

Science Long Term Grid Year 4

Autumn Term	Spring Term	Summer Term
<p><u>States of matter</u></p> <ul style="list-style-type: none"> - To be able to compare and group materials together, according to whether they are solids, liquids or gasses. - To observe that some materials change state when they are heated or cooled, measure or research the temperature at which this happens in degrees Celsius. - Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. <p><u>Electricity</u></p> <ul style="list-style-type: none"> - To identify common appliances that run on electricity. - Construct a simple series of electrical circuits, 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. 	<p><u>Friction</u></p> <ul style="list-style-type: none"> - To use a force meter carefully to measure forces. - That 'newton' is the unit of force. - That there is a force between an object and a surface which may prevent the object moving. - That the force between two moving surfaces in contact is called friction. - That friction can be useful. - That water resistance slows an object moving through water. - That air resistance is a force that slows objects moving through air. <p><u>Sound</u></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 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. 	<p><u>Living things and their habitats</u></p> <ul style="list-style-type: none"> - Recognise that living things can be grouped in a variety of different ways. - Explore and use classification keys to help group, identify and name a variety of living things in their local environment. - Recognise that environments can change and that this can sometimes pose dangers to living things. - Look at the dependence of animals on plants and other animals for their food. <p><u>Animals including humans</u></p> <ul style="list-style-type: none"> - Look at the skeleton and relate to movement and support. How does the skeleton work in both humans and animals? How do muscles move and work? How do joints work? - 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.