


Year 5 Mathematics Overview 2017-18


| Term | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2* |
|-----------------------------------|--|---|---|---|--|---|
| Big Ideas | Place Value +/- | Graphs x/÷ | Fractions/Decimals | Percentages/Angles | Position/Measures | Area/Perimeter/Volume |
| Number | <p>Numbers to 1,000,000</p> <p>Read, write, order and compare up to 1 000 000 Count in steps of powers of 10 Rounding to the nearest 10, 100, 1 000, 10 000 and 1 000 000</p> | <p>Common and factor pairs</p> <p>Square and cube numbers</p> <p>Prime and composite numbers</p> <p>Prime factors</p> | <p>Properties of fractions</p> <p>Place value in decimals</p> <p>Rounding decimals</p> | <p>Calculating angles</p> | <p>Apply knowledge of multiples, square and cube numbers</p> | <p>Estimate area</p> <p>Recognise and write Roman numerals to 100</p> |
| Calculation | <p>Add/Subtract</p> <p>Formal written methods</p> <p>Calculate with numbers more than 4 digits</p> | <p>Multiplication/Division</p> <p>Formal written methods, incl. long multiplication and short division</p> <p>Interpret remainders</p> <p>Multi-step problems</p> <p>Calculating with data</p> | <p>+/- simple fractions and decimals</p> <p>÷ to make fractions</p> <p>Multiply proper fractions and mixed numbers by whole numbers</p> | | <p>Convert measures (length/mass/time)</p> <p>Reading scales (temperature)</p> | <p>Calculate perimeter and area</p> <p>Converting units of volume</p> |
| | Reasoning and Problem Solving (incl. using bar models) | | | | | |
| Fractions (incl. Decimals) | | | <p>Fractions and Decimals</p> <p>Writing improper fractions and mixed numbers</p> <p>Equivalent fractions</p> <p>Read and write decimals</p> <p>Compare and order</p> <p>Write fractions as decimals</p> | <p>Percentages</p> <p>Relate percentages to fractions and decimals</p> <p>Understand percentages</p> <p>Compare quantities</p> | | |
| Shape and Measures | Mental rehearsal of Y4 time objectives. | | | <p>Angles and Shape</p> <p>Identifying, measuring and drawing angles</p> <p>Properties of shape</p> | <p>Position/Measures</p> <p>Name and plot coordinates</p> <p>Translation and reflection</p> <p>Length/Mass/Time</p> | <p>Area/Perimeter/Volume</p> <p>Find perimeter</p> <p>Interpret scale diagrams</p> <p>Measuring area</p> <p>Volume of solids</p> <p>Finding capacity</p> |
| Statistics | <p>Rounding numbers using bar graphs</p> | <p>Graphs</p> <p>Read line graphs</p> <p>Using tables, including time tables</p> | | | | |

* Consolidation and application opportunities to be decided upon in response to assessed needs.

Year 5 Maths No Problem Book 5A Curriculum Map

| | Chapter 1 Numbers to 1 Million | Chapter 2 Whole Numbers Addition and Subtraction | Chapter 3 Whole Numbers Multiplication and Division | Chapter 4 Whole Numbers Word Problems | Chapter 5 Graphs | Chapter 6 Fractions | |
|-----------|---|---|--|---|---|------------------------|--|
| Lesson 1 | | combine | | | Teach as Chapter 6 – after Fractions | | |
| Lesson 2 | | | | | | | |
| Lesson 3 | | | | | | | |
| Lesson 4 | | | combine | | | | |
| Lesson 5 | | | | | | | |
| Lesson 6 | | | | | | | |
| Lesson 7 | | | | | | | |
| Lesson 8 | | | | | | | |
| Lesson 9 | | | 1-column method 2-number | | | | |
| Lesson 10 | | | | | | | |
| Lesson 11 | | | | | | | |
| Lesson 12 | | | | | | | |
| Lesson 13 | | | Number bond method | | | | |
| Lesson 14 | | | | | | | |
| Lesson 15 | | | | | | | |
| Lesson 16 | | | | | | | |
| Lesson 17 | | | 1-column method 2-number | | | | |
| Lesson 18 | | | | | | | |
| Lesson 19 | | | | | | | |
| Lesson 20 | | | | | | | |
| Lesson 21 | | | | | | | |
| Lesson 22 | | | | | | | |
| Lesson 23 | | | | | | | |
| Lesson 24 | | | | | | | |

 Essential/Core Lesson

 Extension/Further Learning

Please Note:



- 1 - Y6 SATs are an end of year assessment that take place 10 weeks prior to the end of the year, which means that the entire curriculum needs to be covered 10 weeks early
- 2 - Pupils currently in Y6 have had limited experience of the to the MNP / Singaporean approach prior to this year, resulting in:
 - a) taking longer to master some of the basic ideas using multiple methods
 - b) an inaccessibility to some of the more challenging word problems and heuristics
 - c) a slower pace than appropriate in order to cover the curriculum using the Singaporean style by the SATs week
- 3 - We believe this to be a temporary plan, needing revision each year, based on the new cohort of pupils' mastery of the previous curriculum and its main concepts
- 4 - Curriculum targets were linked with a available sample SATs testing information to triangulate the 'essential' nature and combination method of the lessons
- 5 - Until the cohort of learners has had a number of years exposure to the Singaporean approach, conceptual variation (multiple methods) may not be appropriate in Anchor tasks for the struggling and average learners, as there must be a balance between pace and depth of learning in the Y6 year in order to meet the national testing requirements.
- 6 - In future years, as pupils come in to Y6 with conceptual variation (multiple methods/concepts) and procedural variation (multiple problem types), revisions will be made to the map until all lessons become individual core lessons.

Credit goes to the following people who contributed to the creation of this curriculum map:

Emma Witham, Y6 teacher - Nightingale Primary School, Becky Gulliver, Y6 teacher - Belleville Primary School, Elen McFadyen, AHT - Belleville Primary School, Leonie Tumej, Y6 teacher - Three Bridges Primary School, Emma Valério, Maths Leader - Three Bridges Primary School, Jeremy Hanna, DHT - Three Bridges Primary School

Year 5 Maths No Problem Book 5B Curriculum Map

| | Chapter 7 Decimals | Chapter 8 Percentage | Chapter 9 Geometry | Chapter 10 Position and Movement | Chapter 11 Measurements | Chapter 12 Area and Perimeter | Chapter 13 Volume | Chapter 14 Roman Numerals |
|-----------|-----------------------|-------------------------|-----------------------|-------------------------------------|----------------------------|----------------------------------|----------------------|------------------------------|
| Lesson 1 | | | | | | | | |
| Lesson 2 | | | | | | | | |
| Lesson 3 | | | | | | | | |
| Lesson 4 | | | | | | | | |
| Lesson 5 | | | | | | | | |
| Lesson 6 | | | | | | | | |
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| Lesson 23 | | | | | | | | |
| Lesson 24 | | | | | | | | |

 Essential/Core Lesson
 Extension/Further Learning

To be adapted by year groups.