Weare Academy
C of E First School
All Can Achieve

Mathematics

Intent, Implementation and Impact statement

Intent

At Weare Academy, our intent for the mathematics curriculum is to provide a robust foundation that equips all pupils with the skills and knowledge they require to thrive both academically and in everyday life. Our whole curriculum is shaped by our school vision, which aims to enable all children, regardless of background, ability, or additional needs, to flourish and become the very best version of themselves they can possibly be. We aspire to foster a love for mathematics, where pupils are inspired to discuss concepts, cultivate curiosity, and develop problem-solving skills that will benefit them throughout their education and future pursuits.

Embedded within our curriculum, we teach the Mathematical skills of Fluency, Reasoning and Problem Solving to develop confident mathematicians, following a Maths Mastery approach. We introduce topics in a logical order and revisit them throughout the year to encourage deep learning (*Curriculum Prioritisation). We endeavour to create learners who become **fluent** in the fundamentals of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. To **reason** mathematically by following a line of enquiry and develop and present a justification, argument or proof using 'expert' mathematical language. To be able to **solve problems** by applying mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts

Our curriculum is underpinned by the following key principles:

- **Aspirational:** In alignment with our school vision, we recognise that every pupil is unique, and we are committed to providing an inclusive learning environment that supports the needs of all students, empowering them to thrive and realise their full potential. Across the school, we use the Wessex Learning Trust key principles to structure lessons, promoting the importance of quality first teaching and scaffolding learning objectives, when required.

- **Respectful:** We promote the importance of 'maths talk', encouraging pupils to take turns and listen to each other's reasoning using Talking Partner pairings.

- **Resilient:** We encourage all pupils to adopt a growth mindset in mathematics, fostering resilience and perseverance in the face of challenges. For example, pupils are encouraged to become active learners by using resources available to them in the classroom when solving more complex equations.

- **Responsible:** We aim for pupils to develop a deep understanding of mathematical concepts, moving beyond rote memorisation to ensure they can apply their knowledge in different contexts. Pupils are encouraged to use and apply taught strategies to solve a variety of reasoning and problem-solving concepts in every maths lesson.

- **Kind:** Pupils will work collaboratively to share and develop initial understanding to encourage a deeper level of thinking. Pupils will be given the opportunity to share their ideas in an inclusive and supportive learning environment.

- **Curious:** We will highlight the relevance and applications of mathematics in real-life scenarios to promote its importance and cultivate a sense of purpose in learning. In the early years and Year 1, pupils are encouraged to explore areas of interest through continuous provision and across the school, pupils are explicitly shown how to make connections between maths taught and how this links with their future career opportunities to broaden children's knowledge of the wider world.

Implementation

To realise our intent, we have designed a well-structured and engaging mathematics curriculum that incorporates National Centre for Excellence in the Teaching of Mathematics (NCETM), Curriculum Prioritisation, as our basic structure and covers additional objectives from the National Curriculum in specific maths lessons and other areas of the curriculum e.g. data handling through Science lessons and PE. Our implementation encompasses:

Curriculum Design:

- Each year group follows a progressive sequence of topics, ensuring a coherent pathway of learning that builds upon prior knowledge and prepares pupils for future mathematical concepts. Our planning is significantly informed by the NCETM Curriculum Prioritsation resources. This ensures that instructional strategies are evidence-based and effective. Teachers use a range of high-quality sources such as Oak Academy, I-See Reasoning and Nrich to support the resourcing of lessons. The objectives not covered in the National Curriculum have been identified and taught discretely or incorporated into other curriculum units of learning e.g. data handing to construct graphs in science.

- **Integration across the Curriculum:** Celebraring the facilities within our school, we integrate mathematics across the curriculum enhancing students practical application of concepts. Throughout the academic year, opportunities will arise in seasonal cooking, from picking apples in the school garden and making crumbles, to baking cookies at Christmas to sell at the school fair. This enables students to explore applying measurement skills. Science Week will promote data

handling through graphs, while outdoor learning in forest school settings will allow exploration of shape and measurement, reinforcing mathematical understanding in diverse contexts.

- **Progressive Skill Development:** Our curriculum promotes mastery learning, where pupils are encouraged to achieve a high level of understanding before moving on to new topics. The mastery approach is heavily influenced by NCETM methodologies, ensuring our pupils develop a concrete understanding of mathematical concepts and are able to talk about the maths they are learning. Each lesson exposes children to a combination of fluency, reasoning and problem-solving questions to gradually build a breadth of understanding and knowledge. In every maths lesson across the school, we use the Wessex Learning Trust key principles for learning, which include an 'I do,' 'we do', 'you do' approach – allowing teachers to model teaching points, children to then practise with support and then to apply their knowledge independently. We recognise the importance of developing fluency in number facts and a flexibility with number. In KS2 we follow the Ashley Down, times tables system and in Reception and KS1 we follow the Mastering Number program.

- **Hands-On Learning:** We employ a range of teaching strategies, including collaborative group work, hands-on activities, and the use of technology. These approaches, supported by NCETM materials, cater to different learning styles and ensure high levels of engagement.

- **Assessment:** Assessment is vital in our mathematics curriculum. Pre-unit assessments are conducted at the start of each module across Key Stages 1 and 2 to assess prior knowledge. Ongoing formative assessments guide daily teaching. At the end of each term, we implement Testbase assessments for Year 2, Year 3, and Year 4, as part of a Trust-led approach to identify learning gaps and necessary next steps. These combined assessment methods ensure a thorough understanding of student progress and support targeted interventions for academic growth.

- **CPD for Staff:** Teachers are provided with ongoing professional development opportunities, including through the NCETM. The school working in partnership with the Boolean Maths Hub as part of a Teaching for Mastery workgroup. Additionally, we participate in collaborative training through the Wessex Learning Trust partnership. Regular subject monitoring through learning walks, moderation and pupil voice, enables staff to identify and explore dynamic teaching strategies, use of manipulatives, and understanding of children's mathematical thinking.

Impact

The effectiveness of our mathematics curriculum is evidenced through various metrics and feedback mechanisms, all reflecting our commitment to our vision:

- **Pupil Outcomes:** We strive to achieve strong outcomes in internal assessments, demonstrating that our pupils are well-prepared for the next stage in their education and have a solid grasp of mathematical concepts.
- **Pupil Engagement:** Pupil voice surveys indicate high levels of enjoyment and confidence in mathematics. Our students express a sense of belonging and are eager to participate actively in lessons, evidencing their flourishing in a supportive environment.
- **Curriculum Evaluations:** Regular monitoring and evaluation of our curriculum, including lesson observations and learning walks, affirm that teaching is consistently of high quality and promotes deep learning.

Through this comprehensive intent, implementation, and impact framework, we are proud to provide an outstanding mathematics education that equips our pupils to flourish and achieve their fullest potential.