## Science at Loughton

'Science is amazing and can answer some of the children's most profound questions. This is why we value the teaching of science and our aim is to do this in a fun and engaging manner. We want to nurture our children's minds and inspire them through hands on exploration of scientific ideas thereby creating scientists who enjoy science.'

Throughout the school science is taught in a diverse number of ways.

We have a variety of ICT resources ranging from interactive and on-line software accessible by all through the computing suite, IPads, and Chromebooks. The IPads available in the school have a number of applications focusing on different areas of science. The children are well motivated to use the range of ICT available and have shown greater motivation and independence.

The science curriculum is enhanced through a range of visits and visitors. For example, the year 5 children have a visit from the planetarium to help them learn about space and planets. Children also profit from many hands-on activities, both indoors and out. The school allotment provides an area for experiments on plant growth and development as well as being a useful habitat for a wide variety of invertebrates.

When a new topic is introduced, a launch day is held, which allows teachers to ascertain prior knowledge, and discover where the children want to take their learning, which then informs planning. Each year group has a topic box for each science unit, in which resources and planning are stored.

The topic boxes, which hold resources and planning for each individual unit of science, are stored in the relevant year groups. By continually assessing the effectiveness of the resources and their application in the classroom, teachers can update and refresh as they go along. New items are added quickly and easily.

The school teach through a creative curriculum that clearly links a whole variety of subjects to one topic. For example, in year 3 the children learn to write adventure stories based on 'Captain Flynn and the Pirate Dinosaur' books and science is linked in by studying rocks, fossils and soils. All year groups have a planning web showing the links between subjects.

Throughout their years at Loughton School, children will be assessed in the different units of science they learn. These assessments are recorded in a science assessment book that then follows them from year to year. We have made the assessments very practical, therefore allowing the children to show off their learning and understanding of the topic studied. During these assessment sessions, teachers will question their pupils to ascertain a variety of learning points that link to the age expectations set by the curriculum.