**Science - Curriculum Map Year 9**

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| Y9 | Half term 1 | Halfterm 2 | Half term 3 | Half term 4 | Half term 5 | Half term 6 |
| Topics | Variation & inheritance,Evolution,Reactions. | Reactions, Importance of plants. | Earth & it’s resources. | Science project,Atomic structure (C1a). | Cell structure & transport (B1a). | Conservation of energy (P1a). |
| Key terms | Variation, genetic inheritance, DNA, characteristics, genes, mutations.Adaptations, predator vs. prey, evolution, natural selection, extinction, endangered species.Chemical reactions, chemical formula, thermal decomposition, combustion, acids, alkalis & indicators, neutralisation, reactivity series, displacement reactions, exothermic & endothermic reactions, catalysts. | Chemical reactions, chemical formula, thermal decomposition, combustion, acids, alkalis & indicators, neutralisation, reactivity series, displacement reactions, exothermic & endothermic reactions, catalysts.Photosynthesis, leaf structure, factors affecting photosynthesis, food chains & food webs, plant reproduction, pollination, bioaccumulation, respiration. | Human population, The Earth’s resources, energy demands, biofuels & nuclear, wind & hydroelectric, solar & geothermal, energy issues, feeding relationships, carbon cycle, water safe to drink, wastewater, recycling, extracting metals, life cycle assessments, land & water pollution, air pollution, deforestation & peat destruction, global warming, maintaining biodiversity.  | Atoms, chemical reactions, separating mixtures, distillation, chromatography, history of the atom, structure of the atom, electronic structures, ions, atoms & isotopes. | Cell structure, microscopes, plant & animal cells, eukaryotic & prokaryotic cells, specialisation in animal & plant cells, diffusion, osmosis, active transport, exchanging materials. | Changes in energy stores, conservation of energy, energy & work, gravitational potential energy stores, kinetic & elastic energy stores, energy dissipation, energy & efficiency, electrical appliances, energy & power. |
| Assessment | N/A | Assessment 1 – written paper on recent topics followed by classroom DIRT. | Assessment 2 – written paper on recent topics followed by classroom DIRT. | N/A | Assessment 3 – written paper on recent topics followed by classroom DIRT. | N/A |
| Embedding learning | How science works 1,How science works 2,How science works 3,Variation 1,Variation 2,Evolution 1,Assessment based. | Evolution 2,Reactions 1,Reactions 2,Reactions 3,Cells 1,Electricity 1,Matter 1. | Plants 1,Plants 2,Earth & it’s resources 1,Assessment based,Earth & it’s resources 2,Earth & it’s resources 3. | Earth & it’s resources 4,Atoms 1,Atoms 2,Cells 2,Electricity 2,Matter 2. | Earth & universe 1,Movement & breathing 1,Assessment based,Movement & breathing 2,Pressure 1,Climate change 1. | C1a,C1a,B1a,B1a,P1a,P1a. |
| Awareness days | Recycle week 20/9, National Poetry Day 7/10,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. |