



	By the end of Year 5 children should be able to...	By the end of Year 6 children should be able to...	Children working at a mastery level in year 6 should...
Thinking Scientifically	<ul style="list-style-type: none"> Record data and results using scientific diagrams and labels and models Record results of increasing complexity using scientific diagrams, labels and tables Present findings in written form and displays Record data using scatter graphs, bar and line graphs and tables Take measurements, using a range of scientific equipment, with increasing accuracy and precision Report findings, including oral explanations of results Identify scientific evidence that has been used to support ideas Use test results to make predictions to set up further comparative and fair tests Reporting and presenting findings 	<ul style="list-style-type: none"> Use scientific diagrams Report findings in written form such as displays and presentations <i>Plan scientific enquiries, including recognising and controlling variables where necessary</i> Take measurements with increasing accuracy and precision Record results Plan scientific enquiries, including recognising and controlling variables where necessary Record results using tables & bar & line graphs Report findings from enquiries including conclusions, causal relationships, and explanations of results Present findings in oral and written forms Identify scientific evidence that has been used to support or refute ideas and arguments Plan different types of scientific enquiries to answer questions 	

	<ul style="list-style-type: none"> Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary 	<ul style="list-style-type: none"> Use test results to make predictions to set up further enquiries Identify scientific evidence that has been used to support or refute ideas Record data and results using classification keys and scientific drawings 	
Biology - Animals Including Humans	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood Describe the way in which nutrients and water are transported within animals, including humans Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function 	
Biology - Living things and their habitats	<p>Living Things and their Environment</p> <ul style="list-style-type: none"> Describe the life process of reproduction in some plants and animals Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird Construct and interpret a variety of food chains, identifying producers, predators and prey 	<ul style="list-style-type: none"> Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals Give reasons for classifying plants and animals based on specific characteristics 	

		<ul style="list-style-type: none">• Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals• Record data and results using classification keys and scientific drawings	
Biology- Evolution and Inheritance Biology		<ul style="list-style-type: none">• Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago• Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.• Identify how animals and plants are adapted to suit their environment in different ways and that adaptations may lead to evolution	

Physics - 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 the 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. 	<ul style="list-style-type: none"> • Recognise that light appears to travel in straight lines • Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them • Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes • Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye 	
Physics - Electricity	<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 	<ul style="list-style-type: none"> • 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 	

	<ul style="list-style-type: none"> • Recognise some common conductors and insulators, and associate metals with being good conductors • Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit • Identify scientific evidence: talk about how scientific views have developed over time (UpperKS2) 	<ul style="list-style-type: none"> • Use recognised symbols when representing a simple circuit in a diagram • Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit • Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches • Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches 	
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Key performance indicators are in **BOLD**.