

INTENT

Luttons Primary Academy recognises and values the importance of science and scientific enquiry through **active learning**. Science at Luttons aims to develop a **creative**, practical and **engaging** high-quality curriculum that **inspires** the next generation to succeed and excel in science. We do this through fully adhering to the aims of the national curriculum and fostering a healthy **curiosity** and interest in the sciences. At the heart of our progressive science curriculum is scientific investigation. Wherever possible, we intend to deliver lessons that are **inclusive** to all and where children learn through varied systematic investigations, leading to them being equipped for life to ask and answer scientific questions about the world around them. We believe science encompasses the acquisition of **knowledge**, concepts, skills, and positive attitudes. Throughout the programmes of study, the children will acquire and develop the key knowledge that has been identified within each unit and across each year group, as well as the application of scientific skills. We ensure that the Working Scientifically skills are built-on and developed throughout children's time at the school so that they can apply their knowledge of science when using equipment, conducting experiments and investigation, building arguments, and explaining concepts confidently, being familiar with scientific terminology and, most importantly, to continue to ask questions and be **curious** about their surroundings.

IMPLEMENTATION

The acquisition of key scientific knowledge is an integral part of our Science lessons. Linked knowledge organisers enable children to learn and retain the important, useful, and powerful vocabulary and knowledge contained within each unit. The progression of skills for working scientifically is developed through the help of the Kapow scheme of work and then broken down for each year group, so they can continue to **develop knowledge** through the use of scientific enquiry skills which are of key importance within lessons. At Luttons, teachers create a positive, **engaging** and **exciting** atmosphere to Science learning within their classrooms and reinforce an expectation that all children are able to meet the high standards in Science. Our whole school approach to the teaching and learning of science involves the following: • Science will be taught in planned, and arranged, topic blocks by the class teacher. Our strategy is to enable all children to be catered for through adapted, **inclusive** planning suited to their abilities allowing all children to feel **inspired**.

At Luttons, we plan for problem solving and real-life opportunities that enable children to be **active**, independent learners. Children are encouraged to ask their own questions and be given the opportunity to allow their **curiosity** to grow and give them the opportunities to use their scientific skills and research to discover the answers. Through **creative** planning by teachers, it allows the children to immerse themselves in practical, **engaging** lessons with opportunities for precise questioning in class to test conceptual knowledge and skills whilst assessing children regularly to identify those children with gaps in learning.

Kapow's Science Scheme follows three key strands:

- Scientific Knowledge and Understanding
- Working Scientifically
- Science in Action

Using the three key strands, the units are created and broken down into key Science disciplines; Biology, Chemistry and Physics. These six key areas of Science are:

- Plants
- Animals, including humans
- Living things and habitats
- Materials
- Energy
- Forces, Earth and space

Through enrichment days, such as 'Science days' we promote the profile of Science and allow time for the children to feel **inspired** and **excited** whilst having the opportunity to develop new skills.

IMPACT

Children will retain knowledge that is pertinent to science with a real life context.
Children will be able to question ideas and reflect on knowledge.
Children will work collaboratively and practically to investigate and experiment.
Children will be able to explain the process they have taken and be able to reason scientifically.