



Franklin County School

# Chemistry I –Honors

Course Code: 2003350

| Semester 1<br>Instructional Units & Standards Focus                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Semester 2<br>Instructional Units & Standards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                           |
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| Quarter 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Quarter 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quarter 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Quarter 4                                                                                                                                                                                                                                                                                                                                 |
| <b>Nature of Science and Measurement</b><br><b>Dimensional Analysis</b><br>SC.912.N.1.2<br>SC.912.N.1.6<br>SC.912.N.1.7<br>SC.912.N.2.4<br>SC.912.N.3.2<br>SC.912.N.3.3<br><br><b>Matter and Energy</b><br>SC.912.P.8.1<br>SC.912.9.10.1<br><br><b>Physical and Chemical Properties and Changes of Matter Classification of Matter</b><br>SC.912.P.8.1<br>SC.912.P.8.2<br>SC.912.P.10.5<br>SC.912.P.10.7<br><br><b>Atomic Theory</b><br>SC.912.P.8.2<br>SC.912.P.8.3<br>SC.912.P.8.5<br><br><b>Atomic Structure</b><br>SC.912.P.8.3<br>SC.912.P.8.4<br><br><b>Classifying Atoms: Avg. Atomic Mass, Atomic #, Isotopes; Dimensional Analysis</b><br>SC.912.P.8.4<br>SC.912.P.8.9 | <b>Electromagnetic Spectrum and Applications, including Wavelength, Frequency, Energy</b><br>SC.912.P.8.4<br>SC.912.P.10.18<br><br><b>Energy Quantization at Atomic Level: Electrons in the Atom</b><br>SC.912.P.8.4<br>SC.912.P.8.5<br>SC.912.P.10.9<br><br><b>The Periodic Table and Trends</b><br>SC.912.P.8.2<br>SC.912.P.8.3<br>SC.912.P.8.5<br><br><b>Bonding: Formulas and Naming; Molecular Geometry, Forces</b><br>SC.912.P.8.2<br>SC.912.P.8.6<br>SC.912.P.8.7<br>SC.912.P.8.9 | <b>Chemical Equations and Types of Reactions</b><br>SC.912.P.8.2<br>SC.912.P.8.8<br>SC.912.P.10.12<br><br><b>Stoichiometry: Empirical and Molecular Formulas, % Comp, % Yield, Limiting and Excess Reactants</b><br>SC.912.P.8.9<br><br><b>Factors That Affect Reaction Rates: Equilibrium</b><br>SC.912.P.10.1<br>SC.912.P.10.5<br>SC.912.P.10.6<br>SC.912.P.10.7<br>SC.912.P.10.12<br>SC.912.P.10.13<br><br><b>Kinetic Molecular Theory &amp; Properties of Water</b><br>SC.912.P.8.1<br>SC.912.P.8.2<br>SC.912.P.10.7<br>SC.912.P.12.11<br>SC.912.P.12.13<br>SC.912.P.18.12 | <b>Solutions and Calculations</b><br>SC.912.P.12.13<br><br><b>Acids and Bases Including Calculations</b><br>SC.912.P.8.<br>SC.912.P.8.11<br><br><b>Nuclear Reactions and Calculations Half-Life and Decay</b><br>SC.912.P.10.12<br><br><b>Gas Laws and Calculations</b><br>SC.912.N.3.3<br>SC.912.P.12.10<br><br><b>Organic Chemistry</b> |