

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

Aluminum Oxide [Al ₂ O ₃]		
Element	#	Molar Mass
Aluminum (Al)		
Oxygen (O)		
Aluminum Oxide (Al ₂ O ₃)		

Convert 120.0g Al ₂ O ₃ to mol Al ₂ O ₃	
Mol Al ₂ O ₃	

Copper(II)Nitride [Cu ₃ N ₂]		
Element	#	Molar Mass
Copper (Cu)		
Nitrogen (N)		
Copper(II)Nitride [Cu ₃ N ₂]		

Convert 82.3g Cu ₃ N ₂ to mol Cu ₃ N ₂	
Mol Cu ₃ N ₂	

Vanadium(III) Fluoride [VF ₃]		
Element	#	Molar Mass
Vanadium (V)		
Fluorine (F)		
Vanadium(III) Fluoride (VF ₃)		

Convert 1.40mol VF ₃ to mass VF ₃	
Mass VF ₃	

Tin(IV)Bromide [SnBr ₄]		
Element	#	Molar Mass
Tin (Sn)		
Bromine (Br)		
Tin(IV)Bromide [SnBr ₄]		

Convert 2.50mol SnBr ₄ to mass SnBr ₄	
Mass SnBr ₄	

Silver(I)Sulfide [Ag ₂ S]		
Element	#	Molar Mass
Silver (Ag)		
Sulfur (S)		
Silver(I)Sulfide [Ag ₂ S]		

Convert 156.3g Ag ₂ S to mol Ag ₂ S		
Mol Ag ₂ S		

Cadmium(III)Bromide [CdBr ₃]		
Element	#	Molar Mass
Cadmium (Cd)		
Bromine (Br)		
Cadmium(III)Bromide [CdBr ₃]		

Convert 374.13g CdBr ₃ to mol CdBr ₃		
Mol CdBr ₃		

Tungsten(VI)Oxide [WO ₃]		
Element	#	Molar Mass
Tungsten (W)		
Oxygen (O)		
Tungsten(VI) Oxide [WO ₃]		

Convert 3.25mol WO ₃ to mass WO ₃		
Mass WO ₃		

Vanadium(III)Sulfide [V ₂ S ₃]		
Element	#	Molar Mass
Vanadium (V)		
Sulfur (S)		
Vanadium(III)Sulfide [V ₂ S ₃]		

Convert 0.537mol V ₂ S ₃ to mass V ₂ S ₃		
Mass V ₂ S ₃		