**Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Boyles Law Lab**

**Introduction:** Pressure plays an important role in the properties of matter. In this lab you will investigate how pressure affects volume. Your objective is to explain the relationship between pressure and volume in a gaseous system.

**Materials:** Vacuums, marshmallows, balloons, shaving cream, water, paper clip, thermometer.

**Procedure:** Using an air pump, place the materials inside one by one and observe any changes that occur. Write the observations down in your data section.

**Data:**

**Pre-Lab Questions:**

1. Define pressure and volume.
2. Explain what a vacuum pump does to the pressure in a container.
3. Hypothesize what will happen to the volume of a gas when pressure is added.

**Post-Lab Questions:**

1. What relationship exists between the pressure and volume of a gas?
2. Why did the chamber make a hissing noise when you pushed the sides or rubber together?
3. Why didn’t the paper clip change?
4. If you increased the external pressure on a balloon, what would happen to the volume assuming it didn’t pop? Would the gas particles get further apart or closer together?