

## Bauk's CHEM Ch. 12 Test (part 2) Review

*This is a 10/10 optional assignment due the day of the test.*

- Materials:** loose leaf paper, pen and/or pencil, calculator  
(You will be given a periodic table.)
- Format:** 10 questions: 8 math problems, 2 writing/balancing equations
- Test date:** \_\_\_\_\_
- Test value:** 200 points

There are no multiple choice or essay questions. Practice the math problems!

### BACKGROUND INFO:

- How do you know when to use:
  - Avogadro's number ( $6.02 \times 10^{23}$ ), representative particles**
  - Molar mass, grams in one mole, GAM, GFM, GMM**
  - Molar volume of a gas at STP (22.4 L)**
- MATH PROBLEMS (with example problems to look at from our notes)
  - Mol-Mol** (E1 & E2) mol A  $\rightarrow$  mol B
  - Mass-Mass** (E3 & E4) g of A  $\rightarrow$  g of B
  - Mass-Particle** (E11 & E12) g of A  $\rightarrow$  r.p. of B r.p. of A  $\rightarrow$  g of B
  - Mass-Volume** (E7 & E8) g of A  $\rightarrow$  L of B L of A  $\rightarrow$  g of B
  - Particle-Volume** (worksheets) r.p. of A  $\rightarrow$  L of B L of A  $\rightarrow$  r.p. of B
  - Volume-Volume** (E9 & E10) L of A  $\rightarrow$  L of B
  - Percent Yield** (E15)
  - Molecular Formula** (E19)
- There are three chemical reactions on the test:

There will be one equation for you to balance.  
One has to be constructed from words, without products given.  
One is given to you already balanced.

For this review, give an example of a balanced equation, a skeleton (unbalanced) equation, and an equation in words which you construct and balance.