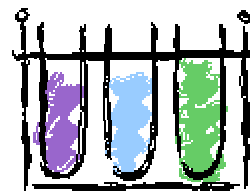# Rainbow Lab

LP: _____**Date**_____

Objectives:
1. to develop skills measuring chemicals with a graduated cylinder.
2. to practice using the metric system.
3. to test precision and ability to follow directions.
4. to practice lab safety procedures.

Procedure: Part 1 :
1. Label 6 test tubes in order: **A, B, C, D, E & F.**
2. **Fill a beaker half full with water.** Use this to *__rinse__* your graduated cylinder and test tubes.
3. The second beaker is for contaminated waste water.
4. Into test tube A, measure **25 mL** of **RED** liquid.
5. Into test tube C, measure **17 mL** of **YELLOW** liquid.
6. Into test tube E, measure **21 mL** of **BLUE** liquid.

Part 2:
1. From test tube **C**, measure 4 mL and pour into test tube **D**.
2. From test tube **E**, measure 7 mL and pour into test tube **D**. Swirl.
3. From test tube **E**, measure 4 mL and pour into test tube **F**.
4. From test tube **A**, measure 7 mL and pour into test tube **F**. Swirl.
5. From test tube **A**, measure 8 mL and pour into test tube **B**.
6. From test tube **C**, measure 3 mL and pour into test tube **B**. Swirl.
7. **SAVE** your results . **Measure** the contents of each test tube and record how many mL were found in each test tube.
8. Answer questions.

Data : **Table 1 : Test Tube Results**

Test Tube	Color of Liquid	Amount of Liquid mL
A		
B		
C		
D		
E		
F		
	Total liquid Test Tubes A-F	**mL**

Analysis/Results:

1. Name the colors that you created.

   _____
   _____
   _____

2. How many mL of liquid were in each test tube at the **start** of this lab?

   _____
   _____

3. Why is it important to follow directions **exactly**?

   _____
   _____
   _____

4. What would have happened if your measurements were not correct?

   _____
   _____
   _____

5. Look at your hands. Do **you** have any **stains** on your hands? If so, those stains represent chemicals that would be on your skin right now!

   _____
   _____

6. How many **TOTAL** mL of liquid did you have at the **end** of the lab? _____**mL**
   How many **should** you have? _____**mL**

7. What are some **reasons** why you may have more or less than when you started?

   _____
   _____
   _____
   _____

Conclusion: 2-3 sentences on what you learned.

_____
_____
_____
_____
_____
_____