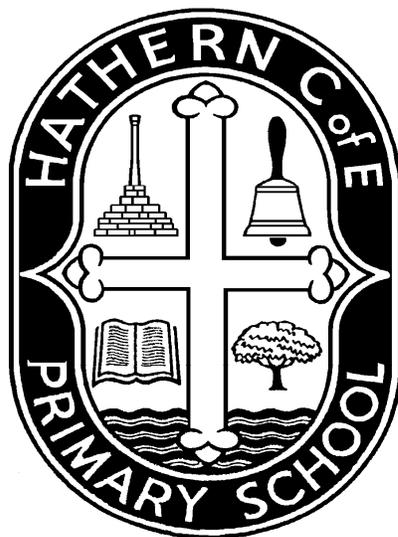


Hathern Church of England Primary School



Science Policy

At Hathern Church of England
Primary School, we believe in
**'Learning and Caring
Together'**



Science Policy

Section 1:

Policy Intention:

This policy is intended to ensure consistency across the school in terms of the Planning, Teaching and Learning and Assessment of Science.

Section 2:

Agreed Procedures:

Planning of Science should:

- be informed by assessment
- be clearly differentiated (G&T down)
- provide opportunities for teacher-led and child-led investigation
- utilise cross-curricular skills (Literate, Numeric, ICT etc)
- provide breadth and depth of skills learning, practice and application. (Currently within the Edison Learning platform)
- lead to assessment

Teaching and Learning of Science should:

- be objective-led (WALT and WILF)
- be appropriately resourced
- be inclusive to all pupils
- model sound scientific predicting, testing, recording and presentation of results
- be engaging
- encourage questioning of our physical world

Section 3:

Is this working?

Monitoring and Evaluation through work scrutiny should suggest that teachers are applying the Science Policy, where there is evidence that the children can:

- ask and answer scientific questions
- plan and carry out scientific investigations, using equipment, including computers, correctly
- know and understand the life processes of living things
- know and understand the physical processes of materials, electricity, light, sound and natural forces
- know about the nature of the solar system, including The Earth

- evaluate evidence and present their conclusions clearly and accurately

Section 4:

The Long-Term Plan:

The Programmes of Study for Sc2/3/4 are covered in a two year rolling programme of units. Key Stage 1 P.O.S. are covered once across Years 1 and 2, Key Stage 2 P.O.S. are covered across Years 3 and 4 and Years 5 and 6. Each unit ties in with a section of the Edison Learning platform.

ref Appendix 1 – Coverage of the programme of study

There are medium-term planning sheets for each unit of work. They are supplemented with relevant information that identify; learning objectives, science activities, assessment opportunities, the vocabulary to be taught and used, safety issues, how information and communications technology and resources should be used. Teachers should evaluate each unit of work after completion.

ref Appendix 2 – Planning Matrix

Expectations:

By the end of Key Stage 1, the performance of the great majority of the pupils should be within the range of levels 1 to 3. Most pupils are expected to achieve level 2.

By the end of Year 4, the performance of the great majority of pupils should be in the range of levels 1 to 4. Most pupils are expected to achieve level 3.

By the end of Key Stage 2, the performance of the great majority of the pupils should be within the range of levels 3 to 5. Most pupils are expected to achieve level 4.

Section 5:

Assessment:

Assessment in Science should:

- provide reliable and credible information to support progression in learning
- accurately identify and track pupil progress – *End of unit 'NSI' currently used*
- highlight strengths and difficulties together with strategies to manage them
- raise the expectations of success and celebrate a broad range of achievements
- motivate and actively involve pupils in review, target setting and self-evaluation
- allow children to demonstrate abilities through a range of assessment opportunities
- measure investigation skills – *Teacher Assessment to inform Report to Parents*
- inform future planning

x-ref ARR Policy / x-ref Marking Policy

Section 6:

Cross Curricular Links:

The teaching of literacy, numeracy and ICT skills is promoted strongly in science as part of Hathern C of E Primary School's drive to raise standards in literacy and

numeracy. Science is also used to extend and enable the pupils to practise the skills of language, literacy and numeracy.

Literacy:

At Key Stage 1, the pupils are predominantly encouraged to use their speaking and listening skills to describe what they see and explain what they are going to do next. Basic recording using written and ICT tools are also expected. At Key Stage 2 the pupils are encouraged to develop their skills of writing to record their planning, what they observe and what they found out. In relation to science, they should be applying their literacy skills at comparable levels to those which they are using in their literacy work.

Numeracy:

At both key stages the pupils are expected to use their knowledge and understanding of measurement and data handling at appropriate levels. In science, they should be applying their numeracy skills at comparable levels to those which they are using in their mathematics lessons.

Information and Communication Technology:

The pupils' ICT skills are applied as identified in the medium-term planning. At both key stages this involves the pupils using ICT to: locate and research information (CD ROM, internet); record findings (using text, data and tables); log changes to the environment over time (sensing equipment); gain confidence in using calculators, DVD, video cameras, digital cameras, and tape-recorder, as well as the computer. The use of this equipment is indicated in medium-term planning and must be used. It forms an important part of the entitlement of all pupils in ICT.

Spiritual Development:

Spiritual development is encouraged through reminding pupils of the wonder of science and the effect of scientific discoveries on the modern world. Topical scientific issues are also discussed as appropriate.

P.S.H.C.E.:

Health education is taught as part of the units on ourselves, health and growing, teeth and eating, moving and growing, keeping healthy and life cycles. We value our 'Healthy Schools' status.

Environmental Science:

The studying of our environment, from local to inter-galactic level, begins with our 'Forest Schools' programme in The Foundation Stage and as a 'Green Flag Status' school, through the support of Pupil Eco-Reps, outdoor and adventurous residential trips at Years 3/4 and 5/6 explores the furthest reaches through yearly 'Science Linked' activity days.

Section 7:

Inclusion:

We aim to give all our children the opportunity to succeed and reach the highest level of personal achievement; to promote the individuality of all our children, irrespective of ethnicity, attainment, age, disability, gender or background.

SEN:

Curriculum planning and assessment for pupils with special educational needs must take account of the type and extent of the difficulty experienced by the pupil. Teachers will encounter a wide range of pupils with special educational needs, some of whom will have disabilities. In many cases, the action necessary to respond to an individual's requirements for curriculum access will be met through greater differentiation of tasks and materials, consistent with school-based intervention as set out in the SEN Code of Practice.

In Science, teachers should take specific action to provide access to learning for pupils with special educational needs by providing the appropriate tools (such as measuring instruments) and equipment (such as larger lenses and unbreakable thermometers) as well as considering the background colour of Interactive White Board presentations (Light blue is preferable) and the position of the student for demonstrations, video clips etc.

x-ref. SEN Policy and SEN Code of Practice

Gifted and Talented:

For pupils whose attainments significantly exceed the expected level of attainment within one or more subjects during a particular key stage, teachers will need to plan suitably challenging work. As well as drawing on work from later key stages or higher levels of study, teachers may plan further differentiation by extending the breadth and depth of study within individual subjects or by planning work which draws on the content of different subjects.

x-ref. Gifted and Talented Policy

Policy Review

The review and updating of this Science Policy is the responsibility of the Science Subject Manager, and should be conducted within three years of the start date of this policy.

Policy Reviewed/revised: **March 2012**

GS