

St. Aloysius Catholic Junior School

Science Policy

OUR MISSION STATEMENT

Through Jesus we learn, love and grow together.

This policy represents the views of the teaching staff and is supported by the Governors.

SHARED PRINCIPLES OF SCIENCE TEACHING AT ST ALOYSIUS JUNIOR SCHOOL

Science teaching is successful at our school when...

- It links to real life, has a meaningful context and enables children to understand how their world works.
- Children are doing practical, hands on activities (there is more practical than theory).
- Children are made to think more deeply as a result of high level questioning.
- AfL strategies are used to gauge children's learning and children are supported and challenged enough.
- It focuses on teaching a discreet skill.
- There are lots of opportunities for discussion (eg with a talk partner) and children question other possibilities.
- Learners are clear about the variable they are investigating in practical work.
- Children can explain why something happens (they make excellent progress).
- There are opportunities for learning outside the classroom (eg playground, park, museums etc).

If all of the above are happening regularly we know that our children will be; engaged in their work, stimulated to learn well and enjoying science!

CURRICULUM AND PLANNING

We follow the KS2 National Curriculum Science programmes of study. The school's curriculum map (appendix 1) shows how the topics are distributed across the years in a sequence which promotes curriculum continuity and progress in children's learning. Science is taught every week, with homework of a scientific nature being set each topic.

Medium term unit plans (stored electronically on the shared area) promote continuity and progression within each topic, these are planned by each year team. The Science Subject Leader is available to support teachers with planning. In science we endeavour to make

links across the curriculum to other subjects whenever the opportunity arises. There are a number of websites we use to support teaching and learning in science, including:

Primary Upd8: www.primaryupd8.org.uk

Switched on Science: <http://sos.lgfl.org.uk/>

BBC Bitesize: <http://www.bbc.co.uk/education/subjects/z2pfb9q>

Aims

The national curriculum for science aims to ensure that all pupils:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop 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
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future

SPECIAL NEEDS, EAL AND THE MORE ABLE

We aim to offer a fully inclusive science curriculum. Lessons should be differentiated to cater for individual abilities and interests including children with special educational needs and the more able. This may take the form of classroom support by one of the teachers or the TA. It may also include the use of grouping of pupils, targeted questioning, differentiated worksheets / tasks, teacher intervention / expectation, extension activities *etc.*

ASSESSMENT

Ongoing assessments are made as part of every lesson using 'Assessment for Learning' strategies, including peer and self assessment.

All teachers use marking for improvement in line with our school marking code. This system gives children a clear indication of what they are doing well and how they could improve their work. A tick/pink highlighter is used to indicate success and an arrow/green highlighter to indicate what the children need to do next. This arrow is an individual target for the child to strive to achieve.

At the beginning and end of each unit, children carry out an assessment task. These tasks are varied and may include activities such as, drawing a concept map, responding to a concept cartoon, writing a quiz or answering test questions.

At the end of year 6, children will be teacher-assessed against the 'Interim Teacher Assessment Framework' to see whether they are *working at the expected standard* or *have not met the expected standard*.

RESOURCES

Equipment and resources are stored in labelled trays in the stockroom. The responsibility for organising and setting up and maintaining this area is that of the Subject Leader. However, the whole staff are responsible for ensuring that broken or used up resources are reported to the Subject Leader so that, repairs, replacements or new orders can be made. It is also the borrower's responsibility to return items to the correct storage area when no longer required. Under NO circumstances are children allowed to access the science resource area in the stockroom.

LIAISON WITH INFANT SCHOOL AND SECONDARY SCHOOLS AND THE WIDER COMMUNITY

Both the Junior and Infant schools teach the National Curriculum Science programmes of study. The programmes of study for science are set out year-by-year for key stages 1 and 2.

The science subject leaders from the Junior and Infant Schools meet annually to discuss items of interest, exchange information/good practice and to ensure progression between the schools. The subject leader also attends regular meetings run by the *Wellcome Trust Primary Science Network*.

HEALTH AND SAFETY

The governing bodies code of practice for Health and Safety in Science is encompassed in the booklet '*Be Safe! Some aspects of safety in Science and Technology for key stages one and two*' (ASE 2001). Copies of this booklet are kept in the science resource area and the staff room. All staff are expected to be familiar with its contents and to follow its guidance.

Science in our school is very safe. However, when children are engaged in a variety of practical activities, including open-ended investigations, vigilance is needed. As a result, individual teachers are asked to do their own risk assessment using the above advice and the knowledge they have regarding their own class and classroom.

MONITORING THE POLICY

The Head Teacher and Senior Leadership Team will monitor the policy by regular reviews and observations.

The Head Teacher must publicise the policy and bring it to the attention of pupils, parents and staff at least once a year.

This policy was updated by Mr Kyle Stebbing the Science Subject Leader.

This policy was agreed in **Summer Term 2016**

Review and update by **Summer Term 2019**

Signed

Chair SEND and Curriculum committee.

Appendix 1 St Aloysius Catholic Junior School- Science Curriculum Map

	Year 3	Year 4	Year 5	Year 6
Autumn 1	Animals including humans	Sound	Properties and Changes of Materials	Animals including humans
Autumn 2	Light	Living Things and their Habitats	Properties and Changes of Materials	Light
Spring 1	Forces & Magnets	Animals including humans	Forces in Action	Habitats
Spring 2	Rocks	Animals including humans	Animals including humans	Evolution and Inheritance
Summer 1	Plants	States of Matter	Living Things and their Habitats	-SATs-
Summer 2	Plants	Electricity	Earth and Space	Electricity

Link to Science curriculum:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/425618/PRIMARY_national_curriculum_-_Science.pdf