

## Christ Church CE Primary School Science Curriculum Intent and Implementation 2025-2026

**Intent:** At Christ Church CE Primary School, our ambition is to inspire and excite children's curiosity to find out about the world around them and how it all works. We aim to make learning hands on and memorable through investigations and testing ideas. We place a huge importance on learning and using scientific vocabulary.

We ensure that all pupils:

- develop scientific knowledge and conceptual understanding through the specific disciplines
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future

Our pupils have the opportunity to carry out practical investigations in science that help them to develop their scientific skills - these skills are known as working scientifically skills

**Below are the 7 working scientifically skills we use when carrying out investigations:**



**Implementation:** At Christ Church CE Primary School we follow the National Curriculum for Science and use a scheme to support teaching and learning called 'Developing Experts.' These units of work go from Nursery-Year 6. Lessons are delivered through a sequenced curriculum designed to enable the learner to experience a coherent curriculum delivered through logical progression. Each lesson builds on prior learning and allows pupils to revisit knowledge and skills from previous years and lessons – a critical step in creating long-term knowledge retention.

At Christ Church CE Primary School, we understand that every child is individual and every child learns at their own speed. Through the use of Developing Experts resources, we aim to ensure that all children have the opportunity to learn science knowledge and vocabulary, revisit knowledge and science vocabulary, and to apply it in meaningful experiments across each year group. We use child friendly indicative assessment opportunities, through; Mission Assignments, quizzes, comprehensive handouts and a range of other activities that interweave with prior learning, as well as end of unit assessments. This blend of assessments grants teachers the necessary tools to ensure pupils make good or better progress in science.

The Developing Experts curriculum revisits and builds upon the national curriculum objectives with extra lessons to really strengthen and make links between science units.

We feel that it is important that the opportunity is offered to extend higher achieving pupils beyond the limits of a key stage of National Curriculum, as well as catering for those that need extra support. As such, our Developing Experts scheme has included additional lessons and resources that carry 'signpost' to extended learning capability, which is used at the discretion of the class teachers.

### **EYFS (Nursery and reception)**

In early years, science is embedded within the 'understanding the world' area of learning and development. Children will be encouraged to explore and be curious in their environment, ask questions and notice patterns and changes. Children will use mainly hands-on activities (water play, building, gardening and cooking) to test ideas, make predictions and describe what they see.

### **Key Stage 1 (Y1&2)**

In Key Stage 1 pupils are exploring and making sense of the world around them; naming things and understanding how they fit in their environment. Developing Experts apply the National Curriculum programmes of study by helping children to identify what makes, animals and humans, materials and their uses, plants and seasonal change. There is a clear progression pathway and children are encouraged to work scientifically, investigating, observing, recording and sharing, using simple equipment increasing their curiosity for their surroundings. In each lesson experts explain things and relate them to the world outside home and education, enabling children at a young age to begin to form the relationships of the working world within their own conceptual understanding.

### **Lower Key Stage 2 (Y3&4)**

Having established the foundational scientific concepts, we now add depth to their understanding of the areas from KS1 and broaden the range of topics and concepts studied; rocks, human impact on living things - conservation and pollution, and eventually, states of matter, sound, and electricity. Children are immersed and progressively build on their foundational scientific knowledge and vocabulary. We continue to encourage children to be inquisitive through real life experiences.

### **Upper Key Stage 2 (Y5&6)**

We ensure topics are visited at each key stage progressively, adhering to the National Curriculum, this is reinforced through revisiting each topic and strand. By Year 5 and Year 6, pupils are becoming confident and independent young scientists. Through their explorations, they raise questions, make simple hypotheses that they test, collect data for, then subject to analysis and report from.

**Impact:** Through Developing Experts, our Science curriculum is high quality, well thought out and is planned to demonstrate progression in knowledge, working scientifically skills and enquiry types. The impact of our science curriculum is that the majority of children, in our school, are able to;

- Demonstrate knowledge and scientific vocabulary in the core areas of science taught each year.
- Recall, make links to and build upon previously taught science vocabulary and knowledge.
- Use scientific vocabulary and skills to help them to work scientifically when planning, conducting, recording, reporting and understanding scientific enquiries.
- Know about science and scientists in real life.

#### **We measure the impact of our curriculum through the following methods:**

- Summative assessment of pupil discussions about their learning.
- Formative assessments –exit quizzes at the end of a unit.
- Images and videos of the children's practical learning.
- Interviewing the pupils about their learning.
- Marking of written work in books.

**Below is a copy of our long-term plan:**

| <b>Term</b>     | <b>Early Years</b>        | <b>Year 1</b>                           | <b>Year 2</b>                           | <b>Year 3</b>            | <b>Year 4</b>                                   | <b>Year 5</b>                    | <b>Year 6</b>                    |
|-----------------|---------------------------|-----------------------------------------|-----------------------------------------|--------------------------|-------------------------------------------------|----------------------------------|----------------------------------|
| <b>Autumn 1</b> | Animals                   | Seasonal Changes                        | Uses of everyday materials              | Scientific enquiry       | Animals including humans                        | Forces                           | Electricity                      |
| <b>Autumn 2</b> | Food                      | Animals including humans – all about me | Living things and their habitats 1      | Animals including humans | Living things and their habitats                | Properties of materials          | Light                            |
| <b>Spring 1</b> | Forces                    | Exploring every day materials 1         | Living things and their habitats 2      | Rocks                    | Living things and their habitats – conservation | Changes of materials             | Animals including humans         |
| <b>Spring 2</b> | Health and safety         | Exploring every day materials 2         | Animals including humans 1 – growth     | Forces and magnets       | States of matter                                | Animals including humans         | Living things and their habitats |
| <b>Summer 1</b> | Insects and invertebrates | Plants                                  | Animals including humans 2 – lifecycles | Plants                   | Sound                                           | Earth and space                  | Evolution and inheritance        |
| <b>Summer 2</b> | Machines                  | Animals including humans – all about me | Plants                                  | Light                    | Electricity                                     | Living things and their habitats | Looking after our environment    |