

Science in USK2 Cycle B

Forces

- I can demonstrate the effect of gravity acting on an unsupported object.
- I can give examples of air (**riding a bike, paper plane**) and water resistance (**swimming**) and friction.
- I can give examples of when it is best to have high or low air resistance, water resistance and friction. (**air resistance, drag, balanced force**).
- I can demonstrate how levers, pulleys and gears work. (**Force, push, pull**)

Working scientifically

- I can record data and results using a range of methods (**keys, tables, scatter graphs, bar and line graphs**)
- I can report and present findings in at least two different ways. (**Displays, presentations, reports**)
- I can discuss conclusions and any relationships from the results.
- I can identify scientific evidence to support arguments.

Electricity

- I can change **cells and components** in a circuit to achieve a specific effect.
- I can draw circuit diagrams of simple circuits using recognised symbols. (**cell, bulb, current**)
- I can change the brightness of a bulb or volume of a buzzer by changing the number and **voltage of cells** in a circuit.
- I can compare a variety of series circuits and give reasons for variations (**brightness of bulbs, the loudness of buzzers, on/off position of switches**).

Animals including humans

- I can describe the changes as humans develop to old age. (**Indicate changes of growth using a timeline, infancy, childhood, puberty, adulthood, old age.**)
- I can draw and label a diagram of the human circulatory system. (**Heart, blood vessels, blood**)
- I can describe the functions of the **heart, blood vessels and blood**
- I can describe the way nutrients and water are transported (**in animals and humans**).

Light

- I can use diagrams to describe how light travels in straight lines into our eyes. (**Opaque, Optic nerve, retina,**
- I can describe how light travels in straight lines to create shadows of the same shape. **Translucent transparent, opaque, omit,**
- I can describe how the path of light rays can be directed to make reflections (**mirrors, surfaces, reflection, refraction**)
- I can explain how the shape of shadows can be changed. (**Light source**)

Living things and their habitats

- I can describe the differences in the life cycles of a range of animals (**chickens, caterpillar, cow**)
- I can give reasons for how I have classified animals based on specific characteristics (**vertebrate and invertebrate**).
- I can give examples of animals in vertebrate (**horse, human, snake, chicken, blackbird**) and invertebrate (**spiders, worms, snails, butterflies**) groups.
- I can describe the characteristics of vertebrate (**backbone, skull, appendages: wings, fins or limbs**) and invertebrate (**no backbone, soft bodies, hard outer skeleton**) animals.

