

Name _____ Period _____

College Prep Chemistry of the Earth

Assignment 5N – Triple Stoichiometry Conversions (*Part 2*)

20 Points

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

Chemical Equation	$3\text{Cu} + 2\text{Zr}_3\text{N} \rightarrow \text{Cu}_3\text{N}_2 + 6\text{Zr}$							
Molar Ratio								

MM Cu	63.55g/mol	MM Zr ₃ N	287.66g/mol
MM Cu ₃ N ₂	218.67g/mol	MM Zr	91.22g/mol

Convert 283.45g Zr ₃ N to mol Zr ₃ N	
mol Zr ₃ N =	

Convert mol Zr ₃ N to mol Cu ₃ N ₂	
mol Cu ₂ N ₃ =	

Convert mol Cu ₂ N ₃ to mass Cu ₂ N ₃	
mass Cu ₂ N ₃ =	

Convert 183.29g Zr to mol Zr	
mol Zr =	

Convert mol Zr to mol Cu	
mol Cu =	

Convert mol Cu to mass Cu	
mass Cu =	