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.
### First Level Numeracy and Mathematics

<table>
<thead>
<tr>
<th>Curriculum Organisers</th>
<th>Experiences and Outcomes for planning, learning, and assessment</th>
<th>Benchmarks to support practitioners' professional judgement of achievement of a level</th>
</tr>
</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 1-05a</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>
</tr>
</tbody>
</table>
| **Number and Number Processes** | 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 | - 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. |

The statements in bold and italic in both the Experiences and Outcomes and the Benchmarks are the responsibility of all and as such, evidence from across the curriculums should be considered when making judgements about achieving a level.
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
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
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

Sample IWB activity on the Digital Planner
Term 1: Needing support

Look and listen for children who need support to work out hidden quantities, and those who need support to describe part changes for the same whole. If so, give children cubes to match the problem. Hide them all inside the cave without the child seeing.

Children are able to predict the number of dinosaurs under the cloth using their knowledge of number bonds, and say that there are 4 dinosaurs in the cave as 4 plus 2 = 6. To deepen this task, extend the task to ten dinosaurs.

We have six dinosaurs and four dinosaurs come out of the cave. Shall we write the number bond?

Can you draw the part-whole model in your book? Big circle at the top and two lines. Then little circle.

How many dinosaurs do we have altogether? Can you remember? How many did we have to start with?

5 and 1 is 6. No, let’s count again.

So, we put six in the big circle. How many are outside?

2. So if there are 2 outside how many do you think are inside?

I think 4. Why do you think 4? Let me get something to help you. So you have 6 and there are two outside, so tick off 2.

Child ticks off 2. So there are 4 left. Shall we check? Well done. So what number should go in here?

4.

Can you count out the 10 dinosaurs?

How many different ways do you think there will be for 10 dinosaurs?

Can you write this as a part-part-whole model for me?

If one part is four, what would the other part be?

Can you write this as an addition sentence?

Is there another way you can write this?

Can you write this as a subtraction sentence?
Assessment

- 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.

Assessment support sample on the Digital Planner.
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

Building a community to support you

- Recruiting a teacher panel to help develop a mastery programme for every child
- Valuable feedback at every stage of development
- An online community of users and experts to give you support and guidance
- Trialling resources in the classroom to ensure they really work
Find out more
- Visit our website
- Register your interest for early access

How to order
- Phone +44 (0)1536 452620