Kinetic Theory of Gases

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Definitions:

 Kinetic Theory of Gases-

 Ideal Gas-

 Root-mean square value-

 Boltzmann’s Constant-

 Thermodynamics-

 Statistical Mechanics-

 State Variables-

 Charles’ Law-

 Boyle’s Law-

 Temperature Reservoir-

 What are the assumptions made in the Kinetic Theory of Gases?

 What are the consequences of these assumptions?

 What is the equation for the ideal gas law?

Math:

 The wall thermometer in the kitchen of a seaside restaurant reads 23 degrees C. An absent-minded chef clamps the top of a pressure cooker shut and turns on the burner. What is the pressure within the pressure cooker when the air inside reaches 90 degrees C?