

Science Curriculum Overview 2017-18

The following curriculum overview may be subject to change. At Monksdown Primary School we are constantly evolving our curriculum in response to the needs of learners and national strategies. For the most up-to-date information of what your child is learning please visit our website and Twitter feeds which are regularly updated throughout the year.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	In Science we will be learning about different materials and their properties. They will be taking part in different investigations which help them to question the world around them. Whilst learning about recycling, children will make their own paper and plastic.		This term, we will be studying plants and trees. We will learn about all the things that plants need to grow and be able to identify a variety of common plants. We will also explore their habitats, including how light and temperature affects plant growth. Children will learn to identify common plants and explore their habitats.		We will be using toys to begin to learn some basic Physics including forces, friction, electricity and magnetism. Children will use toys to explore basic Physics. They will start by identifying pushes and pulls, before learning about fiction, gravity, flight, electricity and magnetism.	
Year 2	In Science we will be learning about different materials and their properties. They will be taking part in different investigations which help them to question the world around them. Whilst learning about recycling, children will make their own paper and plastic.		This term, we will be studying plants and trees. We will learn about all the things that plants need to grow and be able to identify a variety of common plants. We will also explore their habitats, including how light and temperature affects plant growth. Children will learn to identify common plants and explore their habitats.		We will be using toys to begin to learn some basic Physics including forces, friction, electricity and magnetism. Children will use toys to explore basic Physics. They will start by identifying pushes and pulls, before learning about fiction, gravity, flight, electricity and magnetism.	
Year 3	Children will learn about electricity. As scientists they will construct simple circuits and study the links between magnets and electricity. The children will focus on developing scientific skills, including; defining variables, designing questions, planning investigations and predicting outcomes.		The children will learn about geology, mixtures and separation. As scientists they will learn about mixing solids and liquids and how to separate them. They will also study how this relates to soils and rocks in the world around us. The children will focus on developing scientific skills, including; selecting which data to gather, and graphing/tabulating data.		The children will learn to analyse and evaluate data related to environment, ecology and evolution. As scientists they will learn about how the environment affects living things, and how living things have adapted to living on earth. The children will focus on developing scientific skills, including; validating data and identifying/explaining anomalies.	
Year 4	Children will learn about electricity. As scientists they will construct simple circuits and study the links between magnets and electricity. The children will focus on developing scientific skills, including; defining variables, designing questions, planning investigations and predicting outcomes.		The children will learn about geology, mixtures and separation. As scientists they will learn about mixing solids and liquids and how to separate them. They will also study how this relates to soils and rocks in the world around us. The children will focus on developing scientific skills, including; selecting which data to gather, and graphing/tabulating data.		The children will learn to analyse and evaluate data related to environment, ecology and evolution. As scientists they will learn about how the environment affects living things, and how living things have adapted to living on earth. The children will focus on developing scientific skills, including; validating data and identifying/explaining anomalies.	
Year 5	Children will learn about electricity. As scientists they will construct simple circuits and study the links between magnets and electricity. The children will focus on developing scientific skills, including; defining variables, designing questions, planning investigations and predicting outcomes.		The children will learn about geology, mixtures and separation. As scientists they will learn about mixing solids and liquids and how to separate them. They will also study how this relates to soils and rocks in the world around us. The children will focus on developing scientific skills, including; selecting which data to gather, and graphing/tabulating data.		The children will learn to analyse and evaluate data related to environment, ecology and evolution. As scientists they will learn about how the environment affects living things, and how living things have adapted to living on earth. The children will focus on developing scientific skills, including; validating data and identifying/explaining anomalies.	
Year 6	<p>Electricity: Children will investigate the affect voltage has on the brightness of a lamp or the volume of a buzzer. They will be able to explain the functions of components and the reasons for variations in their volume/brightness etc. Children will also be taught to recognise symbols and will represent these in a labelled diagram.</p>	<p>Light: Children will be taught to recognise that light appears to travel in straight lines, and will use that idea to explain how objects are seen. They will explain that light comes from a source and reflects into our eyes and will be able to explain why objects have shadows. Children will be taught to plan a scientific enquiry, make predictions and use results to formulate conclusions.</p>	<p>Living things and their habitats: Children will be taught how living things are classified according to common observable characteristics; taking into account similarities, differences and the reasons why they have been classified in such ways. Children will record data and report findings, identifying key scientific evidence.</p>	<p>Animals including humans: Children will identify, using scientific language, the main parts of the circulatory system, describing the functions of the heart, blood vessels and blood. Children will also be taught about the parts of the digestive system. Children will revisit the impact of diet, exercise, drugs and lifestyle and the way their bodies function. Children will learn how to record and present data on a variety of graphs and charts.</p>	<p>Evolution and Inheritance: Children will recognise that living things have changed over time – using the scientific evidence we learn about to support or refute ideas or arguments. Children will also recognise that living things produce offspring of the same kind, but usually not identical to their parents and they will identify that animals and plants adapt to suit their environment in different ways, discussing the links between this and evolution.</p>	