



GATEWAY FEDERATION



SUBJECT STATEMENTS

## MATHEMATICS

**Date: February 2025**

**INTENT (Aims, Aspirations, Linked to school values, Linked to our 'Federation Curriculum Statement')**

The importance of Mathematics is widely recognised across the Gateway Federation by both staff and children alike. Our approach to Math teaching is driven by the 2014 National Curriculum and our school's curriculum drivers; we aim to ensure fluency in fundamentals through varied and frequent practice, develop conceptual understanding and encourage children to apply their knowledge to reasoning and problem solving tasks across the curriculum.

Curriculum drivers:

**Independence** – Through modelling of concepts, well-planned activities and access to appropriate resources, children's self-confidence is nurtured to ensure that they believe they are capable, independent Mathematicians.

**Resilience** – Children are encouraged to have a 'can-do' attitude, show determination when completing challenging work and bounce back from failures with the mindset that 'mistakes help our brain to grow'.

**Curiosity** – Children ask and answer questions about the subject as well as its connections across the curriculum and its implications in understanding the world around them, developing an appreciation of the beauty and power of Mathematics.

**Aspiration** – Children are ambitious in Math, striving, and supported, to achieve their full potential alongside recognising the interconnectedness of the discipline when thinking about their goals for the future.

**IMPLEMENTATION (Long term Plan, Teaching approach, Wider community, Ensuring Progression, Wider Opportunities, Enrichment / Additions to the curriculum.)**

The utilisation of White Rose Maths (WRM) is implemented across the Gateway Federation to support staff in meeting the aims set out in the National Curriculum (2014). Teachers are encouraged to use their professional judgement when accessing WRM resources and planning a sequence of learning to ensure that all pupils have a secure foundational knowledge before moving onto the teaching of new concepts, as outlined in the National Curriculum. Further resources from the National Centre for Excellent Teaching of Maths (NCETM), nrich, Twinkl, Rising Stars etc are also all carefully selected to support children's progression in fluency, reasoning and problem solving.

Most lessons, from Year 1 upwards, should follow the 'practise it, do it, secure it, deepen it' structure to provide familiarity and continuity for children throughout their school careers, increase opportunities for fluency practise and lead onto reasoning and problem solving tasks. This structure provides ample opportunity for assessment for learning and therefore promotes a better understanding of children's needs in Math. Teacher's are encouraged to make judgements based on children's understanding and therefore utilising practical sessions, and moving away from the agreed structure, is encouraged when necessary. Where possible, these sessions should be documented in children's books through photographs.

Lesson structure also includes a variety of targeted questions and approaches which utilise concrete, pictorial and abstract (CPA) resources to support children's deeper understanding of Mathematical concepts. As students' progress through school they should be familiar with a range of Mathematic manipulatives, as outlined in the Maths Manipulatives Document, which they can use confidently and independently.

The National Curriculum for Mathematics reflects the importance of spoken language in pupils' development across the whole curriculum – cognitively, socially and linguistically. Teachers are expected to provide children with quality and variety of language in every lesson, providing opportunity for children to hear and use these terms both verbally and in their written mathematical justifications. For children with EAL, key terminology alongside visuals, should be sent home at the beginning of each topic to reduce learners cognitive load and promote increased understanding.

In EYFS classrooms, including the Gateway Lodge Nursery, children are taught for mastery through exposing children to different representations of number, rhymes, songs and planned purposeful continuous provision.



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Children with SEN or EAL needs are further supported, where necessary, through both pre-teach and additional interventions as well as being seated near to adult support, having readily available resources and manipulatives – on tables where possible, visual and practical prompts, songs, rhymes or hand gestures.

### **IMPACT (Measure of Success)**

Children across the federation:

- Correctly and consistently use a range of mathematical vocabulary.
- Show increasing fluency skills and can apply this underpinning knowledge to reasoning and problem-solving tasks.
- Show good recall of multiplication and number bond facts.
- Can choose from and use a range of manipulatives effectively.
- Have the ability to work independently and demonstrate perseverance.
- Speak positively about Math and recognise its importance to wider opportunities.

Learning walks, book looks and pupil voice are all utilised regularly, at least once per term, to monitor the effectiveness of Math teaching across the Gateway Federation in relation to the 2014 National Curriculum objectives. Staff meetings across both schools, assigned to Mathematics, are used to analyse and discuss work and give opportunities for staff to ask questions and learn from each other.

Two WRM assessments (one fluency and one reasoning and problem-solving paper) are used as summative assessment at the end of each term in Years 1 - 6, alongside teacher's professional judgment to assist the monitoring of pupil progress. Key Stage 2 SATs are completed by pupils in Summer Term of Year 6.

### **Positive areas for the subject. (What is working well in our schools?)**

1. Clear use of latest edition of WRM to guide the teaching of Mathematics.
2. Teachers have begun to utilise the agreed updated lesson structure.
3. Most children are using stage-appropriate mathematical vocabulary to discuss content and explain their thinking.