## **Effervescent Tablet Lab**

The effervescent tablet contains a chemical called sodium bicarbonate (baking soda!). This chemical reacts with water according to the following reaction:

$$H_2O + NaHCO_3 \rightarrow NaOH + CO_2 + H_2O$$

We will be reacting the effervescent tablets with water in both open systems and closed systems to determine how the type of system impacts the mass of the system.

We will also be reacting the effervescent tablets with different temperatures of water to determine how the temperature at which the reaction occurs impacts the reaction time.

## Open System Trials

Temperature of Water	Starting Mass of System	Ending Mass of System	Length of Reaction

**Closed System Trials** 

Temperature of Water	Starting Mass of System	Ending Mass of System	Length of Reaction

Describe the effect that the system type had on the mass of the system.

## Describe the effect that the temperature of the system had on the rate of the reaction.