

The Good Shepherd Primary Catholic Voluntary Academy



Science Policy

Mission Statement

*Our mission is to develop our children with active and creative minds,
a sense of understanding and compassion for others and
the courage to act on their Catholic beliefs.*

*In our school community we celebrate our faith and we work
together to achieve our personal potential by trying to live like Jesus
and become the person that he wants us to be.*

Ratified On:	Jan 2019
Review Date:	June 2021
Chair of Governors signature:	Mrs R. Burke
Head Teacher's signature:	Mrs M.H.B.Williams



*'It is the glory of God to conceal a thing,
but the glory of a king to search it out.'*
Proverbs 25:2

THE GOOD SHEPHERD PRIMARY CATHOLIC ACADEMY **SCIENCE POLICY**

Aims

Through our teaching the school aims to:

- Stimulate and excite pupils' curiosity about changes and events in the world;
- Satisfy this curiosity with knowledge;
- Engage pupils as learners at many levels through linking ideas with practical experience;
- Help pupils to learn to question and discuss scientific issues that may affect their own lives;
- Help pupils develop, model and evaluate explanations through scientific methods of collecting evidence using critical and creative thought;
- Show pupils how major scientific ideas contribute to technological change and how this impacts on improving the quality of our everyday lives;
- Help pupils to recognise the cultural significance of science and trace its development.

Curriculum Planning

Science is a core subject of the National Curriculum and pupils undertake some science activity every term at both key stages. The work covered in Key Stage 1 builds on the nationally recognised curriculum for pupils aged under five. Pupils in Foundation develop their knowledge, understanding and skills through play activities and direct teaching from which the pupils undertake planned tasks.

Foundation Stage

Science in Foundation is taught in line with the Development Matters framework.

Key Stage 1

The principal focus of science teaching in Key Stage 1 is to enable pupils to experience and observe phenomena, looking more closely at the natural and humanly-constructed world around them.

Topics covered in Key Stage 1 include:

- Plants – identifying, naming and describing common plants including trees.
- Animals including humans – identifying and naming common animals, fish, amphibians, reptiles, birds and mammals also identifying and naming a variety of common animals that are carnivores, herbivores and omnivore.
- Everyday materials.
- Seasonal changes.
- Living things and their habitats.

Topics covered in Lower Key Stage 2 include:

- Plants.
- Animals including humans – including teeth, the skeleton, nutrition and digestion.
- Rocks and soils.
- Light.
- Forces and magnets.
- Living things and their habitats.
- States of matter.
- Sound.
- Electricity.

Topics covered in Upper Key Stage 2 includes:

- Living things and their habitats.
- Animals including humans – including the human circulatory system, diet, exercise, drugs and lifestyle.
- Properties and changes of materials.
- Earth and Space.
- Forces.
- Living things and their habitats.
- Animals including humans.
- Evolution and inheritance.
- Light.
- Electricity

Teaching Guidelines

Pupils observe, explore and ask questions about living things, materials and physical phenomena. They begin to work together to collect evidence to help them answer

questions and to link this to simple scientific ideas. They begin to evaluate evidence and consider whether tests or comparisons are fair. They use reference materials to find out more about scientific ideas. They share ideas and communicate them using scientific language, drawings, charts and tables with the help of ICT if it is appropriate. Children should complete at least one investigation per topic in accordance with 'Working Scientifically' in the National Curriculum. Each investigation should be written up in an age-appropriate way and data collected should be displayed in an age-appropriate way, eg, table, bar chart, line graph. Teachers should use the science scheme 'Science Bug' on which to base their planning but bearing in mind that this can be supplemented with activities to enhance the learning from other sources.

Inclusion

All pupils, including those with special educational needs, undertake the full range of activities. Teacher assessment determines the depth to which individuals and groups go to during each unit of work.

Assessment

Teachers' assessment takes place at the end of each unit of work which notes any attainment and progress which is significantly lower or higher than expected. Assessment consists of teacher observations and assessment of written work. Teachers should also use the assessment scheme 'MiniSats' to make a judgement of attainment level.

Health & Safety

Safe practice must be promoted at all times. Teachers must also take into account the school's Health and Safety policy. Particular attention must be given to avoiding the use of anything that aggravates individual pupils' allergies.

Equality Statement

We have a legal duty under the Equality Act 2010, in respect of safeguarding and in respect of pupils with special educational needs (SEN).

The curriculum is inclusive and facilitates the needs of all children regardless of their age, size, mobility, gender, ethnicity and ability. Our planning aims to foster an appreciation of each other's cultures and beliefs along with the promotion of a healthy and positive self-image. This is linked to the school's role as a Christian community, Special Education Needs and Inclusion.