

Science Knowledge

Key Stage 2 – Topics Covered In A Two Year Rolling Program

Humans & Other Animals – Skeletons & Muscles	<ul style="list-style-type: none">• Pupils will identify that humans and some other animals have skeletons and muscles for support, protection and movement
Animals, Habitats & Food Chains	<ul style="list-style-type: none">• Pupils will learn that living things can be grouped in a variety of ways• They will explore and use classification keys to help group, identify and name a variety of living things in the environment• They will learn that environments can change and that this can sometimes pose dangers to living things• They will construct and interpret a variety of food chains, identifying producers, predators and prey
Light	<ul style="list-style-type: none">• Pupils will learn they need light in order to see• They will observe that light is reflected from surfaces• They will learn light from the sun can be dangerous and there are ways to protect our eyes• They will learn shadows are formed when light from a source is blocked by a solid object• They will find patterns in the way that the size of a shadow changes
Rocks, Soil & Fossils	<ul style="list-style-type: none">• Pupils will compare and group together different kinds of rocks based on appearance and simple physical properties• They will learn that soil is made from rocks and organic matter• They will describe in simple terms how fossils are formed when things that have lived are trapped within rock

Teeth, Digestion & Nutrition	<ul style="list-style-type: none">• Pupils will learn that animals, including humans, need the right types and amount of nutrition and that they cannot make their own food: they get nutrition from what they eat• They will describe the simple functions of the basic parts of the digestive system in humans• They will identify the different types of teeth in humans and their simple functions
Plants	<ul style="list-style-type: none">• Pupils will learn about the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers• They will explore what is needed to make plants grow healthy• They will investigate the way water is transported within plants• They will explore the life cycle of flowering plants including pollination, seed formation and seed dispersal
Forces & Magnets	<ul style="list-style-type: none">• Pupils will compare how things move on different surfaces• They will notice that some forces need contact between two objects, but magnetic forces can act at a distance• They will observe how magnets attract or repel each other and attract some materials and not others• They will describe magnets as having two poles• They will predict whether two magnets will attract each other, depending on which poles are facing

Electricity	<ul style="list-style-type: none">• Pupils will be taught to identify common appliances that run on electricity• They will construct a simple series circuit, identifying and naming its basic parts including cells, wires, bulbs, switches and buzzers• They will identify whether or not a lamp will light in a simple circuit, based on whether or not the lamp is part of a complete loop with a battery• They will recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple circuit• They will recognise some common conductors and insulators and associate metals with being good conductors
Sound	<ul style="list-style-type: none">• Pupils will identify how sounds are made, associating some of them with something vibrating• They will recognise that vibrations from sounds travel through a medium to the ear• They will find patterns between the pitch of a sound and features of the object that produces it• They will find patterns between the volume of a sound and the strength of the vibrations that produce it• They will recognise that sounds get fainter as the distance from the sound source increases
Solids, Liquids and Gases – Including the Water Cycle	<ul style="list-style-type: none">• Pupils will be taught to compare and group materials together, according to whether they are solids, liquids or gases• They will 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• They will identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature