'Train up a child in the way they should go and when they are old, they will not depart from it.' Proverbs 22:6

# Science Intent, implementation and Impact

## Science Intent:

Science teaching at Christ Church Primary aims to give all children a strong understanding of the world around them whilst acquiring specific skills and knowledge to help them to think scientifically, gain an understanding of scientific processes and also acquire an understanding of the uses and implications of Science, today and for the future.

At Christ Church Primary, scientific enquiry skills are embedded in each topic the children study and these topics are revisited and developed throughout their time at our school. Topics, such as 'Animals including Humans', are taught in Key Stage One and studied again in further detail throughout Key Stage Two. This allows children to build upon their prior knowledge and increases their enthusiasm for the topics whilst embedding their knowledge into the long-term memory. All children are encouraged to develop and use a range of skills including observations, planning and investigations, as well as being encouraged to question the world around them and become independent learners. Specialist vocabulary for topics is built upon and effective questioning to communicate ideas is encouraged. Concepts taught should be reinforced by focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions. In Early Years, children will gain scientific knowledge through the Understanding of the World objectives and in Year One, pupils will learn some of the National Curriculum learning objectives by exploring in child initiated time in the Science area. All pupils will be encouraged to explore possible answers for their scientific based questions at an age-appropriate level.

## Implementation:

As part of Christ Church planning process, teachers need to plan the following:

- A Medium Term Plan which outlines knowledge (including vocabulary) that all children must master and a cycle of lessons for each subject, which carefully plans for progression and depth;

- Challenge questions for pupils to apply their learning in a philosophical/open manner;

- Trips and visits from experts who will enhance the learning experience where necessary;

*Time in the forest to enhance learning where possible.

*Front covers for each topic with learning objectives which show progression in the topic.

## Impact:

Our Science Curriculum is high quality, well thought out and is planned to demonstrate progression. If children are keeping up with the curriculum, they are deemed to be making good or better progress. In addition, we measure the impact of our curriculum through the following methods:

Completing Science assessment sheets at the end of each to topic to confirm pupils are working towards, expected or at greater depth in their learning and tracking of knowledge in learning quizzes, pupil discussions about their learning and focused questions.

Most children are expected to achieve age related expectations in Science at the end of their cohort year. Children will retain knowledge that is pertinent to Science with a real life context and will be able to question ideas and reflect on their knowledge.

Children will work collaboratively and practically to investigate and experiment. They will be able to explain the process they have taken and be able to reason scientifically.