

NAME \_\_\_\_\_ PD \_\_\_\_\_ DATE \_\_\_\_\_

### Boyle's Law - Worksheet

1. Which variable is plotted on the graph's vertical axis? \_\_\_\_\_
2. Which variable is plotted on the graph's horizontal axis? \_\_\_\_\_
3. Locate the temperature gauge. What is the Kelvin temperature? \_\_\_\_\_
4. Which of the following conditions is that temperature closer to? room temperature? human body temperature? freezer temperature? \_\_\_\_\_
5. The red plunger is used to exert pressure on the gas molecules in which colored area? \_\_\_\_\_
6. Complete the table below as you watch the animated gas lab.

<u>PRESSURE</u>	<u>VOLUME</u>
1.00	
1.33	
2.00	

7. What do you predict the volume will be when the pressure changes to 4.00? \_\_\_\_\_
8. Sketch the completed pressure-volume graph.

9. Click on "**Effect of changing pressure on volume.**" Describe what is added to the piston to increase the pressure. \_\_\_\_\_
10. Sketch the completed volume-pressure graph.

11. Write the formula equation for Boyle's Law. \_\_\_\_\_
12. Write the equation for Boyle's Law in words. \_\_\_\_\_
13. In the [Animated Gas Lab](#), what are the units of pressure? \_\_\_\_\_
14. What are the units of volume used in this lab? \_\_\_\_\_
15. Predict what the volume in this lab would be if the pressure were 8.00. \_\_\_\_\_