

## Science Curriculum Map 2021- 2022

### Key Stage 3

Year	Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6
<b>7</b>	Transition Content  Introduction to Science skills <ul style="list-style-type: none"> <li>Planning</li> <li>Analysing</li> <li>Identifying variables</li> <li>Graph work</li> </ul>	Matter <ul style="list-style-type: none"> <li>Physical and chemical properties</li> <li>Chemical changes</li> </ul> Organisms <ul style="list-style-type: none"> <li>Structures of the human body</li> <li>Reactions</li> <li>Reactions between metal, acid, oxygen and water.</li> </ul>	Forces <ul style="list-style-type: none"> <li>Balanced and unbalanced forces</li> <li>Speed</li> </ul> Genes <ul style="list-style-type: none"> <li>Inherited and environmental variation</li> </ul> Electromagnets <ul style="list-style-type: none"> <li>Electricity</li> </ul>	Energy <ul style="list-style-type: none"> <li>Energy changes between various stores</li> <li>Renewable and non-renewable energy resources</li> </ul> Earth <ul style="list-style-type: none"> <li>Structure of the earth</li> <li>The rock cycle</li> <li>The solar system</li> </ul>	Waves <ul style="list-style-type: none"> <li>Properties of waves</li> <li>Reflection and refraction</li> </ul> Ecosystems <ul style="list-style-type: none"> <li>Food chains</li> <li>Competition for survival</li> </ul>	Revision for end of year exams and Practical Skills
<b>8</b>	Science Skills Review <ul style="list-style-type: none"> <li>Provide evidence</li> <li>Carrying scientific investigations</li> </ul> Matter <ul style="list-style-type: none"> <li>Atomic structure</li> <li>The periodic table</li> </ul>	Organisms <ul style="list-style-type: none"> <li>Respiratory and digestive systems</li> </ul> Electromagnets <ul style="list-style-type: none"> <li>Magnetism</li> </ul> Reactions <ul style="list-style-type: none"> <li>Conservation of mass</li> <li>Energy changes</li> </ul>	Forces <ul style="list-style-type: none"> <li>Friction and drag</li> <li>Pressure in gases and liquids</li> </ul> Genes <ul style="list-style-type: none"> <li>Charles Darwin and natural selection</li> <li>Biodiversity</li> </ul>	Energy <ul style="list-style-type: none"> <li>Transfer of energy as work</li> <li>Conduction, convection and radiation</li> </ul> Earth <ul style="list-style-type: none"> <li>Earth's atmosphere</li> <li>Climate change</li> </ul>	Waves <ul style="list-style-type: none"> <li>Radiation</li> <li>Electromagnetic spectrum</li> </ul> Ecosystems <ul style="list-style-type: none"> <li>Aerobic and anaerobic respiration</li> <li>Photosynthesis</li> </ul>	Revision for end of year exams and Practical Skills
<b>9</b>	Ecology <ul style="list-style-type: none"> <li>Adaptations, interdependence and competition</li> </ul> Atomic structure <ul style="list-style-type: none"> <li>Particle model</li> </ul> Conservation of energy <ul style="list-style-type: none"> <li>Stores of energy</li> </ul>	Ecology <ul style="list-style-type: none"> <li>Organising an ecosystem</li> <li>Biodiversity and ecosystems</li> </ul> The periodic table <ul style="list-style-type: none"> <li>Groups 1, 7 and 0</li> </ul> Dissipation of energy <ul style="list-style-type: none"> <li>Energy in devices</li> </ul>	Cells & Organisation <ul style="list-style-type: none"> <li>Cell structure</li> </ul> Structure and bonding <ul style="list-style-type: none"> <li>Ionic, covalent and metallic substances</li> </ul> Energy transfer by heating <ul style="list-style-type: none"> <li>Insulating materials</li> </ul>	Disease & Bioenergetics <ul style="list-style-type: none"> <li>Communicable diseases</li> <li>Non-communicable diseases</li> </ul> Chemical calculations <ul style="list-style-type: none"> <li>Relative masses and molar calculations</li> </ul> Energy resources <ul style="list-style-type: none"> <li>Generating electricity</li> </ul>	Disease & Bioenergetics <ul style="list-style-type: none"> <li>Preventing and treating disease</li> </ul> The Earth's atmosphere <ul style="list-style-type: none"> <li>Evolution of the atmosphere</li> <li>Pollution</li> </ul> Molecules and Matter <ul style="list-style-type: none"> <li>States of matter and changes of state</li> </ul>	Revision for end of year exams and Practical Skills