



Mathematic Action Plan 2021-22



Mathematics Aims include:

1. Ensuring National Curriculum Coverage with clear progression throughout the school.
2. To develop pupil's mathematical knowledge and conceptual understanding through a range of concrete, pictorial and abstract lessons and experiences.
3. Monitor the coverage and good practice across the Federation.
4. Monitor the use of manipulatives across the Federation for all children.
5. Challenge and stretch children's learning.
6. Promote the correct use of mathematical vocabulary.
7. Build children's resilience, perseverance and determination skills across all concepts to a more 'have a go' or 'I can't do this yet' culture.
8. To continue to monitor assessment and to identify pupils' strengths and weaknesses.
9. To build upon existing reasoning and problem-solving skills to ensure children become more confident.

| KEY PRIORITY | | | | |
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| Objective | Actions and Responsibility | Success Criteria | Completion | Resources |
| To monitor the statutory requirements within the curriculum | <ul style="list-style-type: none"> • Monitor the teaching of maths throughout the Federation. • Monitor the implementation of manipulatives throughout the Federation. • Book looks to make sure progress is being made and different concepts are being taught. • Learning walks to see maths in action. | <ul style="list-style-type: none"> • All staff to be confident in the delivery of White Rose Maths. • Pupils to have a deeper understanding of mathematical vocabulary and concepts being taught. • All staff to be confident in the maths mastery approach. | | White Rose learning schemes |

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| | <ul style="list-style-type: none"> • Discuss with staff any concerns. • CPD opportunities for all staff both teaching and non-teaching. • Embed the mastery approach • Use power maths as independent mental starters. • Staff to use the correct mathematical vocabulary when introducing new concepts. • Staff to understand the deeper learning used in the mastery approach. • Each classroom to have a maths working wall. | <ul style="list-style-type: none"> • All staff to use the concrete, pictorial and abstract approach to teaching maths. • Staff and pupils to have a positive approach to maths. • Build upon resilience, determination and perseverance skills. • Encourage the use of new vocabulary especially in reasoning and problem solving. | | <p>White Rose Premium Resources</p> <p>Power Maths Books A, B and</p> |
| To monitor assessment across the Federation. | <ul style="list-style-type: none"> • Monitor assessment to see if progress is happening. • Use the skills progression sheets provided to identify next steps. • Use our own trackers to monitor individual pupil progress and to identify gaps in learning. | <ul style="list-style-type: none"> • Staff to feel confident in using the skills progression sheets to check pupil progress. • Staff to feel confident in using the termly trackers to monitor progress and identify gaps. • Pupils to understand their next steps in learning. | | <p>Pupil progress trackers</p> <p>White Rose Assessment</p> <p>Puma Assessment</p> |
| 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. • Different activities to allow all children access to mathematics. | <ul style="list-style-type: none"> • Staff to become better at using their questioning skills, taking part in group discussions and solving problems. • Pupils to increase and build upon their existing subject knowledge. • Pupils to become more confident in taking a positive role in their learning. | Ongoing | A range of questions to use for different concepts |

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| | | | | being taught. |
| <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 maths (presentations, explaining, practical lessons, reasoning and problem solving, allowing all children to have opportunities to share their learning in different ways.) • Differentiate activities to allow children to access to mathematics. • Develop a mathematical working wall that shows different strategies used to help inform children's learning. | <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 | |

OFSTED PRIORITY

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| To provide opportunities to read a variety of texts to allow the children to improve their reading skills (inference, retrieve, sequence and prediction) | <ul style="list-style-type: none"> • Allow opportunities for pupils to read one-step and multi-step word problems. • Children to become familiar with the RUCSAC method to help solve more complex word problems. • Allow opportunities for the children to work systematically to make sure all possibilities have been achieved. | <ul style="list-style-type: none"> • Children to be able to identify the key vocabulary needed to solve word problems. • Children understand how to work systematically through problems which require different outcomes. | Ongoing throughout the year. | White Rose Schemes of Learning |
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SCHOOL DEVELOPMENT PLAN PRIORITY

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| <p>Covid-19:</p> <p>To raise the attainment of children throughout the school with a particular focus on writing and overall 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. | <ul style="list-style-type: none"> • Children to have opportunities to solve word problems during different concepts being taught. • Planning includes opportunities for more complex word problems to build on the children's resilience and perseverance skills where there is more than one outcome. • Planning shows differentiation, progression and build on prior learning. • Clear extensions and challenge activities are planned for. • 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 interest of boys. • Opportunities for pupils to use their phonic skills within mathematics. • Use EYFS Early Adopter to allow Reception to problem solve. • Children are encouraged to work in a variety of different ways during lessons to help develop a 'love' of maths. • EYFS and KS1 have a strong emphasis on building the 'foundations' for maths through strengthening basic skills and following the White Rose maths curriculum. • Maths skills are developed and reinforced across the school's curriculum. | <ul style="list-style-type: none"> • The attainment gap between boys and girls is closing. • Writing skills are being reinforced across the curriculum. • Marking both verbal and written is high quality and identifies next steps to learning; the marking policy is adhered to (think pink stamper used). • Boys show that they want to engage more during lessons. • Boys are excited about learning activities in school which can be linked to their current Cornerstone topic. • Boys are socially successful in school. • Pupils are engaged. • Work is differentiated to meet their needs. • Children in KS1 have a strong foundation in basic maths which allows them to be better prepared for the transition into KS2. • Low attaining pupils close the gaps with their peers. • Pupils are well-prepared for assessment requirements • Maths results show an improvement on 2019/20 results with regards to the number reaching the high standard which leads to better progress measure scores. • Children have greater independence in their maths work. • JF and BH to encourage others to engage in mathematical discussions, share resources and lead training etc... as part of staff CPD | <p>Ongoing throughout the year.</p> | |
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| <ul style="list-style-type: none"> • All pupils to be challenged during lessons. | <ul style="list-style-type: none"> • Maths interventions are used to build confidence, close the gap and raise the attainment of children. • Booster and 1:1 sessions which target high ability children as well as those that need to close the gap. • Mathematical vocabulary is used correctly and embedded from EYFS onwards. • Moderation activities regularly take place (internal and external). • JF and BH to continue their involvement in Great North maths mastery training programme | | | |
| <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. | Ongoing | |
| <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. • Pupils have regular opportunities to debate a range of issues which include those that are important to them and those of national importance linked to mathematics. | <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. | Ongoing | |