Garbon Dioxide and Plants Demonstration

What does it teach? Photosynthesis

Description: When the light is turned on, the plant starts to take more carbon dioxide out of the air in the chamber, reducing its concentration. When the light is off, the plants emit more carbon dioxide, causing its concentration to increase. Without light the plant cannot use photosynthesis.

Background: Plants use a process called photosynthesis to create food for themselves. The leaves contain chlorophyll which reacts to light. During this process water and carbon dioxide are taken into the plant and converted into sugar and oxygen. The plant uses the sugar for food and the oxygen is emitted into the air.

Materials:

- Chamber with Plant(s)
- Carbon Dioxide concentration measurer
- Computer hooked up to measurer with digital display of concentration.
- Light over plants/chamber that can be turned on or off.



Earth Day 2005 Setup of this Activity



Looking into the plant container, one can see the Carbon Dioxide measurement instrument.



Demonstration setup at Earth Day 2006.