

**Year 10 – Science GCSE Long Term Plan 2021-22**

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| **GCSE Combined Science - Synergy** | | | | | |
| **Autumn Term 2021** |  |  |  |  |  |
|  |  |  |  |  |  |
| **Topic and time** | **Hours** | **Teaching and links** | **Topic and time** | **Hours** | **Teaching and links** |
| 4.1.1 States of matter | 6 | Atomic structure | 4.5.1 The periodic table | 5 | Atomic structure |
| RP1 and RP2 |  | Systems in the body |  |  | Structure and bonding |
|  |  | The periodic table |  |  | Acids and Alkalis |
|  |  |  |  |  | The rate and extent of chemical change |
| 4.1.2 Atomic Structure | 3 | States of matter | 4.5.2 Chemical quantities | 9 | Atoms into ions and ions into atoms |
|  |  | The periodic table |  |  | Carbon chemistry |
|  |  | Structure and bonding |  |  | Resources of materials |
| 4.1.3 Cells in animals and plants | 8.5 | Systems in the body | 4.6.1 Forces and energy changes | 12 | Magnetism and electromagnetism |
| RP3 |  | Inheritance | RP9 |  | Forces and motion |
| 4.1.4 Waves | 5 | The Earth's atmosphere |  |  |  |
|  |  | Radiation and risk |  |  |  |
|  |  | States of matter |  |  |  |
| Number of hours | 22.5 |  | Number of hours | 26 |  |
| **Total number of hours** | **48.5** |  |  |  |  |
| **School days in term** | **72** |  |  |  |  |
|  |  |  |  |  |  |
| Spring Term 2022 |  |  |  |  |  |
| **Topic and time** |  | **Teaching and links** | **Topic and time** |  | **Teaching and links** |
| 4.2.1 Systems in the human body | 16 | Cells in animals and plants | 4.6.1 Forces and energy changes | 4 | Magnetism and electromagnetism |
| RP4 |  | The rate and extent of chemical change |  |  | Forces and motion |
| 4.2.2 Plants and photsynthesis | 8 | Cells in animals and plants | 4.6.2 Structure and bonding | 7 | States of matter |
| RP5 and RP6 |  | The Earth's atmoshpere |  |  | Atomic structure |
|  |  | Ecosystems and biodiversity |  |  | The periodic table |
|  |  |  |  |  | Atoms into ions and ions into atoms |
|  |  |  |  |  | Carbon chemistry |
|  |  |  | 4.6.3 Magnetism and electromagnetism | 6 | Forces and energy changes |
|  |  |  |  |  | Forces and motion |
|  |  |  |  |  | Electricity |
|  |  |  | 4.7.1 Forces and motion | 5 | Magnetism and electromagnetism |
|  |  |  | RP10 |  |  |
| Number of hours | 24 |  | Total number of hours | 22 |  |
| **Total number of hours** | **46** |  |  |  |  |
| **School days in term** | **58** |  |  |  |  |
|  |  |  |  |  |  |
| **Summer term 2022** |  |  |  |  |  |
| **Topic and time** |  | **Teaching and links** | **Topic and time** |  | **Teaching and links** |
| 4.3.1 Lifestyle and health | 12 | Systems in the human body | 4.7.2 Electricity | 14 | Forces and energy changed |
|  |  | The rate and extent of chemical change | RP11 and RP 12 |  | Magnetism and electromagnetism |
| 4.3.2 Radiation and risk | 7 | Atomic structure | 4.7.3 Acids and alkalis | 7 | The periodic table |
|  |  | Waves | RP13 |  | Chemical quantities |
| 4.3.3 Preventing, treating and curing diseases | 5 | Lifestyle and health |  |  |  |
|  |  | Waves |  |  |  |
| Number of hours | 24 |  | Number of hours | 21 |  |
| **Total number of hours** | **45** |  |  |  |  |
| **School days in term** | **60** |  |  |  |  |
|  |  |  |  |  |  |
| **Year 2** | | | | | |
| **Autumn term 2022** |  |  |  |  |  |
| **Topic and time** |  | **Teaching and links** | **Topic and time** |  | **Teaching and links** |
| 4.3.3 Preventing, treating and curing diseases | 15 | Lifestyle and health | 4.7.4 The rate and extent of chemical change | 11 | The periodic table |
|  |  | Waves | RP14 and RP15 |  | Chemical quantities |
|  |  |  |  |  | Systems in the human body |
| 4.4.1 The Earth's atmosphere | 10 | Plants and photosynthesis | 4.7.5 Atoms into ions and ions into atoms | 5 | The periodic table |
| RP7 |  | Carbon chemistry | RP16 |  | Chemical quantities |
|  |  | Resources of materials and energy |  |  |  |
| 4.4.2 Ecosystems and biodiversity | 7 | Waves | 4.8.1 Carbon chemistry | 12 | The periodic table |
| RP8 |  | Plants and photosynthesis |  |  | Chemical quantities |
|  |  | Carbon chemistry |  |  | Structure and bonding |
|  |  | Resources of materials and energy |  |  | The Earth's atmoshpere |
|  |  |  |  |  | Ecosystems and biodiversity |
| Number of hours | 32 |  | Number of hours | 28 |  |
| **Total number of hours** | **60** |  |  |  |  |
| **School days in term** | **70** |  |  |  |  |
|  |  |  |  |  |  |
| **Spring term 2023** |  |  |  |  |  |
| **Topic and time** |  | **Teaching and links** | **Topic and time** |  | **Teaching and links** |
| 4.4.3 Inheritance | 5 | Cells in animals and plants | 4.8.2 Resources of materials and energy | 8 | The Earth's atmosphere |
|  |  | Variation and evolution |  |  | Ecosystems and biodiversity |
| 4.4.4 Variation and evolution | 7 | Inheritance |  |  | The periodic table |
|  |  | The rateand extent of chemical exchange |  |  | Atoms into ions and ions into atoms |
| Number of hours | 12 |  | Number of hours | 8 |  |
| **Total number of hours** | **20** |  |  |  |  |
| **School days in term** | **58** |  |  |  |  |
| Revision | | | | | |
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