



The Best That You Can Be

Devonshire Primary Academy

Science Long Term Plan



Year 3			
Week	Autumn	Spring	Summer
1	Identify and describe the functions of different parts of flowering plants: roots, stem, leaves and flowers.	Investigate the way in which water is transported within plants.	Using a range of (real) flowering plants, locate and name the parts of a flower. (apply)
	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 the role of flowers in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.	
2	Identify that animals, including humans, need the right types and amounts of nutrition, that they cannot make their own food and they get nutrition from what they eat.	Construct and interpret a variety of food chains, identifying producers, predators and prey.	Identify that humans and some animals have skeletons and muscles for support, protection and movement.
3	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.	Identify how animals and plants are suited to and adapt to their environment in different ways.
4	Explore and use classification keys.	Recognise that environments can change and that this can sometimes pose dangers to specific habitats.	Identify how plants and animals, including humans, resemble their parents in many features.
	Recognise that living things can be grouped in a variety of ways.		
5	Compare and group together different kinds of rocks on the basis of their simple, physical properties.	Relate the simple physical properties of some rocks to their formation (igneous or sedimentary).	Describe in simple terms how fossils are formed when things that have lived are trapped within sedimentary rock.
6	Recognise that soils are made from rocks and organic matter.	Explain how weathering contributes to the formation of soils. Compare and contrast different types of soils.	Categorise soils using a range of different criteria. Test soils in various ways in order to identify them.
7	Compare and group materials together, according to whether they are solids, liquids or gases.	Observe that some materials change state when they are heated or cooled, and measure the temperature at which this happens in degrees Celsius (°C), building on the teaching in mathematics.	Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.
8	Compare how things move on different surfaces.	Observe how magnets attract or repel each other and attract some materials and not others.	Experiment with magnets to explore whether the force of magnetism can act through materials (e.g. by placing magnets in ice). Identify any patterns in the type and amount of material the force is acting through.
	Notice that some forces need contact between two objects, but magnetic forces can act at a distance.	Predict whether two magnets will attract or repel each other, depending on which poles are facing.	
9	Recognise that shadows are formed when the light from a light source is blocked by a solid object.	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.	Describe magnets as having two poles. Explain why magnets have poles. Experiment with cutting magnets in two. Observe and explain what happens.
	Find patterns in the way that the size of a shadow changes.		

10	Identify how sounds are made, associating some of them with something vibrating.	Recognise that light is required in order to see things and that dark is the absence of light.	Recognise that vibrations from sounds travel through a medium to the ear.
		Notice that light is reflected from surfaces.	
11	Identify common appliances that run on electricity.	Construct a simple series electrical circuit, 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 some common conductors and insulators, and associate metals with being good conductors.	Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.	