

Content and skills in Science

	Content	Skills	Proposed topic
Year 4	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> ♣ I can ask relevant questions and using different types of scientific enquiries to answer them ♣ I can set up simple practical enquiries, comparative and fair tests ♣ I can make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers ♣ I can gather, record, classify and present data in a variety of ways to help in answering questions ♣ I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables ♣ I can report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions ♣ I can use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions ♣ I can identify differences, similarities or changes 	Working Scientifically

	<ul style="list-style-type: none"> • 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. 	<p>related to simple scientific ideas and processes</p> <ul style="list-style-type: none"> ♣ I can use straightforward scientific evidence to answer questions or to support my findings. 	
	<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. 	<ul style="list-style-type: none"> ♣ I can recognise that living things can be grouped in a variety of ways ♣ I can explore and use classification keys to help group, identify and name a variety of living things in my local and wider environment ♣ I can recognise that environments can change and that this can sometimes pose dangers to living things. 	<h2>All Living Things</h2>

	<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"> ♣ I can describe the simple functions of the basic parts of the digestive system in humans ♣ I can identify the different types of teeth in humans and their simple functions ♣ I can construct and interpret a variety of food chains, identifying producers, predators and prey. 	<p>Animals including humans</p>
	<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) • identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. 	<ul style="list-style-type: none"> ♣ I can compare and group materials together, according to whether they are solids, liquids or gases ♣ I can 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) ♣ I can identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. 	<p>States of Matter</p>
	<ul style="list-style-type: none"> • identify how sounds are made, associating some of them with something vibrating • recognise that vibrations from sounds 	<ul style="list-style-type: none"> ♣ I can identify how sounds are made, associating some of them with something vibrating ♣ I can recognise that vibrations from sounds travel through a medium to the ear 	<p>Sound</p>

	<p>travel through a medium to the ear</p> <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> ♣ I can find patterns between the pitch of a sound and features of the object that produced it ♣ I can find patterns between the volume of a sound and the strength of the vibrations that produced it ♣ I can recognise that sounds get fainter as the distance from the sound source increases. 	
	<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 	<ul style="list-style-type: none"> ♣ I can identify common appliances that run on electricity ♣ I can construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers ♣ I can 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 ♣ I can recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit ♣ I can recognise some common conductors and insulators, and associate metals with being good conductors. 	<h2>Electricity</h2>

	<ul style="list-style-type: none">• recognise some common conductors and insulators, and associate metals with being good conductors.		
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