## CLASS COPY-CLASS COPY-CLASS COPY <br> Mixing Water Lab

Lab Objective: to make predictions, measure volume and temperature, and gain experience using lab equipment.

## **EQUIPMENT:

2 thermometers
2 graduated cylinders (to measure water)
1 plastic beaker (warm water)
1 glass 200 ml beaker (cool water)
1400 ml beaker (to mix water)

## **PROCEDURE:

1. Copy data table

2. Set up equipment
3. Measure cold water into one graduated cylinder (see data table)
4. Measure hot water into another graduated cylinder (see data table)
5. Take the temperature of cool water using one thermometer, Record
6. Take the temperature of warm water using the other thermometer, Record
7. Predict temp of the mixed water and Record on data table
8. Mix the warm and cold water, as indicated in data table, measure the temperature and Record results in data table

EACH PERSON HAS THEIR OWN DATA TABLE
THE WATER IS VERY WARM, BE CAREFUL WHILE POURING
When finished clean up area and return equipment.

| Amount of water | Temp of Cool <br> $\bullet$ © | Temp of Warm <br> $\bullet$ © | Predict Temp <br> of MIXED | Actual Temp of <br> MIXED |
| :--- | :---: | :---: | :---: | :---: |
| 40 mL cool <br> 40 mL warm | $\mathbf{X X}$ | $\mathbf{X X}$ | $\mathbf{X X}$ | $\mathbf{X X}$ |
| 30 mL cool <br> 50 mL warm | $\mathbf{X X}$ | $\mathbf{X X}$ | $\mathbf{X X}$ | $\mathbf{X X}$ |
| 20 mL cool <br> 50 mL warm | $\mathbf{X X}$ | $\mathbf{X X}$ | $\mathbf{X X}$ | $\mathbf{X X}$ |
| 10 mL cool <br> 40 mL warm | $\mathbf{X X}$ | $\mathbf{X X}$ | $\mathbf{X X}$ | $\mathbf{X X}$ |
| Your choice <br> Record on table | $\mathbf{X X}$ | $\mathbf{X X}$ | $\mathbf{X X}$ | $\mathbf{X X}$ |
| Your choice <br> Record on table | $\mathbf{X X}$ | $\mathbf{X X}$ | $\mathbf{X X}$ | $\mathbf{X X}$ |

