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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Subject** | | **Science** | | **Year** | **10** | |
| **Term** | **Autumn 1** | | **Spring 1** | | | **Summer 1** |
| **Unit of learning** | Cell biology/Energy | | Organisation/Electricity  Infection and response/Particle model of matter | | | Bioenergetics/Atomic structure |
| **Intent** | 4.1.1 Cell structure  4.1.2 Cell division  4.1.3 Transport in cells  Test and DIRT task  4.1.1 Energy changes in a system  4.1.2 Conservation and dissipation of energy  4.1.3 National and global energy resources  Test and DIRT task | | 4.2.3 Plant tissues, organs and systems  Test and DIRT task  4.3.1 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 Photosynthesis  4.4.2 Respiration  Test and DIRT task  4.5.1 Forces and their interactions  4.5.2 Work done and energy transfer  4.5.3 Forces and elasticity  4.5.4 Moments, levers and gears  Test 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 organisation  4.2.2 Animal tissues, organs and organ systems  4.2.1 Current, potential difference and resistance  4.2.2 Series and parallel circuits  4.2.3 Domestic uses and safety  4.2.4 Energy transfers  4.2.5 Static electricity  Test and DIRT task | | ***4.3.2 Monoclonal antibodies (HT only)***  **4.3.3 Plant disease (biology only)**  Test and DIRT task  4.4.1 Atoms and isotopes  4.4.2 Atoms and nuclear radiation  4.4.3 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 system  Test and DIRT task  4.5.5 Pressure and pressure differences in fluids  4.5.6 Forces and motion  4.5.6.3 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. | | | | | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **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 Homeostasis  4.5.2 The human nervous system  4.5.3 Hormonal coordination in humans  **4.5.4 Plant hormones**  **Test and DIRT task**  4.6.1 Waves in air, fluids and solids  4.6.2 Electromagnetic waves  **4.6.3 Black body radiation**  **Test and DIRT task** | | 4.7.1 Adaptations, interdependence and competition  4.7.2 Organisation of an ecosystem  4.7.3 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 fields  4.7.2 The motor effect  *4.7.3 Induced potential, transformers and the National Grid*  **Test and DIRT task** | | | Biology  1. Cell biology  2. Organisation  3. Infection and response  4.Bioenergetics  5.Homeostasis and response | Physics  1.Energy  2. Electricity  3.Particle model of matter  4.Atomic structure  5.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 Reproduction  4.6.2 Variation and evolution  4.6.3 The development of understanding of genetics and evolution  4.6.4 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.Energy  2. Electricity  3.Particle model of matter  4.Atomic structure | | | Biology  6. Inheritance, variation and evolution  7. Ecology | Physics  6. Forces  7. Waves  8. Space physics (physics only) |
| 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. | | | | | | |