***Rainbow Lab*** 

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_**

***I can…***

*1. measure chemicals with a graduated cylinder.*

*2. use the metric system.*

*3. follow directions.*

*4. practice lab safety procedures.*

**Procedure:
Part 1 :**

1.Label 6 test tubes in order: **A, B, C, D, E & F.**

2. Locate your rinse beaker. You will use this to rinse your graduated cylinder.

3. Locate your waste water. You will use this to dispose of contaminated liquid.

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**, using a **pipette**, measure 4 mL and pour into test tube **D**.

2. From test tube **E**, using a **pipette**, measure 7 mL and pour into test tube **D**. Swirl.

3. From test tube **E**, using a **pipette**, measure 4 mL and pour into test tube **F**.

4. From test tube **A**, using a **pipette**, measure *7* mL and pour into test tube **F**. Swirl.

5. From test tube **A**, using a **pipette**, measure 8 mL and pour into test tube **B**.

6. From test tube **C**, using a **pipette**, 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. You can do this by pouring them back into the graduated cylinder.

8. Answer the questions.

|  |
| --- |
| **Data Table 1 : Test Tube Results Test Tube**  |
| **Test tube** | **Color of Liquid**  | **Amount of Liquid mL** |
| **A**  |  |  |
| **B**  |  |  |
| **C**  |  |  |
| **D**  |  |  |
| **E**  |  |  |
| **F**  |  |  |
|  | **Total liquid Test Tubes A-F** (add them up) | **mL** |

**Analysis/Results:**

1. Name the colors that you created (NOT red, blue, or yellow). \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. How many mL of liquid were in each test tube at the **start** of this lab?
Test tube A\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Test tube C\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Test tube E\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Why is it important to follow directions **exactly**? Use a complete sentence.

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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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! ( yes / no )

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

How many **should** you have? (add up the bold numbers in the procedure) \_\_\_\_\_\_\_\_\_\_\_\_**mL**

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

**Conclusion:** 2-3 COMPLETE sentences on what you learned.

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