

Lab Activity

Materials Needed

- 1.5 mL microcentrifuge tube
- Tube Rack
- Water
- Food coloring
- Parafilm or wax paper
- p2, p20, p200, and p1000 micropipettes
- Pippete tips
- Waste cup
- Ruler

Classroom Preparation:

- Review the Getting Started section on how to properly use a micropipette.
- Make a stock solution of water mixed with a few drops of food coloring. Aliquot at least 1 ml of the colored water into each microcentrifuge tube.
- Provide each lab station with at least one tube of colored water and a few squares of Parafilm, or wax paper.

Lab Activity:

Complete each step and record observations below. Change out tips – and possibly micropipettes – between each step.

STEP 1:

Place a piece of Parafilm, along with the paper overlay, wax side down on the bench. Use a blunt object, such as a coin or tip of a pen, to gently rub lines across the Parafilm until it is loosely attached to the bench. Remove the paper overlay. If using wax paper, cut out a flat piece of paper and use lab tape to secure to bench top.

STEP 2:

Transfer 2 ul of the liquid onto the Parafilm. Use a ruler to measure the size of the droplet and shade in the pipet tip to indicate relative volume.



Micropipette used: _____

Tip size used: _____

Diameter of the 2 ul drop: _____

STEP 3:

Transfer 20 ul of the liquid onto the Parafilm. Use a ruler to measure the size of the droplet and shade in the pipette tip to indicate relative volume.



Micropipette used: _____

Tip size used: _____

Diameter of the 20 ul drop: _____

STEP 4:

Transfer 200 ul of the liquid onto the Parafilm. Use a ruler to measure the size of the droplet and shade in the pipette tip to indicate relative volume.



Micropipette used: _____

Tip size used: _____

Diameter of the 200 ul drop: _____

STEP 5:

Transfer 500 ul of the liquid onto the Parafilm. Shade in the pipette tip to indicate relative volume.



Micropipette used: _____

Tip size used: _____

Diameter of the 1000 ul drop: _____