Lab – Matter

Background: We have learned that matter is anything that has mass and takes up space. The purpose of this lab is to determine if this is true for air. Does air have mass? Does air take up space? In this lab we will find out.

Hypothesis:

Materials: Beaker, Balloon, Water, Electronic Scale, 1 Tissue

Procedure 1:

1. Put your balloon on the scale and record the mass below.
2. Blow up the balloon, tie it in a knot, and carefully let it sit on the scale. Record the new mass.
3. Subtract the old mass from the new mass and record.

Mass of the balloon blown up: \_\_\_\_\_\_\_\_grams (g)

Mass of the empty balloon: \_\_\_\_\_\_\_\_grams (g)

Mass of just the air: \_\_\_\_\_\_\_\_\_grams(g)

Procedure 2:

1. Fill up your large beaker about half way with water.
2. Put a tissue in the bottom of your small beaker so it does not fall out when you turn it over.
3. Carefully turn the small beaker over and push it into the water of the large beaker.
4. Take the small beaker out, turn it right side up, and take the tissue out.

Analyze and Conclude

1. In procedure 1, what accounted for the increase in mass?
2. What did you learn about air in procedure 1?
3. In procedure 2, why did the tissue stay dry?
4. What did you learn about air in procedure 2?
5. What is the definition of matter?
6. Is air matter? Explain why or why not?
7. Was your hypothesis correct?