M02 Labs

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3:26 PM

VoiceThread	http://voicethread.com/share/2202713/

Slide	Notes
	**Note: Tell students that the fit to page setting will be very helpful.** **Lab 2.1:** [Instructor Slide Notes - the cotton balls can be dragged and dropped to the thermometer] Let the thermometer rest on a water-safe, dry surface for 15 minutes and record the temperature. Now wet two or three cotton balls, squeeze out the excess water and place them on the thermometer bulb. After 3 minutes record the temperature. What is the impact of evaporative cooling?
	**EXPERIMENT 2.2** **Oxygen and Fire** Hydrogen peroxide is added to the thistle tube. It drips down into the flask where it contacts the yeast. Bubble of gas (oxygen) form and the gas makes its way through the tubing into the inverted test tube.

[instructor slide notes:

Testing the gas: light the match by pulling the grouped objects so the animated flame is on the match stick and drop it so the students see the update image. Then pull to the smoking match head and drop.

Now pull up the test tube and drop so the students see the updated image.

Then pull back to the lighted match stick.]

Discuss how if the gas can relight the burned out match with a glowing ember, it is an indication that the gas is oxygen.

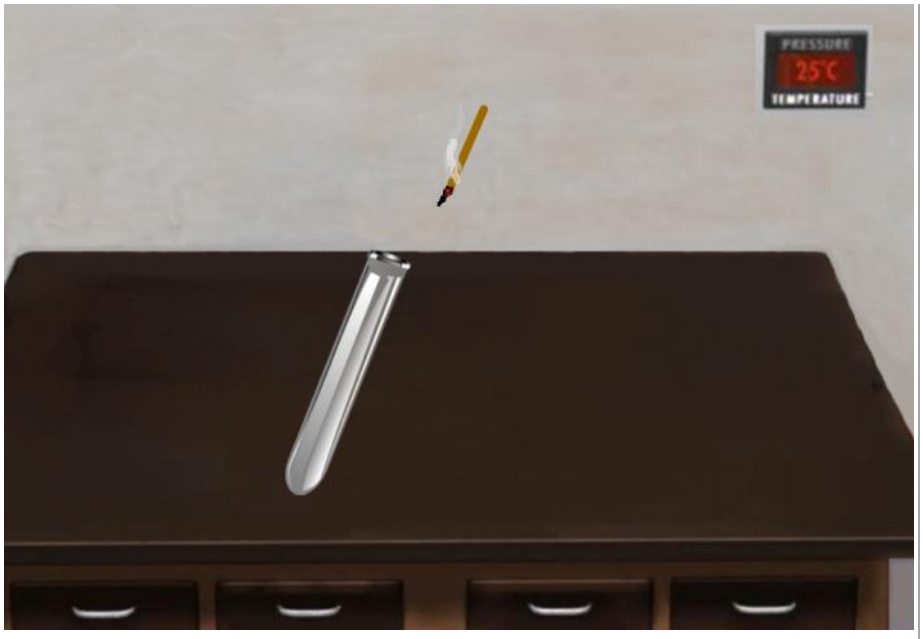
At-Home-Lab:
At home you don't have a thistle tube and tubing, so in your lab you will use a narrow necked glas for the reaction and catch the gas in a balloon. You will let the air flow under an upside bowl that has a freshly extinguished candle. If the candle relights, it is indicative of oxygen.

Lab 2.3

Carbon Dioxide and the Greenhouse Effect

Do the same basic gas collection as you did before, except react backing soda and vinegar instead of the peroxide and the yeast.

Take the collected gas and place it in a zip lock bag and lay it over the thermometer in the sun. What happens to the temperature?

	Optional - test the gas - this time place the flame into the gas in the test tube. (it should go out) Take the collected gas and place it in a zip lock bag and lay it over the thermometer in the sun. What happens to the temperature?