



Being an UKS2 Scientist



I can plan different types of scientific enquiry.



I can control variables in an enquiry.



I can measure accurately and precisely using a range of equipment.



I can record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.



I can use the outcome of test results to make predictions and set up a further comparative fair test.



I can report findings from enquiries in a range of ways.



I can explain a conclusion from an enquiry.



I can explain causal relationships in an enquiry.



I can relate the outcome of an enquiry to scientific knowledge in order to state whether evidence supports or refutes an argument or theory.



I can read, spell and pronounce scientific vocabulary accurately.

Biology – Living things and their habitats Y5/6



I can describe the life cycle of different living things, e.g. mammals, amphibian, insect, bird. Y5



I can describe the differences between different life cycles. Y5



I can describe the process of reproduction in plants. Y5



I can describe the process of reproduction in animals. Y5



I can classify living things into broad groups according to observable characteristics and based on similarities and differences. Y6



I can describe how living things have been classified. Y6



I can give reasons for classifying plants and animals in a specific way. Y6

Biology – Animals including humans Y5/6



I can create a timeline to indicate stages of growth in humans Y5



I can identify and name the main parts of the human circulatory system. Y6



I can describe the function of the heart, blood vessels and blood. Y6



I can discuss the impact of diet, exercise, drugs and life style on health. Y6



I can describe the ways in which nutrients and water are transported in animals, including humans. Y6



Biology – Evolution and inheritance Y6



I can describe how the earth and living things have changed over time.



I can explain how fossils can be used to find out about the past.



I can explain about reproduction and offspring (recognising that offspring normally vary and are not identical to their parents).



I can explain how animals and plants are adapted to suit their environment.



I can link adaptation over time to evolution.



I can explain evolution.

Chemistry- Properties and changes of materials



I can compare and group materials based on their properties .e.g. hardness, solubility, transparency, conductivity (electrical & thermal) and response to magnets.



I can describe how material dissolves to form a solution; explaining the process of dissolving.



I can describe and show how to recover a substance from a solution.



I can describe how some materials can be separated.



I can demonstrate how materials can be separated. E.g. through filtering, sieving and evaporating).



I know and can demonstrate that some changes are reversible and some are not.



I can explain how some changes result in the formation of a new material and that this is usually irreversible.



I can discuss reversible and irreversible changes.



I can give evidenced reasons why materials should be used for specific purposes.

Physics- Earth and space Y5



I can describe and explain the movement of the Earth and other planets relative to the Sun.



I can describe and explain the movement of the Moon relative to the Earth.



I can demonstrate and explain how night and day are created.



I can describe the Sun, Earth and Moon (using the term spherical).



Physics- Forces Y5



I can explain what gravity is and its impact on our everyday lives.



I can identify and explain the effect of air resistance.



I can identify and explain the effect of water resistance.



I can identify and explain the effect of friction.



I can explain how levers, pulleys and gears allow a smaller force to have a greater effect.

Physics- Light Y6



I can explain how light travels.



I can explain and demonstrate how we see objects.



I can explain why shadows have the same shape as the object that casts them.



I can explain how simple optical instruments work, e.g. periscope, telescope, binoculars, mirror, magnifying glasses etc.

Physics- Electricity Y6



I can explain how the number & voltage of cells in a circuit links to the brightness of a lamp or the volume of a buzzer.



I can compare and give reasons for why components work and do not work in a circuit.



I can draw circuit diagrams using correct symbols.

