

## UKS2 Science Cycle B

### UKS2 Plants

I can recognise that living things (plants) produce offspring of the same kind but normally offspring vary and are not identical to their parents.

I can describe the life process of reproduction in some plants.

I understand different types of reproduction, including sexual and asexual reproduction in plants.

I can study and raise questions about my local environment.

I can observe life-cycle changes in a variety of plants.

I can try to grow new plants from different parts of the parent plant, for example, seeds, stem and root cuttings, tubers, bulbs.

### UKS2 Keeping fit and healthy

I can identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood (including the pulse and clotting).

I can recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.

I can describe the ways in which nutrients and water are transported within animals, including humans.

I understand how to keep my body healthy and how my body might be damaged for example by drugs and other substances.

### UKS2 Electricity

I can associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.

I can 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.

I can use recognised symbols when representing a simple circuit in a diagram.

I can answer questions about what happens when I try different components, for example, switches, bulbs, buzzers and motors.

I understand how to construct a simple circuit using various components.

I understand the necessary precautions for working safely with electricity.

### UKS2 forces and movement-pushes and pulls

I can explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.

I can recognise and explore some mechanisms including levers, pulleys and gears.

I can identify the effects of air resistance by observing how different objects such as parachutes and sycamore seeds fall.

I can identify forces that make things begin to move, get faster or slow down.

I can explore the effects of friction on movement and find out how it slows or stops moving objects, for example, by observing the effects of a brake on a bicycle wheel.

### UKS2 Material properties

I can compare and group together everyday materials based on evidence from comparative and fair tests e.g transparency, absorbency, insulation and conductivity.

I can give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.

I can carry out tests to answer questions, for example, 'Which materials would be the most effective for making a warm jacket, for wrapping ice cream to stop it melting, or for making blackout curtains?'

### LKS2 Scientific thinking

I can plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

I can take measurements using a range of scientific equipment with increasing accuracy

I can record data and results of increasing complexity using scientific diagrams or tables

I can discuss test results to make predictions to set up further comparative and fair tests

I can report and present findings from enquiries