

Altham St. James C.E. Primary **School**



Science Policy

Our mission statement is at the heart of all we do:

- Always be the best you can be
- Respect the world and everyone in it
- Love, forgive and reconcile

John 15:12 "Love each other as I have loved you"

Intent

At Altham St. James' we aim to provide a broad and balanced science curriculum which enables all pupils to confidently explore and discover what is around them, so that they have a deeper understanding of the world we live in. We want our children to enjoy science and be inspired by it.

Our science curriculum involves exciting, practical hands on experiences that encourage curiosity and questioning. At Altham St. James' we have a coherently planned and sequenced curriculum. We want to equip our children with not only the minimum statutory requirements of the science National Curriculum, but to prepare them for the opportunities, responsibilities and experiences of later life.

Our aims in teaching science include the following:

- ✓ Preparing our children for life in an increasingly scientific and technological world.
- ✓ Fostering concern about, and active care for, our environment.
- ✓ Helping our children acquire a growing understanding of scientific ideas.
- ✓ Helping develop and extend our children's scientific concept of their world.
- ✓ Encourage the development of positive attitudes to science.
- ✓ Build on our children's natural curiosity and developing a scientific approach to problems.
- ✓ Build our children's self-confidence to enable them to work independently.
- ✓ Develop our children's social skills to work cooperatively with others.
- ✓ Give our children an understanding of scientific processes.
- ✓ Help our children to acquire practical scientific skills.

- ✓ Develop the skills of investigation - including observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
- ✓ Develop the use of scientific language, recording and techniques.
- ✓ Develop the use of ICT in investigating and recording.
- ✓ Enable our children to become effective communicators of scientific ideas, facts and data.

Implementation

As stated in the National Curriculum, science has four areas of learning:

- Sc1 Scientific enquiry;
- Sc2 Life and living processes;
- Sc3 Materials and their properties;
- Sc4 Physical processes.

Our overarching aim is to further embed scientific enquiry through the contexts of the three main content areas (Sc2, 3, 4).

In Key stage 1 and 2, our curriculum is carefully planned over a two year cycle to engage and excite all our learners. The “Engaging Science” scheme of work is used throughout school as the core scheme, supplemented by other resources. The scheme ensures that all the four areas of learning, as stated by the National Curriculum, are taught. The scheme allows science to be taught through practical and investigative activities which encourage children to think both scientifically and creatively. When planning, teachers use the National Curriculum Science statutory requirements document alongside the “Engaging Science” lesson plans to ensure that key elements are taught and so that teachers can ensure that there is

progression throughout the year groups. Science is taught on a weekly basis throughout school.

In EYFS, Science is taught as an integral part of the topic work through child-initiated and adult led activities. This allows children to secure some of the basic skills in the 'Understanding the World' and "Expressive Arts and Design" areas of learning that will build the foundation for the Key Stage One science curriculum.

Impact

Teaching of Science at Altham St. James' provides children with the foundations needed for future learning and for life.

We ensure that all our children have the opportunity to gain science knowledge and understanding regardless of gender, race, class, physical or intellectual ability.

Pupil voice is used to further develop the Science curriculum, through questioning of pupils' views and attitudes towards Science, to assess the children's enjoyment of Science, and to motivate learners.

Assessment and Recording

There are various ways for pupils to record their work in science. These may include:

- written work demonstrating knowledge
- investigations
- diagrams
- photographs of practical activities

In EYFS, records are kept in floor books and examples of children words/answers are collated to support the key areas of the EYFS framework.

In Key Stage One and Two, work is completed in science books and in floor books.

Assessment is an integral part of the teaching process. Assessment is used to inform planning and to facilitate differentiation. The assessment of children's work is on-going to ensure that understanding is being achieved and that progress is being made. Feedback is given to the children as soon as possible, and the school's Marking Policy will guide marking work.

Teachers will record for themselves, those children who are not working at the expected standard or are working above the expected standard. Each child's progress in school is tracked termly and this information is passed to the science leader in order to track the progress in science throughout school.

This information will also be passed on to the next teacher when the cohort moves on.

Monitoring

This subject is led by Mrs Bellard, but the whole staff set aside time each year to review standards, monitor curriculum provision and ensure training and resources are up to date. Monitoring takes place through sampling children's work and planning, conversations with pupils and staff, and lesson observations.

Health and Safety

Teachers are responsible for ensuring the health and safety of their children at all times. Any concerns regarding equipment/substances must be raised with the science lead who will then seek further advice. All staff are reminded of CLEAPSS annually to support keeping children safe during practical investigations. Risk assessments are carried out as appropriate.

Online Safety statement

All members of the school community have a responsibility for promoting and supporting safe behaviours online. ICT and online resources are increasingly used across the curriculum. At Altham St. James' we believe it is essential for e-safety guidance to be given to the pupils on a regular and meaningful basis. Pupils are taught about copyright and respecting other people's information, images, etc.

through discussion, modelling, and activities as part of the curriculum. Additionally, pupils are taught to critically evaluate materials and learn good searching skills. Staff must preview any recommended sites before use. Particular care is taken when using search engines. We continually look for new opportunities to promote e-safety.