

Chem I

Name _____

Date _____ Per _____

Worksheet # C22: Formula Mass and Ionic Compounds

1. Warm Up: What ion do each of the following atoms become? (give the symbol and charge)

a. calcium _____

f. lead IV _____

b. oxygen _____

g. lithium _____

c. iron II _____

h. phosphorus _____

d. gallium _____

i. nitrogen _____

e. bromine _____

j. magnesium _____

2. What would be the formulas of the following compounds?

a. magnesium chloride _____

b. tin II fluoride _____

c. gallium oxide _____

d. sodium phosphide _____

e. aluminum sulfide _____

3. How many atoms or molecules are in a mole? _____

4. How much would one mole of each of the following weigh?

a. calcium _____

d. lead _____

b. gallium _____

e. nitrogen _____

c. bromine _____

f. magnesium _____

5. How much would 1.00 mole of calcium chloride weigh? (show your set up)

6. How much would 3.05 moles of iron III iodide weigh? (show your set up)

7. How many molecules would there be in .0444 mole of potassium oxide?

8. How much would 5.99×10^{20} molecules of tin IV sulfide weigh?

9. How many molecules would there be in 14.2 grams of magnesium oxide?

10. How much would 3.55×10^{20} molecules of lead II iodide weigh?

11. What's a mole of ugly weigh? (think Spanish)