

Crawley Ridge Junior School
Subject Specific Overview- Science

	Autumn	Spring	Summer
Year 3	<p>Animals, including Humans</p> <ul style="list-style-type: none"> To know that vertebrates have a spine and invertebrates do not. To name the following 6 bones in the human skeleton; spine, skull, femur, ribcage, pelvis, clavicle. To know that to make a bone move, muscles contract and relax in pairs. To know that in order to keep healthy, humans need a balanced diet. <p>Plants</p> <ul style="list-style-type: none"> To know that flower, stems, roots and leaves are part of a plant. To know the function of flower, stems, roots and leaves on a plant. To know that plants need light, water, air, space and nutrients to grow. To know that water is transported through the stem To know the life cycle of a plant. To know that you only change one thing in a fair test 	<p>Light</p> <ul style="list-style-type: none"> To know that light reflects off everything so that we can see it To know that light travels in straight lines To know that, when light is blocked, it forms a shadow To know that looking directly at the sun is dangerous and wearing sun glasses can help to protect our eyes 	<p>Forces and Magnets</p> <ul style="list-style-type: none"> To know that friction is created when 2 surfaces move in different directions To know that a smooth surface creates less friction than a rough surface To know that different sides of a magnet attract each other (North to South) To know that a magnet can act over a distance To know that magnet will attract metals which have iron or nickel in them <p>Rocks</p> <ul style="list-style-type: none"> To know a sedimentary rock is made from compressed sediment and you can see the grains and layers in the rock. To know that an igneous rock is made from cooled volcanic rock To know a metamorphic rock is either sedimentary or igneous rock that has had high pressure or heat applied to it and you can see the layers are compressed To know that Mary Anning was a British palaeontologist To know that a fossil is the rock remains of an animal which died thousands of years ago
Year 4	<p>Sound</p> <ul style="list-style-type: none"> To know a sound is made by hitting, plucking, tapping or striking 	<p>States of Matter</p> <ul style="list-style-type: none"> To group materials based on their states of matter (solid, liquid, gas) 	<p>Animals, including Humans</p> <ul style="list-style-type: none"> To know the function of the incisor, canine and molar.

Crawley Ridge Junior School
Subject Specific Overview- Science

	<ul style="list-style-type: none"> To know that sound is a vibration. To know a sound travels from a source to our ears. <p>Electricity</p> <ul style="list-style-type: none"> To name appliances that require electricity to function: washing machine, dishwasher, toaster) To name the components in a series circuit (including cells, wires, bulbs, switches and buzzers) To know the function of a switch in a circuit is to break the circuit. To know an electrical conductor allows electricity to flow through and an electrical insulator does not allow electricity to flow through it. 	<ul style="list-style-type: none"> To know that substances melt at different temperature. To know that water evaporates, cools, condenses and forms clouds as part of the water cycle. 	<ul style="list-style-type: none"> To know energy is passed through the food chain from the producer. To name the producer, predator and prey within a food chain. To name the parts of the human digestive system: mouth, stomach, large intestine, small intestine, rectum and anus. <p>Living things and their habitats</p> <ul style="list-style-type: none"> To name characteristics to identify living things. (feathers, wings, fur, webbed feet) To name living things based on their characteristics.
<p>Year 5</p>	<p>Forces</p> <ul style="list-style-type: none"> To know that air resistant and water resistance are push forces To know that gravity is a force that pulls objects down To know the effects of friction, including air and water resistance, on moving objects To know the difference between weight and mass <p>Properties and Changes of Materials</p> <ul style="list-style-type: none"> To name materials as manmade and natural 	<p>Earth and Space</p> <ul style="list-style-type: none"> To know about the movement of the Earth, and other planets, relative to the Sun in the solar system To know about the movement of the Moon relative to the Earth To know that the Sun, Earth and Moon are approximately spherical bodies To know that day and night occur due the Earth's rotation 	<p>Animals Including Humans</p> <ul style="list-style-type: none"> To name the changes as humans develop to old age: fertilised egg, foetus, baby, child, adolescent, adult, old age, death. To name mammals and their gestation periods: mouse – 20 days; dog – 58 to 68 days; human – 280 days (9 months), elephant – 18 to 22 months. <p>Living Things and Their Habitats</p> <ul style="list-style-type: none"> To name the reproductive parts of a flower

Crawley Ridge Junior School
Subject Specific Overview- Science

	<ul style="list-style-type: none"> To list 3 properties of a material: magnetic, permeable, flexible, durable To name thermal and electrical conductors (copper and steel) and insulators (wood, glass and plastic) To name materials that are soluble (sugar and salt) or insoluble (pasta and glitter) in water: To name a reversible (freezing and melting) and irreversible (burning and baking) changes 		<ul style="list-style-type: none"> To know that plants reproduce asexually To name the differences between the lifecycles of a mammal, an amphibian, an insect and a bird. To know the stages of the life cycles of mammals, birds, insects and amphibians.
<p>Year 6</p>	<p>Light</p> <ul style="list-style-type: none"> To know that shadows are formed when an object blocks a light source and are the same shape as the object that forms them. To know that light travels in a straight line from a light source and they give out or reflect light into the eye. To know that the sun, candles, torches and fire are all light sources but the moon is not. <p>Electricity</p> <ul style="list-style-type: none"> To know that more voltage means more power To know the symbols in a simple circuit (battery, bulb, wire, switch, buzzer, motor) To know that a series circuit the current flows through all the 	<p>Living things and their habitats</p> <ul style="list-style-type: none"> To know the five animal kingdoms animal, plant, fungi, protist and monera. To know that you can classify animals based upon their own characteristics. To name the different types of micro-organisms -bacteria, archaea, fungi (yeasts and molds), algae, protozoa, and viruses 	<p>Animals including humans</p> <ul style="list-style-type: none"> To know the heart, lungs and blood vessels are our circulatory system. To know the function of the heart is to pump blood to the cells in the body. To know that blood carries, oxygen, carbon dioxide and nutrients. <p>Evolution and Inheritance</p> <ul style="list-style-type: none"> To know that Charles Darwin was a key figure in exploring how plants and animals adapt to suit their environment. To know Earth and living things have changed over time. To know fossils can be used to find out about the past.



Crawley Ridge Junior School
Subject Specific Overview- Science

	components. In a parallel circuit the current is split.		
--	---	--	--