**Rodings Primary School** 

# MATHS SELF-EVALUATION FORM



## School Context

- We are a one form entry school with eleven classes. In some years we have been asked to take two classes (current Years R, 2, 3 and 5). Traditionally these have been classes of 20, but most are now closer to 30, meaning we are well above our PAN. This has a number of implications, for example we are very short on space and staff have to be flexible in which year groups they teach (a number have taught in both Key Stages)
- The proportion of pupils eligible for a free school meal is below the national average.
- The percentage of English Additional Language (EAL) pupils is well below the national average. However, since May 2022 the school has had a significant increase in EAL pupils, with a number of Ukrainian children moving into the local area.
- 82% of children started at the school in Reception.
- We have identified a number of pupils who are disadvantaged (14%). The categories we use are: Cultural, Spoken Language, Reading, Parental Engagement, Time or Fuel poor, Emotional needs or Other.
- Our school attendance is in line with the national average, however our persistent absentees is significantly higher than the national average
- We are an inclusive school. Currently 2% of the school have an EHCP which is in line with the national average. However the number of children with an EHCP or SEN support is below the national average.
- Staff retention is very high. Staff are clear on the routines and vision of the school.
- In our recent wellbeing survey of staff we came out in the top 1% of schools nationally for many of the areas.
- The school has formed strong partnership links with a number of local and national organisations. We are part of the Dunmow Excellence in Education Partnership and were one of the trial schools for the Peer Review approach of school based quality assurance.

## School Vision

#### School Vision

At Rodings Primary School we strive to provide an excellence led and enriching experience for our children in a safe and stimulating environment. We have a skilled workforce and a high performing culture, which provides the right support at the right time for all children and staff. We work hard on outside engagement to develop strong relationships with our parents and community

WE ARE COMMITTED TO ACADEMIC EXCELLENCE WE ARE PASSIONATE ABOUT CREATIVITY WE NURTURE SOCIAL INTELLIGENCE WE WORK WITH AND WITHIN OUR COMMUNITY

Rodings Primary School is committed to providing a place of academic excellence, where children's academic success is developed through a broad and deep curriculum.

We have a passion for creativity and the creative arts, and aim to provide inspirational opportunities and experiences for our children. Through strong partnerships we show our commitment to developing creative individuals.

# Subject Self Evaluation Form Subject: Maths



We want our children to be happy whilst with us. We nurture social intelligence through developing a toolkit to look after our own and each other's wellbeing. We give children responsibilities, freedoms, a voice and an opportunity to lead.

Our school sits in the heart of our community, and we are committed to learning about our local area, through our curriculum. We are committed to developing meaningful links with organisations and individuals in our area.

#### School Values

The phrase we use to sum up our school ethos is:

#### Learning together, caring for each other

We believe that children should be encouraged to care for each other as well as being able to accept high levels of responsibility. Visitors regularly comment on the children's excellent learning behaviour. After a year of consultation with children, parents, staff and governors the following Core Values were adopted in January 2016.

Respect Enjoyment Care Confidence Challenge

These Core Values are at the heart of every decision at Rodings Primary School.

#### Curriculum Aims

Academic Excellence, Creativity, Social Intelligence and Community are at the heart of everything we do at Rodings Primary School. We give each of these values equal weighting and through a knowledge-rich curriculum, engaging teaching, great relationships and strong partnerships, we work hard to ensure that Rodings is the best possible primary school experience for every child.

## Intent

At Rodings Primary we see Mathematics very much as a multi-discipline, cross curricular, interconnected subject which should encourage creativity. As much revolves around the discussion about Maths through oracy as it does the completion of calculations. We want the children to see Mathematics as being relevant to their world and applicable to everyday life as well as being something that they will need as they move on through their school life. At Rodings Primary we strive to equip all pupils with the skills and confidence to solve a range of problems through fluency with numbers and mathematical reasoning. As our pupils progress, we want them to have an appreciation of the beauty and power of mathematics; and to have a sense of enjoyment and curiosity about the subject. We also want the children to be able to transfer their mathematical knowledge into their everyday lives and ultimately to the world of employment. Therefore a high-quality, inter-related and creative Maths experience should develop the children's ability to think mathematically. We want children to make rich connections across mathematical ideas to develop



fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. We want the children to become critical thinkers and demonstrate mastery when they can represent concepts or skills in multiple ways, use the correct mathematical language and can independently apply the concept to new problems in unfamiliar situations.

## Implementation

We provide opportunities to support pupils to develop a "deep, secure and adaptable" understanding of the mathematics, where the children master one topic securely enough to move on. Therefore, allowing the children to build on prior knowledge and tackle new learning. The children at Rodings Primary School work together using the mastery approach which involves a whole-class curriculum, without setting by ability. This focus ensures that most pupils can master concepts before moving on, with a "no pupil left behind" philosophy. For pupils who do need further support, they will be provided with additional support, interventions to plug gaps, discussions with parents to ensure continuity at school and home, specialised activities where appropriate.

We will become fluent in the fundamentals of mathematics by:

- Daily teaching of Mathematical concepts, with a minimum of 5 hours study a week.
- Using the calculation and fluency policies to teach an increasingly complex set of skills within a progression of skills.
- Using Mount Multiply to teach and learn times tables. Routines in classes to teach times tables.
- Early Bird Maths provide opportunities to regularly practice arithmetic and fluency.
- Following the CPA approach (Concrete, Pictorial, Abstract).
- Real-life 'hooks' allowing children to apply their mathematics to real-life contexts and problem solving.
- Identifying, understanding and applying a number of strategies to solve a problem; there is more than one way.
- Allow pupils to identify and select their own chosen methods and equipment which support their learning the best.
- Promote a growth mind-set approach towards their learning developing a love for mathematics.
- Going deeper and broadening children's learning (instead of moving to next year's curriculum content but digging deeper with a range of activities).
- Encourage pupils to talk in mixed-ability partners and groups to discuss their mathematical thinking/reasoning.
- Allow pupils opportunities to learn from each other and support one another.
- Using learning walls within classrooms to support pupils learning.

We will reason mathematically and problem solve by:



- Using mathematics across the wider curriculum. For example: In Computing, using algorithms, promoting logical thinking, abstraction of code etc.
- Using opportunities throughout the day to explore mathematical concepts through problem solving and mathematical games.
- Promoting discussion between pupils; working in mixed-ability pairs and groups.
- Promoting enjoyment of learning through practical activity, exploration and discussion through:
- Describing talking through the process of achieving the answer
- Explaining using 'because'
- Convincing I know this is true/correct/right because ...
- Justifying explores/ delves into deeper maths
- Proving visual and algebraic proof
- Using examples of problems, including multi-step problems from the NCA statutory tests
- CPA approach; Concrete, Pictorial, Abstract

#### Impact

The impact of our mathematics curriculum will lead to outstanding progress over time across all key stages relative to each individual child's starting point. The cirriculmu will prepare our children for their future in and outside of education. Therefore, they can become successful in whatever they pursue by leaving our school at least at the expected standard for their age. Pupils understand the relevance and importance of what they are learning in relation to real world concepts. Our rich and broad mathematics curriculum aims to make the children have a love of maths, feel enthusiastic about learning and gain an understanding of its importance in everyday life.

A mathematical concept or skill has been mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.

# Local Context/Local Content

Partnerships with local DEEP Schools DEEP Meetings every half term with an external maths Professional. DEEP maths competitions run and held by us.

## Significant developments in the subject

- Introduction of 'Train the Tutor' interventions across Key Stage 1 and 2.
- Introduction of Mount Multiply.



## Strengths

- Range of maths is taught daily. This ranges from Maths lessons, Early Bird Maths and Mount Multiply.
- Structure of Long term planning allows for progression across the year, the key stage and the School. It makes it easier to monitor and assess.
- Fluency is taught well and results are good in arithmetic.
- Mount Multiply has been successful. Timestable is more structured now with a clear progression. The children enjoy working their way up the mount and receiving the rewards.

#### Areas for development

- Teaching and planning overreliance on White Rose resources.
- Problem Solving and Reasoning needs more exposure.

#### Monitoring and evaluation systems

- Insight is used to track the data .
- Feedback books can be used (when appropriate) to monitor how children are progressing; looking at misconceptions etc.
- Learning walks are conducted when appropriate. Some learning walks have a specific focus.

# Cultural - Diversity

- Maths questions and examples are made as diverse as possible.
- Maths is used and linked across curricular as often as possible.

## Training

- 6 LSA's and 1 teacher has been trained in 'Train the Tutor' intervention.
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## Enrichment

• AMA maths competition was a huge success. With 11 schools taking part across the DEEP Partnership.