

Year 10 Triple Science Teaching Plan (Sept 2024-July 2025)

| Week Beginning | Topic | Required Practicals | Spec. Points |
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| 2/9 Week 1 | P1: energy changes in a system, conservation and dissipation of energy, national and global energy resources | RP1: specific heat capacity RP2: thermal insulators | 4.1 |
| 9/9 Week 2 | P2: static electricity, current, potential difference, resistance | RP3: resistance in length of wire | 4.2.5, 4.2.1 |
| 16/9 Week 3 | P2: series and parallel circuits | RP3: resistance in series and parallel RP4: I-V characteristics | 4.2.2 |
| 23/9 Week 4 | P2: domestic uses and safety | | 4.2.3-4.2.4 |
| 30/9 Week 5 | P3: changes of state and particle model, internal energy, energy transfers, pressure | RP5: density | 4.3 |
| 7/10 Week 6 | P4: atoms and isotopes, nuclear radiation | | 4.4.1-4.4.2 |
| 14/10 Week 7 | P4: hazards and uses of radioactive emissions, background radiation, nuclear fission and fusion | | 4.4.3-4.4.4 |
| 21/10 Week 8 | T1 Revision | | |
| October Half Term | | | |
| 4/11 Week 9 | T1 Assessment – Physics Paper 1 | | |
| 11/11 Week 10 | C1: simple model of atom, relative atomic mass, periodic table | | 4.1.1-4.1.2 |
| 18/11 Week 11 | C1: properties of transition metals | | 4.1.3 |
| 25/11 Week 12 | C2: ionic bonding and properties, simple covalent and giant covalent molecules, structure and bonding of carbon inc. nanoparticles | | 4.2 |
| 2/12 Week 13 | C2: metallic bonding and properties, states of matter | | 4.2 |
| 9/12 Week 14 | C3: chemical measurements, conservation of mass, moles as amounts of substances | | 4.3.1-4.3.2 |
| 16/12 Week 15 | C3: yield and atom economy, concentration of solutions | | 4.3.3-4.3.5 |
| Christmas Holiday | | | |
| 6/1 Week 16 | C4: reactivity of metals, reactivity of acids | RP1: making soluble salts RP2: determining volumes by titrations | 4.4.1-4.4.2 |
| 13/1 Week 17 | C4: electrolysis | RP3: electrolysis of aqueous solutions | 4.4.3 |
| 20/1 Week 18 | C5: exothermic and endothermic reactions | RP4: temperature changes | 4.5.1 |
| 27/1 Week 19 | C5: chemical cells and fuel cells | | 4.5.2 |
| 3/2 Week 20 | B1: cell structure, cell division, transport in cells | RP1: microscopy RP2: antiseptics/antibiotics on bacterial growth RP3: osmosis | 4.1 |
| 10/2 Week 21 | B2: principles of organisation, animal tissues, organs and organ systems, plant tissues, organs and organ systems | RP4: food tests RP5: pH on enzyme activity | 4.2 |
| February Half Term | | | |

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| 24/2 Week 22 | T2 Revision | | |
| 3/3 Week 23 | T2 Assessment - Chemistry Paper 1 | | |
| 10/3 Week 24 | B3: communicable diseases, viral, bacterial, fungal, protists, human defence systems, vaccinations | | 4.3.1 |
| 17/3 Week 25 | B3: antibiotics and painkillers, drug development, monoclonal antibodies, plant diseases | | 4.3.2-4.3.3 |
| 24/3 Week 26 | B4: photosynthesis | RP6: photosynthesis | 4.4.1 |
| 31/3 Week 27 | B4: respiration | | 4.4.2 |
| Easter Holiday | | | |
| 21/4 Week 28 | B5: homeostasis, human nervous system | RP7: reaction time | 4.5.1-4.5.2 |
| 28/4 Week 29 | B5: hormonal coordination in humans | | 4.5.3 |
| 5/5 Week 30 | B5: plant hormones | RP8: light/gravity on germinated seedling growth | 4.5.4 |
| 12/5 Week 31 | B6: sexual and asexual reproduction, meiosis, DNA and the genome, genetic inheritance, inherited disorders, sex determination | | 4.6.1 |
| 19/5 Week 32 | B6: variation, selective breeding, genetic engineering, cloning | | 4.6.2 |
| May Half Term | | | |
| 2/6 Week 33 | PPE revision | | |
| 9/6 Week 34 | PPE Revision | | |
| 16/6 Week 35 | E1 Assessment – Biology Paper 1 | | |
| 23/6 Week 36 | E1 Assessment – Biology Paper 1 | | |
| 30/6 Week 37 | PPE reteach | | |
| 7/7 Week 38 | B6: theory of evolution, speciation, Mendel's genetics, evidence for evolution, fossils, extinction, resistant bacteria, classification | | 4.6.3-4.6.4 |
| 14/7 Week 39 | B7: communities, abiotic factors, biotic factors, adaptations | | 4.7.1 |