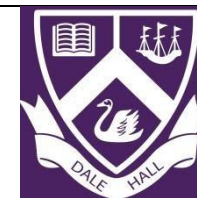


Science



National curriculum Aims: Scientific Enquiry Progression

Science activities provide children with opportunities to develop and practice many different skills and attributes. These include communication skills, collaborative skills, team working and perseverance, as well as analytical, reasoning and problem-solving skills. Although inquiry and the scientific method are integral to science education and practice, every decision we make is based on these processes. ... In this way, science is one of the most important subjects children experience, because it gives them the critical thinking skills they need in every subject.

Aims: At Dale Hall it is our aim to develop a lifelong curiosity and interest in the sciences. We intend to give the children 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 will 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.

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Questioning	Explore the natural world around them, making observations and drawing pictures of animals and plants.	Ask simple questions and recognising that they can be answered in different ways.		Ask relevant questions and using different types of scientific enquiries to answer them.		Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.	
Observations	Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.	Observe closely, using simple equipment.		Making systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.		Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.	

Testing	<p>Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p> <p>Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.</p> <p>Make comments about what they have heard and ask questions to clarify their understanding.</p>	Performing simple tests.	Set up simple practical enquiries, comparative and fair tests.	Use test results to make predictions to set up further comparative and fair tests.
Sorting		Identify and classify.	<p>Gather, record, classify and present data in a variety of ways to help in answering questions.</p> <p>Identify differences, similarities or changes related to simple scientific ideas and processes.</p>	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
Predictions & Conclusions		Use their observations and ideas to suggest answers to questions.	<p>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p> <p>Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</p>	Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.
Recording		Gathering and recording data to help in answering questions.	<p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <p>Use straightforward scientific evidence to answer questions or to support findings.</p>	Identify scientific evidence that has been used to support or refute ideas or arguments.