## Intent

At Girnhill Infant School, we believe in providing a high-quality science education which lays the foundations for understanding the world through the disciplines of biology, chemistry and physics. Exposing our learners to a breadth of enquiry, curiosity and investigations, inspires learners to develop a love of science and appreciate the power of it, how it has changed our lives and how it is essential for the future. We map the National Curriculum and Early Years Foundation Stage Curriculum for science into a coherent a sequential progression model that outlines the substantive knowledge, disciplinary knowledge, vocabulary and sentence stems needed at each stage that will build cumulatively towards learners being able to use and apply their knowledge, skills and understanding across a range of scientific concepts. In science, we value the importance of a high-quality oracy education where children develop and deepen their subject knowledge and understanding of talking like a scientist. Technical tiered vocabulary is modelled through the use of teacher talk and 'my turn, your turn' using flashcards. Language is scaffolded through carefully planned and designed sentence stems appropriate for each concept at each phase. Opportunities for children to practise the skill of presentational talk will be further developed in science through the use of mode B learning such as presenting posters in front of their peers. We enhance the scientific opportunities through the REACH curriculum and The Wanderlust Nature Study.

## Implementation

We ensure that all teachers, including those who are non-specialists, have excellent subject knowledge and are supported in the implementation of the curriculum. Oracy is woven through the science curriculum and children are confident with the expectations such as: the use of tiered scientific vocabulary, sentence stems, exploratory and presentational talk. Within science exploratory talk focuses predominantly on the linguistic and cognitive aspects of communication. Within science, children are given opportunities to apply their scientific knowledge and skills through a wide range of practical, hands - on activities. Children build on their scientific knowledge and known concepts by exploring and developing their understanding of the world around them and working scientifically; observing change over time, questioning, performing simple tests and by gathering and recording data. Modelling is used to demonstrate how to plan, carry out, interpret and conclude. Sentence stems are provided and used for the children to develop their understanding of how to speak like a scientist. Learners are encouraged to be curious by asking questions to investigate or clarify their understanding. Subject specific vocabulary is taught explicitly through flash cards, teacher talk and applied through discussion. Demonstrations are used to aid understanding of concepts. The learners observe over time; look for patterns; identify, classify and group; carry out fair testing (controlled investigations). Based on Rosenshine's theory, Learners have the opportunity to revisit and build on prior learning through carefully planned revisit and review tasks.

Impact	
***	