

Name KEY

Section \_\_\_\_\_

Last 4 digits of SS \_\_\_\_\_

Chemistry 109

Quiz 8 3/28/00

THERE IS NO NUMBER OF IMPLIED CORRECT ANSWERS TO QUESTIONS (ALL COULD BE RIGHT, ALL COULD BE WRONG). CLEARLY CIRCLE ANY CORRECT ANSWERS!

1. (3 pts) Which of the following chemicals will you need today?

a) magnesium metal    b) sodium carbonate ( $\text{Na}_2\text{CO}_3$ )     c) manganese dioxide ( $\text{MnO}_2$ )

2. (1 pts) The relationship between the pressure and volume of a gas at different temperatures is established by

a) Charles' law                      b) Avogadro's law                      c) Newton's law

3. (2 pts) The volume of a gas at 253 K is 20 L. What is its volume at 273 K?

a) 21.58 L                      b) 18.53 L                      c) 20.12 L

4. (2 pts) Do equal masses of all gases have approximately the same volume?

a) Yes                       b) no

5. (2 pts). Zero degrees on the absolute (Kelvin) scale correspond to approximately which temperature on the Celsius scale?

a)  $-273\text{ }^\circ\text{C}$                       b)  $273\text{ }^\circ\text{C}$                       c)  $-32\text{ }^\circ\text{C}$