

Name _____ Period _____

College Prep Chemistry of the Earth

Assignment 5L – Double Molar Conversions Review

20 Points

For the following chemical reactions, complete the chart and perform the following conversions

Chemical Equation	$3\text{Ca}(\text{FO}_3)_2 + \text{V}_2\text{O}_3 \rightarrow 3\text{CaO} + 2\text{V}(\text{FO}_3)_3$							
Molar Ratio								

MM V_2O_3	149.88g/mol	MM $\text{V}(\text{FO}_3)_3$	251.94g/mol
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Convert 1.78mol V_2O_3 to mol $\text{Ca}(\text{FO}_3)_2$		Convert 183.4g $\text{V}(\text{FO}_3)_3$ to mol $\text{V}(\text{FO}_3)_3$	
mol $\text{Ca}(\text{FO}_3)_2 =$		mol $\text{CaO} =$	

Convert 247.4g V_2O_3 to mol V_2O_3		Convert mol V_2O_3 to mol CaO	
mol $\text{V}_2\text{O}_3 =$		mol $\text{CaO} =$	

Convert 5.80mol $\text{Ca}(\text{FO}_3)_2$ to mol $\text{V}(\text{FO}_3)_3$		Convert mol $\text{V}(\text{FO}_3)_3$ to mass $\text{V}(\text{FO}_3)_3$	
mol $\text{V}(\text{FO}_3)_3 =$		mol $\text{V}(\text{FO}_3)_3 =$	