# **Salinity Effects on Density**

**HYPOTHESIS**:

***When salinity is reduced by half, the density will...***

**MATERIALS**:
Hydrometer 250 ml graduated cylinder 4% salt solution

Calibration cylinder 100 ml graduated cylinder Pipette

**PROCEDURE**:

1. Calibrate Hydrometer
2. Measure ~230-250 ml of 4% salt solution into 250 ml graduated cylinder.
3. Record density of 4% salt solution on data table.
4. Save exactly 100 ml of 4% salt solution and discard the rest. Pour it back into the 250 ml cylinder.
5. Measure exactly 100 ml of fresh water and add to reserved salt

water in 250 ml cylinder. This solution is now a \_\_\_\_\_\_% salt solution**.**

1. Check calibration of hydrometer
2. Record density of the new salt solution on data table.
3. Repeat 4-7 for one more salt solution. It is a \_\_\_\_\_\_\_% salt solution.
4. Rinse out 250 ml container and fill with fresh water. This solution

is a \_\_\_\_\_\_\_% salt solution.
5. Measure and record the density of the fresh water..

**DATA:**

1. Which variable is the INDEPENDENT variable? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Which variable is the DEPENDENT variable? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Create a two column data table that includes the correct units)

**DATA ANALYSIS:**