SNC1D Name:_____

Activity: *Getting to Know Your Lab*

Part A:
Fill in the table by naming the piece or pieces of equipment that you would use to perform each of the following laboratory procedures. For a list of all equipment, see text pg. 537.

	Laboratory Procedure	**Equipment**
1	Add 9.0 mL of water.	
2	Weigh 3.25 g of solid sugar.	
3	Filter solid calcium chloride out of solution.	
4	Heat up a solution in a beaker.	
5	Transfer a test tube from a boiling hot water bath to an ice bath.	
6	Examine individual onion cells.	
7	Mix two chemicals by swirling vigorously.	
8	Arrange 10 test tubes during an experiment.	
9	Mix two chemicals together in a beaker.	
10	Measure the volume of a piece of metal.	

Part B:
Follow the procedure below and choose the most appropriate equipment for each step.

1. Measure 90.0 mL of water.

   Equipment used: _____

2. On a piece of notebook paper, weigh exactly 4.25 g of salt (*sodium chloride, NaCl*).

   Equipment used: _____

3. Calculate the volume of the salt given that it has a density of 2.00 g/mL.

   Volume of salt: _____

4. Based on your measurements, if you added the volume of the salt to the volume of water, what should the total volume be?

Total Volume of salt + water: _____

5. Mix the salt and water in an appropriate container. Ensure all salt crystals are dissolved.

Name of Container used for mixing:_____

6. Once no visible salt crystals remain, accurately measure the volume of the final solution and record it below.

Equipment used to measure volume:_____

Final Volume: _____

Questions:

1. Was your prediction in step 4 accurate? If not, give a possible explanation.

2. If the final solution was heated to 75 C, would you expect its volume to increase, decrease or stay the same? Give a brief explanation. (hint: consider what happens to particles when they are heated or cooled)