Sprowston Infant School Medium Term Plan Science

EYFS – detailed are the enhanced provision or directed activities s he

KS1 – see the corresponding knowledge organisers

	Autumn	Spring	Summer
Nursery	What is the weather like?	The World Around Me What is the weather like?	What makes places special to me and others? What is the weather like?
Reception	My senses – touch and hearing Take a look outside – Autumn walk/ Winter walk Light and Dark	Taking care of me – healthy eating, hygiene, exercise Lifecycle – duckling hatching Dinosaur explorers Take a look outside – Spring walk – how has it changed? Planting bulbs and seeds	Lifecycle – frogs Where do you live? – habitats – build a bug hotel Water world – floating and sinking, sea life, rock pools
Year 1	Animals including humans Seasonal change	Materials – what material would you choose for an astronaut helmet? Seasonal Change	Plants Seasonal change
Year 2	Uses of everyday materials Humans	Animals, living things and their habitats	Plants

Early Years

Science in early years comes under the area of 'understanding the world' and overlaps with many other areas. Learning is related to the pupils themselves and the observable world around them, as this is what they understand. In nursery, they make observations of the weather throughout the year, to notice how it changes – this prepares the pupils for learning in science and geography in KS1. Towards the end of nursery, they will explore planting and growing, and experiment with floating and sinking, both key concepts in later study. Throughout Reception, they will continue to focus on aspects of the environment around them, building on all the learning in nursery and deepening their understanding of key ideas while also extending to cover a wider range of areas. For example, they will see the real life cycles of ducks and frogs in school. They will also be introduced to ideas such as light and dark, habitats and healthy eating, all in preparation for KS1.

<u>Key Stage 1</u>

Pupils begin KS1 by returning to the study of themselves (humans) and then looking at other animals. Learning from EYFS is built upon and extended by introducing the names of human body parts as well as classifying animals using words such as amphibian, reptile, carnivore. Children gain a lot of experience of working with different materials in early years and will be familiar with ways they can transform and manipulate them. In Y1, they are taught the vocabulary of materials and properties and extend what they already know by using terms such as waterproof, absorbent, transparent, flexible. They also develop their scientific thinking and working methods through investigations. In the summer term, they return to study plants, this time deepening their knowledge through close observation, use of equipment, identifying and classifying and learning new concepts such as deciduous, evergreen, blossom and types of flowers. Seasonal change is taught all through year 1, so the children are able to see the changes throughout the year. This builds on their weather observations from early years, looking in more depth at how seasonal change affects plants and animals and their habitats.

In Y2, pupils return to many of the previous topics studied, again making sure they build on previous knowledge and extend it further. For example, they begin by looking at materials but with more of a focus on how they can be transformed and how this links to forces, which is a very important concept for study in KS2 and beyond. Further skills in working scientifically are integrated into learning during the year and new concepts are introduced to build on those previously learnt, for example they study animals and habitats but look more closely at food chains and introduce concepts such a producers and consumers and energy transfer. In the summer term, they draw together all of this previous learning to look at growing plants and their life cycles, but also perform investigations and experiments with them and introduce new concepts such as 'germination' that further deepen their scientific knowledge. Integrating scientific working skills throughout key stage 1 and developing pupils' independence in applying these, means they are well prepared for KS2.