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| **Week** | **Coursework Topics and Texts** | **Evaluation Strategies**  |
| Term 11 | Goal setting – entry into year 11 Science subjectsHow to studyLearning styles**Chemistry: Atomic structure***Diagnostic assessment*Structure of Atoms reviewArrangement of electrons in electron shellsThe Periodic Table – how it is organised and why | Diagnostic: Chemistry |
| 2 | Periods of the Periodic Table – relationship to valence electronsValence electrons determine properties of the element.The octet rule. | Formative: Atomic structure |
| 3 | Valence electrons determine type of bonding in reactions.Ionic and covalent bonding | Formative: Ionic and covalent bonding |
| 4 | Metallic BondingProperties of Metals | **Summative: Atomic structure & bonding 10%** |
| 5 | *Investigation: Students plan, carry out and interpret results of an investigation* | ***Validation: Reactions 10%*** |
| 6 | **Chemistry: Reactions**Naming elements and compounds, writing formulaeWriting and balancing chemical equations | Formative: Balancing equations |
| 7 | Decomposition and Combination reactionsPrecipitation reactions – using solubility rules | Formative: Reactions 1 |
| 8 | Oxidations and reduction reactionsCombustion/redox reactions | Formative: Reactions 2 |
| 9 | Factors affecting reaction rates | Formative: Rates of reactions |
| 10 | Chemistry consolidation | **Summative: Reactions 15%** |
| Term 2 1 | **Biology: Genetics**Structure and function of DNARelationship of DNA to genes and chromosomesLocation of DNA in the cell | Diagnostic: Genetics |
| 2 | Sexual and Asexual reproductionMeiosis and FertilisationHow traits are passed from one generation to the nextGenetics vocabulary | Formative: DNA and cellular division |
| 3 | Inheritance of single gene traitsDominant and recessive genesUse of punnet squares to model inheritanceSex linked inheritance | Formative: Inheritance |
| 4 | Role of mutations in inheritanceCause of mutations | **Summative: Genetics 15%** |
| 5 | **Biology: Biodiversity**Introduction to EvolutionBiodiversity as a function of EvolutionHistory of evolutionary theory developmentArtificial Selection‘Survival of the fittest’ | Diagnostic: Evolution |
| 6 | Natural Selection as a mechanism of evolution.Mechanisms of variation and isolation | Formative: Natural selection and speciation |
| 7 | Evidence for Evolution: Fossil record, homologous and analogous structures, embryology, protein structure, biogeography | Formative: Evidence for evolution |
| 8 | Biology consolidation | **Summative: Biodiversity 15%** |
| 9 | Exam Revision |  |
| 10 | Year 10 Examination | **Summative: Examination 35%** |

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| Assessment Outline |
| Investigations | 10% |
| Tests | 55% |
| Exam | 35% |
| Total | 100% |