Pre-Assessment for
Let's Weigh Air

1. What is the formula for the area of a circle? _____
2. What weighs more, a desk or the air above the desk? _____
3. What does equilibrium mean? _____
4. A box has a top that measures 6" x 6" and weighs 100 pounds (about 45 kilos). Will the box weigh more than the air above it? _____
5. If air has weight, then why don't we feel the weight? _____
   _____
   _____
6. How can you feel air pressure? _____
   _____
   _____

Post-Assessment for
Let's Weigh Air

1. What is the formula for the area of a circle? _____
2. What weighs more, a desk or the air above the desk? _____
3. What does equilibrium mean? _____
4. A box has a top that measures 6" x 6" and weighs 100 pounds (about 45 kilos). Will the box weigh more than the air above it? _____
5. If air has weight, then why don't we feel the weight? _____
   _____
   _____
6. How can you feel air pressure? _____
   _____
   _____

Assessment for *Let's Weigh Air*
Answer Key

1. A = 3.14 x radius x radius

2. The air above the desk

3. A balance of forces

4. No, the air weighs more.

5. Air is everywhere, and so is air pressure. It is in your cells and all around each object. Only when the pressure is different on one side, not in equilibrium, can we feel it. When we use a plunger to remove air pressure from one side of an object, we get a vacuum and the ability of the plunger to adhere to the object. The air pressure is still there, all around the plunger except on the bottom where the plunger is attached to the desk.

6. To feel air pressure, the pressure on one part of your body must be greater than the pressure on all other parts. To do this, hold your hand out of a car window while traveling at high speed.