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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.

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

Data Table

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.

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