



SCIENCE

Intent, Implementation, Impact Statement

	Key Points
Our Intent	<ul style="list-style-type: none"> • To deliver activities that meet the requirements of the National Curriculum in a way that is appropriate to the needs and interests of all pupils and which challenges them to fulfil their potential. • To provide experiences to children in the Early Years Foundation Stage relating to Science that meet the objectives laid out in the Early Learning Goals and from the Development Matters additional guidance. • To provide simulating scientific experiences for children. • To develop a positive attitude to Science and scientific enquiry • To foster a love and curiosity of Science • To develop awareness of the influence of science in everyday life. • To teach and develop scientific knowledge and conceptual understanding (see policy) • To teach the different types of scientific enquiry skills (see policy) • Enable children to develop wider skills relating to Science and STEM subjects, including co-operation, teamwork, problem solving and independent working. • Develop a caring attitude towards the environment, living things and to encourage appreciation for the world we live in. • Use scientific contexts to develop and consolidate the basic cross-curricular skills in English, Maths and the role of technology. • To develop children's awareness of careers linking to Science and STEM subjects, challenging gender and cultural stereotypes • To build up children's 'Science Capital'.
Our Implementation	<ul style="list-style-type: none"> • Teaching and Learning <ul style="list-style-type: none"> ○ Plan and deliver the Science outlined in the Primary National Curriculum, including all the relevant learning objectives. ○ Use a range of first hand practical experiences, allowing for development of the different inquiry skills. ○ Allow for opportunities to develop own knowledge through research, exploratory play, experimentation and observation. ○ Scientific enquiry skills (Working Scientifically) taught explicitly alongside subject knowledge content ○ Use a range of resources, outdoor spaces and technology to support learning. ○ Health and safety to be an integral part of the children's learning and planning process. • Inclusion and Wider Engagement <ul style="list-style-type: none"> ○ All learning and activities planned to be accessible to all learners, including those with SEND, G&T, disadvantaged and other factors. Adaptations for these groups of children are made to allow access to the Science Curriculum. ○ Protected characteristics are to be considered at all times during the planning of the Science curriculum. ○ Additional enrichment provided through; Theme days/weeks within schools, outside providers delivering clubs/workshops/assemblies in school (including STEM providers), school trips, after school/lunchtime clubs, access to regional or national competitions and others. These are made accessible to all ages and abilities.
The Impact	<ul style="list-style-type: none"> • Pupil Assessment and Attainment <ul style="list-style-type: none"> ○ During lessons, children's learning is measured using observations, key questioning, marking and annotation of children's work and other forms of Assessment for Learning. This is used to support the planning and development of teaching and learning in the short term. ○ Summative assessments include using ROAs, Rising Stars pre, mid and post learning tasks and the schools 1-6 teacher assessment banding. CAP sample files to identify children's attainment during the year. This supports teacher assessment during the year as well as the Subject Leader's and SLTs monitoring of data to aid in planning for development of the subject and whole school targets. ○ Assessment may require adaptation depending on the needs of individual children. For example, SEND pupils may be assessed using the 'Brackensfield' Assessment Tool if they are working outside age related expectations. • Science Subject Area and School Improvement Planning <ul style="list-style-type: none"> ○ Subject leader measures impact of the implementation through monitoring activities, including; learning walks, questionnaires to staff and pupils, pupil voice, looking at evidence of pupils work, analysis of teacher's assessments (including ROAs, CAP files, test scores, teacher assessments), and any other relevant evidence. ○ Subject leader evaluates the impact and plans for future development of the subject for pupils and staff. ○ Subject leader creates action plan, looking to develop new opportunities, refine current practice, plan CPD for staff and feed into the School Improvement Plan (where appropriate). • Overall Intended Impact <ul style="list-style-type: none"> ○ Science is a subject that is engaging and enjoyable for pupils which fosters a love of Science as a subject and an appreciation of the world around them. ○ Teachers have the confidence and knowledge to deliver a well planned and interesting curriculum to pupils using a range of resources and approaches ○ Pupils make good progress in their acquisition of skills, knowledge and conceptual understanding. ○ Children feel empowered to pursue Science and STEM subjects as a potential career path, regardless of gender, ethnicity, socio-economic backgrounds etc ○ Children access a range of different learning opportunities, both in and out of the classroom. ○ Staff evaluate the impact of their teaching and learning and develop their practice to suit the learners in their classroom. ○ Subject leader can identify strengths and areas for development of the subject and act upon it in the interest of the school.