# St. Mary's Numeracy Position Statement

In St Mary's we believe that mathematics is a creative and interconnected subject that is essential for everyday life and key to children's future wellbeing. We believe that every child can do maths and it is our aim that every child becomes numerate by the end of their primary education.

We endeavour to make maths learning rigorous, enjoyable, practical and rooted in real life contexts.

How we do this

- adopting the National Curriculum programmes of study for maths from September 2014. Year 6 will continue to work from the previous curriculum until September 2015.
- adopting the Singapore approach to maths from September 2014 in the foundation stage and KS1. This approach will be rolled out to subsequent year groups, year on year. The Singapore maths programme focuses on the teaching of three key competencies of pattern spotting, mental strategies and visualisation.

The principles of Singapore maths uphold and develop the aims of the national curriculum.

*The national curriculum for maths aims to ensure that all pupils become **fluent** in the fundamentals of maths, **reason mathematically** and can **problem solve***. (National curriculum in England: mathematics programmes of study)

At St Mary's we endeavour to ensure that these three aims permeate the day to day teaching of maths. We are confident that, by following these aims, we enable children to develop their cognitive skills which can be applied to other curriculum areas and all aspects of life. We agree with the principles espoused by the Singapore maths curriculum with its emphasis on comprehension as opposed to rote learning and the memorisation of a set of rules. We realise that for children to become fluent mathematicians they need time to practice and develop their recall of number facts. To enable this to happen we set aside time, outside of the maths lesson, every morning for children to complete challenges which will develop these skills.

*The expectation is that the **majority of pupils will move through the programmes of study at broadly the same pace.** However, decisions about when to progress should always be based on the*

*security of pupils' understanding and their readiness to progress to the next stage.* ***Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.*** (National curriculum in England: mathematics programmes of study).

At St Mary's we have a strong belief in the above. We aim to secure and deepen children's conceptual understanding. We understand that some learners need more time and support in order to secure this understanding. To support them in this we enable them to use concrete apparatus to problem solve and secure mathematical understanding before encouraging them to move onto abstract representations through visualisation. Communication is a fundamental of maths education at St Mary's and we allow pupils opportunities to develop their competency in this skill, both verbally and written. We have a strong commitment to cooperative learning at St Mary's and we see this as key to both challenging and supporting learners in maths.

The programmes of study are set out:

<table>
<tr><td>KS1</td><td>Lower KS2</td><td>Upper KS2</td></tr>
<tr><td colspan="3">Number – Number and place value</td></tr>
<tr><td colspan="2">Number - addition and subtraction</td><td rowspan="2">Number - addition, subtraction, multiplication and division</td></tr>
<tr><td colspan="2">Number - multiplication and division</td></tr>
<tr><td>Number - fractions</td><td>Number-fractions including decimals</td><td>Number- fractions, including decimals and percentages</td></tr>
<tr><td></td><td></td><td>Algebra</td></tr>
<tr><td></td><td></td><td>Ratio and proportion</td></tr>
<tr><td colspan="3">Measurement</td></tr>
<tr><td colspan="3">Geometry – properties of shapes</td></tr>
<tr><td colspan="3">Geometry – position and direction</td></tr>
<tr><td colspan="3">Statistics</td></tr>
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