

## Lab 1B: Factors Affecting Reaction Rate

### 1 Purpose

### 2 Procedure

### 3 Data/Observations

Table 1: Change in Mass Over Time of an Open  $\text{CaCO}_3(\text{s})$  and  $\text{HCl}(\text{aq})$  Reaction.

Initial Parameters			Total Mass Change Over Time		
Parameter	Test 1	Test 2	Time	Test 1 Mass (g)	Test 2 Mass (g)
Concentration HCl (M)	1.0	3.0	0:00	28.5	46.1
Mass HCl (g)	17.9	32.5	0:30	28.3	46.0
Mass $\text{CaCO}_3$ (g)	10.6	13.7	1:00	28.3	45.8
Mass Total (g)	28.5	46.2	1:30	28.2	45.6
			2:00	28.1	45.4
			2:30	28.0	45.3
			3:00	28.0	45.1
			3:30	27.9	45.0
			4:00	27.9	44.9
			4:30	27.9	44.9
			5:00	27.8	44.8

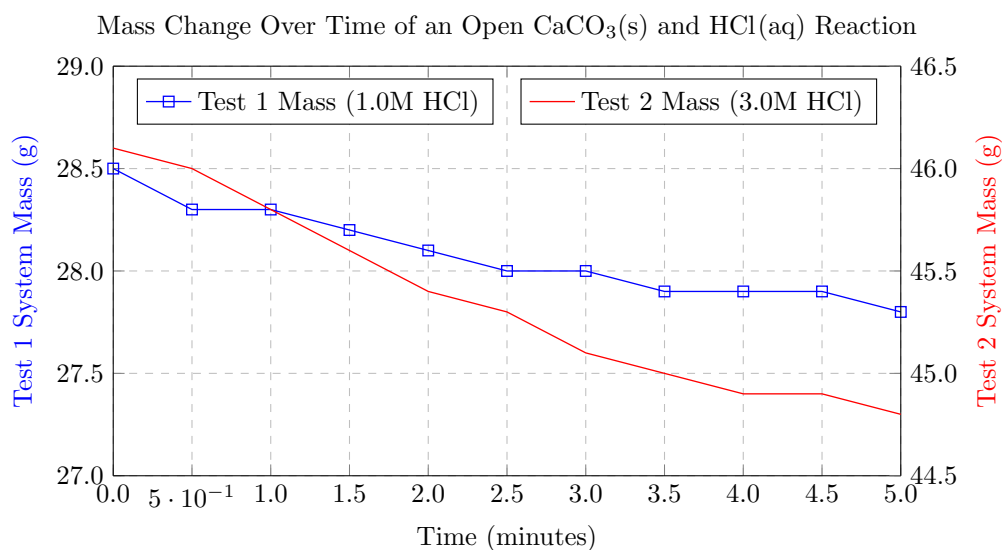


Figure 1: Mass decay of  $\text{CaCO}_3(\text{s})$  and  $\text{HCl}(\text{aq})$  reaction system over time with dual y-axes

**4 Analysis**

**5 Conclusion**