SCIENCE IN THE EYFS

"Art has the role in education of helping children become like themselves instead of more like everyone else."
~ Sydney Gurewitz Clemens

Understanding the world
Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children's personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children's vocabulary will support later reading comprehension.

Foundation Stage 1 (Nursery)
Age - 3 & 4

Children will be learning to...	What the learning will look like...
Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice.	Children exploring interesting natural environments freely outdoors. Opportunities to make collections of natural materials to investigate and talk about. Suggestions: - contrasting pieces of bark - different types of leaves and seeds - different types of rocks - different shells and pebbles from the beach Children using equipment to support these investigations. Suggestions: magnifying glasses or a tablet with a magnifying app. Children will be encouraged to talk about what they see. Teachers will model observational and investigational skills. Ask out loud: "I wonder if…?" Practitioners will plan and introduce new vocabulary, encouraging children to use it to discuss their findings and ideas. Adults showing and explaining the concepts of growth, change and decay with natural materials eg -planting seeds and bulbs so children observe growth and decay over time - observing an apple core going brown and mouldy over time - helping children to care for animals and take part in first-hand scientific explorations of animal life cycles, such as caterpillars or chick eggs. Adults plan and introduce new vocabulary related to the exploration. Encourage children to use it in their discussions, as they care for living things. Adults will draw children's attention to forces. For example: - how the water pushes up when they try to push a plastic boat under it - how they can stretch elastic, snap a twig, but can't bend a metal rod - magnetic attraction and repulsion Adults will provide opportunities to change materials from one state to another eg - cooking – combining different ingredients, cooling or heating (cooking) them - melting – leave ice cubes out in the sun, see what happens when you shake salt onto them. Children will have opportunities to explore how different materials sink and float. Children exploring how you can shine light through some materials, but not others. Investigate shadows. Adults will plan and introduce new vocabulary related to the exploration, and encourage children to use it.