ASPIRE • SUCCEED • LEAD
LADY ROYD PRIMARY
BRADFORD GIRLS' GRAMMAR SCHOOL CAMPUS
For girls and boys up to 11 years

# Curriculum Intent – Science

## Our Vision

Lady Royd Primary School's vision is to provide an exceptional education: rich in learning opportunities in a supportive and nurturing environment that challenges our pupils to raise their aspirations and to develop the confidence and resilience to reach their full potential.

Our ASPIRE values provide a strong focus on the personal development of every child; encouraging accountability, self-confidence, perseverance, integrity, respect and empathy for those around them, pupils will leave as well-rounded, confident, independent young people, fully prepared to take their place in the world.

## The aims of the curriculum

- Provide a broad and balanced educational experience that meets the needs of the pupils, introducing them to the best that has been thought and said and preparing them to be well-educated 21st century citizens.
- Take account of the previous learning of pupils and their readiness for new experiences
- Stretch the most able whilst providing enrichment for all pupils.
- Provide personalised support for pupils with additional needs.
- Ensure that the curriculum in place at any given time provides an appropriate and relevant educational experience and that no pupils are disadvantaged by its provisions.

## Intent

At Lady Royd Primary we want our children to be naturally curious about the world around them. We want to embrace their sense of wonder about natural phenomena and to guide them into becoming enquiry-based learners. The science in our school is about developing children's ideas and ways of working that enable them to make sense of the world in which they live. We want our children to develop an understanding of the uses and implications of Science, how it has changed and shaped our lives and how vital it is to the world's future prosperity.

Scientific enquiry skills are embedded in each topic the children study and these topics are revisited and developed throughout their time at school. Topics, such as Plants, are taught in Key Stage 1 and studied again in further detail throughout Key Stage 2. This allows children to grow in their understanding, building upon their prior knowledge and increasing their enthusiasm for the topics whilst embedding this procedural knowledge into the long-term memory.

Science teaching at Lady Royd involves adapting and extending the curriculum to match all pupils' needs to ensure they are challenged and achieve success, regardless of their starting point. Where possible, science is linked to class topics. Science lessons are taught to ensure coverage in line with the National Curriculum requirements. Teachers plan and adapt lessons following the Grammarsaurus Scheme and include the primary science enquiry skills which include comparative/fair testing, observation over time, research, grouping and classifying, problem solving and pattern seeking.

We ensure that all children are provided with rich learning experiences that aim to:

- Prepare our children for life in an increasingly scientific and technological world today and in the future.
- Help our children acquire a growing understanding of the nature, processes and methods of scientific ideas.
- Help develop and extend our children's scientific concept of their world.
- Build on our children's natural curiosity and developing a scientific approach to problems.
- Encouraging open-mindedness, self-assessment, perseverance and developing the skills of investigation – including: observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
- Develop the use of scientific language, recording and techniques.
- Develop the use of computing in investigating and recording.
- Make links between science and other subjects.

## Implementation

The impact and measure of this is to ensure children not only acquire the appropriate age-related knowledge linked to the science curriculum, but also skills which equip them to progress from their starting points, and within their everyday lives.

All children will have:

- A wider variety of skills linked to both scientific knowledge and understanding, and scientific enquiry/investigative skills.
- A richer vocabulary which will enable to articulate their understanding of taught concepts.
- High aspirations, which will see them through to further study, work and a successful adult life.

Our engagement with the local environment ensures that children learn through varied and first-hand experiences of the world around them. Children at our school overwhelmingly enjoy science and this results in motivated learners with sound scientific understanding. Our pupils are learning that Science in its many forms is vital to the world's future prosperity and know and believe that they play a significant part in this future.

All primary students have access, both at school and remotely, to the Century suite of online resources, an extensive range of learn screens, topic tools and activities which support all aspects of the primary Science curriculum to enrich and support their Science learning.

At Key Stage 2, the curriculum is supported by purpose-built resources which link current scientific news articles directly to primary skills and knowledge.

Students are also encouraged to 'read around' the subject by being signposted to relevant news pages, scientific journals and webpages. This increases both engagement in the subject and provides opportunity to develop their reading skills.

We aim to foster a culture in which students are encouraged to objectively question the content, their understanding and the purpose of what is being delivered. This is a vital skill in developing as a 'scientist', but also as an active member of a community.

## Impact

Successful delivery of the curriculum intent will be seen in numerous ways:

**Teaching/lesson delivery:**

- A balance of knowledge and skills will be embedded into lesson delivery to allow students to consistently engage with both aspects of our curriculum.
- Contextualised approaches will be adopted where possible, as part of the department vision to engage students with Science in the 'real world'.
- Cross-curricular links will be evident during quality assurance procedures.
- Adaptation will be standard practice so ALL learners can be seen to be engaged and participating in all aspects of a lesson.
- ICT will be used when appropriate allowing further skills practice and to demonstrate how science is always advancing.

**Pupil work:**

- Work will be completed to the highest standard possible for each individual pupil.
- Pupil work will show evidence of their progress with both developing a secure knowledge of both the content and skills associated with the subject, Inc. literacy skills.
- Pupil work will show a high level of participation and engagement in each lesson, with self-assessment opportunities becoming part of everyday 'best practice' for both students and staff.
- Pupil work will show evidence of being open-minded, perseverance and accountability.
- Evidence of pupils being able to make links between topics and scientific disciplines means that the correct level of depth is being implemented across the curriculum.

**Pupil voice:**

When asked about Science at Lady Royd, students should be able to articulate the importance of both knowledge and skills in relation to demonstrating progress. Students should be able to, at any point in their studies, be able to explain the 'big picture' in terms of their current learning opportunities.

Students would find Science interesting, engaging and understand the importance of the subject. Most importantly, they should portray a curiosity for the subject brought about by outstanding curriculum design, implementation and consistently high expectations for all.

**Reviewed: May 2024**
**Reviewed by: JJN**

**Next Review: May 2025**