

## Lab Equipment

AP Chemistry

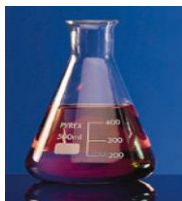
### Beakers

- Used to contain, not measure
- Many sizes
  - 1000 mL
  - 600 mL
  - 400 mL
  - 250 mL
  - 100 mL
  - 50 mL



### Erlenmeyer Flasks

- Used to contain not measure.
- Many sizes
  - 2000 mL
  - 100 mL
  - 500 mL
  - 250 mL
  - 125 mL
  - 5 mL
- Why not just use a beaker?!



### Florence Flasks

- Used in organic chemistry for distillation procedures
- Cousin of the round bottom flask...



### Filtering Flask

- Used for vacuum filtration with funnel and filter paper or other specialized funnel



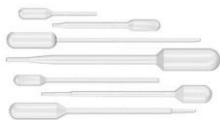
### Test Tubes



For testing things...

## Disposable Transfer Pipets

- Used to transfer liquid, not to measure
- Sometimes have volume increments on them...silly biologists



## Eudiometer

- Measures amount of displaced water/gas
- Can be used to measure the pressure of collected gas over water
- 50 mL
  - Increments of 0.1 mL
  - Read to 4 sig figs



## Volumetric Flask

- Used to accurately measure a single volume when preparing solutions
- TC vs TD
- Many sizes
  - 1000 mL
  - 500 mL
  - 250 mL
  - 100 mL
  - 50 mL
  - 10 mL
  - 5 mL
  - 1 mL



## Graduated Cylinders

- Measures volume (mL)
- Many sizes with varying degree of uncertainty
  - 1000 mL – increments of 10 mL
  - 500 mL – increments of 5 mL
  - 100 mL – increments of 1 mL
  - 50 mL – increments of 1 mL
  - 10 mL – increments of 0.2 mL



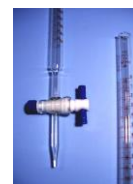
## Volumetric Pipets

- Measure a single volume – higher accuracy, especially for smaller volumes or analytical chem
- Use with bulb to draw liquid up
  - 20 mL
  - 10 mL
  - 5 mL
  - And more!



## Buret

- For titrations (used to determine concentration of an unknown solution using a solution of known concentration)
- 50 mL
  - Increments of 0.1 mL
  - Read to 4 sig figs



## Thermometer

Increments of 1 degree Celsius  
Read to 3 sig figs

- Mercury Thermometer (Banned in schools by CDPHE)



- Alcohol Thermometer



## Balances

- General electronic balances with a variety of uncertainties and maximum masses
- Analytical Balance
  - Read to the thousandth place
  - Very sensitive to air/pressure changes and vibrations (ours is unreliable)



## Clamps and Tongs

- For picking up hot stuff, such as
  - Beakers
  - Test tubes
  - Crucibles
  - Evaporating dishes
  - AND MORE



## Others

- Brushes



- Spatula



- Scoops



- Wire Gauze



## Others

- Clay Triangle



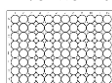
- Evaporating Dishes



- Mortar and Pestle

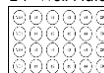


- 96- Well Plate



## Others

- 24- Well Plate



- Dropper



- Watch Glasses



- Ring Clamp



## Others

### Ring Stand



### Utility Clamp



## Funnels

### Separatory



### Long Stem



### Short Stem



### Powder

