

Recovering Mathematics at Hartford Primary School

Current Position (data for EY, eoKS1, eoKS2)

2019 data
 EYFS attainment of the expected standard of Mathematics ELGs were significantly above national and in the highest 20% of all schools.
 End of KS1 data for mathematics is in line with National. Year4 children tracked.
 KS2 progress and attainment of high standard were significantly above national and in the highest 20% of all schools. 3-year trend in mathematics was in the highest 20% of all schools.

Intent

To build the children's confidence and resilience, ensuring that they are fluent and have conceptual understanding of key mathematical concepts. To ensure children are able to reason and problem solve in a range of mathematical contexts within maths lessons and in other areas of the curriculum. To ensure children have a positive view of mathematics and understand the power and purpose of mathematics in everyday life.

Implementation

Teachers have adapted their MTPs, they use the NCETM Assessment materials and the DfE/NCETM Ready to Progress materials drive their short-term planning. Teachers integrate a range of resources to supplement including; White Rose, NCETM, nRich and First4Maths Fluency Grids. Daily fluency sessions are used to reinforce key skills and fluency grids are sent home weekly. Cross curricular links, theme days/weeks are used as appropriate.

Impact

Essential skills and knowledge are prioritised and children are able to move successfully into the next year group. Children enjoy mathematics and access their learning at a level appropriate to their needs. Resources are used effectively, including the Calculation Policy which is implemented consistently. Children understand the purpose of mathematics and can use their skills confidently in other subjects.

Fluency

Staff have received training through moderation and planning sessions on the 4 Rules of Number.
 Staff are secure on the CPA approach to the teaching of calculation.
 Written and Mental Methods taught consistently across the school.
 Strive for Five approach to calculation.
 Classroom displays remind the children of the key skills that they have already covered in class. These methods are there to refer to in order to apply these skills to other areas of mathematics.
 Fluency Grids completed weekly at home.
 Daily Fluency Flashbacks.

Reasoning

Reasoning is embedded throughout the teaching sequence. Children explain the methods that they are using and why they are efficient.

All children given the opportunity to reason at their level using Five Steps of Reasoning - nRich

- Describe, Explain, Convince, Justify, Prove

(NCETM)

A pupil shows mastery of a concept, idea or technique if he/she is able to ...

- describe it in his or her own words;
- explain it to someone else;

A pupil showing mastery with greater depth is able to...

- independently explore and investigate mathematical contexts and structures, communicate results clearly and systematically explain and generalise the mathematics.

Problem Solving

Children develop understanding of routine and non-routine problems as part of the progression within units of work. Children reflect on the strategies that they have used to solve problems and reason about their methods.

(NCETM)

A pupil shows mastery of a concept, idea or technique if he/she is able to

...

- represent it in a variety of ways using the CPA approach
- see connections between it and other facts or ideas;
- recognise it in new situations and contexts;
- make use of it in various ways, including in new situations.

A pupil showing mastery with greater depth is able to...

- solve problems of greater complexity (i.e. Where the approach is not immediately obvious), demonstrating creativity and imagination;
- independently explore and investigate mathematical contexts and structures, communicate results clearly and systematically explain and generalise the mathematics.

EYFS

NCETM Progression Charts used to support next steps planning.
 Maintaining Challenge within 10 Training completed.
 Adult-Initiated and Continuous Provision activities are planned for each next step.
 Teachers worked individually with children in the first week back after lockdown and have grouped them according to ability.
 Teaching is pitched appropriately to address next steps for the children according to the level assessed.
 Children have been identified for weekly intervention in appropriate groups.
 Parents have been given the opportunity to access a training session about how to help children at home.
 Outdoor provision has resources to support maths, numicon, number slices for subitising, large ten frames and double sided counting.

Coverage and Progression

Recovery assessment and planning documents have been used to assess children's starting points following the Spring 2021 Lockdown. These documents have been used alongside the DfE Ready to Progress materials to prioritise the topics to teach for the remainder of the academic year. Staff meetings to ensure consistency of use, 24th March, 26th May, 30th June. Documents will support teachers with end of year transition conversations and the mapping out of Autumn Term. First4Maths Assessment Tags used to support teachers with identifying the small steps within their short-term planning.
 1st April – Maths Day
 Week beginning 28th June – Whole school maths project "Can The Olympics Happen Without Maths?"

Links to Curriculum/British Values/Cultural Capital

Section on the Medium-Term Plan for teachers to complete each half term with the links to other curriculum areas. Teachers ensure links are meaningful and purposeful by indicating which objectives are being taught or reinforced during another subject.

The five British Values are democracy, the rule of law, individual liberty, and mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Teachers are aware of the need to ensure that children value and respect each other's different approaches to working on problems and calculations.

Mathematics enables children to develop skills to help them succeed in life; enterprise, imagination, resilience, ambition, cooperation, collaboration, communication.

Assessment

Staff Training and moderation on expectations for Mastery and Greater Depth.
 First4Maths Assessment Tags
 Internal Moderation
 External Moderation
 NTS Tests termly.

Intervention

Interventions are linked to the teachers' assessments of the children's gaps. TAs using Step Up Programmes to deliver intervention in Years 3 - 6.
 Teachers and Teaching Assistants using the Ready to Progress materials to prioritise areas that need to be delivered through intervention in Years 1 – 2.
 Teaching Assistants are secure in how to develop children's independence and confidence. They are secure in the progression in mental and written methods.
 Subject Leader monitors the implementation of interventions and support Teachers and Teaching Assistants in identifying next steps.
 Same day intervention is planned for to enable children keep up.

Pupil Voice

Children and staff share weekly the purpose of Mathematics in everyday life. *What maths they have used at the weekend.*
 "Maths is very important. You need to know about time. So you are at the right place at the right."
The majority of children in school enjoy maths.
 "I really really like maths, I'm going to be an engineer when I'm older so I need to be good at maths and science!" time.
 When asked about getting stuck:
 "I really like it I think. It not great when you are stuck but it is a challenge and I feel really good when I get it."

Staff Voice

Staff are confident with adapting their planning to address the needs of the children during the recovery of the curriculum?
 "I can see this as a journey for now rather than just thinking I have got to do everything before the end of the Summer Term."
 "Mini Maths- Fluency sessions are very enjoyable the children love it. Good to keep things in the childrens mind and embed learning."
 "Moderation and planning activities make sure I am on the right path for my children."

	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
SEND							
Other Vulnerable Groups							
Target					Spencer B Gracie H Kayleigh M Millie S Just missed out at KS1 standardised scores.		
Gaps							
Monitoring → Impact							
Use of TAs → Impact					Step up to year 4	Step up to Year 5	Step up to Year 6
CPD → Impact → Next Steps							

Transition	
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