

## Durham Gilesgate Primary School

### Science

#### Intent

At Durham Gilesgate Primary School we recognise the importance of Science as a core subject and as something which we can see in every aspect of daily life. We give the teaching and learning of Science the prominence it requires. The science curriculum has three important elements; the first is about increasing pupils' knowledge and conceptual understanding of our world, the second area is about developing the skills of scientific enquiry and the third is about the practical uses and application of science in the world around us. In Early Years Foundation Stage science is found in Knowledge and Understanding of the World and this is the starting point for both knowledge and enquiry based learning. We aim to develop the natural curiosity of each child, encourage respect for both living organisms and the physical environment and provide opportunities for critical evaluation of evidence. As children get older there are clear links to the use of maths in order to interpret and present data. English skills are also important as children will need to be able to read fluently and understand subject specific scientific vocabulary which they will encounter when both reading for research purposes and writing as a means of recoding their learning.

#### Implementation

We have a science curriculum which meets the requirements of the National Curriculum. Where cross curricular links can be clearly made science will be taught thematically and in other cases it will be taught as a discrete subject.

Our planning and implementation is supported by the science scheme written and published by TREDU<sup>1</sup> but we will always seek to adapt planning and use other resources and opportunities where available, including visits, visitors, STEM ambassadors and links to Durham University. By doing this we seek to inspire our children and raise their aspirations and it is one part of our curriculum driver *Heritage and Opportunity*. Encouraging respect for living organisms and the environment is part of curriculum driver *Values*. We have also identified subject specific (tier 3) vocabulary that we will introduce and which children will learn and use in their spoken and written language.

The science curriculum and sequence of lessons taught will always have an element of scientific enquiry. This might be:- forming, asking and answering enquiry based questions, making observations, comparing, grouping and sorting objects, taking measurements and recording these, using secondary sources for research, designing comparative and fair test, recoding and reporting findings, the analysis of data and the use of this to draw and support conclusions.

#### Impact

We expect that the majority of children will achieve at age related standards in science at the end of each year. We recognise that some children may not achieve this standard but we will expect that they have made good progress from their starting point. We also recognise that some other children will exceed age related standards and we will have deepened learning for these children.

Children's knowledge will build progressively over time and both teachers and parents will be able to see this in their science books and other work that they produce, similarly their work will reflect the new subject specific vocabulary that they have learned.

By talking with children we will be able to gauge their understanding and application of enquiry skills and their ability to make links between subject knowledge learned over time.

<sup>1</sup>(Tom Robson Education. Tom is an ex HMI, Headteacher and senior local authority advisor for science. He advised the DfE on the current science curriculum)