



St John's C of E Primary Academy

Science Policy

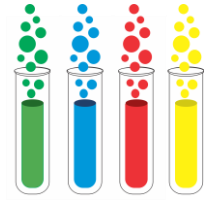
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Key Personnel

Principal: Sarah Cockshott

Chair of Governors: Fr Roger Gilbert

St John's CE Primary Academy



Science Policy

Science provides the foundation for understanding our world through the specific disciplines of biology, chemistry and physics. Children should be encouraged to understand how science has changed our lives and its impact upon our world.

At St John's, Science adheres to the National Curriculum Programme of Study and the Early Years Foundation Stage Curriculum.

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

Good Science Teaching and Learning at St John's happens when:

- children are engaged in and excited about their science learning
- children are encouraged discover for themselves through trial and error
- Children use scientific vocabulary
- teachers are confident about what they are teaching
- children talk, ask questions (developing deeper thinking), share ideas, explain
- when children work practically
- when it is relevant and relates to learning to real-life situations
- when they have opportunities to learn collaboratively
- when cross curricular links are made
- when children record their work in different ways- appropriate to the learning
- class displays show key science vocabulary and are referred to by teachers and children

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the

Planning, Assessment and Monitoring

- Teachers write short term plans for science, which outline objectives and activities.

- should be taught the equivalent of 1 hour per week in KS1 and between 1.30 – 2 hours in KS2
- teachers should refer to the Progression in Science document for the coverage overview
- Lesson plans are then uploaded onto the 'Staff Shared' area.
- Learning is assessed through:
 - observation during investigations
 - questioning
 - written feedback
 - EYFS –Teacher assessment is used, mainly through observation and discussions with learners. Assessments are recorded against the Understanding the World criteria on the Early Years Foundation Stage Profile Assessment.
 - KS1 and KS 2 attainment is tracked using DC PRO

The development and monitoring of science is managed by the subject leader, which includes regular monitoring of planning, teaching and learning. Findings of monitoring are fed into the Academy Improvement Plan which is shared with Governors.

Resources

Science resources are stored in the Learning Hub in labelled colour-coded boxes where possible:

Biology –green

Chemistry – red

Physics - blue

Teachers should inform the Science Lead in good time if resources need replenishing. Resources should be collected and returned by teachers or teaching assistants only.

Equality of Opportunity

All children have equal access to the science curriculum and its associated practical activities. The SLT, Class Teachers and TAs are responsible for ensuring that all children, irrespective of gender, learning ability, physical disability, ethnicity and social circumstances, have access to the whole curriculum and make the greatest possible progress. Where appropriate, work will be adapted to meet pupils' needs through extra support or activities/questioning that challenges.

Science Topic Overview 2016- 2017

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn	<ul style="list-style-type: none"> • Everyday materials • Seasons 	<ul style="list-style-type: none"> • Materials • Solids 	<ul style="list-style-type: none"> • Plants • Forces and magnets 	<ul style="list-style-type: none"> • Animals including humans 	<ul style="list-style-type: none"> • Space • Forces 	<ul style="list-style-type: none"> • All living things • Evolution and inheritance • Animals including humans
Spring	<ul style="list-style-type: none"> • Seasons-changes • Animals including humans 	<ul style="list-style-type: none"> • Animals including humans 	<ul style="list-style-type: none"> • Animals including humans • Rocks 	<ul style="list-style-type: none"> • Sound • Electricity 	<ul style="list-style-type: none"> • Materials - properties and changes 	<ul style="list-style-type: none"> • Light • Electricity
Summer	<ul style="list-style-type: none"> • Seasons-changes • Plants and plant structure 	<ul style="list-style-type: none"> • Living things • Brief introduction to light 	<ul style="list-style-type: none"> • Light 	<ul style="list-style-type: none"> • Living things and habitats • States of matter 	<ul style="list-style-type: none"> • Living things and habitats • Animals including humans 	<ul style="list-style-type: none"> • Evolution and inheritance • Animals including humans - diet and lifestyle