The Federation of St Mary's Priory Catholic Infant & Junior Schools

http://www.stmarysrcn15.ik.org/

Science Policy - June 2017

The importance of science in the curriculum

Science stimulates and excites pupils' curiosity about phenomena and events in the world around them. It also satisfies their curiosity with knowledge. Science links direct practical experience with ideas, it engages learners at many levels. Scientific method is about developing and evaluating explanations through experimental evidence and modelling. This is a spur to critical creative thought. Through science, pupils understand how major scientific ideas contribute to the technological change; impacting on industry, business and medicine and improving the quality of life. Pupils recognise the cultural significance of science-based issues that may affect their own lives, the direction of society and the future of the world.

Aims:

The school aims:

- To teach science in a way that is engaging, imaginative, purposeful, well managed and enjoyable to all pupils.
- To ensure that lessons are delivered in a clear, accurate and offering skillful questioning by the teacher.
- To ensure that links are made between science, other subjects and pupils' life experiences.

How science is structured through our school

Science in our school is about teachers delivering outstanding teaching and our pupils enjoying their learning in a meaningful way. We follow the New National Curriculum for Science and the topics outlined.

- KS1 - science is taught for a minimum of 1 ½ hours per week. A minimum of 1/3 of lessons overall should include practical scientific enquiry.

- KS2 – science is taught for a minimum of 2 hours per week. A minimum of 50% of lessons should include practical science enquiry.
- EYFS – a minimum of 1/3 of lesson overall should include practical scientific enquiry.
- Each unit has ICT links (please refer to relevant documents) ICT must be used when appropriate.
- Classrooms needs to have an interactive Science display that reflect the Unit you are covering and have current Science Vocabulary displayed.

Planning

- Where possible lesson plan should be stored electronically preferably on the school's share drive. This allows the SLT, coordinators and consultants' easy access to them for monitoring purposes and also means they are accessible for future teachers.
- Commercially published schemes of work may be used to support planning of science but mainly for ideas. Ideas should be drawn from a range of resources to ensure coverage of key objectives.
- Plans should identify the type of evidence that will show that the lesson has taken place e.g evidence of scientific enquiry, pupils' recording/written work, teacher's evaluations etc.
- **Please avoid providing children with worksheets to complete unless it is necessary for differentiation.**

Assessment and recording in science

We use assessment to inform and develop our teaching, improve pupils' knowledge and understanding of the topic so that they know their next steps for improvement.

- Starting in KS1, teachers are required to report a level for each pupil for each strand of the science curriculum (Science enquiry, Living processes, Materials and their properties and Physical processes).
- In KS2, we use Rising Stars/NSI Publishing to assess the above strands.
- In Year 6, assessment is carried out using SATs papers from previous years. This will allow gaps in pupils' learning to be identified and to ensure pupil's learning needs are catered for throughout the whole of Year 6. This data may also be used to support the school in setting predicted attainment levels for end of KS2 SATs.
- For EYFS, children are assessed from narrative observations and next steps are planned, which include Understanding of the World. This assessment is ongoing and is interrelated with the other areas pf learning. Teachers in Year 1 classes should use the EYFS P- scale statements where children are working below level 1.
- All children SC1 skills should be levelled at the end of each unit and recorded on the tracking grid.

- Teachers levelling are moderated to ensure consistency across the school. Science is included in pupil progress meetings to enable identification of children that are not making adequate progress.

Inclusion

- School support staff and external educational support staffs, should work as directed by the teacher. These adults should be well briefed beforehand.

- All pupils, including those with special educational needs, should undertake the full range of activities. Teacher assessment should determine the depth to which individuals/groups should perform in each unit of work.

Resources

- Learning resources are kept in the science cupboard. Relevant equipment should be taken to the class by teachers/adults or responsible pupils.
- The school has an outdoor science area that includes a wormery, sensory area etc.
- The subject leader is responsible for the maintenance of these areas, but staffs are politely requested to return resources in good order from whence they came. Batteries should be removed from equipment and stored separately.

Health and Safety

- The scheme of work covers the training of pupils in the safe and considerate handling of animals, plants and equipment. They should be taught to use equipments and consumables safely and efficiently.
- Safe practice as indicated in The Association of Science Education publication, "Be Safe!" and the school's Health and Safety policy must be adhered to.
- Particular attention must be given to avoiding the use of anything that aggravates individual pupils' allergies.
- Safety issues must be identified in medium-term planning and risk assessments must be completed in weekly planning, when activities are identified that are unusual and beyond the scope of normal safety practice.

Extra-curricular opportunities

- Teachers must ensure opportunities for children to visit places of scientific interest and for visitors to come into the school in order to support the learning objectives for units of work where relevant.
- Every term, a year group is expected to share their learning in a science assembly. This is listed on the schools assembly plan which is found in the staff room.

Homework

Homework is given by the class teacher when the topic lends itself and to reinforce understanding of the topic.

Review

This science policy will be reviewed by the science leader and shared with staff.

Date for next review of this document June 2020