

Hampton Court House - Lower Years Curriculum - Science: Year 4

Skills	<p>Pupils develop their knowledge and understanding through practical activity, exploration and discussion. These skills permeate all the units covered in Year 4:</p> <ul style="list-style-type: none"> • sense of laboratory safety • setting up simple practical enquiries, comparative and fair tests • making systematic and careful observations and, where appropriate, taking accurate measurements using a wider range of equipment • gathering, recording, classifying and presenting data in a variety of ways to help in answering questions • recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • using results to draw simple conclusions and make predictions for new values • identifying differences, similarities or changes related to simple scientific ideas and processes
Autumn Term	
Electric Circuits	<ul style="list-style-type: none"> • identify common appliances that run on electricity • construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers • identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery • recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit • recognise some common conductors and insulators, and associate metals with being good conductors.
Spring Term	
States of matter	<ul style="list-style-type: none"> • compare and group materials together, according to whether they are solids, liquids or gases • observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)

Hampton Court House - Lower Years Curriculum - Science: Year 4

	<ul style="list-style-type: none">• identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.
Light	<ul style="list-style-type: none">• recognise that they need light in order to see things and that dark is the absence of light• notice that light is reflected from surfaces• recognise that light from the sun can be dangerous and that there are ways to protect their eyes• recognise that shadows are formed when the light from a light source is blocked by a solid object• find patterns in the way that the size of shadows change.
Summer Term	
Plants and animals	<ul style="list-style-type: none">• recognise that living things can be grouped in a variety of ways• explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment• recognise that environments can change and that this can sometimes pose dangers to living things.• describe the simple functions of the basic parts of the digestive system in humans• identify the different types of teeth in humans and their simple functions• construct and interpret a variety of food chains, identifying producers, predators and prey.