Science

Key Stage 2 Curriculum includes

	Year 7	Year 8
Autumn 1	**Cells** • Microscopes • Animal Cells • Plant cells • Specialised cells • Stem Cells **Acids & Alkali** • Acids and Alkali • Neutralisation • Indicators **Particles** • Solids, liquids & gases • Properties of solids, liquids and gas • Changing state	**Sound** • What is sound • Amplitude • Frequency • Waves • Echoes **Breathing** • Lung structure • How the lungs work • Exercise and breathing rate **Types of reaction** • Displacement • Neutralisation • Decomposition
Autumn 2	**Human Reproduction** • Male reproductive organs • Female reproductive organs • Fertilisation • Pregnancy **Energy Transfer** • Types of energy • Energy Stores • Efficiency • Sankey Diagrams	**Digestion** • Food groups • Food tests • Digestive system organs • Journey of a sandwich • Disease caused by poor diet **Magnets and electromagnets** • Permanente magnets • Temporary magnets • Electromagnets • Magnetic fields

Spring 1	**Elements** • Elements • Compounds • Mixtures • Reactions • Periodic Table • Equations **Light** • Reflection • Refraction • Colour • The eye	**Infection** • Pathogens • Immunity • Vaccination • Diseases **Heating and cooling** • Conduction • Convection • Radiation • Insulation
Spring 2	**Photosynthesis** • Structure of a plant • Plant leaf • Photosynthesis • Factors effecting photosynthesis **Separating mixtures** • Filtration • Crystallisation • Distillation • Chromatography	**Respiration** • Aerobic • Anaerobic • Fitness **Forces** • Types of forces • Contact and non- contact forces
Summer 1	**Speed** • Calculating speed • Factors effecting speed • Road Safety	**Universe** • Planets • Galaxy • Universe • Big Bang

Summer2	**Inheritance** • Nucleus • DNA • Genes • Dominance • Punnet squares	**Ecology** • Keys • Food chains • Food webs • Classification • Sampling techniques • Pooters • Quadrats • Line transits