



This table shows the progression of skills over the year groups, from KS1 to end of KS2
for Science - Topic Knowledge

NEWBOLD SCHOOL TOPIC KNOWLEDGE SKILLS PROGRESSION SCIENCE YEARS 1-6			
	Year 1/2	Year 3/4	Year 5/6
Animals inc. humans	<p>Identifying animals; Carnivores, herbivores & omnivores; Structure of different animals; Basic parts of the human body and how they relate to the senses.</p> <p>Animals and their offspring; Basic needs of animals; Importance of exercise, nutrition and hygiene</p>	<p>Nutrition in animals and humans; Role of skeleton and muscles</p> <p>Human digestive system; Different types of teeth and functions; Food chains (producers, predators and prey</p>	<p>Life cycles; Reproduction in plants and animals</p> <p>Changes to old age including puberty</p> <p>Changes over time & fossils; Offspring and their traits; Adaptation linking to evolution</p> <p>Circulatory system; Impact of personal choices on the body e.g. diet; Transportation of water and nutrients in animals</p>
Living things and habitats	<p>Things that are dead, living or never alive; Different habitats and the animals and plants within them; Microhabitats; Simple food chains and food sources</p>	<p>Grouping living things; Classification keys; Living things in the local and wider environment; Change in environments and dangers this can pose to living things.</p>	<p>Classifying living thing using scientific explanations; Microorganisms; Special characteristics of plants and animals</p>

Plants	<p>Identify and name a variety of plants; Structure of a variety of common flowering plants, including trees.</p> <p>The growth of seeds into mature plants; The needs of plants (water, light, temperature). .</p>	<p>Functions of parts of flowering plants; Requirements of plants (air, light, water, nutrients from soil, and room to grow and how they vary from plant to plant; Investigate how water is transported within plants; Role of the flower in the life cycle of flowering plants.</p>	<p>See above</p>
States of matter		<p>Grouping solids, liquids and gases; how some materials change state; Evaporation and condensation within the water cycle</p>	<p>Exploring properties of everyday materials e.g. solubility, conductivity etc; Liquid solutions; Separating mixtures; Reversible and irreversible changes</p>
Materials	<p>Objects and their materials; Everyday materials and their uses; Physical properties and suitability of materials; Comparing and grouping materials; Investigate how to change the shape of some solid materials.</p>	<p>Different kinds of rocks; Fossil formation; What's in soils</p>	<p>Exploring properties of everyday materials e.g. solubility, conductivity etc; Liquid solutions; Separating mixtures; Reversible and irreversible changes</p>
Forces	<p>n/a</p>	<p>How things move on different surfaces; How magnetic force differs from other forces; Attraction and repelling; Magnetic and non-magnetic materials; Poles of a magnet</p>	<p>Gravity; Effects of air/water resistance and friction; Investigating mechanisms</p>

Light	n/a	Light and dark; Reflections; Keeping eyes safe from sun; Shadow formation; Sizes of shadows	How light travels; How light enables us to see; Shadow shapes in relation to how light travels
Electricity	n/a	What uses electricity?; Electrical circuits; Identifying issues in circuits; Switches; Conductors and insulators	Voltage; Functions of components and their variations e.g. brightness of a bulb; Drawing diagrams using scientific symbols