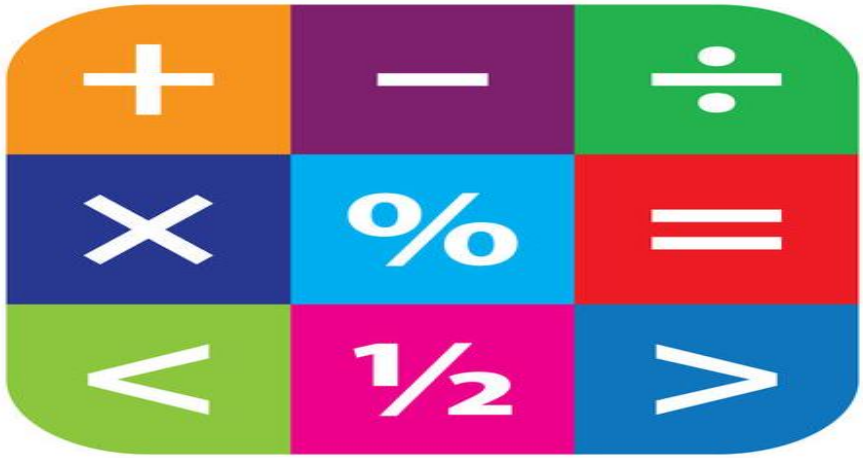
# Maths

Mathematics is an important, creative and highly interconnected discipline, that helps us to understand and change the world. At Shield Row Primary School, we want all pupils to experience the beauty, power and enjoyment of this subject, whilst developing their natural curiosity and enhancing their resilience, so they become 'deep thinkers'. We foster positive attitudes to learning as we believe all children can achieve in mathematics. Engaging lessons teach for secure and deep understanding of mathematical concepts through manageable steps. We use mistakes and misconceptions as an essential part of learning and provide challenge through rich and sophisticated problems. At our school, we aim for pupils to become true masters of their year group content, applying and being creative with new knowledge in multiple ways. We intend for all pupils to:

- Become fluent in the fundamentals of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately;
- Be able to solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios;
- Reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language;
- Have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately to be successful in mathematics.




| | Year 1 | Year 2/3 | Year 3/4 | Year 5 | Year 6 |
|---|---|---|---|---|---|
| **Autumn** | Place Value (to 20)<br>Addition & Subtraction<br>Geometry: 2d and 3d Shape<br>Measures: Time Sequencing<br>Problem Solving: Trial & Improvement; Finding all Possibilities | Place Value (100/1,000)<br>Addition & Subtraction (including Money)<br>Multiplication<br>Problem Solving: Trial & Improvement; Finding all Possibilities | Place Value (1,000/10,000)<br>Addition & Subtraction<br>Multiplication & Division (tables facts)<br>Problem Solving: Trial & Improvement; Finding all Possibilities | Place Value (to 1,000,000)<br>Addition & Subtraction<br>Statistics<br>Multiplication & Division<br>Measures: Perimeter & Area<br>Problem Solving: Trial & Improvement; Finding all Possibilities | Place value (to 10,000,000)<br>Addition & Subtraction<br>Multiplication & Division<br>Fractions<br>Decimals<br>Problem Solving: Trial & Improvement; Finding all Possibilities |
| **Spring** | Place Value (to 50)<br>Multiplication & Division<br>Fractions<br>Length & Height<br>Weight<br>Volume & Capacity<br>Problem Solving: Number Patterns & Working Backwards | Division<br>Statistics<br>Measures: Length & Height<br>Geometry: Shape; Position & Direction/Perimeter<br>Fractions | Multiplication & Division (formal)<br>Measures: Length, Perimeter & *Area*<br>Fractions<br>Y3 Measures: Mass & Capacity/<br>Y4 Number: Decimals<br>Problem Solving: Number Patterns & Working Backwards | Multiplication & Division: Formal Methods<br>Fractions<br>Decimals & Percentages<br>Problem Solving: Number Patterns & Working Backwards | Percentages<br>Consolidation: Fractions, Decimals & Percentages<br>Statistics<br>Measures: Perimeter, Area & Volume<br>Measures: Converting Units<br>Geometry: Position & Direction |
| **Summer** | Place Value (within 100)<br>Measures: Money<br>Measures: Time<br>Geometry: Position & Direction<br>Consolidation<br>Investigations<br>Problem Solving: Visualising; Conjecturing & Verifying | Measures: Time<br>Problem Solving & Efficient Methods<br>Problem Solving: Number Patterns & Working Backwards<br>Measures: Mass, Capacity & *Temperature*<br>Consolidation & Investigations<br>Problem Solving: Visualising; Conjecturing & Generalising | Decimals (including Money)<br>Measures: Time<br>Statistics<br>Geometry: Properties of Shape; *Position & Direction*<br>Problem Solving: Visualising; Conjecturing & Generalising | Decimals: Add & Subtract; Multiply & Divide by 10, 100, 1,000<br>Geometry: Properties of Shape<br>Geometry: Position & Direction<br>Measures: Converting Units<br>Measures: Volume<br>Problem Solving: Visualising; Conjecturing & Generalising | Algebra<br>Ratio<br>Geometry: Properties of Shape<br>Problem Solving: Number Patterns & Working Backwards<br>Investigations<br>Problem Solving: Visualising; Conjecturing & Generalising |