



Talavera Junior School
Science Policy

Document Name: Science

Document ID: N/A

Current Version: 5.2

Status: Approved

Latest Review: November 2023

Next Review Planned: September 2024

Signed: _____ (Policy Owner)

Print Name: Lucy Coombs

Review Date: November 2023

Signed: _____ (Governor Approval)

Print Name: _____

Approval Date: _____



Talavera Junior School Science Policy

Aim

The objectives of teaching science are to enable children to:

- ask and answer scientific questions
- plan and carry out scientific investigations, using equipment (including computers) correctly
- know and understand the life processes of living things
- know and understand the physical processes of materials, electricity, light, sound, and natural forces
- know about the nature of the solar system, including the earth
- evaluate evidence, and present their conclusions clearly and accurately
- use and apply scientific vocabulary within lessons

Teaching and learning style

We use a variety of teaching and learning styles in science lessons. Our principal aim is to develop children's knowledge, skills, and understanding. Sometimes we do this through whole-class teaching, while at other times we engage the children in an enquiry-based research activity.

We encourage the children to ask, as well as answer, scientific questions.

They have the opportunity to use a variety of data, such as statistics, graphs, pictures, and photographs.

They use IT in science lessons because it enhances their learning.

They take part in role-play and discussions, and they present reports to the rest of the class.

They engage in a wide variety of problem-solving activities.

Wherever possible, we involve the pupils in real scientific activities, for example, investigating a local environmental problem, or carrying out a practical experiment and analysing the results.

We recognise that in all classes children have a wide range of scientific abilities and we ensure that we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this in a variety of ways:

- setting tasks which are open-ended and can have a variety of responses
- setting tasks of increasing difficulty
- providing resources of different complexity, matched to the ability of the child
- group work to share understanding and knowledge when available.

- challenge stickers to move on and challenge knowledge
- mixed year group investigations to improve enjoyment understanding and skills
- more able investigations - workshops and trips to engage and develop young scientists

Science curriculum planning

At Talavera Junior School we follow the new national curriculum for science and organise this into termly or half termly topics.

Currently, individual year groups use the national curriculum planning guidance to produce short term plans that break down the skills and knowledge to be taught and the expected outcomes. Teachers evaluate these and use these to inform future planning.

From February 2015, staff will use the new national curriculum objectives to incorporate all aspects of the new National Curriculum including skill development. Teachers will also use a learning journey developed by Hampshire science advisors to ensure they are clear on the key knowledge (substantive) children are taught as well as using a variety of investigations to develop and embed children's understanding of key concepts. In addition to this, children will develop their disciplinary skills throughout all topics through investigations and practical tasks.

Teachers use their professional judgement to organise their timetables. Science can be taught in weekly lessons or blocked but should be taught for the equivalent of 1 to 1 ½ hours per week

Health and safety

Teachers and year leaders are to identify risks and create appropriate risk assessments if needed for science lessons. As discussed and agreed in a previous staff meeting, teachers are to ensure they have referenced within their planning and read in detail the Hazard guidance cards (found in -teacher pool -curriculum - science - Science H&S) that relate to the lessons planned. The subject leader will support teachers with any health and safety requirements and suggest equipment as well as teaching strategies to reduce the risk within lessons.

Marking and Assessment

Science work is marked in accordance with our marking and feedback policy. Teachers are aware of the value of immediate feedback so endeavour to provide verbal feedback wherever possible.

At the end of each unit teachers are expected to complete the assessment grid found in their class assessments folder on the system and use this to inform their future planning. Children will also be required to complete an initial mind

map to show knowledge at the start of the unit and add to this during the unit to show knowledge gained.

Monitoring and review

It is the responsibility of the subject leader to monitor the standards of children's work and the quality of teaching in science. The subject leader is also responsible for supporting colleagues in their teaching, for being informed about current developments in the subject, and for providing a strategic lead and direction for science in the school. The subject leader gives the Headteacher an audit evaluation in which s/he evaluates strengths and weaknesses in science, and indicates areas for further improvement. The subject leader has specially-allocated time for fulfilling the vital task of reviewing samples of children's work, and visiting classes to observe science teaching.

This policy will be reviewed every two years or earlier if deemed necessary by the Science Leader or Senior Leadership Team.

L Coombs

Science lead

November 2023

Review date: September 2024

Signed: _____ (Chair of Governors) Date: _____

