

## The Effects of Salinity

### Problem

How does salinity affect the physical characteristics of water?

### Materials:

Water	graduated cylinder
Salt	digital balance
Hot plate	stirring stick
Beaker	thermometer

### Effects on Density:

1. Measure a volume of 100mL of water. Calculate it's mass also.
2. Calculate the density of water.
3. Measure a mass of 7g of salt.
4. Dissolve the salt into the water by stirring.
5. Calculate the density of the salt water.

### Effects on Boling Point:

1. Place 25ml of the salt water solution into a glass beaker
2. Heat the water until it boils.
3. Record the temperature at which it boils.

### Mass of recovered salt:

1. Continue boiling the salt water solution until all the water has evaporated.
2. Measure the mass of the crystallized salt that is left.
  - a. **NOTE – Do NOT put a hot beaker on the digital scale.**

### Questions:

1. What is the density of water?
2. What changes did you note in the density of salt water?
3. What is the boiling point of water?
4. What was the boiling point of salt water solution?
5. How does salinity affect boiling point and density?
6. What percent of salinity was the salt water solution?
7. How much salt was recovered after boiling?
8. Was the amount of salt recovered expected? Why or Why not?