



CHALKWELL HALL JUNIOR SCHOOL

Science Policy

Reviewed and Approved by:	Governing Body
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Date Reviewed:	September 2026
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**Tenacitas
Trust**

CHALKWELL HALL JUNIOR SCHOOL
SCIENCE POLICY

Purpose of Study

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Aims

The aims of science at Chalkwell Hall Junior School are to enable children to:

- ask and answer scientific questions;
- plan and carry out scientific investigations, using equipment, including computers, correctly;
- evaluate evidence and present their conclusions clearly and accurately;
- 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;
- equip themselves with the scientific knowledge required to understand the uses and implications of science, today and for the future.

Teaching and Learning Style

At Chalkwell Hall Junior School we follow a cross curricular creative approach to learning that incorporates all subjects. There are times when science skills are taught discretely and times when science is taught through topic work and alongside all other subjects.

We use a variety of teaching and learning styles in science lessons, following our Learning and Teaching policy which stresses creativity and personalised learning. Our principal aim is to develop children's knowledge, skills, and understanding in science and their ability to generalise these skills in other areas of learning. Wherever possible, we involve the pupils in 'real' scientific activities where they have the opportunity to carry out a practical experiment and analyse the results.

Science Curriculum Planning

We carry out our curriculum planning in science in three phases: long-term, medium-term and short-term. The long-term plan maps the scientific topics studied in each term during the key stage. Our medium and short term planning is informed by Collins 'Snap Science' scheme, which teachers then adapt to the needs of their own groups.

The contribution of science to teaching in other curriculum areas

Science is complemented by worthwhile and challenging cross-curricular studies that provide opportunities for children to use and apply their subject knowledge and skills to deepen

understanding. Our creative curriculum is firmly underpinned by an enquiry based curriculum adapted from the National Curriculum Framework. We aim to create coherent and more integrated learning experiences which will cover a number of curriculum objectives at once and save valuable curriculum time.

Inclusion and differentiation (also see SEN policy)

All children (must) have regular access to science, appropriate to their stage of development. Challenge for all is integral to our teaching and we aim to encourage all pupils to reach their full potential through the provision of varied opportunities. Work is differentiated to aid children's learning. Also, more-able children are given open-ended tasks and opportunities for further research and more challenging studies. We recognise that our curriculum planning must allow pupils to gain a progressively deeper understanding and competency as they move through our school.

Assessment and Recording

Formative assessment (teacher assessment) forms the basis of our assessment of 'working scientifically' in science. Teacher assessments are made on a regular basis to help inform planning. These short-term assessments are closely matched to the teaching objectives.

Summative assessment is used at the end of each topic (normally every half term) to assess progress in the children's knowledge, skills and understanding against school and national targets. This information is recorded on Learning Ladders and is passed on to the next teacher at the end of the year for future planning.

Resources

We have sufficient resources for all science teaching units in the school which are regularly audited. We keep these in a central store where there are boxes of equipment for each unit of work. The library contains a good supply of science topic books and there a comprehensive range of websites/computerised resources are used to support children's individual research. Links also exist with local secondary schools to borrow equipment for specialist sessions.

Monitoring and Review

The Science Team and all class teachers are responsible for monitoring the standard of the children's work and the quality of teaching in science. The Science Team is responsible for supporting colleagues in the teaching of science, for being informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school.

The Science Team present an annual report to the Headteacher in which they evaluate the strengths and weaknesses in the subject and indicate areas for further improvement. The Science Team make use of their non-contact time to undertake monitoring of science across the whole school. In pursuit of the Primary Science Quality Mark, monitoring has been used to develop and agree the Principles of Science with staff and pupil contributions. These principles are shared with the school community and promoted through teaching and learning of science as well as additional events, displays and clubs. (Appendix 1 and 2)

E-Safety

Chalkwell Hall Junior School is fully committed to ensuring the safety of all staff, pupils and parents/carers with regard to all aspects of e-safety. Please refer to the E-Safety Policy for actions and sanctions for use of devices and internet, etc.

Appendix 1 – Child friendly principles of science for PSQM

Our Principles of Science

Science at Chalkwell Hall is good when...

- ✓ We use enquiry skills to ask and answer our own questions through fun experiments.
- ✓ We use creativity to record our findings in different ways like through drama, art and music!
- ✓ We co-operate with others to learn new things and share what we have discovered with our friends, teachers and family too!
- ✓ We work responsibly and safely with lots of different equipment (including ICT).
- ✓ We work resiliently, knowing that some of the best science happens when you make mistakes and learn from them.
- ✓ We explore our local environment respectfully, working outside when we can to understand more about the way our world works.
- ✓ We have fun, learn something new and build our skills as we become super scientists!

Appendix 2 – Staff and pupil generated principles of science for PSQM

Chalkwell Hall Junior School Principles of Science Teaching and Learning

Children and staff at Chalkwell Hall Junior School have taken part in a series of activities to develop and agree the principles outlined below to ensure that science teaching and learning continues to improve and provide children the greatest opportunity to develop their science capital both while in our school and beyond. In addition, a child-friendly version of this list is now shared in each classroom, on the Science display in the lower hall, and has also been shared with parents and other stakeholders through the school website.

Science at Chalkwell Hall is good when:

- Children ask and answer their own questions through enquiry-based learning.
- Lessons are differentiated adequately, allowing children to record in a wide variety of ways not limited to writing or worksheets, but exploring the use of more visual and kinaesthetic methods such as drama, music or art.
- We are celebrating and raising the profile of science by sharing learning with the wider community on social media, through in school events such as the annual Science Fair and CREST awards and with our links to other local schools.
- Lessons are practical, allowing children and adults to work with a range of easily accessible and well-stocked equipment (including data loggers/Learn Pads/laptops) and learning how to do this confidently and safely.
- Misconceptions and mistakes are used positively to focus learning and an ongoing system of assessment (both formative and summative) allows teachers to identify the skill or knowledge gaps children have in order to support further progress.
- Links are made across the curriculum and with the real world to add depth to the children's understanding of different scientific concepts; this may be through linking to current affairs, making use of the outdoor environment, having a visitor with STEM expertise or taking part in a science based trip.
- There is adequate and accurate progression in skills and knowledge across the Key Stage, which is carefully monitored and supported by the Science Team.