LEAS PARK JUNIOR SCHOOL – Curriculum Progression Map

Year Group: 4 **Subject: Science**

Unit → / Curriculum Strand ↓	Autumn Living things and their habitats (1) Animals including humans (2)	Spring Electricity (3)	Summer States of Matter (4) Sound (5)
Biology Living things and their habitats (1) Animals including humans (2)	Children can… • (1) explore and use classification keys to group, identify and name a variety of living things in their local and wider environment • (1) construct and interpret a variety of food chains • (2) describe the simple functions of the human digestive system • (2) identify the different types of teeth in humans • (2) explain the effects of sugar on tooth decay Children know… • (1) that living things can be grouped in a variety of ways • (1) that environments can change and this can pose dangers to living things • (2) the functions of each part of the digestive system • (2) the function of different types of teeth in humans • (2) that all food chains have producers, predators and prey • (2) how to keep their teeth healthy		
Chemistry States of Matter (4)	Children can… • (4) describe the properties of solids, liquids and gases • (4) compare and group material together, according to whether they are solids, liquids or gases • (4) identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature • (4) describe the different stages of the water cycle • (4) measure or research the temperature at which materials change state in degrees Celsius Children know… • (4) the difference between a solid, liquid and a gas • (4) what happens to a material as it changes state from being heated or cooled • (4) what evaporation and condensation are • (4) the stages of the water cycle		
Physics	Children can… • (3)identify common appliances that run on electricity • (3) construct a simple series circuit and name its basic parts • (3) identify if a lamp will light in a simple series circuit		

Electricity (3) Sound (5)	• (3) explain how a switch works and create a circuit with a switch associating this with whether or not a lamp lights • (5) find patterns between the volume of a sound and the strength of the vibrations that produced it • (5) find patterns between the pitch of a sound and features of the object that produced it • (5) identify how sounds are made, associating some of them with something vibrating Children know… • (3) the two different types of electricity • (3) the names of the basic parts of a simple circuit, including cells, wires, bulbs, switches and buzzers • (3) that a bulb will light up if it is part of a complete loop with a battery • (3) what conductors and insulators are and recognise some of these. • (3) that metals make good conductors • (5) that sounds travel through a medium to the ear • (5) that sound travels by vibrations • (5) how to change pitch and volume • (5) that sounds get fainter as the distance from the source increases
Working Scientifically	• (1-5) ask relevant questions and using different types of scientific enquiries to answer them ((1,2) Observing changes over time; grouping and classifying, (3) noticing patterns; fair tests, (4) observing changes over time; fair tests, (5) noticing patterns) • (1-5) make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers (4) and stopwatches (4) • (1-5) set up simple practical enquiries, comparative and fair tests • (1,3) gather, record, classify and present data using tables and bar charts to help in answering questions • (1,2,4) record findings using simple scientific language, drawings or labelled diagrams, keys, bar charts and tables • (2,5) report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • (3,4,5) use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • (4,5) use straightforward scientific evidence to answer questions or to support their findings • (4,5) identify differences, similarities or changes related to simple scientific ideas and processes