

## We develop practitioners' understanding of how children learn mathematics

Professional development is used to raise the quality of practitioner's knowledge of mathematics, of children's mathematical development and of effective mathematical pedagogy. Developmental progressions show staff how children typically learn mathematical concepts and can inform teaching. Practitioners are aware that developing a secure grasp of early mathematical ideas takes time, and specific skills may emerge in different orders. Staff know that the development of self-regulation and metacognitive skills are linked to successful learning in early math-

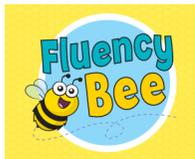


## We dedicate time for children to learn mathematics and integrate mathematics throughout the day

Each class has dedicated time to focus on mathematics each day. Children explore mathematics through different contexts, including storybooks, puzzles, songs, rhymes, puppet play, and games. Staff in EYFS and KS1 make the most of moments throughout the day to highlight and use mathematics, for example, in daily routines, play activities, and other curriculum areas. All adults in school seize chances to reinforce mathematical vocabulary and create opportunities for extended discussion of mathematical ideas with children both inside and outside the maths lesson.

## We use high quality targeted support to help all children learn mathematics

Children who are identified as not keeping up with the curriculum in Y1 and 2 may be assessed using the Numberstacks intervention program or may receive additional small group Fluency Bee input. High quality targeted support provides effective extra support for children. Small-group support is effective because children with the greatest needs are supported by the most experienced staff. Staff have been provided with training, support and resources to complete targeted activities using Fluency Bee or Number Stacks materials outside of the maths lesson. Sessions are brief and regular and explicit connections are made between targeted support and everyday activities or teaching.



## Early Mathematics at Malvern Parish Summary

## We use manipulatives and representations to develop understanding

Manipulatives and representations are powerful tools for supporting young children to engage with mathematical ideas. At Malvern Parish, we ensure children understand the links between the manipulatives and the mathematical ideas they represent. Teaching staff ensure that there is a clear rationale for using a particular manipulative or representation to teach a specific mathematical concept. Children are encouraged to represent problems in their own way, for example with drawings and marks. Manipulatives and representations are used to encourage discussion about mathematics. Classes will use consistent manipulatives and representations such as rekenreks, bead strings, part-part wholes, sorting hoops, counters (including place value counters), base 10 (or dienes), number lines and tens frames.



## We ensure that teaching builds on what children already know

At Malvern Parish, we have adopted a mastery approach to maths teaching, where the belief is that all children can achieve. Quality first teaching is vital. Sequences of lessons are planned using the White Rose schemes of learning, though there is still flexibility for teachers to use their professional judgement regarding sequence length and time for each of the small steps, depending on their class's needs, 'lingering longer' when required.

It is important to assess what children do, and do not, know in order to extend learning for all children. A variety of methods are used to assess children's mathematical understanding, and practitioners check what children know in a variety of contexts. Staff carefully listen to children's responses and consider the right questions to ask to reveal understanding. Information collected is used to inform next steps for teaching. Developmental progressions and medium term planning can be useful in informing deci-

