Mole Conversions: Part 2

Practice Sheet #18

- 1. What is the mass of 8.48 moles of Boron?
- 2. What is the mass of 8.48 moles of Oxygen?
- 3. How many moles are in 65.8 g of ammonium sulfate?
- 4. What is the mass of 3.45×10^{22} molecules of hydrochloric acid?
- 5. What is the mass of 3.5×10^{15} molecules of bromic acid?
- 6. How many molecules are in 9.2 grams of BH₃?
- 7. How many molecules are in 0.0078 grams of sulfur hexafluoride?
- 8. Find the number of atoms of EACH element in 0.0078 grams of hexafluoride.

- 9. What are hydrates?
- 10. How do you name hydrates?
- 11. How do your write the formula for hydrates?
- 12. Write the name for each of the following hydrates.
 - a. Cs_2CO_2 $2H_2O$
 - b. MgSO4• 7H2O
 - c. $FeCl_3 \cdot 6H_2O$
 - d. $Ca(NO_3)_2 \cdot 4H_2O$
- 13. Write the formula for each of the following hydrates.
 - a. Calcium chloride dehydrate
 - b. Cobalt (II) chloride hexahydrate
 - c. Magnesium hydrogen phosphate trihydrate
 - d. Aluminum hypochlorite octahydrate