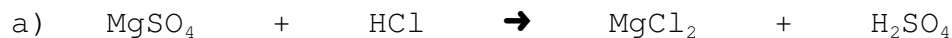


/95 = %

Name: _____

SCH 4C
Stoichiometry Unit Test

1. Balance the following equations



/2

2. Perform each unit conversion. Be sure to use complete and extended units:

a) convert 80.4 g of CO_2 to number of molecules of CO_2

b) convert 3.65×10^{23} Cl atoms to the equivalent mass of HSiCl_3

/5

3. What mass of potassium phosphate is required to form 54.0 g of strontium phosphate?



/7

/8

/22

4. What amount of iron (III) nitrate is require to from 250.0 g of iron(III) carbonate



/6

5. What is the maximum possible mass of chromium(III) hydroxide that can form from 42.0 g of chromium(VI) sulphate and 25.0 g of sodium hydroxide



/16

/22

6. Determine the concentration of each of the following solutions:

a) 750 mL of a solution that contains 0.015 mol of HCl

/5

b) 650 mL of a solution that contains 0.045 g of HCl

/7

c) 5.0 L of a solution of sulphuric acid made through the dilution of 55 mL of 12.0 M H_2SO_4

/4

/16

7. Determine the mass of Na_2CO_3 required to make 2.0 L of 0.25 M sodium carbonate solution.

/6

8. Determine the concentration of solution that would result if 85.0 g of NaHCO_3 is dissolved in 1.5 L of water. What will this concentration become if 8.0 L of water is added?

/11

/17

9. What is the maximum possible mass of lead(II) iodide precipitate that could form from the reaction of 250 mL of 0.25 M lead(II) nitrate mixed with 300 mL of 0.35 M potassium iodide?



/18

BONUS: Determine the concentration of potassium ion in p.p.m. for 250 mL of solution that contains a mass of 0.0015 g of K_2CO_3

/5

/18