

Maths Non-Negotiables

1. All maths lessons follow this 7-part structure and timings:
 - 00:00-00:05 #1 Fluent in 5 or Flashback 4
 - 00:05-00:10 #2 Counting – e.g., 1s, times tables, odd/even, decimals, fractions.
 - 00:10-00:15 #3 Review prior learning – revisit previous lessons including language and vocabulary ('sticky knowledge').
 - 00:15-00:30 #4 Guided practice – teach new concepts or next steps using concrete, pictorial and abstract appropriate to age, ability or topic.
 - 00:30-00:35 #5 Practical reasoning (problem solving) in talk partners – with whiteboards and equipment at tables – in short, sharp bursts stopping frequently and asking pupils to explain their reasoning.
 - 00:35-00:55 #6 Independent practice – the main task. Lower ability – guided practice with adult support. Middle ability – independent or some support. Higher ability – begin main task but may move quickly to challenges.
 - 00:55-00:60 #7 Plenary – True or False (WRM) and/or challenge questions.
2. Maths lessons are taught at the same time across the school.
3. Concrete apparatus available and accessible for all lessons and all learners across the school.
4. Lesson taught using the White Rose Maths PowerPoint. All children to record their learning in the White Rose Maths workbooks for their year group. All children to have their year group workbook except for very special cases.
5. Differentiate in mastery sessions through teacher expectation and challenge. Methods include:
 - Outcome – what their end product will be, e.g. a model, a picture, written explanation.
 - Amount and rate of work.
 - Questioning – simplify or extend
 - Expectation – how far you expect children to go in an investigation and what you expect them to learn and conclude.
 - Resources – choice of a range of manipulatives.
 - Adult support.
 - Peer support – Maths partners
 - Role – offering children specific roles within group work.
6. Provide extra challenges related to lesson content for all children embedded within the WRM slides (WRM Reasoning and Problem-Solving Questions).
7. Provide opportunities for HCLT (high ceiling, low threshold) challenges and investigations within every unit, using NRich, NCETM or Rising Stars Problem solving and reasoning resources.
8. Live marking in lessons and verbal feedback given. Green for 'got it', orange for 'try again'.
9. Daily afternoon 10 minute 'Surgeries' for children who have not gained sufficient understanding of the content of the morning's lesson.
10. Pre-teaching, including vocabulary, to children with SEND and children working towards the expected standard.
11. Assessment at the end of each unit of work using WRM "End of Block Assessments".
12. Maths displays in classrooms:
 - Working wall
 - Static (the same for both classes in a year group)
13. TT Rock Stars in Years 2-6



Arithmetic Sessions

Following a programme for each year group (see separate document), children will be taught arithmetic (Key Stage 1= once a week, Key Stage 2= twice a week) where they will have the opportunity to practise and consolidate key concepts and learning within place value and the four operations. Year 1 to complete learning on whiteboards and Years 2-6 to complete work in arithmetic books.

Problem Solving

In Year 6 once a week, children will focus on problem solving around one particular objective (see separate document) and complete work in their arithmetic books.

Times Table Sessions

In Years 3-5, children will have a weekly times table session where they are explicitly taught and practise a timetable one week and then have the opportunity to practise their times tables through games and tasks online the following week following a programme (see separate document). Children will track their progress with a times table tracker inside arithmetic books.