

## **Subject: Science**

### **Intent: (What do we want our learners to know)**

Our Science is designed to inspire our pupils through thinking like a scientist. Pupils should be curious and question the world around them. Through the Programmes of Study from the National Curriculum and a topic-based curriculum, pupils are able to explore a range of topics through investigation, research and practical activities.

Through high quality teaching, planning and subject knowledge, we develop the following essential characteristics of a scientist:

- Develop the skills for investigation - including observing, measuring, predicting, questioning, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
- Develop the use of scientific language/vocabulary, recording and techniques.
- Develop the use of ICT in investigating and recording.
- To be able to question ideas and reflect on knowledge.
- Enable our children to become effective communicators of scientific ideas, facts and data.
- Help develop and extend our children's scientific concepts of their world and learn about scientists and their work.

### **Implement: (How are we going to do it)**

- Teachers will plan a series of lessons which reflect on prior learning (including science from KS1), progression and depth using the Programmes of Study from the National Curriculum and with an awareness of future learning.
- Misconceptions in science are addressed.
- Science is taught as biology, chemistry or physics depending upon the topic.
- Curriculum vocabulary is accessible to children through eg. wordmats, glossaries, displays and modelled consistently by all staff to pupils during lesson time.
- Elicit what pupils know about a topic at the start of each topic and what they would like to learn.
- The local area is used for 'outdoor learning' opportunities to enrich science teaching and learning.
- Trips, visitors, science days for example, will enhance children's learning experiences.
- Staff are supported through the use of relevant resources, including Explorify, and planning time (PPA).
- Staff ensure the Science Programmes of Study from the National Curriculum are embedded in planning.

### **Impact: (What will the outcome look like)**

- Pupils can discuss their learning coherently using given vocabulary for both the upper and lower key stages during relevant points in a topic.
- As children progress through the school, they develop a deeper knowledge, understanding of science.
- Children can communicate their learning clearly and apply their practical skills with developing confidence.
- Pupils are able to explain scientific understanding with the correct vocabulary.