Maths

*“Without mathematics, there’s nothing you can do. Everything around you is mathematics. Everything around you is numbers.” Shakuntala Devi*

At Lady Katherine Leveson C of E Primary School we want all children to have an enthusiasm and passion for Maths. We aim to do so through practical and engaging lessons that are tailored to meet the needs of all of our learners whilst building on a secure foundation of prior knowledge. Children will be equipped with fundamental Mathematical knowledge required to enable them to become competent mathematicians. They will become proficient in reasoning and solving problems whilst developing a fluency in number and calculation using a variety of different strategies. Children will be encouraged to think deeply, engage in discussion and use appropriate vocabulary to support their ideas and reasoning in all lessons.

*Aims*

* To build and maintain an enthusiasm for Maths through our teaching and planning of mathematical concepts.
* Develop a resilience and perseverance towards mathematical concepts, particularly when problem solving.
* To enable children to confidently reason about their mathematics, ensuring knowledge of a range of suitable mathematical vocabulary.
* To use models, manipulatives and varied representations to develop a deep conceptual understanding alongside procedural fluency.

*Long Term Plan*

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| **Year Group** | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Reception** | Match and sort  Compare amounts  Compare size, mass and capacity  Explore pattern | Represent, compare and explore the composition of 1,2 and 3  Circles and triangles  Positional language  Represent numbers to 5  One more or less  Shapes with 4 sides  Time | Introducing 0  Compare numbers to 5  Composition of 4 and 5  Compare mass (2)  Compare capacity (2)  6, 7 and 8  Combining two amounts | Making pairs  Length and height  Time (2)  Counting to 9 and 10  Comparing numbers to 10  Bonds to 10  3D shapes  Spatial awareness  Patterns | Build numbers beyond 10  Count patterns beyond 10  Spatial reasoning  Match, rotate, manipulate  Adding more  Taking away  Compose and decompose | Doubling  Sharing and grouping  Even and odd  Spatial reasoning  Visualise and build  Patterns and relationships  Spatial mapping |
| **Year 1** | Place value within 10  Addition and Subtraction within 10 | Addition and Subtraction within 10  Shape | Place Value within 20  Addition and Subtraction within 20 | Place value within 50  Length and height  Mass and volume | Multiplication and division  Fractions  Position and direction | Place value within 100  Money  Time |
| **Year 2** | Place Value  Addition and Subtraction | Addition and Subtraction  Shape | Money  Multiplication and Division | Length and Height  Mass, Capacity and Temperature | Fractions  Time | Statistics  Position and Direction |
| **Year 3** | Place Value  Addition and Subtraction | Addition and Subtraction  Multiplication and Division | Multiplication and Division  Length and Perimeter | Fractions  Mass and Capacity | Fractions  Money  Time | Time  Shape  Statistics |
| **Year 4** | Place Value  Addition and Subtraction | Area  Multiplication and Division | Multiplication and Division  Length and Perimeter | Fractions  Decimals | Decimals  Money  Time | Shape  Statistics  Position and Direction |
| **Year 5** | Place Value  Addition and Subtraction | Multiplication and Division  Fractions | Multiplication and Division  Fractions | Decimals and Percentages  Perimeter and Area  Statistics | Shape  Position and Direction  Decimals | Negative numbers  Converting units  Volume |
| **Year 6** | Place Value  Addition, Subtraction, Multiplication and Division | Fractions  Converting Units | Ratio  Algebra  Decimals | Fractions, Decimals and Percentages  Area, Perimeter and Volume  Statistics | Shape  Position and Direction | Themed projects, consolidation and problem solving |