

**Crowmarsh Gifford CE Primary
Science Curriculum**



	Year 1		Year 2
Plants	identify and name a variety of common wild and garden plants, including deciduous and evergreen trees	Plants	observe and describe how seeds and bulbs grow into mature plants
	identify and describe the basic structure of a variety of common flowering plants, including trees.		find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.
Animals including humans	identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals	Animals including humans	notice that animals, including humans, have offspring which grow into adults
	identify and name a variety of common animals that are carnivores, herbivores and omnivores		find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
	describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)		describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.
	identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.		
Everyday Materials	distinguish between an object and the material from which it is made	Everyday Materials	identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
	identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock		find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.
	describe the simple physical properties of a variety of everyday materials		
	compare and group together a variety of everyday materials on the basis of their simple physical properties.		
Seasonal	observe changes across the four seasons		

Changes			
	observe and describe weather associated with the seasons and how day length varies.		
	Year 3		Year 4
Plants	identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers	Living things and their habitats	recognise that living things can be grouped in a variety of ways
	explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant		explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
	investigate the way in which water is transported within plants		recognise that environments can change and that this can sometimes pose dangers to living things.
	explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.		
Animals including humans	identify 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	Animals including humans	describe the simple functions of the basic parts of the digestive system in humans
	identify that humans and some other animals have skeletons and muscles for support, protection and movement.		identify the different types of teeth in humans and their simple functions
Rocks	compare and group together different kinds of rocks on the basis of their appearance and simple physical properties		construct and interpret a variety of food chains, identifying producers, predators and prey.
	describe in simple terms how fossils are formed when things that have lived are trapped within rock	States of Matter	compare and group materials together, according to whether they are solids, liquids or gases
	recognise that soils are made from rocks and organic matter.		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 (°C)
Light	recognise that they need light in order to see things and that dark is the absence of light		identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.
	notice that light is reflected from surfaces	Sound	identify how sounds are made, associating some of them

			with something vibrating
	recognise that light from the sun can be dangerous and that there are ways to protect their eyes		<input type="checkbox"/> recognise that vibrations from sounds travel through a medium to the ear
	recognise that shadows are formed when the light from a light source is blocked by a solid object		find patterns between the pitch of a sound and features of the object that produced it
	find patterns in the way that the size of shadows change.		find patterns between the volume of a sound and the strength of the vibrations that produced it
Forces and Magnets	compare how things move on different surfaces		recognise that sounds get fainter as the distance from the sound source increases.
	notice that some forces need contact between two objects, but magnetic forces can act at a distance	Electricity	identify common appliances that run on electricity
	observe how magnets attract or repel each other and attract some materials and not others		construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
	compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials		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
	describe magnets as having two poles		recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
	predict whether two magnets will attract or repel each other, depending on which poles are facing.		recognise some common conductors and insulators, and associate metals with being good conductors
	Year 5		Year 6
Living things and their environment	describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird	Living things and their environment	describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals
	describe the life process of reproduction in some plants and animals.		give reasons for classifying plants and animals based on specific characteristics.
Animals including humans	describe the changes as humans develop to old age.	Animals including humans	identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood

			recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function
			describe the ways in which nutrients and water are transported within animals, including humans.
Properties and changes of material	compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets	Evolution and inheritance	recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
	know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution		recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
	use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating		identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.
	give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic	Light	recognise that light appears to travel in straight lines
	demonstrate that dissolving, mixing and changes of state are reversible changes		use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye
	explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.		explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
Electricity	associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit		use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.
	compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches	Earth and Space	describe the movement of the Earth, and other planets, relative to the Sun in the solar system
	use recognised symbols when representing a simple circuit		describe the movement of the Moon relative to the Earth

	in a diagram.		
	use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.		describe the Sun, Earth and Moon as approximately spherical bodies
Forces	explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object		
	identify the effects of air resistance, water resistance and friction, that act between moving surfaces		
	recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.		