Chemistry Reactions-Stoichiometry review Name:

For the following compounds, give the formulas and the molar masses:

 **Formula Molar Mass**

1) sodium phosphide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2) magnesium nitrate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3) lead (II) sulfite \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4) calcium phosphate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5) ammonium sulfate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write complete balanced equations for each reaction given below.

6) Sodium phosphate reacts with potassium hydroxide.

7) Magnesium chloride reacts with lithium carbonate.

8) Calcium reacts with water.

Complete the following calculations. Show all work and use appropriate significant figures.

9) How many moles are in 43.1 grams of potassium sulfate?

10) How many grams are in 2.3 moles of chlorine gas?

11) How many molecules are in 5.2 moles of glucose?

12) How many moles are in 3.4 x 1023 molecules of iron (II) nitrite?

13) How many molecules are in 56.9 grams of barium chloride?

14) How many grams are in 8.2 x 1022 molecules of copper (I) selenide?