

College Prep Chemistry of the Earth

Assignment 5F – Molar Mass Conversions (Part 1)

20 Points

For the following use the given molar mass to perform the following conversions

Molar Mass A (Conversion): 1 mol A (mol) = Mass A (g)

Remember to show both *units* and *labels* for each part of the conversion process!

Conversion
 48.2 g Na^*
 $\frac{\text{g mol}^{-1} \cdot \text{unit label}}{\text{mass}}$
 $\rightarrow \frac{\text{mol Na}^*}{\text{unit label}}$
 $1 \text{ mol Na} = \text{MM g Na}$

Convert <u>48.2g Na</u> to <u>mol Na</u>	
Molar Mass Na	<u>22.99</u> ^{PT} g/mol
48.2 g Na *	<u>1</u> mol Na *
	22.99 g Na *
mol Na	<u>2.10</u> mol Na

Convert <u>3.29mol Pb</u> to <u>mass Pb</u>	
Molar Mass Pb	<u>207.2</u> g/mol
<u>3.29 mol Pb</u> *	<u>207.2 g Pb</u> *
	<u>1</u> mol Pb
mass Pb	<u>681.69</u> g Pb

$\frac{1 \text{ mol Pb}}{207.2 \text{ g Pb}}$
Periodic Table

Convert 329.58g Ag to mol Ag	
Molar Mass Ag	g/mol
mol Ag	

Convert 0.83mol Cr to mass Cr	
Molar Mass Cr	g/mol
mass Cr	

Convert 25.4g Sr to mol Sr	
Molar Mass Sr	g/mol
mol Sr	

Convert 1.81mol Br to mass Br	
Molar Mass Br	g/mol
mass Br	

quan unit label

Convert <u>374.2g W</u> to <u>mol W</u> PT	
Molar Mass W	183.84 g/mol
374.2g W	1 mol W
	183.84 g W
mol W	2.04 mol W

end
1 mol W
MM g W
start

Convert <u>0.472mol Ra</u> to <u>mass Ra</u>	
Molar Mass Ra	226 g/mol
0.472 mol Ra	226 g Ra
	1 mol Ra
mass Ra	106.67 g Ra

end
MM g Ra
1 mol Ra
start

Convert 372.5g Ag to mol Ag	
Molar Mass Ag	g/mol
mol Ag	

Convert 32.74mol Cr to mass Cr	
Molar Mass Cr	g/mol
mass Cr	