

LKS2 Science Cycle B

LKS2 Plants
I can identify and describe the functions of different parts of flowering plants: roots, stem/trunk leaves and flowers
I can 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
I can investigate the way in which water is transported within plants for example, by putting cut, white carnations into coloured water and observing how water travels up the stem to the flowers.
I can explore the role of flowers in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.
I can explore and understand the relationship between structure and function: the idea that every part has a job to do.
I understand that plants can make their own food
I can compare the effect of different factors on plant growth, for example, the amount of light, the amount of fertiliser; discovering how seeds are formed by observing the different stages of plant life cycles over a period of time; looking for patterns in the structure of fruits that relate to how the seeds are dispersed.

LKS2 Keeping fit and healthy
I can 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
I can describe the simple functions of the basic parts of the digestive system in humans
I can draw and discuss my ideas about the digestive system and compare them with models or images
I can name the main body parts associated with the digestive system, for example, mouth, tongue, teeth, oesophagus, stomach and small and large intestine and explore questions that help them to understand their special functions
I can identify the different types of teeth in humans and their simple functions
I can compare the teeth of carnivores and herbivores, and suggesting reasons for differences; finding out what damages teeth and how to look after them
I can compare and contrast the diets of different animals (including their pets) and decide ways of grouping them according to what they eat
I can research different food groups and how they keep us healthy and design meals based on what they find out.

LKS2 Electricity
I can identify common appliances that run on electricity and can use the terms current and voltage
I can construct a simple series electrical circuit identifying and naming the basic parts of a simple electrical circuit, including cells, wires, bulbs, switches and buzzers
I can construct simple series circuits, trying different components, for example, bulbs, buzzers and motors, and including switches, and use their circuits to create simple devices.
I can recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
I can recognise some common conductors and insulators, and associate metals with being good conductors
I can draw the circuit as a pictorial representation
I understand some precautions for working safely with electricity
I can observe patterns, for example, that bulbs get brighter if more cells are added, that metals tend to be conductors of electricity, and that some materials can and some cannot be used to connect across a gap in a circuit.

LKS2 forces and movement-pushes and pulls
I can compare how things move on different surfaces
I can notice that some forces need contact between two objects but magnetic forces act at a distance without direct contact
I can 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
I can describe magnets as having two poles
I can observe and predict whether two magnets will attract or repel each other, depending on which poles are facing
I can explore the behaviour and everyday uses of different magnets (for example, bar, ring, button and horseshoe).
I can sort materials into those that are magnetic and those that are not

LKS2 Material properties
I can compare and group together different kinds of rocks on the basis of their simple physical properties
I can describe in simple terms how fossils are formed when things that have lived are trapped within rock
I can recognise that soils are made from rocks and organic matter, raising questions about the way soils are formed
I can observe, identify and classify rocks, including those used in buildings and gravestones, and exploring how and why they might have changed over time
I can research and discuss the different kinds of living things whose fossils are found in sedimentary rock and explore how fossils are formed.
I can explore different soils and identify similarities and differences between them and investigate what happens when rocks are rubbed together or what changes occur when they are in water.

LKS2 Scientific thinking
I can ask relevant questions and use different types of scientific enquiries to answer them
I can set up simple practical enquiries, comparative and fair tests
I can make systematic and careful observations
I can record findings from enquiries using simple scientific language in a variety of ways
I can use results to draw simple conclusions, make predictions and suggest improvements
I can identify differences, similarities or changes