

Joy Lane Primary School  
Science Policy



# Joy Lane Primary School Science Policy

September 2017

## Aims

- To develop pupils' enjoyment and interest in Science.
- To develop pupils' understanding of key scientific concepts and scientific skills.
- To ensure that all pupils develop an 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.
- To ensure that all pupils are equipped with the scientific knowledge required to understand the uses and implications of science today and for the future
- To enable pupils to effectively communicate scientific ideas using scientific vocabulary.

## The Science Curriculum

- The Kent Scheme of Work (enhanced by QCA units of study where appropriate) – the focus has changed from the QCA units of study to The Kent Scheme of Work in order to be consistent between KS1 and KS2; regular review and evaluation will be necessary.
- Wherever possible, **genuine** cross-curricular links are encouraged.
- Links are made to the School Development/Action Plan, where appropriate.

## Foundation Stage

Science is taught in Reception according to the curriculum guidance for the Foundation Stage. It is incorporated in the Early Learning Goal, 'Knowledge and Understanding of the World', in which pupils develop the crucial knowledge, skills and understanding that helps them to make sense of their world.

## Key Stages 1 & 2

The knowledge and skills within The National Curriculum Programme of Study are met using The Kent Scheme of Work for Primary Science, with appropriate QCA and cross-curricular opportunities.

In Key Stage 1 and 2, a minimum of one unit of work is covered each term to ensure coverage and progression of skills. This equates to at least one hour per week of science teaching in KS1 and an hour and a half in KS2.

## Approaches to Teaching and Learning

### Scientific Enquiry

Science is taught with emphasis on engaging the pupils in practical enquiry to support and develop their understanding of scientific concepts and skills. Teachers use a range of strategies: exploration, investigative enquiry and illustrative enquiry. Where possible, teachers try to incorporate children's ideas as a basis for enquiry.

## ICT

Pupils are taught to use a range of ICT equipment to enhance their scientific learning: video cameras to record investigations; data loggers for accurate measurements; digital microscopes for close observation and Excel to create graphs and charts to record results.

## Recording Pupils' Work

Pupils are taught and encouraged to use a range of recording strategies to communicate their ideas and scientific findings.

## **Assessment for Learning**

Teachers will:

- carry out continuous assessment;
- make short-term assessments matched to the learning objectives to adjust their planning;
- make comments in pupils' books related to the learning objective;
- carry out medium and longer-term assessments to assess progress against school and national targets;
- use long-term assessments to help them plan for the next academic year;
- inform parents and carers of their child's progress and targets.

## **The Monitoring of Standards**

The monitoring of standards of children's work and the quality of teaching is the responsibility of the subject coordinator supported by the Headteacher and the SLT.

Standards will be monitored by:

- looking at pupils' work;
- subject observations;
- pupil discussions;
- audit of subjects;
- scrutiny of planning;
- general curriculum discussions.

## **Responsibility of the Class Teacher**

Teachers should:

- plan and deliver good to outstanding lessons;
- have high expectations for all children and provide work that will extend them;
- assess, record and report on the development, progress and attainment of pupils;
- achieve high standards;
- celebrate the success of pupils in lessons;
- ensure marking is used to acknowledge achievements, as well as showing the pupils what they need to do in order to improve.
- model and correct scientific spellings.

## **Assessment**

Teachers to assess pupils according to the key skills and knowledge levelled outcomes (The Kent Scheme of Work assessments – on named Excel grids on the Server ‘Science – Staff Assessment’ so assessment should be kept centrally as well as notifying the Science Leader and Assessment Manager by email).

Oysters SRP will use B Squared to assess, but also has access to P Levels (on the server).

## **Responsibility of the Science Leader**

The Subject Leader will:

- lead the development of this policy throughout the school;
- work closely with the Headteacher, the nominated governor and SENCO;
- be accountable for standards in this subject area;
- monitor standards by:
  - auditing the subject area
  - reviewing of the scheme of work
  - monitoring teachers planning
  - lesson observations
  - scrutinising children's work
  - discussions with pupils
- ensure continuity and progression throughout the school;
- provide guidance and support to all staff / arrange training for staff when the need arises;
- attend appropriate and relevant CPD;
- keep up to date with new developments;
- liaise with outside agencies and attend courses/take part in initiatives to remain up to date with scientific advances in procedures;
- inspire and hold ‘Science Events’ with support from staff – weeks; science visitors, competitions, conferences, etc.;
- undertake an annual audit and stock take of resources and purchase new resources when required;
- manage the subject budget effectively.

## **Resources**

The school has a full range of resources to support the teaching of this subject throughout all year groups. Shared science resources are stored in the science cupboard in the Year 6 area.

Resources are upgraded and replenished when the need arises. A stock take and audit is undertaken by the subject coordinator in the summer term in preparation for the next academic year.

## **Health & Safety**

The safe use of equipment and materials is promoted at all times. The Association for Science Education document 'Be Safe' to be adopted by the school as a realistic guide to primary school health and safety. 'CLEAPPS' Primary Science and Technology advice is available in the science book cupboard. A telephone advice line/online is available for Health and Safety and free Email advice is given the same day.

## **Additional Education Needs**

The study of science is planned and differentiated to provide pupils with a suitable range of activities and support appropriate to abilities and needs. Curriculum planning ensures that all pupils have an equal opportunity to take part in every aspect of the science curriculum, for example, a range of introductory, practical recording skills. Gender, disability and cultural differences are reflected positively in this school.

## **Inclusion**

We believe that we are an educationally inclusive school as we are concerned about the teaching and learning, achievements, attitudes and wellbeing of all our pupils. We aim to provide places for all pupils who express a preference to join this school. We work hard to offer equality of opportunity and diversity to all groups of pupils within school.

We want to give all children the right to access high-quality educational experiences, to take part in a broad and balanced curriculum and to be part of the social life of the school. We recognise that within the school we have more able, gifted and talented (Greater Depth) children.

We have an obligation to plan and deliver well-structured lessons with appropriate assessment, plus ambitious targets for pupils who have low levels of prior attainment or come from disadvantaged backgrounds.

The Oysters SRP will follow the same schemes of work but will adapt the planning and delivery of lessons where necessary.

Also, we have a duty to cater for pupils whose first language is not English by planning teaching opportunities to help them develop their English and to gain full access to the National Curriculum.

## **Policy Review**

Reviewed September 2017 (previously April 2014)

Due by September 2020

KS/DJH