## Bauck's CHEM Ch. 10 Test Review

This is an optional assignment due the day of the test.

**Materials:** loose leaf paper, pen and/or pencil (You will be given a periodic table.)

**Format:** math problems; representative particle topics

Test date:

**Test value:** 200 points

## BACKGROUND INFO:

1) **Empirical formula**—What is it?

- 2) **GAM, GFM, GMM** What are these? How are they measured?
- 3) What is the **molar volume** of a gas at STP?
- 4) **Molar mass** What is it?
- 5) **Mole**: What is it? Why is it so important in chemistry?
- 6) **Molecular formula**—What is it?
- 7) **Percent composition**—What is it?
- 8) **Representative particles**: What are they? List the four main types of r.p's and identify an example of each.
- 9) **STP**: What is it? When is it used?
- 10) MATH PROBLEMS Give an example of each for this review.
  - (problems E1-E3 in notes)  $mol \rightarrow r.p.$  r.p.  $\rightarrow mol$
  - (problems E4-E5 in notes) 2 steps  $mol \rightarrow atom \text{ or ion in a cmpd.}$  atom or ion in a cmpd.  $\rightarrow mol$
  - (problems E6-E7 in notes) find GFM or GMM
  - (problems E8-E9 in notes)  $mol \rightarrow mass (g) \qquad mass (g) \rightarrow mol$
  - (problems E10-E11 in notes)  $mol \rightarrow L$   $L \rightarrow mol$
  - (problems E12-E13 in notes) 2 steps mass (g)  $\rightarrow$  r.p. r.p.  $\rightarrow$  mass (g)
  - (problems E14-E15 in notes) gas density:  $g/L \rightarrow g/mol$   $g/mol \rightarrow g/L$
  - (problem E16-E17 in notes) percent composition
  - (problem E18-E19 in notes) empirical formula
  - (problems E20-E21 in notes) molecular formula
  - (other problems from Mole Conversion Practice #3) 2 steps

 $\begin{array}{ccc} \text{mass } (g) \to L & & L \to \text{mass } (g) \\ L \to \text{r.p.} & & \text{r.p.} \to L \end{array}$ 

\*\*\* Note \*\*\*

There will be at least one question pertaining to material in past chapter(s) or unit(s).