

Name: _____

Date: _____ Period: _____

14.1 – Properties of Gases

1. What is compressibility?
2. Explain kinetic theory.
3. List the name, symbol, and a common unit for the four variables that describe the characteristics of a gas.
 - 1.
 - 2.
 - 3.
 - 4.
4. What is the relationship between pressure and volume with gases?
5. What is the relationship between pressure and temperature with gases?
6. What is the relationship between volume and temperature with gases?

13. What is the combined gas law?
14. What is the equation that goes with the combined gas law?
15. Which gas law is represented if temperature is held constant?
16. Which gas law is represented if pressure is held constant?
17. Which gas law is represented if volume is held constant?

14.3 – Ideal Gases

18. In addition to pressure, temperature and volume, what fourth variable must be considered when analyzing the behavior of a gas?
19. Identify all of the variables in the equation that goes with the ideal gas law:

$$P \times V = n \times R \times T \quad \text{or } PV = nRT$$

20. When are real gases most different from ideal gases?

