### Science Intent, Implementation and Impact

#### Intent:

Within the Foston, Stillington and Terrington Federation, in collaboration with Langton Primary School, we intend that all our children will develop a deep curiosity about the world around them, and to experience the wonder which comes with gaining a knowledge and understanding about the processes and systems they can and can't see.

## Our children will further develop:

- The ability to think independently and raise questions about working scientifically and the knowledge and skills that it brings;
- Confidence and competence in the full range of practical skills;
- Excellent scientific knowledge and understanding which is demonstrated in written and verbal explanations;
- Scientific enquiry skills to be embedded in each topic throughout the school to allow the children to build upon prior knowledge;
- The ability to undertake practical work in a variety of contexts;
- Have a clear understanding of the jobs available from science specialisms.

## Implementation

- Planning is differentiated in every class by year group and children are given the opportunity to transfer their Maths, English and Computing skills through meaningful cross-curricular links.
- Our scheme of work is taken from the Chris Quigley Essentials curriculum and the Plymouth Science scheme (KS1). It is enhanced with carefully chosen content from resources including (but not limited to), the National STEM Centre and Outstanding Science, and covers all aspects of the National Curriculum.
- Children develop and build on their Working Scientifically skills, enabling them to become competent in hypothesising, predicting, planning and carrying out investigations before they communicate their findings to a range of audiences.
- Wherever possible, learning experiences are hands-on to facilitate the "awe and wonder" of science. When this isn't possible, and children need to rely more on secondary sources of information, we make the learning as memorable as possible through a range of meaningful activities.
- Specific vocabulary is set out and planned for the children to develop a varied and extensive vocabulary by the end of KS2.
- Rich experiences are planned for all children, including those with SEND. Class teachers know their children best and are empowered and supported by both the Science co-ordinator and the SENCo to adapt the activities to ensure that the needs of all children are met, and that all children have the opportunities to excel as scientists.

# **Impact**

- That all children will become confident and competent scientists, happy and eager to ask and answer questions as scientists, using the scientific vocabulary that they have been taught;
- That all children progress to KS3 with a solid foundation in primary Science, which will both enthuse, enable and empower them to approach their KS3 science careers with confidence and curiosity;
- That children will see the Sciences as a relevant and exciting future career path, regardless of their backgrounds.