**Combined Science - Curriculum Map Year 11**

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| Y11 | Half  term 1 | Half  term 2 | Half  term 3 | Half  term 4 | Half  term 5 | Half  term 6 |
| Topics | The human nervous system (B5a),  Hormonal coordination (B5b),  Reproduction (B6a),  Crude oil & fuels (C7a),  Rate & extent of chemical change (C6),  Chemical analysis (C8). | Variation & evolution (B6b),  Genetics & evolution (B6c),  Adaptations, interdependence & competition (B7a),  Force & motion (P5c),  Wave properties (P6a),  The EM spectrum (P6b). | Organising an ecosystem (B7b),  Biodiversity & ecosystems (B7c),  Electromagnetism (P7),  Our atmosphere (C9),  The Earth’s resources (C10a). | Revision of all topics. | Revision of all topics. | N/A |
| Key terms | Homeostasis, human nervous system, reflexes.  Hormones, controlling of blood glucose levels, diabetes, negative feedback, human reproduction, menstrual cycle, contraception, infertility treatments.  Hydrocarbons, fractional distillation, burning hydrocarbons (combustion), cracking.  Rates of reaction, collision theory & surface area, effect of temperature, effect of concentration, effect of catalysts, reversible reactions, energy & reversible reactions, dynamic equilibrium, altering conditions.  Pure substances & mixtures, analysing chromatograms, testing for gases. | Variation, evolution by natural selection, selective breeding, genetic engineering, cloning, ethics of genetic technologies.  Evidence for evolution, fossils & extinction, antibiotic resistant bacteria, classification, new systems of classification.  Importance of communities, organisms in their environment, distribution & abundance, competition in animals & plants, adaptations in animals & plants, survival.  Force & acceleration, weight & terminal acceleration, forces & braking, momentum, forces & elasticity.  Types of waves, wave nature, wave properties.  Electromagnetic spectrum, infrared, communications, UV, X-ray & gamma, X-rays in medicine. | Feeding relationships, materials cycling, carbon cycle.  Human population, land, water & air pollution, deforestation & peat destruction, global warming, maintaining biodiversity.  Magnetic fields, electromagnetism.  History of the atmosphere, our evolving atmosphere, greenhouse gases, global climate change, atmospheric pollutants.  Finite & renewable resources, water safe to drink, treating wastewater, extracting metals, life cycle assessments, recycling. | N/A | N/A | N/A |
| Assessment | N/A | Assessment 1 – practice paper 1 followed by classroom DIRT. | N/A | Mock exams – practice paper 1 and paper 2 followed by classroom DIRT. | GCSE exams. | N/A |
| Embedding learning | Mixed bio paper 1,  Mixed chem paper 1,  Mixed phys paper 1,  Mixed bio paper 1,  Mixed chem paper 1,  Mixed phys paper 1,  Mixed all paper 1. | Mixed all paper 1,  B5a & b,  C6,  C7a,  B6a,  C8,  P5a & b. | P5c,  B6b & c,  P6a & b,  C9,  B7a & b,  C10a. | Mixed bio paper 2,  Mixed chem paper 2,  Mixed phys paper 2,  Mixed bio paper 1,  Mixed chem paper 1,  Mixed phys paper 1. | Mixed bio paper 1,  Mixed chem paper 1,  Mixed phys paper 1,  Mixed bio paper 2,  Mixed chem paper 2,  Mixed phys paper 2. | N/A |
| Awareness days | Recycle week 20/9, National Poetry Day 1/10,  Black History Month. | World Kindness Day 13/11,  Pride in STEM Day 18/11,  No pen day. | Holocaust Memorial Day 27/1,  Mental Health Awareness week 7/2. | World Book Day 23/4, International Women’s Day 8/3, British Science week 11/3. |  | World Environment Day 5/6. |