



Science Action Plan 2021-22



Science Aims include:

1. Ensuring National Curriculum Coverage with clear progression throughout the school.
2. To develop pupils scientific knowledge and conceptual understanding through a range of Science lessons and experiences.
3. Monitor the coverage and good practice across the school.
4. To develop the pupils curiosity and allow them to ask questions and develop the skills they need to answer those questions.
5. To continue to monitor assessment and identify pupils strengths and weaknesses.

KEY PRIORITY				
Objective	Actions and Responsibility	Success Criteria	Completion	Resources
To monitor the statutory requirements within the curriculum.	<ul style="list-style-type: none"> • Monitor cornerstones subjects and make sure all Science requirements are covered. • Book looks to make sure coverage is being taught. • Staff to share with NC topics covered in each Key Stage. • Gap analysis to be carried out, time as a staff given to plan how to cover those objectives. • Discuss with staff any issues or concerns. • Lesson observations to make sure content is delivered at high standard. • Learning walks and sharing sessions via email/ video conferencing when restrictions are lifted. 	<ul style="list-style-type: none"> • Staff to be confident at delivering Science lessons • Pupils to use Science vocabulary and have a deeper understanding of scientific events. 	Throughout the year	Cornerstones

To monitor assessment across the Federation.	<ul style="list-style-type: none"> Using the skills progressions provide opportunities for the children to identify their next steps. Pupils to self-assess using the skills progressions and staff to use skill progressions to check for any gaps. Staff to use the Half termly grids to check progress. 	<ul style="list-style-type: none"> Staff to feel confident at using skills progressions as well as the half termly grids to check pupil's progress. Pupils to understand their next steps in their learning. 	Ongoing throughout the year.	Assessment trackers. Self-assessment grids
To provide well resourced equipment.	<ul style="list-style-type: none"> Staff to be asked to check their topics this year for outstanding resources needed. Provide a list of resources that are available for staff. Grant applications- Crest/BSA Kickstart. 	<ul style="list-style-type: none"> Staff can deliver high quality Science lessons. 	Ongoing throughout the year.	

SIAMS PRIORITY

<ul style="list-style-type: none"> To extend the provision for Spiritual Development within all areas. 	<ul style="list-style-type: none"> Use a wide range of questions to start the lesson to allow children to develop their spiritual thinking and to show a deeper understanding of the subject knowledge. Differentiate activities to allow all children access to Science. 	<ul style="list-style-type: none"> Pupils to become better at using their questioning skills, taking part in group discussions and solving problems. Pupils to increase their subject knowledge. Pupils to become more confident in taking a positive role in their learning. 	Ongoing	A range of questions to use for lessons.
<ul style="list-style-type: none"> To develop the importance of equal opportunities and understand British values. 	<ul style="list-style-type: none"> Provide equal opportunities through a range of activities to deliver Science (role play, presentation work, allowing all children to have opportunities to share their learning in different ways.) To take responsibility in their learning and to respect others suggestions. 	<ul style="list-style-type: none"> Pupils to have a better understanding why equal opportunities and respect is important. Pupils to become positive role models to others. Pupils to demonstrate British values to all members of the school family. 	Ongoing	

	<ul style="list-style-type: none"> Encourage to highlight the British values during Science lessons. 			
OFSTED PRIORITY				
<p>To provide opportunities to read a variety of texts to allow the children to improve their reading skills (inference, retrieve, sequence and prediction)</p>	<ul style="list-style-type: none"> Allow opportunities for pupils to read a variety of texts linked to Science. Provide opportunities for pupil discussions. Provide opportunities for pupil presentations. Provide opportunities for pupils to use information gathered in their written work. 	<ul style="list-style-type: none"> Pupils to be more confident at reading within a range of contexts. Pupils to become more confident to understand Scientific terms and events. Pupils develop confidence in sharing information they have read. 	Ongoing throughout the year.	
<p>To provide opportunities to learn from hands-on experimentation and practical activities.</p>	<ul style="list-style-type: none"> Provide practical lessons with the pupils 'doing' rather than watching adults/videos wherever possible. Provide pupil with a range of resources needed to independently test, experiment with, or measure and record. 	<ul style="list-style-type: none"> Pupils develop independence and confidence in using equipment responsibly and accurately. Pupils develop an understanding of why certain equipment and practical, 'hands on' experiments are necessary for specific investigations. 	Ongoing throughout the year	
SCHOOL DEVELOPMENT PLAN PRIORITY				
<p>Covid-19:</p> <p>To raise the attainment of children throughout the school with a particular focus on writing and overall</p>	<ul style="list-style-type: none"> Children have opportunities to write in Science at length at least twice in a topic. Planning includes opportunities for purposeful writing within Science. Planning shows differentiation, progression and builds on prior learning. Clear extension and challenge activities are planned for. 	<ul style="list-style-type: none"> The attainment gap between boys and girls writing is closing. Writing skills are being reinforced across the curriculum. Marking (verbal and written) is high quality and identifies next steps to learning; the marking policy is adhered to. Boys show that they want to write more. Boys are excited about learning activities in school linked to their Cornerstones topic. 	Ongoing throughout the year	

<p>attainment in EYFS, phonics, KS1 and KS2</p> <ul style="list-style-type: none"> • To ensure the standards of writing improves throughout the school. • The in-school achievement gap between boys and girls closes. • Ensure the needs of all pupils are met during lessons with a particular focus on boys, the more able children. • All pupils to be challenged during lessons. 	<ul style="list-style-type: none"> • Teacher led discussions allow children to be more reflective, discuss their learning and take responsibility for their own development. • High quality resources to support scaffolding of tasks and activities and learning/ toolkits used. • Curriculum topics maintain the interests of boys. • Opportunities for pupils to use their phonics skills within Science. • Use EYFS Early Adopter (Understanding of the World) to allow Reception to write about Science. 	<ul style="list-style-type: none"> • Boys want to write. • Boys are socially successful in school. • Pupils are engaged. • Work is differentiated to meet their needs. 		
<p>To support Pupils mental health.</p>	<ul style="list-style-type: none"> • Pupils to help support each other in a range of activities. 	<ul style="list-style-type: none"> • Pupils to feel more positive about themselves. • Pupils to be more supportive of each other. 	<p>Ongoing</p>	
<p>To raise children's aspirations and self-coaching skills.</p>	<ul style="list-style-type: none"> • Children know what to do when they can't do something. • So be aware of the need for trial and error within science investigations and experiments, reflecting upon planning, strategies used, techniques, processes and results to obtain reliable, accurate results. 	<ul style="list-style-type: none"> • Pupils learn how to respect each other's viewpoints. • Pupils to have a more positive attitude towards school life. • Pupil leaders to take an active role in school life. • Pupils learn how to be independently self-reflective. 	<p>Ongoing</p>	

	<ul style="list-style-type: none">• Science in my pocket resources- Chn use this resource independently.			
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