

RESCUE A MILLION LESSON HELPS

PLANTS & TREES THANKS FOR THE AIR! EXPERIMENT

Key Words

photosynthesis
carbon dioxide
glucose
chloroplasts
oxygen
respiration

Materials

(for six small groups)

1. 12 transparent plastic cups
(8 oz. - 2 per group)
2. Boiled, cooled water at least a day old
(so chlorine is gone), with a little baking soda
added in to provide carbon dioxide.
3. 12 aquarium plant sprigs from pet store
(two 3-4 inch sprigs per group)

Plants Produce Oxygen Experiment Method

1. Place spring of plant and enough water to fill each cup.
2. Put one cup on a window sill or directly under a lamp, place second cup in dark locker or cabinet.
3. Students draw a picture of their initial observations of the sprig in light and in dark.
4. At 5 minute intervals, observe plants and record (draw) any changes in observations.
(20 - 30 minutes total should suffice)
5. Students record any thoughts or hypotheses they develop during their observations.
6. Students records their thoughts on what process they conclude is occurring and what the bubbles developing on the sprig in the light are in comparison to why there are few, if any, bubbles developing on the sprig placed in the dark.
7. Instruct students on the process of photosynthesis: that sunlight and carbon dioxide are required for a plant to produce its own food, glucose, and the byproduct is oxygen.