

## Science at Littledean C of E Primary School

INTENT	At Littledean C of E Primary School, we aim to instil a love of Science in our children. We aim to give all children a strong understanding of the world around them whilst acquiring specific skills and knowledge to help them to think scientifically. They will develop an understanding of the uses and implications of Science today and for the future. All children will experience exciting, practical hands on experiences in their Science lessons that encourage curiosity and questioning. They will be encouraged to develop and use a range of skills including planning investigations, making predictions and observations and interpreting data, as well as acquiring and using appropriate scientific vocabulary. Children will be encouraged to build arguments and explain concepts confidently, so that they become independent learners in exploring possible answers for their scientific based questions. Our Science curriculum will also encourage respect for living organisms and the physical environment.
IMPLEMENTATION	<ul> <li>Planning</li> <li>Long Term: National Curriculum and Development Matters (EYFS). We have a 2 year rolling programme of topics, with links made between other subject areas where appropriate and meaningful.</li> <li>Medium Term: Teachers plan units of work based on an initial stimulus question. This question is used at the start of a unit to elicit children's prior knowledge and understanding and again at the end of the unit in order to ascertain the learning that has taken place. In our whole school Science overview document there is a through breakdown of the progression of scientific skills and knowledge for each class.</li> <li>Teaching and Learning</li> </ul>
	<ul> <li>Science lessons follow a clear and consistent teaching sequence which builds children's knowledge and skills in order to be able to answer their stimulus question.</li> <li>Where appropriate we use a range of resources, visitors, workshops and visits to excite and intrigue our children.</li> <li>Each class carries out a unit of work related to the local environment or local area within their 2-year plan</li> </ul>

	<ul> <li>and cross curricular links are made wherever possible.</li> <li>Children are introduced to key vocabulary and its meaning and given opportunities to use this within the correct context.</li> <li>Children have opportunities to present their learning in a variety of ways, including graphs, diagrams, drawings and photos, in order to communicate their scientific knowledge and understanding accurately.</li> <li>Homework grids will contain activities to build on children's skills and knowledge related to their current science topic.</li> </ul>
	<ul> <li>Topic question, asked at the start and end of the unit of work.</li> <li>Ongoing assessment during lessons (based on discussions and engagement), along with assessment of tasks completed in class.</li> <li>End of unit assessment where children will be assessed as either developing, expected or exceeding in relation to the learning objectives covered within the unit of work.</li> <li>Use of topic related quizzes to check knowledge and understanding.</li> <li>Monitoring of Subject Leader will include planning scrutinies, book looks, lesson observations and pupil conferencing to ensure appropriate coverage of the curriculum.</li> <li>Science lessons follow a clear and consistent teaching sequence which builds children's knowledge and skills</li> </ul>
IMPACT	<ul> <li>in order</li> <li>Through the high quality teaching of Science taking place we will see the impact of the subject in different ways.</li> <li>Through pupil voice children will be able to talk about the skills and knowledge they have acquired, be able to ask and answer question based on what they have learnt and be able to reason scientifically.</li> </ul>
	<ul> <li>Children will be observed to be engaged practically in Science lessons and will work independently or collaboratively to investigate and experiment.</li> <li>Children will complete research independently through projects and homework to further their own enjoyment about the subject or topic.</li> <li>Work will show that a range of topics are being covered, cross-curricular links are made (where appropriate) and differentiated work is set as needed.</li> <li>The school environment will be Science rich through displays, resources and use of specific vocabulary.</li> <li>Assessments and monitoring will show that standards in Science are high and match the standards in other subject areas.</li> </ul>