

Buret/Balance Tips

Balance Rules:

- 1 Tare balance to read 0.000 gm before weighing.
Circular plastic windscreens are helpful to obtain a steady reading.
If balance only displays to ± 0.01 gm, press the tare several times to reset to ± 0.001 gm.
Masses above ~ 150 gm will cause this to occur.
- 2 Never transfer chemicals to containers which are resting on the balance pan.
Remove container from balance, add chemicals, then reweigh.
- 3 Always use the same balance for all weighings, to minimize calibration errors.
- 4 Clean up any spills immediately.

Buret Technique

- 1 Check tip and top of buret for chips. Return if damaged. Fill buret with water and check that valve does not leak.
- 2 Clean buret with soapy water and a buret brush so that no droplets cling to interior when drained. Do not add concentrated dish soap directly to buret.
- 3 Lower buret so top is below eye level and use a funnel for filling.
- 4 For titrations, rinse and drain buret twice with 1-2 ml of standardized solution before filling completely with standard to avoid dilution.
- 5 Open valve fully and drain briefly into a beaker to remove air bubbles from tip.
- 6 Take initial reading to ± 0.01 ml with eye level with bottom of meniscus to avoid parallax error, using a dark surface placed below and behind the meniscus for ease of reading.
All readings should be read and recorded to ± 0.01 ml, even if they land exactly on a line, (eg. 1.00 ml instead of just 1 ml).
- 7 Use a sheet of white paper under flask to improve visibility of indicator color change.
- 8 Titrate carefully, with swirling, so that color change occurs after 1 additional drop.
Record final buret volume to 0.01 ml.
- 8 If in doubt about endpoint, record buret reading, add 1 more drop and observe color again.
- 9 When finished, drain buret and rinse with water, then inspect for chips. Return to stockroom.