

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Y4	<p>Animals including humans</p> <p>Digestive system Teeth Food chain</p>	<p>Sound</p> <p>Sound origins Sound travels through the ear Pitch Sound gets fainter</p>	<p>States of Matter</p> <p>Solids liquids and gases Change of state Evaporation and condensation-water cycle</p>	<p>Living things and their habitats</p> <p>Environmental changes and dangers (Links to Geography)</p>	<p>Electricity</p> <p>Electrical appliances Circuit Switches Conductors and insulators</p> <p>Links to English</p>	<p>Living things and their habitats</p> <p>Grouping of animals Classification keys</p>
Topic take Aways	<p>I can identify and name the parts of the human digestive system.</p> <p>I can explain the functions of the organs in the human digestive system.</p> <p>I can identify the different types of</p>	<p>I know that sound is a type of energy. Sounds are created by vibrations which spread out over distance.</p> <p>I know that sound vibrations pass through air particles until the particle next to your ear vibrates.</p>	<p>I can group materials based on whether they are a solid, a liquid or a gas.</p> <p>I can describe how materials can change state (such as heat causing solids to change to liquids and vice versa)</p> <p>I can explore and explain how water changes state.</p>	<p>I know that changes to an environment can be natural or caused by humans.</p> <p>I know that changes can be positive as well as negative.</p> <p>I can explain how changes might endanger living things.</p>	<p>I can identify and name 6 appliances that require electricity to function.</p> <p>I know that a circuit is a pathway that electricity can flow around.</p> <p>I can construct a series circuit.</p>	<p>I know that plants and animals can be grouped in different ways based on their characteristics.</p> <p>I know that classification keys can be used to help group, identify and name living things.</p> <p>I can create my own</p>

	<p>teeth in humans.</p> <p>I can describe the functions of the different teeth in humans.</p> <p>I can use and construct food chains to identify producers, predators and prey.</p>	<p>I know how sound travels through the ear and then is changed into electrical signals which are sent to the brain.</p> <p>I know that pitch is how high or low a sound is and this can be changed. Faster vibrations create a higher pitch and slower vibrations create lower pitch.</p> <p>I know that the size of the vibration affects the volume of the sound.</p>	<p>I can measure the temperatures at which water changes state.</p> <p>I can explain the water cycle.</p> <p>I can explain evaporation and condensation in the water cycle.</p>	<p>I can give 2 examples of natural things that can change an environment (such as storms or earthquakes)</p> <p>I can give 2 examples of human made changes (such as pollution or deforestation).</p>	<p>I can identify and name the components in a series circuit (cells, wires, bulbs, switches and buzzers.)</p> <p>I can draw a circuit diagram.</p> <p>I can predict and test whether a lamp will light in my circuit.</p> <p>I can describe the difference between a conductor and an insulator.</p> <p>I can give an example of a conductor and</p>	<p>classification key.</p>
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					an insulator. (E.g. Metal is a good conductor and wood is a good insulator.)	
Working Scientifically (skills ongoing throughout)	I can ask relevant questions and suggest how to answer them, using different types of scientific enquiry.	I can take measurements using different equipment and units of measure and record what they have found in a range of ways. I can make a prediction based on something I have found out and then ask further questions based on data and observations.	I can plan and set up a fair test, explaining why it was fair and which variables have been isolated I can make systematic and careful observations and take accurate measurements using standard units.	I can report on findings in different ways, including oral and written explanation, displays or presentations of results and conclusions.	I can evaluate what I have found using scientific language, drawings, labelled diagrams, bar charts and tables. I can identify differences, similarities or changes related to simple scientific ideas or processes.	I can use straightforward scientific evidence to answer questions or support my findings.

<p>Science Investigation</p>	<p><u>Can I investigate the digestive system?</u> Show the digestive system through simulating the different organs and processes</p>	<p><u>Can I investigate how sound travels?</u> Explore how sound is made through vibrations using musical instruments Experiment with tuning forks in water, rice on drums to show vibrations Explore pitch on stringed instruments, different sized drums and glockenspiels. Measure decibels using APP</p>	<p><u>Can I investigate solids, liquids and gases?</u> Freeze different types of water and compare Read temperature around school Observe/record evaporation of puddles Show condensation by breathing on cold surface Recreate water cycle in a bag and discuss evaporation, condensation and precipitation.</p>	<p><u>Can I explore how environments changing can cause harm to living things?</u> Explore and research how endangered animal are being affected by environmental change. Bees Water voles Newts Tigers etc</p>	<p><u>Can I explore simple circuits?</u> Make a simple series circuit Test insulators and conductors Explore adding a switch to a circuit.</p>	<p><u>Can I explore human and animal classification?</u> Children sort and classify a wide variety of animals, including humans.</p>
<p>Vocabulary</p>	<p>movement, muscles, bones, skull, nutrition, skeletons</p>	<p>volume, vibration, wave, pitch, tone, speaker</p>	<p>solid, liquid, gas, evaporation, condensation, particles,</p>	<p>vertebrates, fish, amphibians, reptiles, birds, mammals, slugs, invertebrates,</p>	<p>cells, wires, bulbs, switches, buzzers, battery,</p>	<p>vertebrates, fish, amphibians, reptiles, birds, mammals, slugs, invertebrates,</p>

			temperature, freezing, heating	snails, worms, spiders, insects, environment, habitats	circuit, series, conductors, insulators	snails, worms, spiders, insects, environment, habitats
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