Baines Endowed Curriculum Map - Science

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception						
Year 1	**Seasonal changes** Children learn about the 4 seasons and the weather associated with each.	**Everyday Materials** Identifying the difference between objects and materials, children explore their surroundings to find examples of each.	**Sensitive Bodies** Familiarising themselves with the basic parts of the human body, children investigate their senses through stimulating experiences that highlight how we interact with the world around us.	**Comparing animals** Studying both local and global animals, children recognise common features and use this information to make comparisons and begin to classify animals.	**Introduction to plants** Identifying the key features of a plant, children describe important structures and make comparisons between different plants.	**Making connections** Making connections between key concepts and skills.
Year 2	**Habitats** Considering that life processes that all living things have in common, pupils classify objects into alive or has never been alive	**Microhabitats** Children discover that microhabitats provide what minibeasts need to survive and carry out a survey of where they live on the school grounds.	**Uses of everyday materials** Children begin to explain why materials are used in certain contexts.	**Life cycles and health** Studying the life cycles of various animals, children learn what animals need to survive and how they change over time.	**Plant growth** Using their prior knowledge of important plant structures, children explain which factors are needed for successful growth and compare how those needs vary across different plants.	**Making connections** Making connections between key concepts and skills.

Year 3	**Movement and nutrition** Studying the human skeleton, children identify key bones and compare them to other animals explaining the role within the body.	**Forces and magnets** Investigating the movement of vehicles on different surfaces, children learn about the impact of friction and compare uses and drawbacks.	**Rocks and soil** Studying rocks and their properties, children learn that rock properties support classification and tell us about how rocks were formed.	**Light and shadows** Identifying examples of luminous objects, children learn about how light travels around us and how that enables us to see.	**Plant reproduction** Building on their prior knowledge of plant structures, children describe the functions of named parts and use evidence to explain their significance in plant development.	**Making connections** Making connections between key concepts and skills.
Year 4	**Digestion and food** Using models, children describe the function of key organs in the digestive system.	**Electricity and circuits** Exploring appliances that use electricity in their setting, children learn how to work with electricity safely and build circuits.	**States of matter** Investigating the properties of solids, liquids and gases, children learn about the different states of matter.	**Sound and vibrations** Exploring different ways of producing sounds, children learn about the relationship between vibrations and what they hear.	**Classification and changing habitats** Identifying different ways living things can be grouped, children make classification keys to explore which grouping methods are most effective.	**Making connections** Making connections between key concepts and skills.
Year 5	**Mixtures and separation** Pupils explore different types of mixtures and the different methods that can be used to separate them.	**Properties and changes** Broadening their experience of the properties of materials, children investigate how certain properties influence the uses of materials	**Earth and space** Exploring some of the key celestial bodies in our solar system, children learn the names and compare their movements.	**Life cycles and reproduction** Studying different life cycles of animals, children learn the significance of reproduction for the survival of a species.	**Imbalanced forces** Building on the knowledge of contact forces, children explore gravity, air resistance and water resistance in more depth and compare the effect of these forces being imbalanced.	**Human timeline/Making connections** Studying human development and changes, children identify key stages and consider the data which may help determine if a child is growing normally.

Year 6	**Classifying big and small** Children broaden their knowledge of how vertebrates, invertebrates, plants and micro organisms are grouped using shared characteristics.	**Light and reflection** Proving that light travels in straight lines, children use this information to explain observations of reflection and shadows.	**Evolution and inheritance** Studying patterns through families, children learn about the characteristics that are inherited from parents and those that are environmental.	**Circuits, batteries and switches** Using their prior knowledge of electrical circuits, children learn to draw conventional circuit diagrams and use models to explain current and voltage.	**Circulation and exercise** Studying the human circulatory system, children learn about the role of the heart, blood and blood vessels and use models to demonstrate their function.	**Making connections** Making connections between key concepts and skills.

Materials – beige
Animals including humans – green
Plants – yellow
Living things and their habitats – blue
Forces, Earth and space – grey
Energy - red