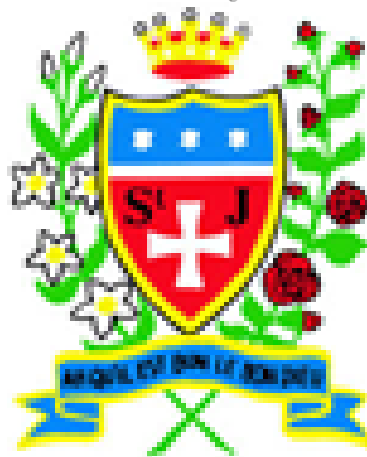


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Science
Policy



St. Julie's R.C.
Primary School

MISSION STATEMENT

St Julie Catholic Primary School...
A caring, family school where we learn, grow
and walk in the footsteps of Jesus.

In consequence of our school mission it is a fundamental aim of St. Julie's to be an inclusive school. To be a school which:-

- Has a sense of community
- Provides equal opportunities
- Offers partnership between school parents and parish
- Reflects upon the teachings of Christ and puts them into practice
- Values all members of the school community
- Its members show respect for themselves and each other
- Is a caring community.

We define an inclusive school as one where...

- Everyone, irrespective of age, gender, ability or disability, race or religion is encouraged and given equal opportunity to participate in the full life of the school,
- All members of the school community are given the opportunity and support to achieve their true potential,
- All members of the school community, and the contributions they make to the life of the school, are valued and where everyone is treated with mutual respect, care and consideration, and
- Everyone feels empowered to play a full and effective role in the school.

Aims and Objectives

We live in an increasingly scientific and technological age where children need to acquire the knowledge, skills and attitudes to prepare them for life in the 21st century.

Science stimulates and excites children's curiosity about phenomena and events in the world around them. We, at St. Julie's believe that the teaching of science develops in children an interest about the world in which they live, and fosters in them a respect for the environment.

Through our Science teaching we aim to:

- Equip children to use themselves as starting points for learning about science, and to build on their enthusiasm and natural sense of wonder about the world.
- Raise standards of achievement and attainment in science.
- Develop through practical work, the skills of observation, prediction, investigation, interpretation, communication, questioning and hypothesizing, and increased use of precise measurement skills and ICT.
- Encourage and enable pupils to offer their own suggestions, and to be creative in their approach to science, and to gain enjoyment from their scientific exploration.
- Enable children to develop their skills of co-operation through working with others, and to encourage where possible, ways for children to explore science in forms which are relevant and meaningful to them.
- Teach scientific enquiry through contexts taken from the National Curriculum for science.
- Encourage children to collect relevant evidence and to question outcome and to persevere.
- Encourage children to treat the living and non-living environment with respect and sensitivity.
- Stress the need for personal and group safety by the correct usage and storage of resources.
- To enable children to appreciate that we do not always know the answers and results when carrying out scientific enquiry.

The Philosophy and Ethos:

We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes.

We believe that science promotes communication in a specific and precise language involving mathematical and logical thinking. It allows children to develop ways of finding out for themselves and gives them practice in problem solving.

As their knowledge and understanding increases and they become more proficient in selecting and using scientific equipment and collating and interpreting results they will become increasingly confident in their growing ability to come to conclusions based on real evidence. Science fosters a healthy curiosity in children about our universe and promotes respect for the living and non living. It allows children to develop original ideas and a questioning attitude.

In science, pupils are encouraged to be open-minded and to try and make sense of what they see and find out. The main focus of our approach will be through open-ended activities where we encourage children to recognize the need for fair testing.

Equality and SEN Statement

At St Julie Primary School we aim to provide equality of opportunity for all children whatever their age, ability, gender, race, religion or background. We aim to create an environment that values each pupil and enables them to achieve their full potential. We provide a broad and balanced curriculum appropriately differentiated to respond to pupils' diverse learning needs. Ensuring differentiation is a fundamental and core element of inclusion. As such we plan and resource our learning, in line with our whole school policies, to enable all pupils to make good and sustained progress in Science. In our differentiated planning we take due regard of factors such as classroom organisation, learning materials and the learning environment.

The opportunities and experiences we provide enable our pupils to participate fully and give their best across all aspects of school life. We place great value on the quality of relationships within our school community and celebrate the achievements of all pupils. We appreciate that children may have special educational needs throughout, or at any time during their school career. At St Julie Primary School we aim to facilitate the full inclusion of pupils with special educational needs.

We teach Science to all children, whatever their ability, in accordance with the school curriculum policy of providing a broad and balanced education to all children. Teachers provide learning opportunities matched to the needs of children in their

Inclusion:

In school we aim to meet the needs of all our children by differentiation in our science planning and in providing a variety of approaches and tasks appropriate to ability levels. This will enable children with learning and/or physical difficulties to take an active part in scientific learning and practical activities and investigations and to achieve the goals they have been set. Some children will require closer supervision and more adult support to allow them to progress whilst more able children will be extended through differentiated activities. By being given enhancing and enriching activities, more able children will be able to progress to a higher level of knowledge and understanding appropriate to their abilities.

Relationships and Sex Education (RSE)

Sex education is taught in line with the statutory provision of the National Curriculum. However, as a Catholic school we follow Arcdiocese guidance which state:

“Any teaching about love and sexual relationships in a Catholic school must be rooted in the Catholics Church’s teaching about what it is to be truly human in Christ and be presented within a positive framework of Christian virtue. For this reason we encourage Catholic schools to speak about Relationship and Sex Education (RSE) rather than Sex and Relationship Education (SRE), since this emphasises that it is within loving, committed relationships, and specifically within marriage, that sexual love finds its’ most authentic expression.”

The school’s RSE policy gives further guidance on this.

Health and Safety:

In regard to science work in school all teachers are conversant with "Every Child Matters". At St. Julie’s we:

- Encourage and provide opportunities for children to learn about keeping healthy.
- Provide opportunities for learning about the environment in which the children live and how they can care for their world.
- Begin providing the children with skills for life and raise their awareness of possible future employment.

Where appropriate, reminders will be given to children about potential hazards and care of the equipment they are using.

The school ‘Health and safety guidance in Science’ document, should be referenced by all staff before teaching science.

Any trips should have been planned with due regard to the school policy on taking children on outings.

Procedures:

How we teach Science:

- Science teaching is in line with National Curriculum requirements
- Science is taught as a discrete subject. However, where appropriate, it may be linked to a topic. If meaningful links cannot be made to other curriculum areas, it is taught independently.
- At KS1, Science is taught for a minimum of 1hr 30 mins a week and at KS2 for a minimum of 2hrs a week. These times can be split into separate lessons or taught as one continuous lesson depending on circumstances.
- We teach a knowledge-based Science curriculum, which is used to develop pupil enquiry skills.

- Inquiry is integral to our science teaching.
- IT is to be used to enhance understanding, further enquiry and support investigations.
- Opportunities for science visits and visitors are always promoted including, whole school Science Week celebrations and assemblies / Science demonstrations by external organisations.

Resources:

- General resources are kept in the Science Resource shelves in labelled boxes.
- If further resources are needed or if there are any issues with resources, the Science Co-ordinator should be informed.
- Resources are to be monitored termly by the coordinator for 'wear and tear' and during daily use by class teachers.

Planning:

Planning should be in three phases:

- *Long-term planning* shows which topics each year group will cover. We follow an enquiry approach to science and topic titles are presented in a question format eg, 'Why are there no leaves on the tree?'
- *Medium-term planning* – Is provided by the school, developed by the subject lead. Although based on the National Curriculum, planning is bespoke to the needs of St Julie's pupils. It outlines the lesson enquiry, the specific learning objectives, and how these will be taught.
- *Weekly planning* - The class teacher is responsible for differentiating the medium term plans for their class. They should show how SEND and G&T children are to be supported.

Assessment and Record Keeping:

Assessment for learning is continuous throughout the planning, teaching and learning cycle.

However children are more formally assessed at the end of each topic using a variety of methods:-

- Observing children at work, individually, in pairs, in a group, and in classes.
- Questioning, talking to and listening to children
- Considering work/materials/investigations produced by children together with discussion about this with them.
- End of unit assessment quizzes based on Knowledge Organisers.

Children's progress is continually monitored and tracked throughout their time at St. Julie's through:

- Year group record sheets in the front of books in KS2
- Individual record sheets held by the teacher in KS1
- A teacher assessed judgement is to be recorded at the end of each topic
- Updating class records each term with point scores.

It is particularly important that scientific skills are assessed on an on-going basis through teacher assessment. This is achieved through clear learning objectives and success criteria that show the stages through which the children will progress in order to reach the objective.

Ratified.....

Position Held.....

Date.....

Next Review: