

Noteset 6A (Part 6) – Unit 6 Review – Common Solving Errors

Based on Quizzes 10 and 11 – Double and Triple Molar Conversions

Complete the following conversions based on the equation given below

Chemical Equation	$Mn_2O_3 + 3Na_2C_2O_3 \rightarrow Mn_2(C_2O_3)_3 + 3Na_2O$			
Molar Ratio	mol Mn_2O_3 =	mol $Na_2C_2O_3$ =	mol $Mn_2(C_2O_3)_3$ =	mol Na_2O

need to fill out molar ratio

MM Mn_2O_3	157.88g/mol	MM $Mn_2(C_2O_3)_3$	325.94g/mol
MM $Na_2C_2O_3$	118.00g/mol	MM Na_2O	61.98g/mol

Quiz 10 – Two Step Molar Conversions

swapped mol = 1 g = MM (above)

Convert 184.20g Mn_2O_3 to mol Mn_2O_3		Convert mol Mn_2O_3 to mol Na_2O	
184.20 Mn_2O_3	157.88 $mol Mn_2O_3$	1.17 mol Mn_2O_3	3 mol Na_2O
	1 g Mn_2O_3		1 mol Mn_2O_3
mol Mn_2O_3 =	1.17 mol	mol Na_2O =	3.51 mol Mn_2O_3

missing the unit

Wrong
1
3
check molar ratio

Quiz 11 – Three Step Molar Conversions

no label

wrong label

Convert 48.28L Na_2O to mol Na_2O		Convert mol Na_2O to mol Mn_2O_3	
48.28 L Na_2O	22.4 L Na_2O	2.15 mol Na_2O	1 mol
	3 mol Na_2O		3
mol Cr_2O_3 =	2.15 mol Na_2O	mol Mn_2O_3 =	0.72 mol Mn_2O_3

no label
no units or label

Convert mol Mn_2O_3 to mass Mn_2O_3

g not mass

0.72	157.88 mass Mn_2O_3
	3 mol Mn_2O_3
mass Mn_2O_3 =	113.67 g Mn_2O_3

Don't forget unit + label when trans.

wrong ratio always "1"