

**Church Lane Primary School and Nursery**

**Science Policy**

*Men love to wonder, and that is the seed of science – Ralph Waldo Emerson*

*Science gives man knowledge which is power – Martin Luther King Jr*

**Intent**

Our intention at Church Lane Primary School and Nursery is to develop children’s sense of awe and wonder in the world around them. Encouraging them to fully engage in the world and question and investigate what they see. We want our curriculum to be ambitious and designed to give all of our children the knowledge and cultural capital they need to success in life past primary and aim for a variety of careers.

**We will ensure that our intention is met through…**

* Providing a broad and robust curriculum for our children to work through which challenges them and stimulates their interest in Science
* Delivering engaging Science lessons that link to other areas of the curriculum – providing the children with regular opportunities to complete practical Science work
* Forging links with local secondary schools – allowing our children to experience Science experiments and ideas they will be approaching in secondary school early, thus ensuring they are at an advantage
* Giving our children the opportunity to ask their own scientific questions and have an input in to the planning of their experiments.
* Ensuring our children have access to our outdoor learning environment, visits from specialists and local facilities to enhance the delivery of our curriculum and engage our children’s interest.
* High quality and level vocabulary will be introduced in each lesson alongside knowledge which will be built upon through the children’s time in school.

**Our curriculum**

Early Years Foundation Stage

Children in our school study Science as part of the specific learning area of ‘understanding the world’. Within the nursery setting this is where our children begin to explore and talk about differences in the world around them and how things in the world around them change over time. In reception, children begin to discuss differences and similarities in a larger range of things including places, objects, materials and living things. Making observations about animals and plants and explaining why some things occur and change.   
This knowledge is gained in a cross curricular way through: active learning, interest based learning and moved forward by daily interactions with adults.

Key stage 1 and 2

In Key stages 1 and 2 our children study a range of areas of Science. Their knowledge is split in to four main subject areas within Science: Working Scientifically, Biology, Chemistry and Physics.   
In Key Stage 1 our curriculum is focused on questioning, identifying and observing – allowing the children to have practical hands on experience of different areas of Science. This means that they are in the perfect position and have all the knowledge of the world around them they need to continue onwards with Science and exploration of the world around them in Key Stage 2.  
In Key Stage 2 the children’s knowledge from Key Stage 1 is built upon. They begin to go beyond observation and start to explain the why and the where. Questioning begins to extend to changes in variables and constants and the children begin to examine what can affect accurate results in tests. They look at the four main areas in more depth, expanding their scientific vocabulary and understanding – making links between things they know and exploring not just the testable areas of science but also those that are theoretical.

**Principles of Teaching**

Science is taught throughout the school from EYFS to KS2.

Each class (Year 1 – 6) will study a unit from the same area of Science at the same time – building upon prior learning where appropriate.

All pupils are encouraged to participate in Science lessons regardless of race, culture, gender, ability or physical limitations. We use Science work to support our PSHE and Social studies where we have mutual respect and a sense of ethics behind what we do. *“Our Scientific power has outrun our spiritual power. We have guided missiles and misguided men.” Martin Luther King Jr*

During Science lessons the children are expected to work in a variety of ways including groups, as a whole class, in pairs and individually.

The children are provided with the opportunity to explore the world around them – questioning is always welcome and extra ideas and questions that come from the learning should always be explored.

**Role of the Science co-ordinator**

Endeavour to promote a dynamic approach to the teaching of Science so that it is engaging and opens the children’s eyes to the world around them

Provide CPD and advice to staff

Oversee the implementation of the Science Curriculum

Keep up to date with developments through reading and course attendance

Monitor the subject through book looks/ planning/ observations/ children’s voice and data

Co-ordinate extra Science theme days and activities

**Assessment, Recording and Reporting**

Teachers will assess Science using the Head Start progress tests in Science termly. This data will be inputted in to the I track assessment system at the end of each year.

Policy Written by: R Minucci on November 2019

To be reviewed: November 2021