LUSTON & SHOBDON
COMMUNITY PRIMARY FEDERATION

What Maths Looks Like in the Federation

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Curriculum Intent

What a maths lesson looks like in our school:

- Mastery Approach to learning – small steps to success – children can see what they already know and how this supports next steps in learning.
- Use of concrete materials, pictorial representations and abstract elements are used to ensure a deeper understanding of taught concepts
- Stem sentences are used fluidly to develop a reasoning approach to learning within daily lessons.
- Daily Basic Skills outside of the maths lesson are used to provide opportunities for fluency and independent recall.
- Maths Talk
- Mini plenaries to share misconceptions, pose questions, challenge ideas

This is our philosophy:

- High quality modelling and scaffolding of the skill leading to confident learners
- Fluency of the method with the ability to independently solve problems
- Stem sentences used to scaffold language and develop a deeper understanding to reason and complete reasoning & problem solving questions
- Opportunities to go 'deeper' in the learning accessible for all.
- Mastery approach (Concrete/pictorial images/symbols/abstract/ Experiences)
- Carefully sequenced lessons that build on previous learning embedding taught skills and allowing deeper learning.
- Keeping the class/ year group working on the same objective so that all can access and master mathematics (Keep up, not catch up)
- Appropriate time spent on key topics, providing time to go deeper and embed learning
- Cross-curricular links wherever possible

Cultural Capital:

- Children are encouraged to use their mathematical intelligence, brainstorming, strategizing and solving problems. We promote creativity in the problem-solving process through encouraging the identification and solution of significant problems.

This is the knowledge and understanding gained at each stage:

By the end of EYFS, including Luston Nursery, pupils will:

- Have a deep understanding of numbers to 10, including the composition of each number.
- Subitise (recognise quantities without counting).
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.
- Verbally count beyond 20, recognizing the pattern of the counting system.
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

By the end of Key Stage 1 pupils will:

- Develop confidence and mental fluency with whole numbers, counting and place value
- Use numerals, words and the four operations. Children will use pictorial representations to demonstrate understanding such as part whole models and bar models.
- Recognise, describe, draw, compare and sort different shapes and use the related vocabulary
- Use a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money
- Know the number bonds to 20 and be precise in using and understanding place value
- Read and spell mathematical vocabulary

By the end of Lower Key Stage 2 pupils will:

- Be increasingly fluent with whole numbers and the four operations, including number facts and the concept of place value
- Perform efficient written and mental calculations accurately with increasingly large whole numbers
- Develop their ability to solve a range of problems, including with simple fractions and decimal place value
- Analyse shapes and their properties, and confidently describe the relationships between them
- Use measuring instruments with accuracy and make connections between measure and number
- Memorised and know their multiplication tables up to and including the 12 multiplication table
- Read and spell mathematical vocabulary correctly and confidently, using their growing word reading knowledge and their knowledge of spelling

By the end of Key Stage 2 pupils will:

- Understand the number system and place value to include larger integers
- Make connections between multiplication and division with fractions, decimals, percentages and ratio
- Develop their ability to solve a wider range of problems, including increasingly complex properties of numbers and arithmetic, and problems demanding efficient written and mental methods of calculation
- Use the language of algebra as a means for solving a variety of problems
- Classify shapes with increasingly complex geometric properties and use the vocabulary they need to describe them

- Be fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages
- Read, spell and pronounce mathematical vocabulary correctly

Curriculum Implementation

This is how it works:

- Teachers use assessments to determine baseline attainment for each child. A mastery approach is used across the mixed year group classes, children will learn about the same mathematical topic within the lesson, using their own year group objective. Children all have the opportunity to be further challenged within a lesson.
- Teachers build in regular opportunities for formative assessment, particularly at the end of the teaching sequence, to ensure children are secure with the content that has been taught before moving on. Children in KS1 & 2 complete 'end of unit check' assessments.
- Children in reception and KS1 also follow the NCETM 'Mastering Number' programme. This project aims to secure firm foundations in the development of good number sense for all children from Reception through to Year 1 and Year 2. The aim over time is that children will leave KS1 with fluency in calculation and a confidence and flexibility with number.
- Carefully planned and sequenced mastery style lessons using the teaching for mastery approach.
- Reasoning activities used to extend learning and deepen understanding.
- Daily Keep Up sessions for those needing to consolidate learning ready to move onto the next lesson.
- Many opportunities for Maths talk to reason and justify answers eg I know this because...
- Stem sentences used to verbalise learning and deepen understanding of taught vocabulary to reason and explain.
- Children to use 'Prove It!' methods to show understanding of a concept
- Targeted children provided with maths interventions such as 1stClass@Number and mastering number
- Daily respond and learn (purple time) sessions provided as opportunities to learn from our mistakes
- Daily 'fluent in 5' mental maths recap questions are used in KS1 and KS2 to support a know more and remember more approach.

This is what adults do:

- Planning documents includes discrete focus on 3 aims of curriculum- Fluency, Reasoning and Problem Solving; reflection to then steer next steps learning and planning
- Positive use of mistakes/misconceptions
- Create a learning environment rich in resources that support learning
- Regular book scrutiny, learning walks, planning audits, pupil perceptions, staff audit
- Participation in Maths Triads with local cluster schools
- Whole school PD
- CPD with SHAW – our local maths mastery hub
- Participation in SHAW maths training days – with course attendants watching lessons delivered by a range of practitioners
- Raised profile of Mathematics in Maths Days, Clubs, National Numeracy Day, favourite number

activities and Mathematics tips ‘n’ tricks sessions

- Opportunities for parental involvement/support in all year groups

This is how we support:

For children requiring a ‘block’ of intervention in addition to main class teaching:

- Children are assessed on entry point
- Learning gaps are highlighted and prioritised
- We use teacher and self-assessment to quickly identify any child who requires additional support in specific areas.
- Then they receive the appropriate intervention to ensure they have sufficient skills in place to access learning.

This is how we challenge:

- Deeper learning activities planned from very start of lessons when appropriate
- Rapid graspers are moved on when ready
- Small group work to further challenge
- Reasoning and justification
- Generalising and testing rules
- Opportunity for some to participate in Maths Challenges beyond the school

Curriculum Impact

This is what you might typically see:

- Happy and engaged learners
- Open ended investigations- low threshold/high ceiling tasks
- Different representations of calculations
- Use of concrete and pictorial representations to demonstrate understanding
- Paired/group work
- A range of different activities including practical and use of technology
- Engagement and perseverance
- Self-motivated children
- Resilient learners
- Children talking positively about maths, sharing and reflecting on their learning and how it relates to real life situations

This is how we know how well our pupils are doing:

- Tracking Pupil attainments using Arbor
- Pupil Progress Meetings
- Teacher/TA daily formative assessment
- Marking and feedback
- Photo / recorded written / verbal evidence

This is the impact of the teaching:

- Confident children who can talk about maths
- Children who are enjoying their learning in maths
- Depth of understanding/application in different contexts
- Children ready for the next step in education

Date: September 2025
To be reviewed: September 2026