

# Science

## Intent, Implementation & Impact



### Intent

Our intent is for our children to love science. By giving every child a broad and balanced curriculum, we intend to enable them to confidently explore and discover what is around them, so that they have a deeper understanding of the world we live in. We want our children to have ambitious aspirations with an understanding of the breadth of scientific careers that are open to them in the future from astronauts to forensic scientists, toxicologists to microbiologists. We want our children to remember their science lessons in our school, cherish these memories and embrace the scientific opportunities that they are presented with. To achieve this, teachers will ensure that all children are exposed to high-quality teaching and learning experiences that are practical, hands-on and that encourage curiosity. Throughout lessons, children will be encouraged to ask questions about the world around them and work scientifically to further their conceptual understanding and scientific knowledge. Our aim is that these stimulating and challenging experiences help every child secure and extend their scientific knowledge and vocabulary, as well as promoting a love and thirst for learning. At North Kidlington School, we aim to have a coherently planned and sequenced curriculum which has been carefully designed and developed with the need of every child at the centre of what we do. We wish to equip our children with not only the minimum statutory requirements of the science National Curriculum but to prepare them for the opportunities, responsibilities and experiences of later life.

### Implementation

As a school, we follow both the National Curriculum and our own detailed progression of skills development documents to ensure comprehensive coverage of objectives. Other ways that we develop deep knowledge, understanding and skills are through:

- Resources available to support practical lessons.
- Science Oxford membership provides staff CPD sessions and school trips to enhance class-based provision.
- North Kidlington Science Week provides a whole school celebration of science and week-long enquiry-based investigations from Reception to Year 6.
- Regular science-based trips across the whole school.
- Visits from members of our local scientific community.
- Science staff CPD is included regularly on the staff meeting agenda.
- Practical, enquiry-based approach to scientific learning embedded across all year groups.

#### SEND

Pupils are given the same opportunities as all other learners, however extra support, scaffolds or prompts are provided as and when appropriate. Recapping and explaining vocabulary. Open discussions allow for contributions on all levels.

#### Disadvantaged

High quality teaching means all our children have access to a wide range of opportunities regardless of socio-economic position in life. Disadvantaged children are given full access to the science curriculum. The school is a member of Science Oxford which provides practical investigative trips and CPD for staff ensuring the curriculum is expertly planned for all learners.

Pupils are active and questioning in science and have secured the key knowledge and skills as directed by the National Curriculum. At NKS, we use a three-tiered approach to monitor the impact:

1. Assessment is used to shape future learning, both for the individual child and for future cohorts. In science we use the following assessment methods: live assessments; quizzes; discussions; practical tasks; rubrics; targeted questioning; 'book-looks'; KWL grids and investigations. All assessment is purposeful and should not create an onerous workload for teachers.
2. Regular pupil progress meetings, structured conversations, parents' evenings, SEN reviews and pupil voice ensure there is parity for all groups of pupils.
3. Information is verified through oversight by Subject Cluster Groups, school leadership and the governing board.