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| **Year 9**  **Physics**  **2021-2022** | In year 9 you will learn about the connection between energy transfer and power; energy changes and temperature changes and how we monitor the transfer of energy and examine the environmental impact of energy resources. We then move on to how particles are arranged, the properties that arise from the arrangement and the energy particles have. Finally we learn about the structure of the atom, how the nucleus gives rise to radiation, radioactive decay and the uses and dangers of radiation. This builds upon work on states of matter and types of energy and energy transfers covered in KS3. These topics deepen the knowledge of particle movement, behaviour and the energies involved in all particle activity. |

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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| **Topic P1 – ENERGY** | | | | | | | |
| Weekly Homework Tasks | |  |  | **Mid Topic assessment** |  |  |  |
| **Key Knowledge Content =** Energy Transfers  **Attitudes and Skills**  **TENSILE:** Numeracy,  **Numeracy =** Significant figures and handling data | | |  |  | Required Practical = Specific heat capacity |  |  |

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| 9 | 10 | 11 | 12 | 13 | 14 | 15 | **16** |
| **P1 Cont….** | | | | **Topic P3 – PARTICLE MODEL OF MATTER** | | | |
|  | | | **End of P1 Topic Test** | Weekly Homework Tasks | |  |  |
| Required Practical = Reducing energy transfers |  |  |  | **Key Knowledge Content =** Particle arrangement and movement.  **Attitudes and Skills**  **TENSILE:** Numeracy, Expression  **Numeracy =** Drawing and interpreting graphs | | | Required Practical = Density |

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| 17 | 18 | 19 | 20 | 21 | **22** | 23 | 24 |
| **P3 Cont….** | | | | | **Topic P4 ATOMIC STRUCTURE** | | National Science Week |
| **Mid Topic assessment** |  |  |  | **End of P3 Topic Test** | Weekly Homework tasks | |
|  |  |  |  |  | **Key Knowledge concept =** Howan atoms structure gives rise to nuclear activity.  **Attitudes and Skills TENSILE:**Numeracy, Enquiry  **Numeracy** = ratio | |  |

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| 25 | 26 | 27 | **28** | 29 | 30 | 31 | 32 |
| **P4 cont…** | | | | | | Revision for Mock Exams | **Year 9 Mock Exams** |
|  |  | **Mid Topic Assessment** |  |  |  |
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| **33** | 34 | 35 | 36 | 37 | 38 | 39 |  |
| **P4 cont…** | | **Required Practical Consolidation** | | **Consolidation** of Yr 9 Physics Content, Numeracy and Literacy skill Development | | |  |
|  | **End of P4 Topic Test** |  |
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