

# Emmanuel Holcombe C of E Primary Science policy

## Vision Statement

Jesus came to give us life in all its fullness. Our vision is that through faith, family and friendship, each of us can grow in love and learning, being tolerant, having resilience and developing enquiring minds, so that we can all experience the abundance Jesus came to give us.

#### **Mission statement**

In our small, friendly school, everyone respects and cares for one another In our community, church, home and school we work together to grown in faith and friendship In our learning we encourage each individual to reach their potential to grow through skills, knowledge and understanding

#### Intent

- To prepare our children for life in an increasingly scientific and technological world.
- To foster care and concern for our environment.
- To help our children acquire a growing understanding of scientific ideas.
- To help develop and extend our children's knowledge of scientific concepts.

#### **Implementation**

The Emmanuel Holcombe curriculum is shaped by the school vision to enable all children, regardless of background, ability or additional needs to flourish and live life to the full. Our Science curriculum has been designed in line with the National Curriculum (2014), to produce clear skills and knowledge progression. At Emmanuel Holcombe we believe that:

- Science should be taught in an imaginative, purposeful, well managed, safe and enjoyable way.
- Teachers should give clear and accurate instructions and use skilful questioning.
- Links should be made with other subjects. E.g. PE, Maths, etc.
- The children should be given time to study the main areas of the science curriculum.
- They should be given opportunities for practical investigations and enquiries.
- Teaching should occur both in and outdoors.

The teaching of science will be carried out using a two-year cycle (See Science Curriculum Overview). Each block the children will be given a topic to study e.g. Animals including Humans. Each topic will include an area of scientific enquiry to focus on.

Science sessions will be taught in a block, where each science lesson follows on from the learning of the previous day. It would be beneficial for all classes to have a Science display in their classroom, this will allow the children to be immersed in the language as often as possible.

In addition to the knowledge and understanding aspects of the national curriculum the children should also be taught the skills of scientific enquiry. It is expected that at least one practical investigation will take place every half term. Children need to be given the opportunity to experience each form of scientific enquiry at least once a year. These are fair tests, observations over time, pattern seeking and sorting and classifying.

Links should be made between Science and other subjects wherever appropriate and references to the world around us should be made where possible.

#### Impact

Our Science curriculum will ensure all pupils develop key knowledge and practical enquiry skills, as set out by the national curriculum.

These are as follows:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- 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.

# Teaching and Learning

Fundamental skills and knowledge are taught to children through a carefully planned programme. Science is taught on a two- year rolling programme, which has been carefully devised by the Science subject lead in consultation with the rest of the teaching staff.

## **Assessment**

Within EYFS children's assessment is formative by reviewing evidence gathered from continuous provision and adult led activities then making a holistic judgement against the relevant ELG. Staff refer to the exemplification documents to moderate the judgements.

Children in KS1 and KS2 record their learning, either individual or group tasks, using their Journal books, Seesaw, pictures and videos.

To help inform teacher assessment, Knowledge Retrieval Weeks are planned 6 times a year to assess the children's ability to recall key knowledge and vocabulary. Using Knowledge Retrieval Week scores, pupil's books etc, teachers use a best-fit model to record their judgements on assessment grids. At the end of each unit, teachers decide whether a pupil is 'Working Towards' (WTS)', 'Expected' (E), or 'Greater Depth' (GD) and record pupil initials on the whole class assessment grids. Teachers then input an end of year judgement into Target Tracker, (once a year), using the unit assessment grids to make an overall judgement. This enables staff to measure progress throughout a pupil's time in school.

## Planning and Resources

Planning lessons and preparing resources for Science lessons is the responsibility of the class teacher.

## **Organisation**

At Emmanuel Holcombe, Science teaching is taught weekly.

## Equal Opportunities

The Science curriculum adheres to the Emmanuel Holcombe Equal Opportunities Policy. The Science curriculum takes into account issues of difference: gender, race and ethnicity, and class.

## Inclusion

Science is taught in an inclusive way, which values and respects everyone's differences.

## Role of the Subject Leader

- Order and maintain Science resources as needed.
- To review the 2 year cycle to ensure the units are being covered.
- To check class timetables and long term planning, to ensure that Science teaching is taking place and that Scientific Enquiry is happening at least once every block.

- To complete work scrutinises, learning walks and facilitate pupil voice opportunities, to monitor the effectiveness of Science teaching. Complete evidence scrutiny to ensure all objectives are being covered.
- To complete Science 'drop ins' to monitor the impact and quality of Science teaching.
- To meet with the Science link governor.
- To check that Science display areas reflect the unit being taught and are kept to a high standard.
- To liaise with other Science leads in other primary schools to share ideas and seek external moderation.
- Ensure staff display a positive and enthusiastic approach to the teaching of Science in school.
- To ensure our school mission and vision statements permeate everything we do.
- Review the Science policy and curriculum progression document annually and inform staff of any changes.
- To support staff if needed.

#### Parents

Parents are encouraged to be a part of their child's Science education. Work will be shared at parent's evenings and celebrated in whole school assemblies. Experiences will be shared and celebrated via seesaw and twitter. Parents and carers are invited and encouraged to attend all of these assemblies throughout a child's time at Emmanuel Holcombe.