

Review Sheet – Unit 1

Introduction and Measurement

- Scientific method and types of research
- Definition of analytical chem., methods of analysis, steps in analysis
- SI system, including prefixes from Giga to nano
- Conversion between units of measurement, derived units
- Accuracy/Precision
- Significant figures
- Concentration units
 - Molarity/molality
 - % by weight/% by volume
 - ppm/ppb
 - dilution equation

Techniques

- Safety
- Equipment: filtering, pipets, burets, volumetric flask

Define the following terms:

1. % by volume
2. % by weight
3. Aliquot
4. Analyte
5. Aqueous
6. Atomic mass
7. Calibration curve
8. Composite sample
9. Concentration
10. Decant
11. Density
12. Electrolyte
13. Equilibrium
14. Heterogeneous
15. Homogeneous
16. Interference
17. LeChatlier's principle
18. Molality (m)
19. Molarity (M)
20. Mole
21. Molecular mass
22. Ordinate
23. Parts per billion
24. Parts per million
25. Qualitative analysis
26. Quantitative analysis
27. Random sample
28. Sampling
29. SI unit
30. Solute
31. Solvent
32. Standard solution
33. Supernatant
34. Systemic error