

Subject: Science Year 7 Curriculum Map 2023-2024			
Terms	Topics covered and core knowledge and skills	Links to careers	Links to the Knowledge organiser and other additional resources
Half term 3	<p>Unit 03 – “Chemical Engineer”</p> <ul style="list-style-type: none"> ▪ Properties of Solids, liquids and gases and their particles ▪ Changing state ▪ Diffusion and Brownian motion ▪ Solubility - solute, solvent, solutions/conservation of mass ▪ Elements, Mixtures, and Compounds ▪ Chemical Reactions and Forming Compounds ▪ Separating Mixtures - Evaporation and Filtration ▪ Separating mixtures - distillation ▪ The Periodic table ▪ Metals Vs Non-metals ▪ Trends in Group 1 Elements - Reactions and Reactivity ▪ Trends in Group 7 Elements - Reactions and Reactivity 	<p>How to become a degree apprentice process engineer: Alex's story - BBC Bitesize</p> <p>How to become an engineering apprentice: Jade's story - BBC Bitesize</p>	<p>What is the arrangement of particles in a solid, liquid and gas? - BBC Bitesize</p> <p>What are changes of state? - BBC Bitesize</p> <p>What is the process of filtration? - BBC Bitesize</p>
Half term 4	<p>Unit 04 – “Roller Coaster Engineer”</p> <ul style="list-style-type: none"> ▪ Drawing force diagrams ▪ Resultant forces and their effects ▪ Contact & non-contact forces ▪ Friction investigation (1) ▪ Friction investigation (2) ▪ Hooke's law ▪ Hooke's law: focus on graph skills ▪ Speed: focus on substituting into equations ▪ DT Graphs ▪ Moments ▪ Pressure ▪ Using pressure ▪ Launching a rollercoaster - Bad Science 	<p>How to become a physicist: Mark Richards' story - BBC Bitesize</p> <p>How to become an engineer - BBC Bitesize</p>	<p>Introduction to forces - Forces and movement - KS3 Physics - BBC Bitesize - BBC Bitesize</p> <p>Force diagrams and resultant forces - Forces and movement - KS3 Physics - BBC Bitesize - BBC Bitesize</p> <p>Friction - Forces and movement - KS3 Physics - BBC Bitesize - BBC Bitesize</p> <p>Hooke's law - Forces and movement - KS3 Physics - BBC Bitesize - BBC Bitesize</p>