## Energy in Ecosystems Outline

# Lesson 2: How Do Plants Get Energy?

## 1. Getting Sunlight, Water, and Air

- A. Sun Energy
  - 1. Plants get energy from the sun
  - 2. Leaves change sunlight into useable energy

## B. Chlorophyll

- 1. Plant cells contain chlorophyll
- 2. Chlorophyll traps the sun's energy
- 3. Chlorophyll is the green substance in leaves

### C. Water and Minerals

- 1. Veins, tubes in leaves, bring water and minerals from the stems
- 2. Roots get water and minerals from soil

#### D. Carbon Dioxide

- 1. Plants use CO2, carbon dioxide
- 2. CO2 comes in tiny holes in the bottom of the leaves

## 11. How Plants Produce Sugar

## A. Photosynthesis

- 1. Plants use sunlight, CO2, and H2O to make sugar
- 2. When plants make sugar, it is called photosynthesis
- 3. When plants make sugar, O2, oxygen, is released
- 4. When plants use sugar, they give off CO2 and H2O
- 5. Plants get rid of the waste through the tiny holes

#### B. Producers

- 1. Plants use light energy to make sugar
- 2. Because plants make sugar, they are called producers
- 3. Plants use sugar (and minerals) to make plant parts
- 4. Some sugar is stored by the plant
- 5. Some sugar is changed into starch and is stored (mostly in the roots)