

## Stukeley Federation Science LKS2

Throughout the year the children will cover a variety of aspects of the science curriculum to ensure all children:

- develop **scientific knowledge and conceptual understanding** through the specific disciplines of biology, chemistry and physics
- develop understanding of the **nature, processes and methods of science** through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the **uses and implications** of science, today and for the future.

<b>Autumn 1</b>	<b>Living things and their habitats</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>• describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</li> <li>• describe the life process of reproduction in some plants and animals.</li> </ul>
<b>Autumn 2</b>	<b>Animals including humans</b> (Nutrition, skeleton, muscles) Pupils should be taught to: <ul style="list-style-type: none"> <li>• identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat</li> <li>• identify that humans and some other animals have skeletons and muscles for support, protection and movement.</li> <li>• describe the simple functions of the basic parts of the digestive system in humans</li> <li>• identify the different types of teeth in humans and their simple functions</li> <li>• construct and interpret a variety of food chains, identifying producers, predators and prey.</li> </ul>
<b>Spring 1</b>	<b>Forces and Magnets (Y3)</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>• compare how things move on different surfaces</li> <li>• notice that some forces need contact between two objects, but magnetic forces can act at a distance</li> <li>• observe how magnets attract or repel each other and attract some materials and not others</li> <li>• compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials</li> <li>• describe magnets as having two poles</li> <li>• predict whether two magnets will attract or repel each other, depending on which poles are facing.</li> </ul>

<b>Spring 2</b>	<b>States of Matter</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>• compare and group materials together, according to whether they are solids, liquids or gases</li> <li>• observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)</li> <li>• identify the part played by evaporation and</li> <li>• condensation in the water cycle and associate the rate of evaporation with temperature.</li> </ul>
<b>Summer 1</b>	<b>Plants</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>• identify and describe the functions</li> <li>• explore the requirements of plants for life</li> <li>• explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</li> </ul>
<b>Summer 2</b>	<b>Scientists and Inventors</b>

**Investigations – on-going throughout all units**

*planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary*  
*taking measurements, using a range of simple scientific equipment,*  
*recording data and results using scientific diagrams and labels, classification keys, tables and, bar graphs*  
*using test results to make own predictions and conclusions,*