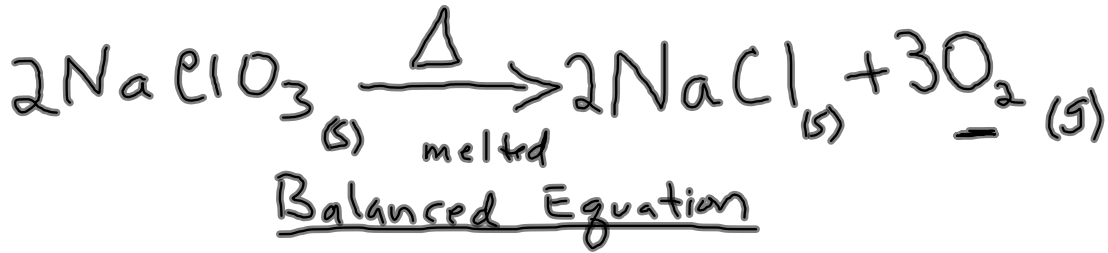


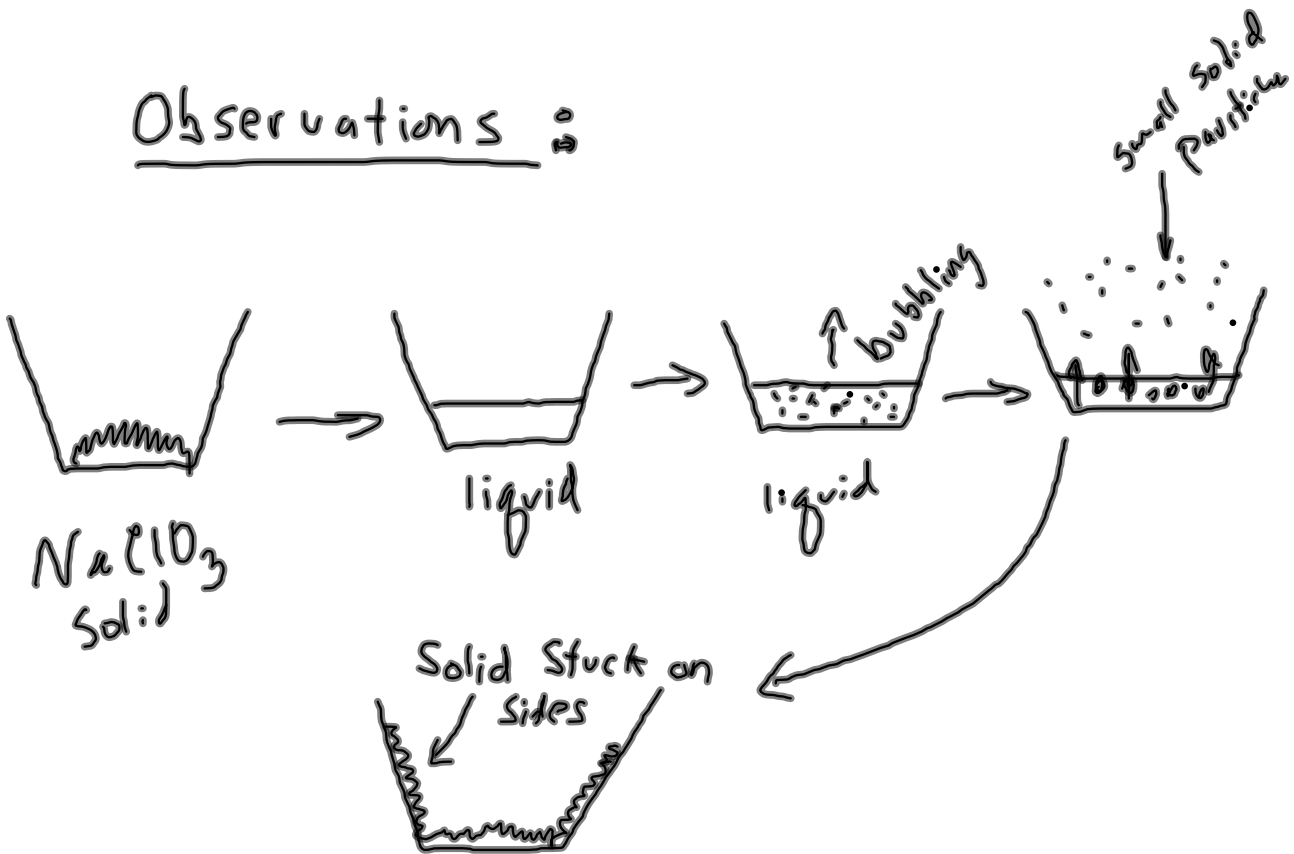
Post-Lab

% Composition

12/7/09



Observations



Example Data

Empty Crucible + Lid (g)	50.00g	
Empty Dish (g)		
Dish + Sample (g)		
Dish + Sample - Dish <hr/>		
Sample mass (g)	5.00g	
Crucible + Lid + NaCl	52.70g	

Calculations

Theoretical

• Percent = parts per hundred

$$\frac{\text{Portion}}{\text{Whole}} \times 100$$

$$\begin{aligned} \% \text{ NaCl in NaClO}_3 &= \frac{\text{NaCl}}{\text{NaClO}_3} \times 100 \\ &= \frac{58.443 \text{ g/mol}}{106.441 \text{ g/mol}} \times 100 \\ \boxed{\% \text{ NaCl} = 54.9\%} \end{aligned}$$

$$\% \text{ Oxygen} = \frac{0 \times 3}{\text{NaClO}_3} \times 100 = \frac{47.9982 \text{ g/mol}}{106.441 \text{ g/mol}} \times 100$$

$$\boxed{\% \text{ Oxygen} = 45.1\%}$$

$$\begin{array}{r} \text{Check} \quad 54.9\% \\ \quad \quad 45.1\% \\ \hline \quad \quad 100.0\% \end{array}$$

Experimental %

Mass NaClO_3 Sample =

$$\text{Mass NaCl remaining} = \frac{\text{Crucible + Lid + NaCl} - \text{Crucible + Lid}}{\text{NaCl}}$$

$$\text{Mass Oxygen Released} = \frac{\text{Sample NaClO}_3 - \text{NaCl remaining}}{\text{Oxygen}}$$

$$\% \text{ NaCl} = \frac{\text{mass NaCl}}{\text{mass sample}} \times 100 =$$

$$\% \text{ Oxygen} = \frac{\text{mass oxygen}}{\text{mass sample}} \times 100 =$$