

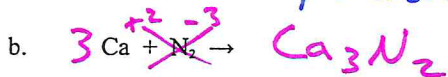
Date:

Predict the products and balance each equation:

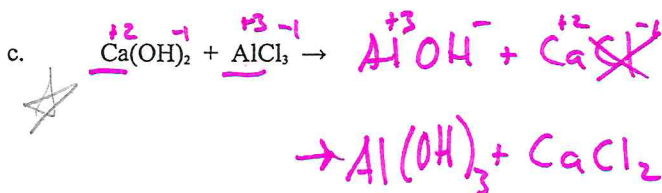
Single



Synthesis



Double



Date:

How many moles are in a balloon that contains 220 g of carbon dioxide?



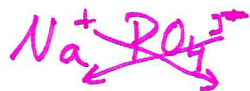
$$220\text{g CO}_2 \times \frac{1\text{mol CO}_2}{44\text{g CO}_2} = 5\text{mol CO}_2$$

molar mass

$$\begin{array}{l} \text{C: } 1 \times 12 = 12 \\ \text{O: } 2 \times 16 = 32 \\ \hline 44 \end{array}$$

Date:

Change 0.025 moles of Sodium Phosphate to grams.



$$0.025\text{mol Na}_3\text{PO}_4 \times \frac{164\text{g Na}_3\text{PO}_4}{1\text{mol Na}_3\text{PO}_4} = 4.1\text{g Na}_3\text{PO}_4$$

molar mass

$$\begin{array}{l} \text{Na: } 3 \times 23 = 69 \\ \text{P: } 1 \times 31 = 31 \\ \text{O: } 4 \times 16 = 64 \\ \hline 164 \end{array}$$

Convert 16.5 g of Lithium Oxide to moles.



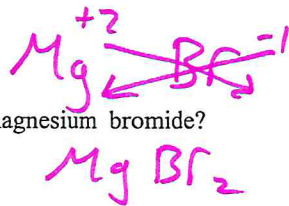
$$16.5\text{g Li}_2\text{O} \times \frac{1\text{mol Li}_2\text{O}}{30\text{g Li}_2\text{O}} = 0.55\text{mol Li}_2\text{O}$$

molar mass

$$\begin{array}{l} \text{Li: } 2 \times 7 = 14 \\ \text{O: } 1 \times 16 = 16 \\ \hline 30 \end{array}$$

Date:

What is the percent composition of magnesium bromide?



$$\begin{array}{l} \text{Mg: } 1 \times 24.31 = 24.31 \\ \text{Br: } 2 \times 79.90 = 159.8 \\ \hline 184.11 \end{array}$$

$$\text{Mg: } \frac{24.31}{184.11} \times 100 = 13.2\%$$

$$\text{Br: } \frac{159.8}{184.11} \times 100 = 86.8\%$$

100%  
check work