

What Are You Breathing?



Materials

- A piece of stiff cardboard, at least one foot square
- A piece of clear plastic (plastic wrap will do)
- Petroleum jelly
- Tape
- String

Procedure

1. Make a frame with the cardboard by cutting out a center square, leaving at least an inch on each side.
2. Tape or staple the clear plastic to the cardboard frame, stretching it tight.
3. Coat the plastic wrap on both sides with a thin film of petroleum jelly. Using a spatula may help apply it evenly.
4. Attach a string to the top of the frame and hang it up where it is exposed to the air. Allow to hang for a day or two.
5. Look closely at the plastic. Use a magnifying glass, if available. What is in the air that your nose and lungs filter out for you?

The air contains many small particles that we do not normally notice. We have small hairs in our noses that trap the larger particles, and most of the smaller ones stick to the mucus membranes lining our nose and airways. We sneeze or cough to dislodge any troublesome particles.

Air pollutants such as was trapped in the sticky jelly come from a variety of sources including factories, vehicles, and plants. Most are smaller than the eye can see -- less than 50 microns across -- but they can range from 1 to 1000 microns (1/1000 of a millimeter to one millimeter).

