Name:_____ Period:_____ Date:_____

CHAPTER 10 NOTES

10.1: The Kinetic-Molecular Theory of Matter

1. List 4 properties of gases you can think of from previous classes or just general knowledge.

2. How are gases different from other states of matter?

3. Define kinetic-molecular theory:

4. Give 3 examples of how you have experienced or observed the kinetic-molecular theory in everyday life.

   a.

   b.

   c.

5. Define ideal gas:

6. List and explain each of the 5 assumptions the kinetic-molecular theory is based on:

   a.

   b.

   c.

   d.

   e.

7. List and describe the physical properties of gases on pages 304-305. Also note which kinetic-molecular theory assumption is demonstrated by each property.

Physical Property	**Explanation or Definition of Property**	**Assumptions Illustrated by the Property**
Expansion		
Fluidity		
Low Density		
Compressibility		
Diffusion		
Effusion		

8. Explain how real gases deviate from the behavior assumed of ideal gases.

10.2 Pressure

1. What are the four measurable quantities that fully describe a gas?

2. Define pressure:

3. What is the equation for pressure?

4. Define newton:

5. Give a real life example (not the one in the book with the dancer, but similar) of the relationship between pressure and area.

6. What does the pressure of a gas depend on?

7. Define barometer:

8. Summarize Torricelli's experiment when he essentially designed the first barometer and figured out how it worked.

9. COPY Table 10-1 on page 311 onto this page:

Unit Name	Symbol	Definition/relationship

10. Define standard pressure and temperature:

11. Convert a pressure of 1.75 atm to kPa and to mm Hg.

<u>Homework: Do section reviews 10-1 & 10-2. Assignment due Wednesday (5/7)</u>