

#### **Working at the Expected Standard in Science**

	<u>YEAR 1</u>	
Working	Asking simple questions and recognising that they can be answered in different	
Scientifically	ways.	
	Observing closely, using simple equipment.	
	Performing simple tests.	
	Identifying and classifying.	
	Using their observations and ideas to suggest answers to questions.	
	Gathering and recording data to help in answering questions.	
Plants	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.	
	Identify and describe the basic structure of a variety of common flowering plants, including trees.	
Animals	Identify and name a variety of common animals including fish, amphibians,	
Including	reptiles, birds and mammals.	
Humans		
	Identify and name a variety of common animals that are carnivores, herbivores	
	and omnivores.	
	Describe and compare the structure of a variety of common animals (fish,	
	amphibians, reptiles, birds and mammals, including pets).	
	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.	
Everyday Materials	Distinguish between an object and the material from which it is made.	
	Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.	
	Describe the simple physical properties of a variety of everyday materials.	
	Compare and group together a variety of everyday materials on the basis of their	
	simple physical properties.	
Seasonal Changes	Observe changes across the four seasons.	
	Observe and describe weather associated with the seasons and how day length varies.	



	YEAR 2
Working	Asking simple questions and recognising that they can be answered in different
Scientifically	ways.
	Observing closely, using simple equipment.
	Performing simple tests.
	Identifying and classifying.
	Using their observations and ideas to suggest answers to questions.
	Gathering and recording data to help in answering questions.
Living Things	Explore and compare the differences between things that are living, dead, and
and Their	things that have never been alive.
Habitats	
	Identify that most living things live in habitats to which they are suited and
	describe how different habitats provide for the basic needs of different kinds of
	animals and plants, and how they depend on each other.
	Identify and name a variety of plants and animals in their habitats, including
	microhabitats.
	Describe how animals obtain their food from plants and other animals, using the
	idea of a simple food chain, and identify and name different sources of food.
Plants	Observe and describe how seeds and bulbs grow into mature plants.
	Find out and describe how plants need water, light and a suitable temperature
	to grow and stay healthy.
Animals	Notice that animals, including humans, have offspring which grow into adults.
Including	
Humans	
	Find out about and describe the basic needs of animals, including humans, for
	survival (water, food and air).
	Describe the importance for humans of exercise, eating the right amounts of
	different types of food, and hygiene.
Uses of	Identify and compare the suitability of a variety of everyday materials, including
Everyday	wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.
Materials	
	Find out how the shapes of solid objects made from some materials can be
	changed by squashing, bending, twisting and stretching.



	YEAR 3
Working	Asking relevant questions and using different types of scientific enquiries to
Scientifically	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	Identify and describe the functions of different parts of flowering plants: roots,
riants	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	Identify that animals, including humans, need the right types and amount of
Including	nutrition, and that they cannot make their own food; they get nutrition from
Humans	what they eat.
	Identify that humans and some other animals have skeletons and muscles for
	support, protection and movement.
Rocks	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	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	Compare how things move on different surfaces.
Magnets	
	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



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.



	YEAR 4
Working	Asking relevant questions and using different types of scientific enquiries to
Scientifically	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.
Living Things	Recognise that living things can be grouped in a variety of ways.
and Their	
Habitats	
	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.
Animals	Be the simple functions of the basic parts of the digestive system in humans.
Including	
Humans	
	Identify the different types of teeth in humans and their simple functions.
	Construct and interpret a variety of food chains, identifying producers, predator
	and prey.
States of	Compare and group materials together, according to whether they are solids,
Matter	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).
	Identify the part played by evaporation and condensation in the water cycle and
	associate the rate of evaporation with temperature.
Sound	Identify how sounds are made, associating some of them with something
	vibrating.
	Recognise that vibrations from sounds travel through a medium to the ear.
	Find patterns between the pitch of a sound and features of the object that
	produced it.
	Find patterns between the volume of a sound and the strength of the vibrations
	that produced it.
	Recognise that sounds get fainter as the distance from the sound source
	increases.
Electricity	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.