

# Science Key Skills

## Year 6

Working scientifically	To explain which variables are being controlled in a test and why
	To understand what measurements should be taken, for how long and whether they should be repeated
	To use more complex tables, scatter graphs and line graphs to record information
	To identify scientific evidence that has been used to support or refute ideas or arguments
	To look for causal relationships in data and identify evidence that supports or refutes their ideas
Biology - Living things and their habitats - classification	To describe how living things are classified into broad groups according to common observable characteristics (including microorganisms, plants and animals)
	To give reasons for classifying plants and animals based on specific characteristics
	To understand that broad classifications can be subdivided
	To apply classification keys to animals from their local environment and those which are unfamiliar
Biology - Animals, including humans - circulatory system	To recognise, name and give the importance of the major organs in the human body
	To describe the functions of the heart, blood vessels and blood
	To recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function
	To describe the ways in which nutrients and water are transported within animals, including humans
	To understand the roles of the major organs, bones and muscles in the human body
Physics - Light	To explain that light travels in a straight line from a source and when reflected
	To explain how objects are seen because they give out or reflect light into the eye
	To explain that we see things because light travels from light sources to our eyes (or to objects and then our eyes)
	To explain why shadows have the same shape as the objects that cast them
	To have experimented with prisms and observed the spectrum of colours
Physics - Electricity	To understand the relationship between the performance of a component and the number/voltage of cells used in a circuit
	To compare and give reasons for variations in how components function in a series circuit
	To use the recognised symbols when drawing accurate circuit diagrams
	To know a range of conductors and insulators of electricity
Biology - Evolution and inheritance	To recognise that fossils provide information about living things that inhabited the Earth millions of years ago
	To understand how and why living things have changed over time
	To recognise that living things produce offspring of the same kind, but that offspring vary and are not identical to their parents
	To identify how animals and plants are adapted to suit their environments in different ways and that adaptations may lead to evolution
	To compare adaptations of animals in their locality with those from more extreme environments