

First and Last Name: \_\_\_\_\_

Student ID Number: \_\_\_\_\_

TA: \_\_\_\_\_

Lab Section: \_\_\_\_\_

Date Performed: \_\_\_\_\_

Vernier #: \_\_\_\_\_

### NaOH solution preparation

- Please record the NaOH stock solution concentration as reported on the bottle.  
Check the ambient (room) temperature  $T_1$  in the lab (look for digital thermometers on the white columns in the middle on each side of the lab) and record it in  $^{\circ}\text{C}$ .

NaOH stock solution (solution A) concentration, M	
$T_1, ^{\circ}\text{C}$	

- Calculate the concentrations of your NaOH solutions **B** and **C** by using  $C_1V_1=C_2V_2$  formula and the report the values with the correct number of significant figures and proper units.

Dilution 1: preparation of solution B			
$V_1$ (mL) =	$V_{\text{H}_2\text{O}}$ (mL) =	$V_2$ (mL) =	$C_1$ (M) =
Calculation:  $C_2$ =			
Solution B concentration (M):			
Dilution 2: preparation of solution C			
$V_1$ (mL) =	$V_{\text{H}_2\text{O}}$ (mL) =	$V_2$ (mL) =	$C_1$ (M) =

Calculations:

$C_2 =$

**Solution C concentration (M):**

### Rate of Reaction

- Record a corresponding NaOH concentration for each run

Run #	NaOH concentration

- What did you observe during the data acquisition? Did all the reactions have similar reaction rate? If not, did you observe any trend related to changes in NaOH concentration?