

Measurement and Accuracy Worksheet

Instructions

- Measure 25 mL of solution from beaker A using a graduated cylinder. Pour into tube 1.
- Measure 28 mL of solution from beaker B using a clean graduated cylinder. Pour into tube 3.
- Measure 22 mL of solution from beaker C using a clean graduated cylinder. Pour into tube 5.
- Pour 8 mL of solution from tube 3 into a graduated cylinder and add it into tube 4.
- Pour 7 mL of solution from tube 5 into a graduated cylinder and add it into tube 4. Mix the solution by swirling the tube.
- Pour 10 mL of solution from tube 1 into a graduated cylinder and add it into tube 2.
- Pour 5 mL of solution from tube 3 into a graduated cylinder and add it into tube 2. Mix the solution by swirling the tube.

Data Table

Test Tube	Color	Volume
1		mL
2		mL
3		mL
4		mL
5		mL

Post-Lab Questions

1. Summarize the results of this activity in a few sentences.

2. Re-read the demonstration instructions above. Predict the volume of water that should have been obtained in each tube and the color of each resulting solution.

3. What are likely sources of experimental error in this activity? Describe how they would have affected the results.

4. A student measured 25 mL of water in a small beaker and transferred it into a graduated cylinder. The volume was 25.6 mL. Explain in terms of accuracy and precision.