VAUGHAN PRIMARY SCHOOL
MATHS POLICY

Date of Policy: Spring 2023
Date of Review: Spring 2025

Next Review: To be reviewed bi annually

Review Date	**Changes made**
SPRING 2023	Assessment

1. Aims

At Vaughan Primary School, we want to create confident, skilful mathematicians who have a life-long love of mathematics and can expertly apply their knowledge and understanding.

The 2014 National Curriculum states:

"Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject."

2. Planning, Teaching and Learning in Mathematics

At Vaughan Primary School, we use a variety of planning resources to provide a bespoke teaching and learning experience that is designed to interest, inform and inspire our children. For KS1 and KS2, we follow our Maths Programme of Study which we have developed using the National Curriculum 2014 and this then informs each year group's Medium Term Plans. They ensure teachers stay in the required key stage and support the ideal of depth before breadth. Within every lesson teachers include mastery elements and plan using a small step approach. From this, teachers systematically build maths knowledge, skills and understanding into their weekly, short term plans which further supports a mastery approach to mathematics. The teaching is underpinned by the 'five big ideas' in Mastery. These are: fluency, mathematical thinking, representation and structure, variation and coherence. When using these five big ideas teachers follow a concrete – pictorial – abstract method of looking at mathematical

concepts. This enables opportunities for pupils to working together and provides them with plenty of time to build their reasoning and problem solving skills. Teachers follow a structure when planning lessons where they link children's prior knowledge to the new learning which takes place in lessons. Allowing children to make connections from information they already know. Children are then encouraged to verbalise their mathematical understanding; through talk task and teachers pairing of children.

For EYFS, we follow the Statutory Framework for the Early Years Foundation Stage, working towards meeting the Early Learning Goals.

All planning is saved centrally on the school network and is regularly checked for consistency and content, challenge and enrichment by both the Year Group Leaders and the Maths Curriculum Lead.

3. EYFS

Mathematics within the EYFS is developed through purposeful, play based experiences and will be represented throughout the indoor and outdoor provision. The learning will be based on pupil's interests and current themes and will focus on the expectations from Development Matters / Early Years Outcomes. Mathematical understanding can be developed through stories, songs, games, imaginative play, child initiated learning and structured teaching. As pupils progress, they will be encouraged to record their mathematical thinking in a more formal way.

4. **Assessment Approaches**

At Vaughan we see assessment as an integral part of teaching and learning, and it is inextricably linked to our curriculum.

4.1 In-school formative assessment

Assessment for Learning (AfL) provides opportunities to elicit real-time evidence of what students are learning and involves both teacher and learners in ongoing dialogue, reflection on learning and decision-making. This formative assessment process is central to classroom practice. Teachers gather evidence of where the learners stand in their learning. They use this evidence to make the necessary instructional adjustments by providing constructive or quality feedback that moves learning forward. Teachers are expected to use this formative assessment to update our assessment tracker, Arbor, as they are teaching. Effective in-school formative assessment is the day-to-day assessment which is carried out by teachers and is key to effective classroom practice. It enables:

- **Teachers** to identify how pupils are performing on a continuing basis and to use this information to provide appropriate support or challenge, evaluate teaching and plan future lessons
- **Pupils** to measure their knowledge and understanding against learning objectives, and identify areas in which they need to improve
- **Parents** to gain a broad picture of where their child's strengths and weaknesses lie, and what they need to do to improve

A range of day-to-day formative assessments will be used including, for example:

- Rich questioning
- Written and verbal feedback of children's work
- Observations
- Pupil self-assessments and peer assessments
- Peer marking
- Pupil conferences

4.2 In-school summative assessment

Effective in-school summative assessment enables:

- **Senior Leadership Team** to monitor the performance of pupil cohorts, identify where interventions may be required, and work with teachers to ensure pupils are supported to make progress and attain personal learning goals
- **Teachers** to evaluate learning at the end of a unit or period and the impact of their own teaching
- **Pupils** to understand how well they have learned and understood a topic or course of work taught over a period of time. It should be used to provide feedback on how they can improve
- **Parents** to stay informed about the achievement, progress and wider outcomes of their child across a period

Pupils at Vaughan are assessed periodically and progress and attainment data is recorded on the assessment system 'Arbor'. These assessments are carried out three times a year in December, March and July. Teacher Judgements on Arbor for Maths will relate to the National Curriculum age related expectations and will state whether a child is working, Pre Key Stage, Below age related expectation; At the Expected Standard, or at Greater Depth. These assessments are used to monitor the performance of individuals, groups and cohorts; to identify where interventions may be required; and to work with teachers to ensure that children are supported to achieve at least sufficient progress and expected attainment.

A range of in-school summative assessments will be used including, for example,

- Short end of topic or unit tests or tasks
- Reviews of progress against individual targets for pupils with SEN
- Teacher judgements on Arbor relating to the National Curriculum age related expectations

5. <u>Inclusion</u>

In line with the School's Inclusion Policy, each child will have an equal entitlement to all aspects of the Maths curriculum and to experience the full range of Maths activities. Therefore, in delivering Maths, care will be taken to ensure that a variety or learning styles are accessed and teaching methods adopted. Intervention groups will take place both within the Maths lesson and outside; these sessions may be delivered by the teacher or teaching assistant and may involve individual or small group work.

6. Home Learning in Mathematics

Maths is a regular weekly part of Home Learning, in accordance with the Homework Policy, to reinforce or extend maths skills taught in lessons. Homework activities are set according to the needs of the pupils and are designed to support the pupil's overall progress in maths. MyMaths homework is set in line with the Homework Policy.

Times tables Rock Stars is an online programme designed for pupils to access at home and regularly practice their rapid recall of times tables up to 12 x 12. Under the structured set-up, configured by class teachers, pupils from years 2-6 can take part in regular practice in order to develop and secure their times tables recall.

Monitoring and Evaluation

The effectiveness of the Mathematics Policy will be monitored during the year through:

- Monitoring of planning, teaching and learning by the Maths leader and Year Group Leaders
- Consultation with staff
- Induction and monitoring of new staff including ECTs
- Scrutiny exercises of pupil's books
- Data analysis and target setting across year groups
- Moderation exercises both in school and across the local authority
- OFSTED visits and recommendations