ST. LUKE'S SCIENCE
Year Three

Year Three: Clumber Class					
Autumn		Spring		Summer	
Fossils, Rocks & Soils (PB) N.C. Y3 PoS	Animals inc. humans (PB) N.C. Y3 PoS	Reduce, Reuse, Recycle (Tw) Beyond N.C.Y3 PoS	Flowering Plants (PB) N.C. Y3 PoS	Forces & magnets (PB) N.C. Y3 PoS	Light and Shadows (PB) N.C. Y3 PoS
Key Vocabulary Sedimentary, igneous, metamorphic, fossil, formed, excavation, erosion, permeable, layers, types	**Key Vocabulary** Balanced diet, intolerance, celiac, vegetarian, lactose intolerant, omnivore, carnivore, herbivore, food source, growth, energy, repair, dairy, carbohydrate, protein, starch, skeleton, food group	**Key Vocabulary** Waste, single use, sustainable, landfill, reduce, reuse, recycle, decompose, pollution, renewable, non-renewable, greenhouse gas, greenhouse effect, climate change, carbon footprint, litter, wood, water, oil, coal, e-waste, fossil fuels, biodiversity, energy, biodegradable	**Key Vocabulary** Roots, transported, pollination, seed formation, seed dispersal, capillaries, reproduction, photosynthesis, energy	**Key Vocabulary** Contact, objects, surfaces, poles, Newton's, force meter, magnetic force, materials, magnetic field, conduct	**Key Vocabulary** Behave, change, reflection, UV light, travel, straight line, reflective, light source, natural, man-made, opaque, transparent, translucent

Scientific Knowledge to be covered throughout the year				
Term	Disciplinary Knowledge	Biology	Chemistry	Physics
Autumn 1: Fossils, Rocks & Soils	<u>Comparative and fair testing</u> • **Y3:** Know that an investigation includes simple, practical enquiries. • **Y3:** Know that measurements can be taken using a range of equipment. • **Y3:** Know that comparative tests can be carried out.		• Know and escribe in simple terms how fossils are formed when things that have lived are trapped within sedimentary rock. • Know that soils are made from rocks and organic matter. • Know, compare and group together different kinds of rocks on the basis of their simple, physical properties. • Know and recognise the simple physical properties of some rocks to	

	Identifying and classifying • **Y3:** Know that identified criteria will determine how living and non-living things are classified. • **Y3:** Know that keys can be used when grouping, sorting and classifying. **Gathering and recording** • **Y3:** Know that patterns can be naturally occurring. • **Y3:** Know that conclusions can be formed based on findings.		their formation (igneous or sedimentary).	
Autumn 2: Health & Movement		• Know that animals, including humans, need the right types and amounts of nutrition, that they cannot make their own food and they get nutrition from what they eat. • Know, construct and interpret a variety of food chains, identifying producers, predators and prey. • Know that humans and some animals have skeletons and muscles for support, protection and movement.		
Spring 1: Reduce, Reuse, Recycle		• Know, explore the requirements of plants, for life and growth (air, light, water, nutrients from the soil, and room to grow) and how they vary from plant to plant. • Know and recognise that environments can change and that this can sometimes pose dangers to living things (Y4)		
Spring 2: Flowering Plants		• Know and describe the functions of different parts of flowering plants: roots, stem, leaves and flowers. • Know and explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. • Know and investigate the way in which water is transported within plants.		

		• Know and explore the role of flowers in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.		
Summer 1: Scientists & Inventors		• Know how plants need water, light and a suitable temperature to grow and stay healthy. • Know and describe the basic structure of common flowering plants by observing and sketching a range of common plants. • Know the importance for humans of exercise, of eating the right amounts of different types of food, and hygiene. • Know and describe the importance of hygiene to humans • Know and describe how animals obtain their food from plants and other animals, using the idea of a simple food chain	• Know about people who have developed new materials (Charles Macintosh) • Know, identify and compare the suitability of a variety of everyday materials for particular uses	
Summer 2: Growing plants		• Know, observe and describe how seeds and bulbs grow into mature plants. • Know and describe how plants need water, light and a suitable temperature to grow and stay healthy.		