

## SCIENCE- Mrs Angela Cooke

*"DON'T let anybody tell you you can't do anything'." –Tim Peake*

### How is the content chosen?

The National Curriculum is the core of our school science curriculum but we have built upon this to ensure that it meets the needs of our children. Our learning model is child-centred, following on from our excellent Early Years practice. It is based upon a core of skills and knowledge on which we sit specific topics, endeavouring to match these to the interests of the children where possible. We aim to develop our children into considerate young people who care about the plants and animals in the world around them and have an awareness of the impact of science on their lives. We want to provide our children with a broad, balanced and progressive curriculum which is stimulating and exciting for them.

### How do we ensure progression of knowledge and skills?

We have recently invested in PlanBee and PZAZ science schemes. These provide long, medium and short term plans that are stimulating, challenging and engaging. This ensures sequenced and appropriate content for specific year groups, as well as a build-up of knowledge and skills throughout our school. Within these documents there are also opportunities for differentiation and adaptations, in order to meet the needs of all our children and personal cohort to our school. All staff members are given training on our curriculum and how to effectively implement it. It is our intention to take the best from both schemes and design a Science curriculum for Newton Hall Infants' that reflects our aims, intentions and creates children's curiosity as scientists, developing a thirst for learning and finding out why things happen in the way that they do.

### How is the subject taught?

At Newton Hall Infants' School we want our children to be confident and excited explorers who are intrigued by the world in which they live.

Science is taught through challenging and engaging lessons. They provide our children with opportunities to investigate, to be confident in asking questions and to have chances to find the answers for themselves. Children are given many opportunities to carry out practical activities, experiments and observations in class and within our school grounds. We plan for high level vocabulary that is suitable yet challenging for our children. Science books are used in each class to record experiences and learning. These books travel through school with the children as a working document of what they have discovered and how they have evolved. There are links and opportunities that arise from other subject areas and these are incorporated where possible and appropriate.

### How is Science taught in Early Years Foundation Stage (EYFS)?

At Newton Hall Infants' School we aim to build on the wealth of knowledge and skills children already have when they arrive. We recognise that all children are unique, celebrating and welcoming differences within our school community. Therefore, our curriculum is child centred following the interests and fascinations of the children in the current year group. Science is taught through topics that

provide motivating first-hand experiences. As well as topic work and the teaching of valuable skills and knowledge, children in EYFS are given the opportunity to continually practise and embed their skills through the areas of provision set up in the indoor and outdoor learning environments.

### How do we know children are making progress?

Ongoing assessments of the children's knowledge and skills are observed daily by the class teacher. Misconceptions are addressed and next steps carefully planned. Children's outcomes are compared to the subject specific skills and knowledge documents, as well as the year group expectations from the National Curriculum. Senior leaders and subject leaders gather an overview of children's learning and outcomes through monitoring activities and pupil voice sessions. Regular assessments are collated for children in EYFS and Key Stage 1 which are used to plan appropriate next steps for their future learning, as well as provide an overview of learning within a subject area across the whole school.

### Impact of our Science teaching

Our intent is to spark children's curiosity as scientists, developing a thirst for learning and finding out why things happen in the way that they do. At Newton Hall Infants' School we want our children to be confident and excited explorers who are intrigued by the world in which they live. We aim to develop our children into considerate young people who care about the plants and animals in the world around them and have an awareness of the impact of science on their lives and their futures.