Year 7

Autumn Term How do we get our drinking water? How fast can we go? How do we get our nutrition?	Spring Term How does your mobile phone work? How is Science used in farming?	Summer Term Is there life beyond Earth? How Science works
Key knowledge:   • Particle model   • States of matter   • Chemical formulae   • Lab safety and using scientific equipment   • Separating techniques   • Water Cycle and solutions   • Forces   • Speed equation   • Acceleration   • Distance time graphs   • Velocity time graphs   • Terminal velocity   Living organisms   • Plant and animal cells   • Diet and digestive system   • Respiration and photosynthesis	Key knowledge:   • Energy stores and pathways   • Energy transfers   • Electricity - series and parallel circuits   • Waves   • Sound   • Light   • Acid and bases   • Neutralisation and pH scale   • Acid rain   • Fertilisers   • GM foods   • MRS GREN	Key Knowledge:   • Solar systems   • Space theories   • Earth's structure   • Earth's atmosphere   • Weathering   • Erosion   • Transportation   • Rock cycle   • How Science works - Practical investigation skills
Pupils will be able to: Key Vocabulary:   explain the nature of matter Atom, Element, molecule, solvent, solution, solute, velocity, acceleration, terminal velocity, contact and non contact forces, cytoplasm, nucleus, cell membrane, cell wall, chloroplasts, macro and micronutrient	Pupils will be able to: Key Vocabulary:   Apply scientific concepts to everyday occurrences, such   as light and sound. Begin to understand how chemical   reactions work, to evaluate theories regarding space.	Pupils will be able to: Key Vocabulary:   Know and understand more about planet Earth.   know what independent, dependent and control variables   are. are.
Assessment: 1. Bunsen burner and scientific drawing 2. States of matter and particle model. 3.VESNU and terminal velocity. 4. Cells and nutrients	Assessment: 6.Circuits, waves, comparing, VESNU 7. pH scale and acid/base reactions.	Assessment: 8. Earth's structure and data analysis.
Enrichment Opportunities <u>https://www.bbc.co.uk/bitesize/topics/z9r4jxs</u> <u>https://www.bbc.co.uk/bitesize/topics/z4brd2p/articles/zw9qwnb</u> <u>https://www.bbc.co.uk/bitesize/subjects/z4882hv</u> Science club	Enrichment Opportunities https://www.bbc.co.uk/bitesize/topics/zc3g87h https://www.bbc.co.uk/bitesize/subjects/zh2xsbk https://www.bbc.co.uk/bitesize/subjects/znxtyrd Science week Science club	Enrichment Opportunities https://www.bbc.co.uk/bitesize/subjects/znxtyrd https://www.bbc.co.uk/bitesize/topics/zhirci6 https://www.bbc.co.uk/bitesize/articles/zssccmn Science club Trip to the big bang fair