Name_____ Date Due _____

Homework 3 – Naming Compounds

1. Complete the table for these compounds using valency rules.

Name	Formula
Sodium nitrate	$NaNO_3$
Magnesium sulphate	
Calcium nitrate	
Zinc(II) permanganate	
Lithium sulphate	
Potassium ethanoate	
Aluminium nitrate	
Tin dichromate	
Gold(I) phosphate	
Iron(III) hydroxide	
Barium nitrate	
Magnesium ethanoate	
Copper sulphate	

Nitrate = NO_3, valency 1; sulphate = SO_4, valency 2; permanganate = MnO_4, valency 1; ethanoate = CH_3COO, valency 1; dichromate = Cr_2O_7, valency 2; hydroxide = OH, valency 1; phtosphate = PO_4, valency 3.

2. Calculate the gram formula mass.

Magnesium Chloride ($MgCl_2$)

GFM = (24.5 x 1) + (35.5 x 2)

GFM = <u>95.5 g</u>

Iron(III) Chloride ($FeCl_3$)

GFM = (_____ x ____) + (____ x ____)

GFM =

Magnesium phosphide (Mg_3P_2)

GFM = (_____ x ____) + (____ x ____)

GFM =

Magnesium phosphate ($Mg_3(PO_4)_2$)

GFM = (__ x 3) + (__ x 2) + (__ x 8)

GFM =

Relative atomic masses: Magnesium = 24.5 g, chlorine = 35.5 g, Iron = 56 g, phosphorus = 31 g, oxygen = 16 g