use. Plants use the sun's energy to change carbon dioxide and water into carbohydrates (simple sugars like glucose). This process takes place in tiny chambers called chloroplasts, which are found in plant leaves. Chloroplasts contain chlorophyll, a green pigment that enables plants to absorb the sun's energy. A byproduct of photosynthesis is oxygen. Plants release oxygen through tiny openings, called stomata, located on the underside of their leaves. Carbohydrates produced by photosynthesis are stored in plant cells.



Answer the following questions about photosynthesis:

What is the sun's role in photosynthesis?

How do plants absorb carbon dioxide?

What is chlorophyll, and what does it do?

How is glucose created?

Why do plants release oxygen?

Compare how much oxygen an average person uses to the amount of oxygen an average tree produces each day:

A typical person uses approximately 1.05 pounds of oxygen each day. The average tree produces about 0.06 pounds of oxygen per day. About how many trees are needed to supply oxygen for one person for one day?