

# Separating Salt and Sand to Recover Both

Name \_\_\_\_\_ Period \_\_\_\_\_



## A Background Information: Learn and use the "S-words" for Separations and Solutions.

Sand is SiO<sub>2</sub> or S \_\_\_\_\_ dio \_\_\_\_\_. Salt is NaCl or s \_\_\_\_\_  
Salt is \_\_\_\_\_ (soluble/insoluble) in water. Sand is \_\_\_\_\_ in water.

To separate a soluble substance from an insoluble substance, dissolve the \_\_\_\_\_ substance in a solvent (usually water) and then filter out the \_\_\_\_\_ substance.  
Evaporate the \_\_\_\_\_ to recover the soluble substance.

### "S- Words"

- Solvent
- Solute
- Soluble
- Insoluble
- Salt
- Silicon Dioxide
- Sodium Chloride

## B. The Procedures or steps of the Separation Process:


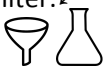
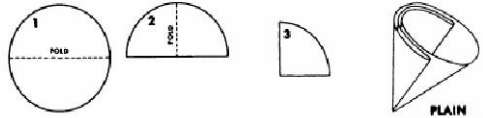
These are **NOT** in the correct order.

Fill in and number to correct the order.

- # \_\_\_\_\_ Evaporate the \_\_\_\_\_ to get the \_\_\_\_\_
- # \_\_\_\_\_ Obtain sand and salt on a dry paper towel.
- # \_\_\_\_\_ Filter out the \_\_\_\_\_ using a paper filter
- # \_\_\_\_\_ Dissolve the \_\_\_\_\_ in \_\_\_\_\_ in a beaker.

## C. The Lab: Write the steps (from above) in order.

### D. Label parts and actions to do.

<p># 1. _____</p>	<p>#2. _____</p> <p>___ a) Stirring helps. Use a stirring straw.</p> <p>___ b) Use the water you need, but <b>more water takes longer</b> to filter and evaporate</p> 
<p>#3. _____</p> <p>___ a) ↓ First fold a paper circle to make a filter. ✓</p> <p>___ b) A wet funnel helps hold the paper. </p> <p>___ c) Use a flask to hold your funnel.</p> <p>___ d) Have your filter checked. <input style="width: 100px;" type="text"/></p> 	<p>#4. _____</p>

Lab Check \_\_\_\_\_

\_\_\_ E. Let your filter dry on a paper towel with your name. **Return the sand to your teacher for points** \_\_\_\_\_

\_\_\_ F. **Ask...** Label a plastic dish with your name. Use it to evaporate water. Slower = crystals of NaCl. Get points later.