

Unit 2 –States of Matter, Gasses, Kinetic Theory

1. Relate observations of diffusion to particle motion and collision in the gas and liquid phases.	BW Thursday, Oct 31, 2013 Notes, Oct 21 - 24, 2013: p2 & p 4
2. Relate observations regarding the addition of energy by warming to increased particle motion.	Chemistry – Unit 3 Work sheet, p2 Bell Work & Notes, Nov 4 -5, 2013: p12 -15
3. Describe the characteristics of solids, liquids and gases in terms of particles and their arrangement (density): use particle diagrams to account for motion and density differences; describe the process of how the arrangement of particles changes during phase changes.	Bell Work, Oct 14 - Oct 17, 2013, Tue, Wed, Thur Bell Work, Oct 28 - Oct 31, 2013: Mon, Thur Notes, Oct 21 - 24, 2013: p 3, p12 -15 Notes, week Oct 28, p2
4. Relate temperature to the thermal energy (E_{th}) of particles in motion.	Bell Work, Oct 21 - 24, 2013: Thursday Unit 3 Work sheet: #9
5. Explain, at the particle level, how a thermometer measures the temperature of the system.	Bell Work & Notes, Nov 4-5: p 14-15 Bell Work, Oct 21 - 24, Wednesday
6. Explain the basis for the Celsius temperature scale.	Notes - Week of Oct 21, 2013 - Gasses, Kinetic Theory: p10 Bell Work, Oct 28 - Oct 31, 2013: Tuesday

6.	x
7. State the basic tenets of the Kinetic Molecular Theory (KMT).	<p>1) All matter is composed of small particles such as atoms, ions, or molecules.</p> <p>2) These particles are in constant motion, and this motion is felt as temperature and pressure.</p> <p>3) Temperature is a measurement of the average motion of particles (atoms, molecules & ions)</p> <p>4) Collisions between particles are perfectly elastic meaning the kinetic energy of the particles does not change when they collide</p> <p>Bell Work, Oct 21 - 24, Thursday</p> <p>Unit 3 Work sheet, p2</p>
<p>8. The 3 variables P, V and T are interrelated. Any factor that affects the number of collisions has an effect on the pressure. You should be able to:</p> <ul style="list-style-type: none"> Predict the effect of changing P, V or T on any of the other variables. $P \propto \frac{1}{V} \quad P \propto T \quad V \propto T$ <ul style="list-style-type: none"> Explain (in terms of the collisions of particles) <i>why</i> the change has the effect you predicted. Explain the basis for the Kelvin scale. Use the absolute temperature scale to solve gas problems. Use factors to calculate PVT 	<p>Bell Work, Oct 38 -31, Wednesday</p> <p>Exploring Properties of Gasses Worksheet</p> <p>Unit 3 Worksheet, question #3</p> <p>Bell Work, Oct 28 – 31, Tuesday, Thursday</p>
9. Whose particle model are we using? List the key features of the model (COM is not part of this model, it was added later).	<p>Bell Work, Oct 28 – 31, Monday</p> <p>Notes, Oct 21 -24, p3</p>