Weighing Air

Right now, your set-up looks something like this. But soon your teacher will let out all the air from one side. What will happen? Answer the questions below, then find out!

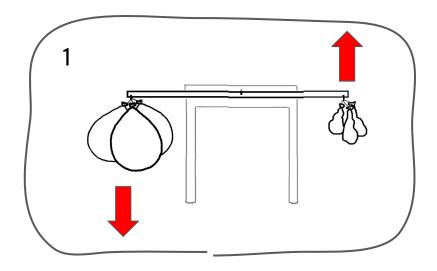


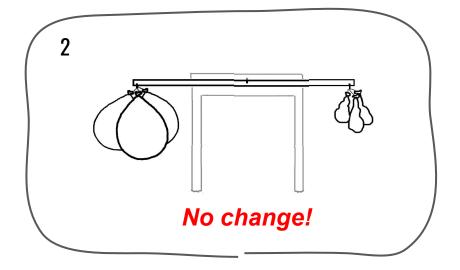
- 1. Add arrows to the picture below to show how you think the scale will move if air DOES weigh something. Why do you think that?
- 2. Add arrows to the picture below to show how you think the scale will move if air DOESN'T weigh anything. Why do you think that?

If air weighs something, the balloons with air in them will weigh more than the balloons without air, so that end of the scale will go down.

If air weigh doesn't weigh anything, the balloons with air in them will weigh the same as the balloons without air. So the scale will stay balanced.

Name: ANSWER KEY





3. Which drawing did the experiment look like in the end? (Drawing 1 or drawing 2?) What does that mean about air?

It looked like drawing #1. The side of the scale with balloons full of air went down and the other end went up. That means that air DOES weigh something.