

## KS4 Chemistry – Year 10

|  | Topics Covered  | Assessment   |
|--|---|--|
| <b>YEAR 10 AUTUMN TERM</b><br>Weeks – 1-15<br>5 <sup>th</sup> September – 21 <sup>st</sup> December 2016 | ATOMIC STRUCTURE AND THE PERIODIC TABLE<br>- Simple models of the atom<br>- Symbols<br>- Relative atomic mass<br>- Electronic charge<br>- Isotopes<br>- The periodic table<br>- Properties of transition metals<br><br>BONDING AND STRUCTURE<br>- Chemical bonds, ionic, covalent and metallic<br>- Bonding and the properties of substances<br>- Bulk and surface properties of matter including nanoparticles | Graded homework<br>In-class assessments<br>Formal PT1 examination                |
| <b>Year 10 Spring Term</b><br>Weeks – 16-26<br>9 <sup>th</sup> January – 31 <sup>st</sup> March 2017     | QUANTITATIVE CHEMISTRY<br>- Chemical measurements<br>- Conservation of mass<br>- Yield and atom economy<br>- Quantitative interpretation of chemical equations<br>- Using concentrations in mol/dm <sup>3</sup><br>- Using amount of substance in relation to volume of gases<br>- Chemical changes<br>- Electrolysis   | Graded homework<br>In-class assessments<br>Formal PT2 examination                |
| <b>Year 10 SUMMER TERM</b><br>Weeks – 27-39<br>17 <sup>th</sup> April – 21 <sup>st</sup> July 2017       | ENERGY CHANGES<br>- Endothermic and exothermic reactions<br>- Chemical cells and fuel cells<br>- Rate and extent of chemical change<br>- Reversible reactions and dynamic equilibrium   | Graded homework<br>In-class assessments<br>Formal PT3 examination (mock C1 Exam) |

### Progress Tracking Assessment dates

**PT1: 14<sup>th</sup>- 18<sup>th</sup> November 2016**

**PT2: 23<sup>rd</sup> January to 3<sup>rd</sup> February 2017**

**PT3: 19<sup>th</sup> to 30<sup>th</sup> June 2017**