

CHM 100 UNIT 9 NOTES: SOLUTIONS & ACID-BASE REACTIONS  
SUGGESTED READING: CRACOLICE/PETERS - CHAPTERS 16, 17  
WORK ON PRACTICE PROBLEMS

OBJECTIVES FOR UNIT 9

AQUEOUS SOLUTIONS

1. IONIC COMPOUNDS DISSOLVED IN WATER  
HYDRATED IONS
2. COVALENT COMPOUNDS DISSOLVED IN WATER  
SOLVATED COMPOUNDS  
IONIZATION

SOLUTION TERMINOLOGY

SOLUBILITY  
UNSATURATED  
SATURATED  
SUPERSATURATED  
CRYSTALLIZATION

FORMATION OF A SOLUTION

HYDRATED COMPOUNDS  
HYDRATES

SOLUTION CONCENTRATION

PERCENT BY MASS  
MOLARITY  
SOLUTION BY DILUTION

ACID-BASE TITRATION

TITRATION  
BURET  
TITRANT  
INDICATOR  
PHENOLPHTHALEIN  
EQUIVALENCE POINT  
STANDARDIZATION

CALCULATIONS INVOLVING NEUTRALIZATION REACTIONS

REVIEW NAMING ACID MOLECULES

REVIEW NEUTRALIZATION REACTIONS

DEFINITIONS OF ACIDS AND BASES

ARRHENIUS THEORY OF ACIDS AND BASES  
BRONSTED-LOWRY THEORY OF ACIDS AND BASES

STRONG AND WEAK ACIDS

STRONG AND WEAK BASES

THE WATER EQUILIBRIUM & pH AND pOH

SOME TERMS

pH METER  
INDICATORS  
HYDRION PAPER  
LITMUS PAPER