**Music Stuff SOW (Long-Term)**

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| **Subject** | **Science** | **Year** | **10** |
| **Term** | **Autumn 1** | **Spring 1** | **Summer 1** |
| **Unit of learning** | Cell biology/Energy | Organisation/ElectricityInfection and response/Particle model of matter | Bioenergetics/Atomic structure |
| **Intent** | 4.1.1 Cell structure4.1.2 Cell division4.1.3 Transport in cellsTest and DIRT task4.1.1 Energy changes in a system4.1.2 Conservation and dissipation of energy4.1.3 National and global energy resourcesTest and DIRT task | 4.2.3 Plant tissues, organs and systemsTest and DIRT task4.3.1 Communicable diseases**4.3.1 Changes of state and the particle model****4.3.2 Internal energy and energy transfers****4.3.3 Particle model and pressure**Test and DIRT task | 4.4.1 Photosynthesis4.4.2 RespirationTest and DIRT task4.5.1 Forces and their interactions4.5.2 Work done and energy transfer4.5.3 Forces and elasticity4.5.4 Moments, levers and gearsTest and DIRT task |
| **Term** | **Autumn 2** | **Spring 2** | **Summer 2** |
| **Unit of learning** | Organisation/Electricity | Infection and response/Particle model of matter | Homeostasis/Atomic structure |
| **Intent** | 4.2.1 Principles of organisation4.2.2 Animal tissues, organs and organ systems4.2.1 Current, potential difference and resistance4.2.2 Series and parallel circuits4.2.3 Domestic uses and safety4.2.4 Energy transfers 4.2.5 Static electricityTest and DIRT task | ***4.3.2 Monoclonal antibodies (HT only)*****4.3.3 Plant disease (biology only)**Test and DIRT task4.4.1 Atoms and isotopes4.4.2 Atoms and nuclear radiation4.4.3 Hazards and uses of radioactive emissions and of background radiation (physics only)4.4.4 Nuclear fission and fusion (physics only)Test and DIRT task | 4.5.1 Homeostasis.5.2 The human nervous systemTest and DIRT task4.5.5 Pressure and pressure differences in fluids4.5.6 Forces and motion4.5.6.3 Forces and braking*4.5.7 Momentum***Test and DIRT task** |
| Rationale: | The science curriculum aims to inspire curiosity, critical thinking, and a deep understanding of the natural world by engaging students in meaningful, practical, and inquiry-based learning. Through a focus on hands-on activities and experiments, students develop both foundational scientific knowledge and transferable skills that will empower them to thrive in an increasingly complex and technological world. This rationale highlights the curriculum’s focus on engaging practical lessons, fostering key knowledge and skills, and supporting pupils’ literacy development, whilst ensuring opportunities for overlearning and retrieval practise. The course allows of qualifications in AQA GCSE Biology and Physics and also Enry Level qualifications as appropriate.  |

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| **Subject** | **Science** | **Year** | **11** |
| **Term** | **Autumn 1** | **Spring 1** | **Summer 1** |
| **Unit of learning** | **Homeostasis and Response/Waves** | **Ecology/Magnets** | **Revision** |
| **Intent** | 4.5.1 Homeostasis4.5.2 The human nervous system4.5.3 Hormonal coordination in humans**4.5.4 Plant hormones****Test and DIRT task**4.6.1 Waves in air, fluids and solids4.6.2 Electromagnetic waves**4.6.3 Black body radiation****Test and DIRT task** | 4.7.1 Adaptations, interdependence and competition4.7.2 Organisation of an ecosystem4.7.3 Biodiversity and the effect of human interaction on ecosystems**4.7.4 Trophic levels in an ecosystem****4.7.5 Food production****Test and DIRT task**4.7.1 Permanent and induced magnetism, magnetic forces and fields4.7.2 The motor effect*4.7.3 Induced potential, transformers and the National Grid***Test and DIRT task** | Biology1. Cell biology2. Organisation3. Infection and response4.Bioenergetics5.Homeostasis and response | Physics1.Energy2. Electricity3.Particle model of matter4.Atomic structure5.Magnetism and electromagnetism |
| **Term** | **Autumn 2** | **Spring 2** | **Summer 2** |
| **Unit of learning** | **Inheritance, variation and evolution/Space** | **Key Ideas/Paper 1 revision** | **Revision** |
| **Intent** | 4.6.1 Reproduction4.6.2 Variation and evolution4.6.3 The development of understanding of genetics and evolution4.6.4 Classification of living organisms**Test and DIRT task****4.8.1 Solar system; stability of orbital motions; satellites****4.8.2 Red-shift****Test and DIRT task***Y11 Mock Revision**Y11 Mock DIRT Task* | The complex and diverse phenomena of the natural world can be described in terms of a small number of key ideas in biology and Physics.**Test and DIRT task**Revision 1.Energy2. Electricity3.Particle model of matter4.Atomic structure | Biology6. Inheritance, variation and evolution7. Ecology | Physics6. Forces7. Waves8. Space physics (physics only) |
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