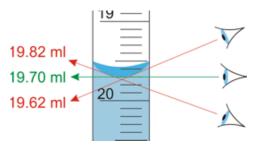
# **Measuring Volume Lab**

# How to read a graduated cylinder:

- 1. Read the cylinder at eye level, to get an accurate reading.
- 2. Measure the volume at the lowest point of the meniscus.
  - a. In image here, 19.70 mL is the correct measure; the view is level and straight across from the bottom of the meniscus.



# **OBJECTIVES**

• to practice measuring liquids with a graduated cylinder

# MATERIALS

- 6 test tubes Labeled: A, B, C, D, E & F
- test tube rack
- 50 mL cup with Red liquid
- 50 mL cup with Blue liquid
- 50 mL cup with Yellow liquid
- 5 25 mL graduated cylinder (LARGE)
- 2 10 mL graduated cylinder (SMALL)

## PROCEDURE

#### To COMPLETE this lab, WATCH the Volume Measurement Lab VIDEO (16:40)

https://www.youtube.com/watch?v=jixLuWnet\_c&t=5s

 $\ensuremath{^*}\xspace$  this document had been adapted from the original used in the video

## Part 1: Use the LARGE cylinder for the next 3 measurements.

- Measure 25 mL of RED liquid, pour into test tube A
- Measure 17 mL of YELLOW liquid, pour into test tube C
- Measure 21 mL of BLUE liquid, pour into test tube E

## Part 2: Use the SMALL graduated cylinder for the following measurements.

- 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.
- 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.
- 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**.
- 7. Measure EACH of your tubes using the graduated cylinder and write down the volume you have in each test tube.

Data Table on next page

# DATA/RESULTS

Test Tube	Color of Liquid	Amount of Liquid (mL)
А		
В		
C		
D		
E		
F		
	Total liquid Test Tubes A-F	

# **ANALYSIS QUESTIONS**

- 1. What would have happened if you did NOT follow the directions **exactly**?
- 2. Give 2 reasons why it is important to be able to accurately measure out liquids.