

Name: \_\_\_\_\_

Period: \_\_\_\_\_ Date: \_\_\_\_\_

### **Bishop Shockwave Animations**

[http://preparatorychemistry.com/Bishop\\_animations.htm](http://preparatorychemistry.com/Bishop_animations.htm)

Procedure:

1. Scroll down to Chapter Thirteen and click **Boyle's Law Animation**.
2. Follow the directions on screen. Be sure to read each page of the animation.

Observe:

In your own words, how is gas pressure created?

In your own words, how is gas pressure defined?

During the moving part of animation, what happens to the speed of the gas particles when the piston moves down?

According to the description, what are all of the measurements that increase when the piston moves down?

Procedure:

3. Click **Gay-Lussac's Law Animation**.
4. Follow the directions on screen. Be sure to read each page of the animation.

Observe:

During the moving part of the animation, what happens to the pressure inside the chamber when the temperature on the thermometer goes up?

According to the description, what are all of the measurements that increase when the temperature rises?

Procedure:

5. Click **Charles' Law**.
6. Follow the directions on screen. Be sure to read each page of the animation.

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Observe:

What law ensures the piston will move to keep the internal and external pressures equal?

During the moving part of the animation, what happens to the pressure inside the chamber when the temperature rises?

During the moving part of the animation, what happens to the piston when the temperature rises? How does this affect volume?

According to the description, what are all of the measurements that increase when the temperature rises?

Procedure:

7. Click **Volume-Moles Animation**.
8. Follow the directions on screen. Be sure to read each page of the animation.

Observe:

What law is being demonstrated in this animation?

During the moving part of the animation, what happens to the pressure inside the chamber when the second container is opened? Pay attention to the pressure gauge.

According to the description, what happens to the pressure?

Explain the difference of what you see on the pressure gauge and what the description says is happening.

What happens to the piston when the second container is opened? How does this affect volume?