Introduction

Give every child the depth of learning they need with MathsBeat, a digitally-led teaching and learning resource, crafted by teachers who understand the challenges of teaching for mastery.

Overseen by series editors, Mike Askew and Robert Wilne, all the resources are in one accessible place to give you the flexibility you need.
The statements in bold and italics in both the Experiences and Outcomes and the Benchmarks are the responsibility of all and as such, evidence from across the curriculum should be considered when making judgements about achieving a level.

First Level Numeracy and Mathematics

**Curriculum**

MathsBeat is fully aligned to the National Curriculum and supports all other UK curricula covering Reception (P1) to Year 6 (P7).

Correlation charts are provided to help you align MathsBeat with your chosen curriculum.

<table>
<thead>
<tr>
<th>Curriculum organisers</th>
<th>Experiences and Outcomes for planning learning, teaching</th>
<th>Benchmarks to support practitioners’ professional judgement of achievement of a level</th>
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</thead>
<tbody>
<tr>
<td><strong>Estimation and rounding</strong></td>
<td>I can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate. MNU 1.04a</td>
<td>- Uses strategies to estimate an answer to a calculation or problem, for example, doubling and rounding. - Rounds whole numbers to the nearest 10 and 100 and uses this routinely to estimate and check the reasonableness of a solution.</td>
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<tr>
<td><strong>Number and number processes</strong></td>
<td>I have investigated how whole numbers are constructed; can understand the importance of zero within the system and can use my knowledge to explain the link between a digit, its place and its value. MNU 1.02a</td>
<td>- Reads, writes, orders and recites whole numbers to 1000, starting from any number in the sequence. - Demonstrates understanding of zero as a placeholder in whole numbers to 1000. - Uses correct mathematical vocabulary when discussing the four operations including, subtract, add, sum of, total, multiply, product, divide and shared equally. - Identifies the value of each digit in a whole number with three digits, for example, 867 = 800 + 60 + 7. - Counts forwards and backwards in 2s, 5s, 10s and 100s. - Demonstrates understanding of the commutative law, for example, ( 6 + 3 = 3 + 6 ) or ( 2 \times 4 = 4 \times 2 ). - Applies strategies to determine multiplication facts, for example, repeated addition, grouping, arrays and multiplication facts. - Solves addition and subtraction problems with three digit whole numbers. - Adds and subtracts multiples of 10 or 100 to or from any whole number to 1000. - Applies strategies to determine division facts, for example, repeated subtraction, equal groups, sharing equally, arrays and multiplication facts.</td>
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</tbody>
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# Year 4 Medium-term plan

## Autumn term

### Unit 1: Number and place value

#### Week 1:
- Represent and round numbers up to 10,000
  - Identify and represent numbers using different representations.
  - Find 1000 more or less than a given number.
  - Count in multiples of 25 and 1000.

#### Week 2:
- Read, write and compare numbers up to 10,000
  - Recognize the place value of each digit in a 4-digit number (thousands, hundreds, tens and ones).
  - Round any number to the nearest 10 or 100.

### Unit 2: Addition and subtraction

#### Week 3:
- Reasoning and problem solving with addition (3-digit numbers)
  - Add numbers with up to 4 digits using the formal written methods of columnar addition where appropriate.
  - Estimate answers to a calculation.
  - Solve addition two-step problems in contexts, deciding which operations and methods to use and why.

#### Week 4:
- Reasoning and problem solving with subtraction (3-digit numbers)
  - Subtract numbers with up to 4 digits using the formal written methods of columnar subtraction where appropriate.
  - Estimate answers to a calculation.
  - Use inverse operations to check answers to a calculation.
  - Solve subtraction two-step problems in contexts, deciding which operations and methods to use and why.
  - Solve addition two-step problems in contexts, deciding which operations and methods to use and why.

### Unit 3: Geometry: properties of shapes

#### Week 5:
- Comparing and classifying shapes
  - Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.

#### Week 6:
- Exploring symmetry
  - Identify lines of symmetry in 2D shapes presented in different orientations.
  - Complete a simple symmetric figure with respect to a specific line of symmetry.

Supports the 2019 Ofsted Framework

- Lots of opportunities for problem-solving and reasoning so all children can engage in maths
- Carefully designed progression to build on knowledge and skills year on year
- Pre-emptive teaching ideas to address gaps, and activities for greater depth and intervention
- Everything teachers need is in one place, saving time and helping to ease workload
- Extra detail, prompts and unit opener videos help to support non-specialists
How it works
Digital Planner
Provides your toolkit for day-to-day teaching
- An easy-to-follow sequence of tasks enables all children to be engaged in active learning
- Tasks are designed to support all learners, with prompts for observation and assessment

National Curriculum objectives
- Measure and compare objects (e.g. Choose three sticks. Which is shortest? Which is longest? How do you know?).
- Use comparative language (e.g. taller, shorter, longest) to accurately describe the relationship between two or more objects (e.g. Look at this pencil, pen and crayon. Think about how tall they are. Can you describe how they are the same? How are they different?).
- Take an everyday action and break it down into a series of steps and describe them in chronological order.
- Describe what they do each morning to get ready for school.

Sample unit overview on the Digital Planner
How it works
Digital Planner

- Supports areas of maths that you have told us are challenging, including:
  - addressing mixed attainment
  - assessing for depth of understanding
  - how to go deeper
  - knowing when to move children on

- Flexible for all teachers, providing the right amount of detail for those who want to use it wholeheartedly as well as those who want to tailor it for their class

Sample task on the Digital Planner
How it works

Digital Planner

- Includes IWB software to support your day-to-day teaching with the key representations used in *MathsBeat*

- Collates IWB software, front-of-class slides and downloadable practice activities into one easily accessible place to save you time
How it works

Teacher’s Handbook

Your pick up and go resource for planning, teaching and assessment

- Provides visual case studies of children’s work, as well as real conversations between teachers and children, with detailed commentary
- Contains guidance on how to question to develop children’s reasoning and problem-solving skills
- Integrated professional development provides lots of support for building your subject knowledge to ensure you are confident to teach for mastery
Aims of the unit give examples of the sort of things that children say or do to show mastery of the objectives at the end of the teaching sequence.

‘On track/Look and listen for’ features help you to identify when children are on track, common misconceptions and suggested next steps to get them back on track.

Downloadable practice tasks provide regular opportunities for assessment for learning within the unit.
Community

As well as an experienced author team and our two expert series editors, Mike Askew and Robert Wilne, we have recruited a teacher community to:

- help us develop a mastery programme for every child
- trial the resources in the classroom to ensure they really work
- provide online support so you have everything you need to plan, teach and assess
Find out more

- Visit our website
- Book an appointment for a demo and free trial

How to order

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