**Combined Science - Curriculum Map Year 11**

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| Y11 | Half term 1 | Halfterm 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. |