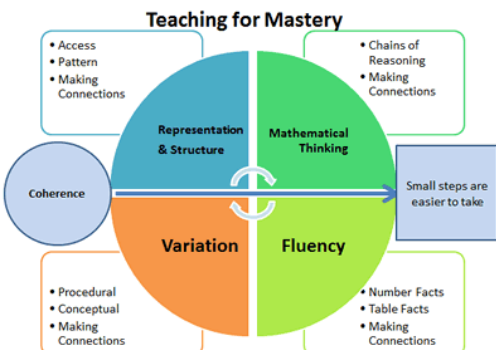




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| <b>INTENT</b>         | <p>When our children leave Shaftesbury Primary, we expect them to be competent and inspired mathematicians, children who are enthusiastic about maths and can apply their knowledge across our overarching INSPIRE curriculum.</p> <p>We are committed to using a Concrete-Pictorial-Abstract approach to our maths teaching and learning. (CPA)</p> <p>New concepts should be taught practically using concrete materials, then pictorially before any formal methods in abstract concepts are undertaken. In this way, children will have a solid understanding of <i>why</i> a method works, leading them to become confident and knowledgeable mathematicians.</p> |                                                                                                                                                                                                                                                                                     |                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Underpinned by</b> | <b>High Expectations</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Modelling</b>                                                                                                                                                                                                                                                                    | <b>Teaching for Mastery</b>                                                                                                                   | <b>Coherence</b>                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                       | All children are expected to succeed and make progress from their starting points.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Teachers teach the skills needed to succeed in maths following the progression outlined in the White Rose Scheme of Learning. Teachers provide examples of good practice through the use of WAGOLL's, modelling, White Rose Maths resources and by having high expectations of all. |                                                            | Lessons are broken down into small, connected steps that gradually unfold the concept, providing access for all children and leading to a generalisation of the concept and the ability to apply the concept to a range of contexts.                                                                                                                                                                                                                  |
|                       | <b>Representation &amp; Structure</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Mathematical Thinking</b>                                                                                                                                                                                                                                                        | <b>Fluency</b>                                                                                                                                | <b>Variation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                       | Representations used in lessons expose the mathematical structure being taught, the aim being that students can do the maths without recourse to the representation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | If taught ideas are to be understood deeply, they must not merely be passively received but must be worked on by the student, thought about, reasoned with and discussed with others.                                                                                               | Quick and efficient recall of facts and procedures and the flexibility to move between different contexts and representations of mathematics. | Variation is twofold. It is firstly about how the teacher represents the concept being taught, often in more than one way, to draw attention to critical aspects, and to develop deep and holistic understanding. It is also about the sequencing of the episodes, activities and exercises used within a lesson and follow up practice, paying attention to what is kept the same and what changes, to connect the mathematics and draw attention to |

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| IMPLEMENTATION | <b>White Rose Maths</b><br><br>We use the White Rose Maths planning materials for our long- and medium-term planning. These help to scaffold the development of reasoning and problem-solving skills. Once children are fluent in a concept, they should be given opportunities to develop breadth of understanding (making links to other mathematical areas) and depth (application through reasoning and problem solving). All children should be developing mastery in maths at a level that is appropriate to them. Teachers are encouraged to use White Rose Maths small steps as guidance for their own maths planning, editing and adapting resources as necessary. | <b>Mastering Number</b><br><br>The NCETM Mastering Number programme is taught in EYFS and KS1, alongside White Rose Maths. The aim through the programme is for all children to secure firm foundations in the development of good number sense from Reception through to Year 1 and Year 2. Over time, children will develop fluency in calculation and a confidence and flexibility with number. | <b>5 in 5</b><br><br>Across KS2, teachers use the '5 in 5' approach to regularly recap calculation methods from a previous year, term, month or week. Two sets of 5 questions to be answered in 5 minutes, usually at the beginning of a maths lesson. Children are encouraged to be resilient if they make mistakes. Teachers introduce the 5 in 5 approach in KS1 at the appropriate time for their class. | <b>CAR Time</b><br><br>Check and Respond Time is an opportunity for children to revisit concepts that they may need more support with or to look ahead to new topics within maths through pre-teaching.<br><br>CAR time is responsive to children's needs, planned as a result of marking and feedback and delivered by both teachers and LSM's. |
|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Numbots/Times Tables Rockstars</b><br><br>All children in EYFS, KS1 and KS2 either have a Numbots or TTRS account where they can practise and improve their recall of multiplication and division facts. This can be accessed both at home and at school.                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                  |
|                | <b>Test Base</b><br><br>Teachers may use Test Base when planning a range of reasoning and problem-solving questions. These may be used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Calculation</b><br><br>Our calculation policy outlines expectations for the end of each year group. However, it should be noted that it is crucial to develop the necessary                                                                                                                                                                                                                     | <b>The Learning Environment</b><br><br><u>Maths Toolkits</u><br>To facilitate our 'Connective model' approach, each class has maths toolkits available to use during maths sessions. This ensures the children have access to a                                                                                                                                                                              | <b>Cross Curricular links</b><br><br>Where possible, links are made to the context of a mathematical topic in the wider world, thus giving the children a relevance for their learning. In particular, links should be made wherever possible                                                                                                    |
|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                  |

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|               | for both consolidation and extension at all levels.                                                                                                                                                                  | mental skills alongside more formal calculation teaching.                                                                                                                                   | range of practical resources to support their learning.<br>These will vary from year group to year group, but could include: <ul style="list-style-type: none"> <li>• Multilink</li> <li>• Base 10 apparatus</li> <li>• Numicon</li> <li>• 100 squares</li> <li>• Multiplication squares</li> <li>• Number lines</li> <li>• Fraction walls</li> </ul> | within STEM subjects (Science, Technology and engineering)                                                                                                                                                                                                                                                                                                                                         |
| <b>IMPACT</b> | <b>Pupil Voice</b><br>Through discussion and feedback, children talk enthusiastically about maths and understand the importance of the subject. They can also talk about how they apply maths across the curriculum. | <b>Evidence in knowledge</b><br>Children can make links between the skills and knowledge they are developing.<br>They can recognise how concepts are developing throughout their schooling. | <b>Evidence in skills</b><br>Children are taught maths progressively and at a pace appropriate to each individual child.<br>Teachers' subject knowledge ensures that skills and knowledge are taught progressively and at a pace appropriate to the children they teach.                                                                              | <b>Outcomes</b><br>At the end of each year, we expect most children to have achieved age related expectations (ARE) for their year group. Some children will have progressed further and achieved greater depth (GD).<br>Children who have gaps in their knowledge receive targeted support and intervention. We expect all children to make expected progress from their various starting points. |