Air Exercises

1. Air Has Weight

- a. Take two empty balloons of equal size and weight and attach them with two equal lengths of string to two corners of a wire coat hanger. Balance it as shown in the diagram.
- b. Remove one balloon, blow it up, and attach it again to the coat hanger.
- c. Record what happens. How does this show that air has weight?

2. Air Has Volume

- a. Attach two inflated balloons of the same size to the two ends of a straightened coat hanger and balance them so that the hanger is level.
- b. Hold one of the balloons under hot water for a few minutes.
- c. Record what happens to the balloon.

3. Air Contains Solid Particles

- a. Coat a glass slide, a petri dish (see your science teacher), or a piece of white paper with a very thin layer of petroleum jelly.
- b. Place it outside, on a window sill or table, on a day when there is no wind.
- c. After an hour or two, bring it inside and examine it. What has collected on the sticky surface? Is it dirty or dark? Can you guess where these particles have come from?
- d. Repeat the same experiment on a windy day.
- e. Do you get more particles on your sticky surface on a calm day or a windy day? Why?

