Name _____ Period _____

College Prep Chemistry of the Earth

Assignment 5G – Molar Mass Conversions (*Part 2*) 20 Points

For the following calculate the molar mass and convert the following measurements

Al_2O_3

53.96
+48.00
101.96

Aluminum Oxide [Al_2O_3]		
Element	#	Molar Mass
Aluminum (Al)	2	26.98 g/mol
Oxygen (O)	3	16.00 g/mol
Aluminum Oxide (Al_2O_3)		101.96 g/mol

V_1F_3

50.94
+57.00
107.94

Vanadium(III) Fluoride [VF_3]		
Element	#	Molar Mass
Vanadium (V)	1	50.94 g/mol
Fluorine (F)	3	19.00 g/mol
Vanadium(III) Fluoride (VF_3)		107.94 g/mol

Convert 120.0g Al_2O_3 to mol Al_2O_3	
120.0 g Al_2O_3	1 mol Al_2O_3
	101.96 g Al_2O_3
Mol Al_2O_3	1.18 mol Al_2O_3

Convert 1.40mol VF_3 to mass VF_3	
1.40 mol VF_3	107.94 g VF_3
	1 mol VF_3
Mass VF_3	151.12 g VF_3

Copper(II)Nitride [Cu_3N_2]		
Element	#	Molar Mass
Copper (Cu)		
Nitrogen (N)		
Copper(II)Nitride [Cu_3N_2]		

Tin(IV)Bromide [$SnBr_4$]		
Element	#	Molar Mass
Tin (Sn)		
Bromine (Br)		
Tin(IV)Bromide [$SnBr_4$]		

Convert 82.3g Cu_3N_2 to mol Cu_3N_2	
Mol Cu_3N_2	

Convert 2.50mol $SnBr_4$ to mass $SnBr_4$	
Mass $SnBr_4$	

Silver(I)Sulfide [Ag_2S]		
Element	#	Molar Mass
Silver (Ag)		
Sulfur (S)		
Silver(I)Sulfide [Ag_2S]		

Tungsten(VI)Oxide [WO_3]		
Element	#	Molar Mass
Tungsten (W)		
Oxygen (O)		
Tungsten(VI) Oxide [WO_3]		

Convert 156.3g Ag_2S to mol Ag_2S	
Mol Ag_2S	

Convert 3.25mol WO_3 to mass WO_3	
Mass WO_3	

Cadmium(III)Bromide [$CdBr_3$]		
Element	#	Molar Mass
Cadmium (~~Cr~~ Cd)		
Bromine (Br)		
Cadmium(III)Bromide [$CdBr_3$]		

Vanadium(III)Sulfide [V_2S_3]		
Element	#	Molar Mass
Vanadium (V)		
Sulfur (S)		
Vanadium(III)Sulfide [V_2S_3]		

Convert 374.13g $CdBr_3$ to mol $CdBr_3$	
Mol $CdBr_3$	

Convert 0.537mol V_2S_3 to mass V_2S_3	
Mass V_2S_3	