**Law of Conservation of Matter DATA TABLE**

Be sure to include correct units with your data.

|  |  |  |
| --- | --- | --- |
|  | Trial 1 | Trial 2 |
| Mass of sodium bicarbonate used |  |  |
| Volume of acetic acid used |  |  |
| Total mass before mixing (reactants) |  |  |
| Observations before mixing |  |  |
| Initial Temperature of the Acetic Acid |  |  |
| Total mass after mixing (products) |  |  |
| Observations after mixing |  |  |
| Difference in mass between reactants and products |  |  |
| Final Temperature of the Solution (After the Reaction is Complete) |  |  |
| % change\* = [(mass of Products – mass of Reactants)/mass of Reactants] X 100% |  |  |

\* A change in mass of <1% is not significant. Results with a change in mass of <1% will still demonstrate the Law of Conservation of Matter is valid. Any change in mass <1% is likely caused by human error, which is present in all the experiments we will conduct in this course.