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| **Year 7** | **Curriculum Aims**: 1) Enthuse and inspire students by linking science to culture and everyday experience. 2) Engage students with science through personalising localising and making science relevant and meaningful. 2): Develop foundation knowledge and begin to apply this to unfamiliar situations. 3) Develop practical skills, graphical and data analysis skills, scientific numeracy and literacy. 5) Embed the UN ‘sustainable development goals’ as a SOW driver.  |
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| **Topic 7.1 Can you think like a scientist?** **Context: SDG 8 Work and Economic Growth****Knowledge:** Key science transferable skills and competencies.**Prior learning:** assumes only basic skills | **Topic 7.2 Mixing, Dissolving and Separating** **Context: SDG 6 Clean water and sanitation.** **Knowledge:** Atoms, elements, Compounds, dissolving, separation techniques**Prior learning:** Solids, liquids and gases & separating mixtures (filtering, sieving and evaporating) |
| **Attitudes and Skills (TENSILE) Teamwork and Enquiry**  | **Attitudes and Skills (TENSILE) Solving problems, independence**  |
| **Assess:** End certificate of competence.  | 8**Assess**: 1 assessed mid unit task. End of topic test |

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| **9 Y7 form tutor eve** |  **10** |  **11** |  **12** | **13**  | **14 Y7 project** | **15 Xmas 16 17 18**  |
| **Topic 7.3 Explaining Forces and effects** **Context: SDG 9 industry, innovation and infrastructure****Knowledge:** forces and movement, resistances, pressure**Prior learning:** Gravity, friction, air and water resistance, magnets. | **Topic 7.4 Cells –The building blocks of life.** **Context: SDG 4 and 5 gender equality and Quality education****Knowledge:** types of cells, organisation in the body, reproduction and puberty**Prior learning:** describe the life process of reproduction in some plants and animals |
| **Attitudes and Skills (TENSILE) Numeracy, independence**  | **Attitudes and Skills (TENSILE) Expression, Enquiry**  |
| **Assess:** 1 assessed mid unit task. End of topic test | **Assess**: 1 assessed mid unit task. End of topic test |

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| **Topic 7.5 – Explaining Physical Changes** **Context: SDG 11 Sustainable cities and communities****Knowledge:** Particle theory explanation of changes of state, diffusion and dens**Prior learning:** temperature, evaporation and condensation, characteristics of different states | **Topic 7.6 – Energy Transfers and sound****Context: SDG 7 Affordable and Clean energy****Knowledge:** Energy transfers**,** Heat, temperature, work, Fuels and sound**Prior learning:** how sounds are made; relationships of pitch and volume |
| **Attitudes and Skills (TENSILE) Teamwork and Numeracy** | **Attitudes and Skills (TENSILE) Solving problems and numeracy** |
| **Assess:** 1 assessed mid unit task. End of topic test | **Assess:** 1 assessed mid unit task. End of topic test |

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| **Topic 7.7 – Eating, Drinking and Breathing.****Context: SDG 1&2 No poverty, Zero hunger,****Knowledge:** Diet, good groups, digestion and enzymes, gas exchange systems**Prior learning:** ways in which nutrients are transported within animals; name, locate and describe the functions of the main parts of the digestive, musculoskeletal, and circulatory systems, | **Topic 7.8 – Elements, Compounds and Reactions****Context: SDG 12 Responsible production and consumption****Knowledge:** Particle theory explanation of changes of state, diffusion and density**Prior learning:** temperature, evaporation and condensation, characteristics of different states |
| **Attitudes and Skills (TENSILE) Literacy and Expression** | **Attitudes and Skills (TENSILE) Literacy and Independence**  |
| **Assess:** 1 assessed mid unit task. End of topic test | **Assess:** 1 assessed mid unit task. End of topic test |

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| **End of Year Revision****Exams** | **Y7 End of year Project** **Attitudes and** Skills ALL TENSILE embedded in investigative project work |