## CP ADVANCED CHEMISTRY <br> EXPERIMENT NUMBER \#3 <br> SEARCHING FOR REGULARITY

NAME
SECTION __ DATE
NAME OF LAB PARTNER

## OBJECTIVE:

To observe mathematical and graphical relationships between mass and volume

## PROCEDURE:

1. Mass a metal object to the nearest 0.01 g .
2. Fill a graduated cylinder to the 30.0 ml mark with water.
3. Carefully add the metal object to the water and record the water displacement.
4. Record data on your data table.
5. Repeat these steps for the other metal objects.
6. Obtain mass and volume data from other members of the class.
7. Plot average mass and volume. Record mass along the vertical axis and volume along the horizontal axis. Give the graph a title.
8. State the regularity and propose an explanation for what you observed on your graph.
9. Draw lines to represent the mass-volume relations.

## DATA:

| Object Number | Mass (g) | Volume (ml) |
| :---: | :---: | :---: |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
| 9 |  |  |
| 10 |  |  |
| 11 |  |  |
| 13 |  |  |
| 14 |  |  |

