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 sortCompare amountsCompare size, mass and capacityExplore pattern | Represent, compare and explore the composition of 1,2 and 3Circles and trianglesPositional languageRepresent numbers to 5One more or lessShapes with 4 sidesTime | Introducing 0Compare numbers to 5Composition of 4 and 5Compare mass (2)Compare capacity (2)6, 7 and 8Combining two amounts | Making pairsLength and heightTime (2)Counting to 9 and 10Comparing numbers to 10Bonds to 103D shapesSpatial awarenessPatterns | Build numbers beyond 10Count patterns beyond 10Spatial reasoningMatch, rotate, manipulateAdding moreTaking awayCompose and decompose | DoublingSharing and groupingEven and oddSpatial reasoningVisualise and buildPatterns and relationshipsSpatial mapping |
| **Year 1** | Place value within 10Addition and Subtraction within 10 | Addition and Subtraction within 10Shape | Place Value within 20Addition and Subtraction within 20 | Place value within 50Length and heightMass and volume | Multiplication and divisionFractionsPosition and direction | Place value within 100Money Time |
| **Year 2** | Place ValueAddition and Subtraction | Addition and SubtractionShape | MoneyMultiplication and Division | Length and HeightMass, Capacity and Temperature | FractionsTime | StatisticsPosition and Direction |
| **Year 3** | Place ValueAddition and Subtraction | Addition and SubtractionMultiplication and Division | Multiplication and DivisionLength and Perimeter | FractionsMass and Capacity | FractionsMoneyTime | TimeShapeStatistics |
| **Year 4** | Place ValueAddition and Subtraction | AreaMultiplication and Division | Multiplication and DivisionLength and Perimeter | FractionsDecimals | DecimalsMoneyTime | ShapeStatisticsPosition and Direction |
| **Year 5** | Place ValueAddition and Subtraction | Multiplication and DivisionFractions | Multiplication and DivisionFractions | Decimals and PercentagesPerimeter and AreaStatistics | ShapePosition and DirectionDecimals | Negative numbersConverting unitsVolume |
| **Year 6** | Place ValueAddition, Subtraction, Multiplication and Division | FractionsConverting Units | RatioAlgebraDecimals | Fractions, Decimals and PercentagesArea, Perimeter and VolumeStatistics | ShapePosition and Direction | Themed projects, consolidation and problem solving |