Science at Robin Hood Junior School

Our Vision

We want our children to be:

literate and numerate – achieving outcomes which build on our starting points and reflect our high expectations

hardworking – reflective and resilient; able to persevere, punctual and aware of our part in the community

communicators –through all areas of the curriculum and in all our interactions with others

brave – taking risks in our learning, extending ourselves and those around us through controlled exposure to risk

compassionate – aware of differing experiences and opportunities; proactive, tolerant and open to ideas.

Assessment

Performance: Interwoven into the teaching sequence are key assessment questions, identified on lesson plans. These allow teachers to assess children's levels of understanding at various points in the lesson.

Long-term learning: At the start of each unit we will refer to prior learning associated to the topic. Retrieval practice activities will recap on the learning from previous units, including learning from previous years. Throughout units we will include opportunities for the children to apply both the knowledge and skills from prior learning. The children's learning will be assessed against the key questions for each lesson, these will be self-assessed and Teacher assessed.

Skills and knowledge: The sequence of lessons helps to embed scientific knowledge and skills, with each lesson building on previous learning. There is also the opportunity to regularly review and evaluate children's understanding.

Our Teaching Principles

It is our intention in Science to develop in all young people a lifelong curiosity and interest in the sciences. When planning for the science curriculum, we intend for children to have the opportunity, wherever possible, to learn through varied systematic investigations, leading to them being equipped for life to ask and answer scientific questions about the world around them. As children progress through the year groups, they build on their skills in working scientifically, as well as on their scientific knowledge, as they develop greater independence in planning and carrying out fair and comparative tests to answer a range of scientific questions.

School Development Plan

- build independence and a growth mindset (risk-taking; metacognition)
- Opportunities for challenge and choice (mastery; learning conversations; feedback and intervention; action research)
- Widen horizon for the whole community (better knowledge of prior learning; parental engagement opportunities)

Maths and Reading in Science

Maths: When recording data from investigations, the children will work on tables, graphs and charts from their relevant year group Maths curriculum. We have looked closely at the progression of this across the Key stage, children in Y3 working on recording in tables and charts, Y4 using these and Bar charts, Y5 adding Line graphs to these and Y6 recording using these and scatter graphs.

Reading: Within the booklets we have highlighted the reading skills that the children will focus on during particular lessons, images of the reading domain diamonds are included next to the each of the texts. Key words will be highlighted and clarified, and the children will then be encouraged to use these scientific terms within their discussions and writing. We have also highlighted fiction and non-fiction texts for years 3 to 6 in each of the Science units.