



End of Year Science Expectations: Year 4

| Working Scientifically | Living things and their habitats | Animals, inc Humans | State of Matter | Sound | Electricity |
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| <p>During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none"> asking relevant questions and using different types of | <p>Pupils should be taught to:</p> <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 | <p>Pupils should be taught to:</p> <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 | <p>Pupils should be taught to:</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 | <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> identify how sounds are made, associating some of them with something vibrating recognise that vibrations from sounds travel through a | <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> identify common appliances that run on electricity construct a simple series electrical circuit, identifying |

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| <p>scientific enquiries to answer them</p> <ul style="list-style-type: none"> ▪ 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 | <p>things in their local and wider environment</p> <ul style="list-style-type: none"> ▪ recognise that environments can change and that this can sometimes pose dangers to living things.  | <p>their simple functions</p> <ul style="list-style-type: none"> ▪ construct and interpret a variety of food chains, identifying producers, predators and prey.  | <p>when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius ($^{\circ}\text{C}$)</p> <ul style="list-style-type: none"> ▪ identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. | <p>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. | <p>and naming its basic parts, including cells, wires, bulbs, switches and buzzers</p> <ul style="list-style-type: none"> ▪ 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 |
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| <ul style="list-style-type: none">▪ 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 | | |  A cartoon illustration of a young male scientist with spiky blonde hair, wearing a white lab coat over a blue shirt and dark pants. He is wearing blue gloves and holding a small green and yellow beaker in his left hand. He has a friendly expression and is waving with his right hand. | | <p>opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</p> <ul style="list-style-type: none">▪ recognise some common conductors and insulators, and associate metals with being good conductors. |
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| <p>presentations of results and conclusions</p> <ul style="list-style-type: none">▪ 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 | | | | | |
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| answer questions or to support their findings. | | | | | |
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