

Subject	<b>Science</b>
Intent	<p>At Chalk Hill 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 learner. Science at Chalk Hill 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.</p> <p>Scientific enquiry skills are embedded in each topic the students. Prior topics are referred back to thus increasing their enthusiasm for the topics whilst embedding this procedural knowledge into the long-term memory.</p> <p>Our curriculum has been designed to match all pupils’ needs to ensure they are challenged and achieve success, regardless of their special educational needs or disabilities, social disadvantage or starting point. Science is taught as discrete units and lessons where needed to ensure coverage in line with the National Curriculum requirements. Teachers plan to suit their children’s interests, current events, their own teaching style, the use of support staff and the resources available whilst addressing gaps in prior learning and to make accelerated progress from their individual starting points.</p> <p>Our intent is that all students are provided with rich learning experiences that aim to:</p> <ul style="list-style-type: none"> <li>• Prepare our children for life in an increasingly scientific and technological world today and in the future.</li> <li>• Help our children acquire a growing understanding of the nature, processes and methods of scientific ideas.</li> <li>• Help develop and extend our children’s scientific concept of their world.</li> <li>• Build on our children’s natural curiosity and developing a scientific approach to problems.</li> <li>• Encouraging open-mindedness, self-assessment, perseverance and developing the skills of investigation – including observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.</li> <li>• Develop the use of scientific language, recording and techniques.</li> <li>• Develop the use of computing in investigating and recording.</li> <li>• Make links between science and other subjects.</li> </ul>
Implementation	<p>Our Science curriculum is broad, balanced, engaging and is highly differentiated so that it meets the individual needs of all our pupils so that they can make rapid progress.</p>

	<p>The subject content of our curriculum meets the requirements of the KS1, 2 National Curriculum, with NC KS3 for the students in Class 2, when staff are confident that all gaps in prior knowledge have been filled.</p> <p>All students receive 3 Science lessons a week and this allows for the combination of investigative and theoretical work.</p>
<p>Skills and Knowledge</p>	<p>All skills and knowledge expectations will be individualised and will be addressed to a greater or lesser extent than stated:</p> <p><b><u>Biology:</u></b></p> <p>Plants, Animals, including humans, Living things and their habitats, Seasonal changes and Evolution and Inheritance</p> <p><b><u>Chemistry:</u></b></p> <p>Use of everyday materials, Properties and changes of materials, States of matter and rocks</p> <p><b><u>Physics:</u></b></p> <p>Light and Sound, Forces, Electricity and Earth and Space</p> <p><b><u>Working Scientifically:</u></b></p> <p>All students will learn how to work scientifically, demonstrating from KS1, KS2 and KS3 by improving their scientific attitudes, experimental skills, analysis, evaluation and measurement. Some of these will include:</p> <ul style="list-style-type: none"> <li>• securing an understanding of knowledge and concepts;</li> <li>• observing over time using prior knowledge;</li> <li>• pattern seeking;</li> <li>• identifying, classifying and grouping; comparative and fair testing (controlled investigations);</li> <li>• analyse and evaluate observations and data;</li> </ul> <p>understanding the processes of chemical reactions</p>
<p>Social Moral spiritual cultural</p>	<p>Science helps us to make sense of the world. The children will:</p> <ul style="list-style-type: none"> <li>• make new discoveries increases our sense of awe and wonder at the complexities and elegance of the natural world.</li> <li>• Be open minded (creating hypotheses)</li> <li>• Be critical (analysing and evaluating data)</li> <li>• Become collaborators by sharing their results</li> <li>• Understand the positive and negative impact of science on our society</li> <li>• Explore discoveries from the past and the present.</li> </ul>

British Values	Science and religion, for example different views on evolution and creation. Environmental activism and different views on fracking and fossil fuels and our right to peaceful protests.
ASDAN Links	<u>Environment</u>  Challenges 5-7 (Natural Disasters) and Challenges 21-23 (Natural Resources)  World environment issues.  Challenge 1 and 2 – learn about things that affect the world environment.