

Chem 18.1

Goals:

- Configure relationship between pressure, volume and temperature of a gas
- Predict the effects of changing a variable to the effects of other variables

Bellwork:

- If you had a balloon filled with air, how could you affect the pressure inside it without adding more air?

Plan:

Definitions: Pressure, volume, temperature

Discussion: how would you predict a change in one variable would change the other variables?

Video: Lawn Chair Larry

- What conditions would determine the amount of pressure in each balloon?
- How would the conditions change as the balloons rose higher into the air?

Guided practice: Combined gas law problems

- Calculate the pressure, volume, temperature or moles of air particles given certain data
- Check answers for correct units and does it make sense

HW: Combined gas law worksheet

Chem 18.3

Goals: Contrast combined gas law with ideal gas law, describe and analyze what makes a gas “ideal”

Bellwork: What do the following symbols stand for in gas equations: P, V, T, n

Plan:

Review combined gas law, class discussion on parts and how they are configured

Mini-lecture: ideal gas law, formula and value for ‘R’

Demo: crushing a soda can with temperature changes

- Relate result to ideal gas law: which variables changed and in what ways?

Kahoot: gas laws review

HW: ideal gas law worksheet