Maths Guidance – September 2025 (Review: Sept 2026)

Rationale

Mathematics is a tool for everyday life. It is a whole network of concepts and relationships which provide a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real-life problems. Our aim is for our pupils to approach mathematics with a positive, can do attitude. Teachers have high expectations and promote the belief that 'We can all do maths! '
Our curriculum focuses on securing and deepening pupils understanding of mathematical concepts through manageable small steps. Mistakes and misconceptions are embraced as points for new learning through same day intervention and support pupils to embrace challenges, take risks and to be more resilient. We want children to be fluent with mathematical fundamentals and procedures, be able to recall facts rapidly and accurately, reason mathematically using correct vocabulary and be able to solve increasingly more complex and sophisticated problems. Further, we want our pupils to confidently apply and transfer key knowledge and skills to new contexts and recognise the interconnectedness of maths to other subjects and understand that maths is important in the wider world and serves a real purpose.

Implementation

We use the White Rose Maths Schemes of learning (WRM) designed to support a mastery approach to teaching and learning. This covers all the required statutory content and is line with the aims and objectives of the National Curriculum (2014). The WRM curriculum focuses on pupils developing skills of fluency in the fundamentals of mathematics and being able to reason and to solve problems. We use the CPA approach as we believe this deepens children's understanding. The concrete aspect is encouraged right the way through school – if they can hold the maths in their hands, they can hold it in their heads.

Pupils in all year groups, in the main, move together through the curriculum content and SEND children are included wherever possible within the same year group content so as not to create bigger gaps later on in school.
Differentiation is demonstrated through abler pupils being encouraged and challenged to go deeper whilst others are given additional support to master fluency. However, we are keen to ensure that all pupils, no matter their ability, have the opportunity to access all areas of maths including reasoning and problem solving.
Pupils who have mastered fluency move on to activities which develop the deep understanding required for mastery. Those who require additional support will work with the class teacher or classroom support to ensure fluency is achieved. Although this is what happens within a typical maths lesson, we know there are times when there needs to be flexibility within the lesson to meet the needs of groups or individual children, for example, mini plenaries throughout the lesson, additional mental and oral sessions or extended teaching of the main fluency. Other strategies to support

understanding include; pre-teaching of some key ideas to increase confidence and participation in lessons and specific intervention outside of lessons to close gaps and/or deepen understanding. We use a program called number stacks which is specifically designed to plug gaps in the core areas of mathematics beginning with place value. Pupils who require this may access it as a 1:1 or as part of a small group dependent upon individual needs.
Teachers use their professional judgement in order to deliver the best lessons possible for our pupils and it is expected that all lessons have a clear structure including beginning by dedicated time to revise prior learning before moving onto fluency and then reasoning and problem solving if fluency is secured.

The WRM curriculum is carefully structured for continuity and progression and ordered in such a way as to make the learning of mathematics more effective. For each year group, the schemes start with work on place value, followed by the essential calculation skills pupils need to succeed in maths. Some things are deliberately taught before others, e.g. place value needs to be understood before working with addition and subtraction, addition needs to be learnt before looking at multiplication (as a model of repeated addition). Our long-term plans set out our curriculum structure and detail how we cover the National Curriculum. There is flexibility within the curriculum and teachers are encouraged to slow the pace and spend time securing each small step before moving on to the next. We believe that children should secure learning and not just encounter knowledge; ploughing through a curriculum when children are not ready is counterproductive.

The curriculum has a strong emphasis on number skills first, carefully ordered, which can then be used and applied in different contexts. The early focus on number each year gives children confidence and helps them to access the rest of the maths curriculum. The WRM curriculum supports visualisation of concepts and pays close attention to the structures of the maths and how best to represent them. Pupils are encouraged to use a range of concrete objects and manipulatives with pictorial resources to support them to understand the structure of maths so that they are able to move towards abstract understanding. Resources to support with this should be available in all classes and children should have easy access to these. Any larger or more specific resources such as scales, weights, etc. are stored centrally. Our classroom learning environments have been carefully designed to ensure that children can use these to support their learning. For example, the maths working wall follows a set format (the CPA approach) and should be updated daily to reflect current learning.

The curriculum promotes mathematical talk. In lessons, there is a strong emphasis on using mathematical language and targeted and open-ended questioning to assess pupils understanding and ensure that they are able to reason and explain their mathematical thinking. Pupils are encouraged to answer questions in full sentences using our stem sentences to help articulate thoughts. The WRM curriculum supports pupils to be able to perform simpler tasks so that they can then go onto more complex ones. Content is carefully structured so that each step builds carefully from what came before. The curriculum is organised into blocks of learning carefully sequenced. Each block is made up of a series of 'small steps' which again are sequenced in order of difficulty and dependency. Each step builds carefully from the previous step, building on pupils' prior knowledge. Built into the curriculum

are opportunities for pupils to revisit, consolidate and practice taught skills later in the year and to build further on these skills in subsequent years. It is recognised that spending lots of time on one topic does not guarantee that all pupils will 'master' it the first time they see it, some need to see it repeated times in different contexts and in different years, to help them develop their understanding on their journey to mastery.

Alongside White Rose, other resources are used regularly to supplement and enrich the maths curriculum offered such as NRICH to support with problem solving and reasoning.

In addition to our daily maths lessons we also complete 'Early Bird' which is a set of mental arithmetic fluency questions for children to complete during registration. These questions are carefully linked to the WRH curriculum within each year group and give children the opportunity to practice their arithmetic skills daily, strengthening fluency and supporting children's confidence and ability to be able to recall number facts. Each day pupils practice methods linked to the 4 operations as set out in the calculation policy for their year group. Any pupils working below may receive intervention during this time based on their specific learning needs.

Reception

By the end of Reception children will aim to achieve the following Early Learning Goals.
Mathematics – Number

- Children to have a deep understanding of number to 10, including the composition of each number.
- Subitise (recognise quantities without counting) up to 5.
- 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.

Mathematics – Numerical Patterns

- Children to verbally count beyond 20, recognising 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.

At Parklands, we have written our curriculum to support children to achieve in maths in Reception using the new WRH small steps curriculum and resources, which map lessons progressively building through the year in line with the rest of school. This feeds into whole school teaching and ensures progression when children move to Year One. Children have daily maths sessions as well as lots of opportunity to explore and develop key maths skills during their independent play or focused activities supported by an adult.

Impact

The impact of having a well-structured, well-taught maths curriculum is strongly seen at the end of Key Stage 1 where children have consistently been achieving good results in mathematics on National Standard Assessment Tests. In Year 4 pupils usually achieve scores slightly above both regional and national averages in the multiplication check.

Regular and ongoing assessment in all year groups informs teaching, as well as intervention, to support and enable the success of each child. Children complete end of block assessments at the end of each topic and teachers use this to inform teacher assessment and future planning for gaps etc. We also use this to target areas of weakness and feed these back into early bird arithmetic and if needed extra revisit lessons within weekly lesson planning.

There are no official grade boundaries for the end of block White Rose Assessments. However, in line with the KS1 and KS2 SATs, the following is a guideline:

- Less than 35% - Working below
- 35% - 54% - Working towards
- 55% + - Age related or expected
- 85% + - Greater depth

Summative pupil attainment is recorded each term using O'Track software and is based on teacher judgement and a combination of assessment of progress within lessons and the end of block assessments.
Termly Pupil Progress Meetings provides opportunities for teachers to discuss the progress of individual children in more depth with the Senior Leadership Team and address any issues with those pupils not making adequate progress.
The teaching and learning of mathematics is monitored and evaluated by the maths subject lead and SLT through lesson drop ins, talking to pupils and staff and looking regularly at the children's work. The maths subject lead is always available for support and will ensure staff are kept up to date with all the latest developments within the area of mathematics.

In lesson observations over time, evidence show that pupils are;

- Engaged and challenged
- Enthusiastic and confident to talk about maths
- Making links between mathematical topics
- Using a range of resources to support learning
- Accessing challenges in order to extend their learning beyond fluency and achieve greater depth

Children's maths books show evidence of;

- Clear progression through the curriculum
- Work that is well matched to pupils' current attainment

- Work that provides pupils with sufficient challenge and/or support

Children in Reception are assessed within the Early Years Framework and their progress tracked through both formal and informal observations and through carefully planned activities. Assessment is completed regularly. At the end of the final term in Reception we assess whether each child has achieved GLD within the Mathematics strand (Number & Numerical Patterns)

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Reviewed by: Jess Buckley Maths Lead
Next Review date: September 2026