

Science – Year 8	Term one	Term two	Term three
Key Knowledge and understanding	<p><u>Forces</u> including friction, drag, how the resultant force affects the motion of an object and calculating moments.</p> <p><u>Pressure</u> including how in fluids relate to floating and sinking, and the calculation of pressure.</p> <p><u>Magnetism</u> including how to interpret magnetic field diagrams, how to make an electromagnet and the factors affecting it's strength and their use in devices like bells and loudspeakers.</p> <p><u>Matter</u> including the periodic table, the elements of groups 1,7 and 0, Compounds and the use of chemical formulae.</p>	<p><u>Organisms</u> including how we use the respiratory system to breathe, the damage that smoking , alcohol and other drugs can cause. What a balance diet contains and it's importance to health , and how the digestive system obtains the nutrients needed.</p> <p><u>Energy</u> including calculating the work done, and the use of levers and pulleys. In addition, how energy is transferred by conduction, convection and radiation and insulation methods.</p> <p><u>Waves</u> including the difference between transverse and longitudinal waves and an introduction to the electromagnetic spectrum.</p> <p><u>Reactions</u> including combustion, thermal decomposition, energy and what happens to atoms and energy during reactions.</p>	<p><u>Ecosystems</u> including photosynthesis and the importance of minerals to plants. In addition aerobic and anaerobic respiration including fermentation.</p> <p><u>Earth</u> including the carbon cycle, global warming and climate change, metal extraction and the importance of recycling.</p> <p><u>Genes</u> including inheritance, DNA and genetic modification. In addition evolution through natural selection, extinction and preserving biodiversity.</p>
Progression			

Challenge			
Skills	Use of chemical formulae. Calculation of pressure and moments. Interpreting magnetic field diagrams.		
Scope ie Local/Global			
Assessment			