

# What a Lemon



30 minutes

## What You Will Do

Demonstrate the chemical breakdown of lemon juice.

## Get it Together

- ◆ Fresh lemon
- ◆ Cotton swab
- ◆ Desk lamp
- ◆ Paper
- ◆ Water
- ◆ Cup

## Procedure

1. Squeeze all the juice from the lemon into the cup.
2. Add an ounce or two of water. Stir.
3. Use the swab and write a secret message on the paper.
4. Wait for the message to dry.
5. Turn on the desk lamp and hold the paper over the bulb for a few minutes.
6. Read your secret message.

## A Closer Look

At first the message is hard to see because of the light color of the lemon juice. When the heat from the lamp evaporated the water, the oxygen in the air reacted with the remaining citric acid, causing it to turn brown.

## Attention!

Be careful not to burn yourself with the heat from the desk lamp.

