

## Curriculum Ambitions for Science at Parkside Community Primary School

Curriculum Ambitions	To deliver high quality teaching of science using scientific enquiry skills and substantive knowledge.	To ensure a rich and diverse vocabulary is taught progressively throughout the topics covered and through the school.	To foster a love of science and children see themselves as scientists.	To ensure a range of assessment opportunities in science to allow all children to showcase their knowledge, skills and scientific vocabulary.
Reasoning	We aim to ensure the children acquire and develop knowledge and skills through an ambitious science curriculum. Through careful planning of substantive knowledge and skills, our children are given the opportunity to use and apply these in a variety of meaningful contexts.	Ambitious scientific literacy and vocabulary must be of a high standard to ensure a broad science curriculum. Children will, therefore, be able to articulate their learning using rich vocabulary and show a deep appreciation of the science curriculum.	Through our science curriculum, our children acquire the vital knowledge and skills required for the next stage of their learning journey. This enables our children to become successful, active and positive members of our local community and wider world. We believe children should develop enquiring minds and the ability to question. This will build on their natural curiosity and enable them to understand and care for the world in which they live.	Teachers are to have high expectations of all learners. Assessment in science will take place in many different forms and allow all learners to have the opportunity to succeed and exceed their own expectations. The assessment will capture children's knowledge, skills and scientific literacy and build on the children's understanding.
Progression of Skills <a href="#">Progression in vocabulary</a> <a href="#">Long term plan (skills and knowledge)</a>	<ul style="list-style-type: none"> <li>● progression of knowledge from EYFS to year 6 and allows investigative opportunities to enable all children to explore, experience, observe and discover</li> <li>● ask their own questions about what they see and observe changes over time, noticing patterns, grouping and classifying things</li> <li>● carrying out simple comparative and fair tests</li> </ul>	<ul style="list-style-type: none"> <li>● progression in vocabulary document given to staff</li> <li>● opportunities for the children to explore scientific vocabulary and learning opportunities based on first hand experiences</li> <li>● exploration, observation, problem solving, prediction, critical thinking, decision making and discussion are all encouraged</li> <li>● the science units of work for KS1 and 2 continue to build</li> </ul>	<ul style="list-style-type: none"> <li>● each scientific unit will enable our children to grow up understanding how to work scientifically whilst fostering positive attitudes such as curiosity, perseverance, striving for accuracy</li> <li>● they will have the knowledge they need to succeed in all science subjects (biology, chemistry and physics) and have high aspirations for their future careers</li> </ul>	<ul style="list-style-type: none"> <li>● teachers' challenge and move children on through questioning, discussing, explaining, modelling, and demonstrating.</li> <li>● they provide support and scaffolding where needed so that all children can achieve.</li> <li>● science lessons include differentiated work and activities to ensure that all students are engaged and challenged throughout the curriculum</li> </ul>

<p><a href="#">Yearly coverage</a></p>	<ul style="list-style-type: none"> <li>● find things out using secondary sources of information</li> <li>● draw simple conclusions and use scientific language to talk and write about what they have found out</li> </ul>	<p>connections on knowledge, concepts and skills ensuring that all knowledge and understanding programmes of study are covered</p> <ul style="list-style-type: none"> <li>● opportunities for homework linked to science support and include all learners</li> </ul>	<ul style="list-style-type: none"> <li>● children taught about key historical and modern day scientists</li> </ul>	<p>irrespective of their starting point and challenges they face.</p>
<p>Experiences we could offer</p>	<ul style="list-style-type: none"> <li>● engaging lessons that build upon prior knowledge</li> <li>● practical, hands-on science lessons embedded into each topic</li> <li>● answering 'big' questions to deepen and broaden knowledge and show an appreciation of scientific enquiry</li> </ul>	<ul style="list-style-type: none"> <li>● vocabulary displayed in classrooms</li> <li>● ambitious knowledge organisers</li> <li>● <a href="#">example of KS1 knowledge organiser</a></li> <li>● <a href="#">Example of lower KS2 knowledge organiser</a></li> <li>● <a href="#">Example of upper KS2 knowledge organiser</a></li> </ul>	<ul style="list-style-type: none"> <li>● Science Week</li> <li>● links with other schools (Queen's)</li> <li>● links with local business (GSK)</li> <li>● enrichment opportunities (trips, workshops)</li> </ul>	<ul style="list-style-type: none"> <li>● questioning</li> <li>● pupil book study talking about learning with the children</li> <li>● talking to teachers</li> <li>● low stakes 'Drop-in' observations by leaders</li> <li>● quizzing and retrieval practise</li> <li>● feedback and marking</li> <li>● progress in book matches the curriculum intent and medium term plan</li> <li>● practical skills demonstrated in lessons</li> </ul>