SCIENCE POLICY 2026/7

Aims: Increasing children's knowledge and understanding of the world, whist developing the skills associated with scientific enquiry.

Science Curriculum and Delivery: We teach the National Curriculum for science keeping a close eye on current matters and adapting lessons to address the needs of our current cohort. In KS1 and KS2, lessons are introduced through a 'Big Question' that is directly linked to NC substantive knowledge. Teachers plan lessons around this question, whilst also developing disciplinary knowledge (or working scientifically skills). At Front Street, we have divided the disciplinary knowledge from the NC into five core strands:

- Find Out and Explain
- Classify
- Plan and Carry Out
- Observe, Measure, Record
- Notice and Interpret

A carefully planned combination of substantive and disciplinary knowledge support pupils to perform different types of science enquiries and answer scientific questions about the world around them. Our curriculum drivers are promoted through science lessons: ready, relevant, progressive, ambitious, independent, inclusive and resilient.

Inclusion and Equal Opportunities: Our science curriculum is fully inclusive. We support ranging needs and celebrate cultural diversity. We believe all children can access the science curriculum and make reasonable adjustments to suit individual needs:

- Lesson content is delivered in small steps
- Lessons are adapted and teaching strategies are carefully selected to suit the needs of learners, for example Kagan structures, oracy-based activities and opportunities for outdoor learning
- We allow time to revisit, review and retrieve information
- We use questions carefully and to a wide number of pupils
- Models, worked examples, scaffolds and floor books are used as necessary
- We support children to build connections between new and known knowledge and show where learning fits within the bigger picture

Where there are cases when pupils are working significantly below their year group content, such pupils will be given a bespoke curriculum, based upon their needs (as identified on their learning plan or EHCP). We work in compliance with the Equality Act 2010 and the Special Educational Needs and Disability Regulations 2014 to ensure our curriculum is accessible for pupils with SEND.

Growth Mindset: It is our aim to maintain an ambitious vision, with high expectations and a culture of problem solving, resilience and improvement developed through Growth Mindset.

Intervention: Children are supported and challenged. Teachers use assessment for learning techniques throughout lessons and units of work, reacting and intervening based on the needs of the children. Questioning techniques and scaffolding of tasks are used skilfully to ensure children's success. Pre and post teaching is used when necessary.

Speaking and Listening: Children are encouraged to become scientifically articulate – speaking in full sentences and using appropriate vocabulary. This is supported through the use of stem sentences.

Planning in Science: EYFS deliver science through all 7 EYFS strands. This learning is built upon in KS1 and 2. The order of units is adjusted annually by teachers to ensure learning is progressive, and links with other subjects are exploited. One-page medium term plans are available for every KS1/2 unit.

Heath & Safety: The local authority and school have a log in to CLEAPSS for safety in science advice.

Timetabling of Science: Science lessons take place through regular weekly or fortnightly sessions. Each unit is a

different length depending upon how long teachers believe is necessary. The order in which teachers choose to teach units may be adjusted each year to link with other areas of the curriculum.

How do we assess science? Science assessment is on-going and formative. It happens in the classroom as part of the normal teaching process and informs lesson pitch, intervention within lessons and future planning. Key documents are available to support teacher understanding of expectations:

- Medium term plans
- Progressional scientific enquiry skill grids
- Gateshead knowledge and understanding grids
- Statutory statements for end of KS1/2

Teacher assessments are informed by performance in lessons across the whole year and also by end of unit quizzes or exit questions intended to measure retention of knowledge. Assessments are recorded at the end of each academic year for substantive knowledge and disciplinary knowledge. Teachers are aware of children's barriers to learning and put appropriate actions in place to address these barriers.

Homework in Science: Teachers occasionally set science home learning tasks that link to classwork.

Involvement of Home: The subject lead sets optional whole school science tasks, often citizen-science themed, annually aimed at developing family science capital.

Extra Curricula Science: On occasions throughout the year, a curiosity box is set up next to the whole school science display and offers children the opportunity to ask questions linked to science. Questions are then addressed in class assemblies.

Information and Communication Technology (ICT) in Science: Science is linked to computing where applicable. Teachers use ICT to support teaching and pupils use ICT to support learning. A set of data loggers are stored in the science resource cupboard.

Resources in Science: Most science resources are organised into unit boxes and kept in classrooms. Some resources are kept centrally. They are maintained and updated annually. Sometimes consumables or other resources are required within lessons and are purchased by class teachers who are reimbursed for their purchases.

CPD in Science: Delivered by Science lead, external advisors, independent reading and virtually. The science lead attends Gateshead Network meetings and shares information with staff.

Work and Presentation: Non-negotiable school presentation and organisation procedures should be adhered to in books. Science work is presented in various ways.

Marking: Marking is ideally done 'live' during lessons, teachers respond to misconceptions as a whole class or through intervention. Pupils sometimes self-assess. Questioning is used to extend learning. Learning objectives are highlighted green when children have been successful.

Monitoring and Development Cycle: Monitoring feeds into a development cycle: meetings with pupils, termly governor meetings, work scrutinies and formal observations conducted alongside SLT with a key focus. Teachers ensure a broad range of disciplinary knowledge is covered in lessons and a skill tracker sheet is available to track this.

School Governor Role in Science: There is a link governor allocated for the oversight of science – Malcom Dawson. Key documents are shared and termly meetings are held between the science lead and link governor.

For further explanation or clarification of any item discussed in this policy, please see science lead Emma Smith.

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Articles 3, 6, 12, 13, 17, 24, 28, 29