

Common Road Infant and Nursery School
Science
Curriculum Statement

'Flying High Together'

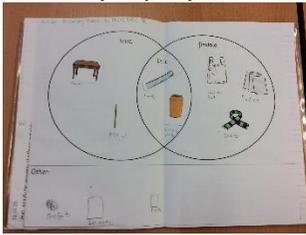
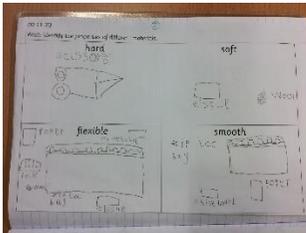
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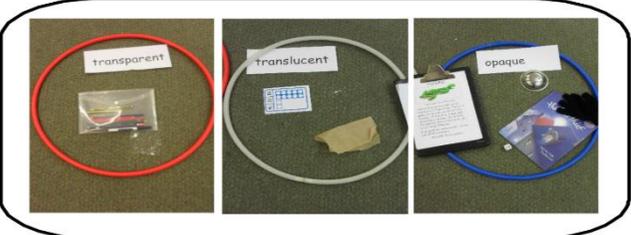
Intent	Implementation	Impact
What will take place before teaching in the classroom?	What will this look like in the classroom?	How will this be measured?
<p>At Common Road Infant and Nursery School we believe that a high quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. 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, to gain an understanding of scientific processes and also an understanding of the uses and implications of Science, today and for the future.</p> <p>Pupils will be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes. Specialist vocabulary for topics is taught and built up, and effective questioning to communicate ideas is encouraged. Concepts taught will be reinforced by focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions.</p>	<p>At Common Road Infant and Nursery School, the science curriculum is progressive through EYFS and KS1. Key areas of focus are the teaching of new vocabulary and scientific enquiry. Throughout school, our pupils will be exposed to, learn and develop their understanding of scientific vocabulary and concepts through clear and concise teaching and explanation. Vocabulary will be built on through each unit of work, and key concepts regularly revisited. Each unit of work will be heavily focussed on scientific enquiry, so that children can apply their knowledge and practice skills to answer a range of questions about the world around them.</p> <p>The school long term plan sets out which units will be covered throughout the year for each year group, and class teachers will use this as a starting point for their planning. Science lessons will be taught as discrete lessons every week, but will be linked to topics where possible (e.g. in Year 2, sessions investigating the properties of materials will be linked to DT/history work on coal mining and Davy lamps).</p> <p>Children will be encouraged to work practically as much as possible - having access to good quality resources and being allowed the time to investigate through first-hand experience and observation. Learning will be embedded as the children apply specific knowledge and skills in different ways to investigate similar themes.</p> <div style="text-align: center;">  </div>	<p>Most pupils at Common Road Infant and Nursery School will reach the expected national age related expectations in science. They will know and understand the key terminology in their areas of study (e.g. plants, animals, materials) - being able to explain key terms. Throughout their journey at Common Road they will continue to develop their skills in scientific enquiry and observation; applying the specific knowledge they have learnt in key areas of study.</p> <p>Pupils' progress will be tracked every lesson by the class teacher, who will plan and adapt lessons to meet the needs of the learners. At the end of each unit of study, class teachers will assess each child's individual achievements using the end of Key Stage One / EYFS profile statements, and record an assessment grade for each. This also includes separate assessments for scientific enquiry in each of the units.</p>

<p>The curriculum leader will:</p> <ul style="list-style-type: none"> • Share curriculum expectations effectively to support teaching and delivery. • Ensure appropriate progression of skills throughout EYFS and KS1 by providing a clear, structured long term plan for science which is heavily focussed on investigation and scientific enquiry. • Ensure an appropriate progression for vocabulary is in place, which builds on prior learning. • Ensure staff are confident in delivering the content of the science curriculum. • Provide staff training in the form of staff meetings where necessary. • Ensure school systems and resources allow the effective teaching of science. 	<p>Our learning areas will:</p> <ul style="list-style-type: none"> • Provide pupils with high quality equipment and resources to enable them to investigate scientific concepts. • Have a specific display area to show the current unit of work, key vocabulary and resources to encourage questioning and investigation. • Allow children to explore their science learning through continuous provision in EYFS and Year 1. 	<p>Recorded evidence will show:</p> <ul style="list-style-type: none"> • Pupils actively participating in science activities. • Pupils working collaboratively to answer questions about the world around them. • New vocabulary, knowledge and skills being applied in a variety of ways within a topic. • The ways in which children have applied their knowledge and skills in other curriculum areas.
<p>The class teacher will, with support from the curriculum leader:</p> <ul style="list-style-type: none"> • Develop good subject knowledge so that they are able to deliver high quality lessons to enable pupils to be challenged and achieve highly. • Provide pupils with challenging, engaging and motivating lessons. • Ensure science units of work are well planned, taking into account the school's progression grids, national curriculum expectations and needs of the pupils. • Ensure specific vocabulary is taught and built upon throughout the year, with clear and precise explanations of key scientific concepts. 	 <p>Our pupils will be:</p> <ul style="list-style-type: none"> • Engaged learners - able to ask and answer questions confidently. • Resilient learners - who understand their own strength and areas for development. • Able to review their own work and talk about how they can improve it. • Enjoying learning in a safe environment, which gives them opportunities to explore their own creative development. • Nurtured to overcome any barriers to their learning and develop their self-confidence. <p>Developing scientific skills and confidence over time as a result of quality first teaching.</p>	<p>The curriculum leader will:</p> <ul style="list-style-type: none"> • Celebrate the successes of pupils in assembly, parents meetings, information meetings, governor reports and displays around school. • Collate evidence over the year which shows that pupils learn and apply a wide range of scientific vocabulary with a focus on investigation. • Monitor the standards in the subject to ensure that outcomes are at expected levels. • Provide ongoing CPD support based on the outcomes of subject monitoring to ensure that the impact of the curriculum is wide reaching and positive.

School Evidence

Autumn

<p>EYFS</p>	<p>Children observe the natural world – looking at how leaves change from summer to autumn, and observing worms and where they live.</p> 	<p>Children investigate how to melt water in different ways. Which melted the ice the quickest? What does ice look and feel like? How is it made?</p> 	<p>Children use the tuff trays to explore plants. They experiment with growing vegetables from seeds, learn about the life cycle of plants and what plants need to grow.</p> 
<p>Year 1</p>	<p>Children went on an autumn walk to identify features of autumn to compare with other seasons.</p>   	<p>Children sort and group objects and materials according to type and simple properties.</p>  	

<p>Year 2</p>	<p>Children sort and group objects based on the materials from which they are made (revision).</p> 	<p>Children investigate how objects can be changed by bending, twisting, stretching and squashing.</p> 
		<p>Children plan and carry out an investigation into which materials are transparent, translucent or opaque. The findings are then used in DT sessions to help to choose the most suitable materials for a model Davy lamp.</p> 

Spring

EYFS				
Year 1				
Year 2				

Summer

EYFS				
Year 1				
Year 2				