How do the Alveoli work?

Experiments:

To examine how the alveoli increase the lungs surface area.

Materials:

You will need:

- Sellotape, scissors,
- 1 sheet of blue card (18 inches x 6 inches),
- lots of sheets of white card (6inches x 4 inches).

Method:

- 1. Bend the large blue sheet into a cylinder. Tape the edges. This represents the outside of a lung.
- 2. Make tubes from the white card. Use elastic bands to secure their shape. These represent the alveoli for the inside of the lung.
- 3. Place the white tubes inside the large lung blue lung until it is full.
- 4. Now unravel the alveoli tubes and spread them out flat.

Here comes the Science bit!

- 1. You have increased the surface area of your lung greatly by adding just a few alveoli tubes.
- 2. Imagine how great the oxygen absorbing surface area of a real lung is with millions of alveoli packed inside.