

Science - The National Curriculum - Year 3 and 4

The Statutory requirements

Year 3

Working scientifically: -	During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills <u>through the teaching of the programme of study content:</u> ▪ asking relevant questions and using different types of scientific enquiries to answer them ▪ setting up simple practical enquiries, comparative and fair tests ▪ making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers ▪ 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 ▪ reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions ▪ using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions ▪ identifying differences, similarities or changes related to simple scientific ideas and processes ▪ using straightforward scientific evidence to answer questions or to support their findings.
Plants: -	Pupils should be taught to: ▪ identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers ▪ explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant ▪ investigate the way in which water is transported within plants ▪ explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.
Animals, including humans: -	Pupils should be taught to: ▪ identify that animals, including humans, need the right types and

	amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat ▪ identify that humans and some other animals have skeletons and muscles for support, protection and movement.
Rocks: -	Pupils should be taught to: ▪ compare and group together different kinds of rocks on the basis of their appearance and simple physical properties ▪ describe in simple terms how fossils are formed when things that have lived are trapped within rock ▪ recognise that soils are made from rocks and organic matter.
Light: -	Pupils should be taught to: ▪ 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 an opaque object ▪ find patterns in the way that the size of shadows change.
Forces and magnets: -	Pupils should be taught to: ▪ compare how things move on different surfaces ▪ notice that some forces need contact between two objects, but magnetic forces can act at a distance ▪ observe how magnets attract or repel each other and attract some materials and not others ▪ compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials ▪ describe magnets as having two poles ▪ predict whether two magnets will attract or repel each other, depending on which poles are facing.