**Science Objectives Mrs Lancaster Year B**

Working Scientifically

* plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
* take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
* record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
* use test results to make predictions to set up further comparative and fair tests
* report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
* identify scientific evidence that has been used to support or refute ideas or arguments.

**Autumn Term**

* describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals
* give reasons for classifying plants and animals based on specific characteristics
* recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
* recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
* identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution

**Spring Term**

* describe the movement of the Earth and other planets relative to the sun in the solar system
* describe the movement of the moon relative to the Earth
* describe the sun, Earth and moon as approximately spherical bodies
* use the idea of the Earth’s rotation to explain day and night and the apparent movement of the sun across the sky

**Summer Term**

* demonstrate that dissolving, mixing and changes of state are reversible changes
* explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.
* explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
* identify the effects of air resistance, water resistance and friction, that act between moving surfaces
* recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect