# Church of the Ascension CE Primary School Science Policy



# 'Learn with love, flourish with faith.'

**Our School Vision:** 

Do everything in love (I Corinthians 16:14).

As an inclusive Christian school, Church of the Ascension C.E Primary School aims to create a loving, caring and respectful community, where individuals can flourish spiritually, socially and academically as children of God in a rich learning environment. Our vision is to inspire lifelong learning, whilst encouraging resilience, independence, aspiration and an appreciation of God's wonderful world.

# **Curriculum Drivers**

#### Resilience:

- Developing problem solving skills.
- To be able to think critically and evaluate the efficacy of their work and the work of others.
- Lifelong curiosity and interest.
- Appreciate the processes of experiments and enquiries and be able to learn from observations and mistakes made.

# Independence:

- Developing skills as a process of enquiry.
- Ask questions.
- Carry out investigations with increasing accuracy and independence.
- Ask scientific questions about the world around us.
- To consider critically the information presented.
- Plan and carry out fair and comparative tests with increasing independence.

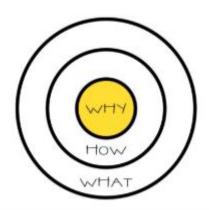
# **Aspiration:**

- To understand the work of scientists and the impact that it has had on life today.
- To understand the role that science plays in many professions and to consider science as a valid career pathway.
- Desire to contribute to the advancement of the sciences.

# **Appreciation:**

- Developing the natural curiosity of the world around us.
- Developing respect for the world around us and considering our role in preserving and protecting it.
- Be able to make increasing sense of the world around us.

# Our Approach to the Teaching and Learning of Science



# **Subject Intent**

The important thing is not to stop questioning, curiosity has its own reason for existing.

(Albert Einstein)

### Why do we do what we do in this subject (aims)?

At Church of the Ascension Primary School, we recognise the importance of Science in every aspect of daily life. As one of the core subjects, we aim to give the teaching and learning of Science the prominence it requires.

We aim to offer a Science curriculum that increases pupils' knowledge and understanding of our world and develops skills associated with Science as a process of enquiry. We aim to develop the natural curiosity of the child, encourage respect for living organisms and the physical environment and provide opportunities for critical evaluation of evidence.

We aim for all our children to develop skills that enable them to view themselves as scientists. Throughout their time with us, we aim for children to develop and maintain a curiosity of the world around them and be equipped with the scientific knowledge required to understand the uses and implications of Science, today and for the future.

# **Subject Implementation**

# How do we ensure our intent becomes a reality?

At Church of the Ascension Primary School teachers create a positive attitude to Science learning within their classrooms and reinforce an expectation that all children can achieve high standards.

Our whole school approach to the teaching and learning of Science involves the following;

- All teachers ensure that the school gives full coverage of the 2014 National Curriculum programmes of study.
- We include problem solving/critical thinking opportunities in our planning that allow children to find out for themselves. Children are encouraged to ask their own questions and are given opportunities to use their scientific skills and research to discover the answers.

- Teachers plan bespoke programmes of study that incorporate high quality resources tailored to the children's needs. This planning is carefully sequenced to build on prior learning.
- Teachers use precise questioning to test conceptual knowledge and skills and assess children regularly to identify those children with gaps in learning, so that all children keep up.
- 'Working Scientifically' skills are embedded into lessons to ensure these skills are being developed throughout the children's school career.
- Teachers demonstrate how to use scientific equipment safely and new vocabulary and challenging concepts are introduced through direct teaching.

Science is taught discretely in both key stages. The curriculum is planned over a two year rolling programme and arranged into topic blocks to enable the achievement of a greater depth of knowledge.

In Early years, Science is taught through play with the children experiencing and learning about the world around them.

SEND children are supported according to individual needs with activities and the use of resources being differentiated accordingly.

Additional opportunities are provided in Science, such as a Science week, Science fairs in school and educational visits linked to the Science curriculum, such as visits to Birmingham Science Museum and Enginuity Telford. Children are given the opportunity to participate in a Fizz Pop Science after school club.

We endeavour to ensure that the Science curriculum we provide will develop the children's resilience and give them the confidence and motivation to further develop their skills into the next stage of their education and life experiences.

# **Subject Impact**

### What are the outcomes for our children in this subject?

Through our carefully designed curriculum, by the time children leave Church of the Ascension they will:



#### How do we know that we have achieved these outcomes?

Science is monitored by the Science co-ordinator by:

Book scrutiny
Pupil Questionnaires
Lesson observations (when possible)
Long and medium term planning reviews

Teachers review prior learning at the beginning of each new Science topic through the use of flashback questions. They make ongoing assessments to inform short term planning. They also complete assessments at the end of a 'topic block' or unit of work using Headstart assessments. These results are recorded in teacher's assessment book. Due to our two-year rolling programme, this information is passed on to the next year group teacher, at the beginning of the autumn term, to inform a summative assessment at the end of each phase. To consolidate this assessment, children in Year 2, 4 and 6 complete a Headstart progress test as a summative assessment in the summer term.