

Topics/concepts covered on quiz:

stoichiometry

mole stoichiometry

mass stoichiometry

coefficients

balancing equations

excess

states of matter

precipitates

use of the solubility chart

use of activity series

single displacement

double displacement

mole ratios

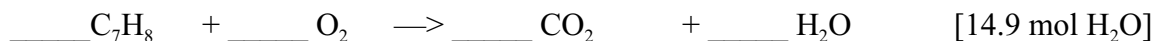
naming ionic compounds

formulas of ionic compounds

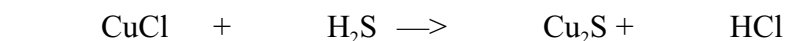
Practice questions:

1) What is stoichiometry? _____

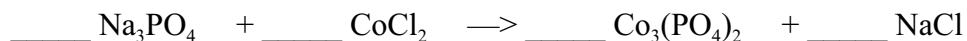
2) What do the coefficients in a balanced equation stand for? _____

3) How many moles of water can be made from 3.72 moles of C_7H_8 and excess oxygen gas?

4) How many grams of copper (I) sulfide can be made from 3.60 g of copper (I) chloride and excess hydrogen sulfide? [2.89 g]



- 5) What mass of precipitate will be produced if 45.0 grams of cobalt (II) chloride react under wet conditions with excess sodium phosphate? [42.4 g]



6) Single Displacement Reactions:

- predict the products using a word equation
- if there will be no reaction, write "no reaction"

(a) magnesium + aluminum chloride ----->

(b) silver + copper (II) sulfate ----->

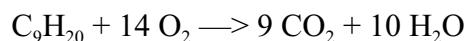
7) Double Displacement Reactions:

- predict the products using a word equation
- use the solubility of salts chart to determine states of matter
- if there is a precipitate formed, write out the equation in symbols and balance it

(a) aluminum chloride + sodium sulfide —>

(b) calcium hydroxide + hydrogen phosphate —>

- 8) Write out three mole ratios for the following balanced equation:



- 9) Write out the formulas for the following ionic compounds:

(a) sodium fluoride _____ (c) copper (II) sulfide _____

(b) calcium nitrate _____ (d) aluminum iodide _____