

Quantitative Analysis is performed when

Measuring Mass

Tare:

Weighing by difference:

Analytical Balance

Measured in g

Measured in mg

To calibrate:

- Check the leveling bubble before taring.

Top Loading Balance

Measuring Volume

TD vs. TC

To calibrate:

Uncertainty in measurement

as volume

Pipet

To rinse:

Class A Transfer pipet

Mohr (measuring) Pipet

Micropipettor

- Don't blow the liquid out with your pipet bulb. Let gravity do its job, then touch the tip of the pipet into your container.

Buret

To Rinse:

- Check stopcock:
- Be consistent in your readings
- Dispense any **air bubble** before taking your first reading

Volumetric Flask

- Don't ever put a stirring bar in a volumetric flask. Never ever. Why?

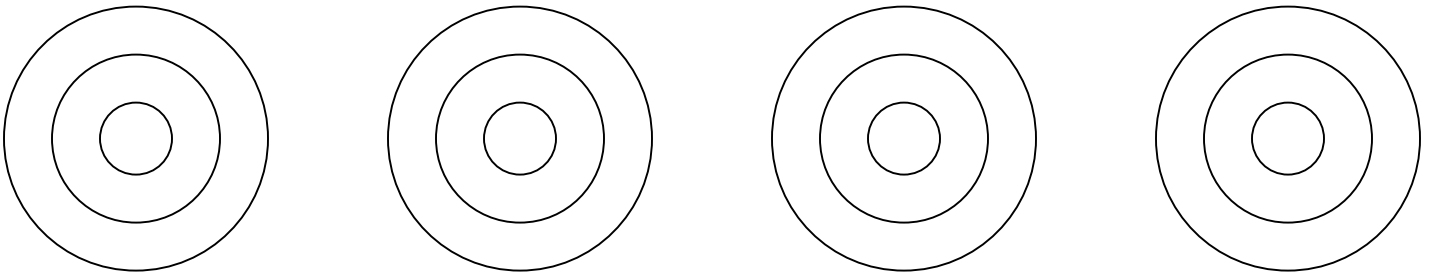
Then how do you mix something in a volumetric flask?

Graduated Cylinder

Syringe

Rule of thumb for reading volume with gradations

Accuracy and Precision



Calculations for Evaluation of Data

Mean

Median

Range

Standard Deviation

Relative Standard Deviation

To ***calibrate*** a piece of glassware or other measurement instrument means

Pipet Calibration Factor

A ***primary standard*** is

To ***standardize*** a solution means

Homework: Complete “First Day Worksheet” on class website, turn in on Thursday, August 23.
For more problems to “refresh your memory”, do Chapter 1 #11, 13, 15, 16, 19