Mountain View Academy

All children deserve to belive in themselves…

Chemistry-20 Year Plan, Fall 08/09			
Units	**Topics**	**Key Concepts**	**Dates**
A	Matter as Solutions, Acids and Bases	- Homogeneous mixtures - Solubility - Electrolyte/non-electrolyte - Concentration - Dilution - Strong acids and bases - Weak acids and bases - Monoprotic/ polyprotic acid and base - Arrhenius (modified) theory of acids and bases - Indicators - Hydronium/pH - Hyroxide/pOH - Neutralization	Sept 2 to Oct 10
B	Quantitative Relationships in Chemical Changes	- Chemical reaction equations - Net ionic equations - Spectator ions - Reaction stoichiometry - Precipitation - Limiting and excess reagents - Actual, theoretical and percent yield - Titration - End point - Equivalence point - Titration curves for strong acids and bases	Oct 14 to Nov 21

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C	Forms of Matters: Gases	- Celsius and Kelvin temperatures scales - Absolute zero - Real and ideal gases - Law of combining volumes - Charles's law - Boyle's law - Ideal gas law - Standard temperature and pressure (STP) - Standard ambient temperature and pressure (SATP)	Nov 25 to Dec 12

D	The Diversity of Matter and Chemical Bonding	- Chemical bond - Ionic bond - Covalent bond - Electronegativity - Polarity - Valence electron - Intramolecular and intermolecular forces - Hydrogen bond electron dot diagrams - Lewis structures - Valence-shell electron-pair repulsive (VSEPR) theory	Dec 15 to Jan 16