

Name: \_\_\_\_\_

Per: \_\_\_\_\_

## Salt and Sand Lab

II. Purpose: To separate a known amount of salt from a salt/sand mixture.

III. Procedure:

1. Tare a weighing boat and add about 1 gram of salt. Remove from balance
2. Weigh a 50 mL beaker. Record mass
3. Add salt to beaker
4. Reweigh beaker with salt. Record mass
5. Mix a pinch of sand to salt in beaker
6. Measure between 19 & 20 mL of tap water. Record the volume.  
Dissolve the salt in the water
7. Weigh an evaporating dish and watch glass. Record mass
8. Set up a filter to separate the salt water from the sand
9. Filter the salt water into the evaporating dish
10. Remove the water from the salt by boiling in a covered evaporating dish
11. **Once cool**, reweigh the dish and glass with the recovered salt. Record mass
12. Clean up and return watch glass

IV. Data

1. mass of beaker= \_\_\_\_\_
2. mass of beaker + salt = \_\_\_\_\_
3. volume of water: \_\_\_\_\_
4. mass of evap. dish and watch glass = \_\_\_\_\_
5. mass of evap. dish / watch glass + salt = \_\_\_\_\_

V. Calculations

1. Initial mass of salt

2. Mass of salt recovered

3. Percent Error

## VI. Conclusion

1. Why did we measure the mass of the beaker and the mass of the evaporating dish/watch glass by themselves?

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2. When you measured the volume of the water, what rule did you use to determine how many decimal places of accuracy to record? How is this then reflected in the data you wrote down? When you measured the mass of the beaker, what rule did you use to determine how many decimal places of accuracy to record? What, then, is the general principle when deciding how to estimate measurements taken in lab?

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