# **Properties of Gases Name:**

Read pgs. 34-36 in your textbook and answer the questions as you read.

## Pressure

1. What is pressure?

1. More pressure on or in a substance means more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. Draw particles in the boxes below to demonstrate high and low pressure systems.

**High Low**

1. Car and bike tires have a max pressure (PSI) that they are supposed to be filled to, why is it important that you don’t fill them past that pressure?

## Boyle’s Law

1. In your own words restate Boyle’s Law.

1. If you dropped weighted balloon into the middle of Resurrection Bay and it landed on the sea floor at 2000 ft deep, what do you imagine would happen to it? Explain how the volume and pressure inside the balloon would change?

1. Why does pressure of a gas increase when it’s in a smaller volume, what about the substance changes when the space gets smaller? (Look at the picture)

## Charles’s Law

1. In your own words restate Charles’s Law.
2. How does particle behavior change as you add energy to them and increase the temperature?
   1. How does this lead to a greater volume of a gas?
3. According to Charles’s law why are bike and car tires more flat when it’s cold?