Big Maths

Reception

Termly Learning Objectives

Counting

Learn Its

It's Nothing New

Calculation

Shape

Amounts

Fractions

Explaining Data

Big Maths takes the broader curriculum statements from the national curriculum and breaks them down into smaller manageable steps. This results in a sequence of learning that forms the structure of the Big Maths curriculum design, which schools can then adopt. In Big Maths we call each strand/spine a Progress Drive, since it becomes a tool for the teacher to drive (as in 'to guide' or 'to steer') the learner's progress. We can see too how Ofsted now explicitly recognises this as a crucial curriculum design feature for maths.
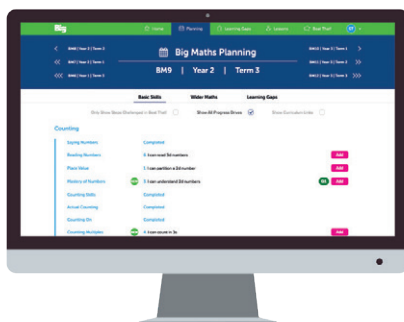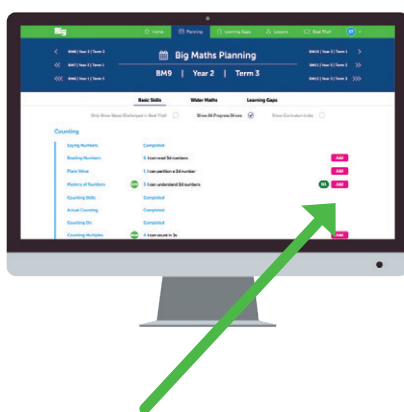

It is also effective to know *when* learners should secure each small step on the Progress Drive. This is an age-related expectation that comes from mapping the smaller steps to national curriculum year group statements. This provides the teacher with a clear and simple view of which steps need to be secured each term in order to keep the learner 'on track'. These can be seen as a list of term by term learning objective statements on the Big Maths Online website.

This can also be seen here in this 'termly learning objectives' planning document. This can be downloaded and printed out from the library section within the Big Maths Online website (new learning is denoted by being highlighted in green).

This planning guidance should not be used as a list that takes the teacher back to the antiquated days of simply 'covering a curriculum', but rather is a list of 'next steps' for learners to secure (that term) in their long term memory, the teacher having ensured learners have secured earlier steps on that Progress Drive. The teacher will need to construct their own plan as to how they will guide their pupils from their current starting points to the desired end points for that term. Although this requires important thinking that can only be done at the bespoke level of that teacher responding to that particular class of children, the planning process itself is quick and easy since the step is always simply located from the structure of the Big Maths curriculum, and the teacher notes and resources are there to be found at that location. All the teacher need do is click and add that step to their weekly/lesson plan, and then familiarise themselves with the delivery of that step.

Click here to immediately add this step to Big Maths Online weekly/lesson planning:
- Teacher notes are added automatically.
- Personalised notes can be added.
- Chosen resources from Big Maths Online can also be immediately added.

A more short-hand version of this termly planning view is to use the Big Maths planning document that outlines the expected finishing position for leaners that term on each Progress Drive. This document simply shows which step the learner should be on by the end of that term if they are to be classed as 'on track'.

	Progress Drive	Steps
C	Saying Numbers	✓
	Reading Numbers	10, 11
	Place Value	4
	Mastery of Numbers	7
	Counting Skills	✓
	Actual Counting	✓
	Counting On	✓
	Counting Multiples	✓
	Counting Along in 4 Ways	-2s, -5s
	Counting Along Scales	5

	Progress Drive	Steps
L	Learn Its	✓

	Progress Drive	Steps
I	Swapping the Units	✓
	INN: Addition and Subtraction	✓
	Doubling & Halving	✓ ✓ ✓
	INN: Number Bonds to 10	✓
	x10 & ÷10	4 4
	INN: Multiplication	5
	Coin Multiplication	5

	Progress Drive	Steps
S	Explore & Draw	24
	2D Shapes	23
	3D Shapes	20, 21
	Position & Direction	26, 27

	Progress Drive	Steps
A	Amounts of Distance	26
	Amounts of Mass	16
	Amounts of Money	15
	Amounts of Space	20
	Amounts of Temperature	11
	Amounts of Time	27
	Amounts of Time: Telling the Time	✓
	Amounts of Turn	22, 23, 24

	Progress Drive	Steps
F	Fractions of a Whole	17
	Fractions of a Set	13
	Fractions: Counting	18
	Fractions: Learn Its	9
	Fractions: It's Nothing New	7
	Fractions: Calculation	8 - 12

The Big Maths Beat That challenges are also mapped into this age-related expectation journey. Indeed, the 10 questions on each CLIC challenge represent the most essential core knowledge of the curriculum that the learner should have acquired. In effect, the 10 questions are 10 learning objectives that provide the sharpest focus of a clearly defined end point for each term. This allows the school to have perfect transparency as to which individuals, and what proportion of individuals, are 'on track' at any one time. Ensuring all pupils secure this core knowledge of the curriculum is a vital aspect of any mastery approach. Again, this idea of breaking the bigger maths journey into smaller clearly defined parts, mapped into an expected timeframe, is something that has been part of Big Maths for over a decade, but that Ofsted now recognises as an essential element of curriculum design.

Using Big Maths Online to track the performance of pupils will speed up the teacher's response to planning the next steps for learning. This can be extended into pupils completing their challenges online so that there is no printing, photocopying, sheet-management or marking; yet, the teacher can use the learning gaps feature to respond immediately in their online planning if they so wish.

Basic Skills

Progress Drive	Step	Statement	✓
Saying Numbers	1	I can count to 10	
Actual Counting	1	I can count 3 objects	
Learn Its	1	1+1 2+2	

Wider Maths

Progress Drive	Step	Statement	✓
Explore and Draw	4	I can show interest in shapes around me	
2D Shapes	3	I can describe simple 2D shapes	
3D Shapes	2	I can use 3D shapes when I play	
Position and Direction	6	I can move myself in lots of specific ways	
Amounts of Distance	2	I can describe an object as tall or short	
Amounts of Mass	2	I can describe an amount of mass as heavy or light	
Amounts of Money	2	I can play 'shop'! 1 - buying things	
Amounts of Space	2	I can describe an amount of space	
Amounts of Temperature	3	I can compare hot to cold	
	4	I understand hotter and colder	
Amounts of Time	5	I can describe periods of time	
Amounts of Turn	1	I can make a whole turn	
Diagrams and Tables	2	I can record my sorting using mark making	
Pattern Spotting	4	I can create two colour patterns	

Basic Skills

Progress Drive	Step	Statement	✓
Saying Numbers	1	I can count to 10	
Reading Numbers	1	I can read 1d numbers	
Mastery of Numbers	1	I can understand numbers to 10	
Actual Counting	2	I can count 4 objects	
	3	I can count 5 objects	
	4	I can count 6 objects	
	5	I can count 10 objects	
Counting On	1	I can Count On and Count Back 1	
Learn Its	2	3+3 4+4 5+5	
Doubling with Pim (without crossing 10)	1	I can double 1d numbers	
Addition	1	I know when to add some more	
	2	I know to find the total	
Subtraction	1	I know when to take some away	
	2	I know to take some away, then count how many are left	
Division	1	I can give out objects fairly	

Wider Maths

Progress Drive	Step	Statement	✓
Explore and Draw	5	I can use shapes with purpose as I play	
2D Shapes	4	I can see when shapes are similar	
	5	I can recognise a circle	
	6	I can recognise a square	
	7	I can recognise a triangle	
3D Shapes	3	I can recognise a cube	
	4	I can recognise a pyramid	
	5	I can recognise a sphere	
Position and Direction	7	I can describe my own position	
Amounts of Distance	3	I can compare 2 different amounts of distance	
Amounts of Mass	3	I can compare 2 different amounts of mass	
Amounts of Money	3	I can play 'shop'! 2 - identifying coins, narrating and giving change	
Amounts of Space	3	I can compare 2 different amounts of space	
Amounts of Temperature	4	I understand hotter and colder	
Amounts of Time	6	I can order daily events	
Amounts of Turn	1	I can make a whole turn	
Fractions of a Set	1	I can show awareness of half of an amount	
Diagrams and Tables	3	I can collect data using objects	
Pattern Spotting	5	I can create three colour patterns	

Basic Skills

Progress Drive	Step	Statement	✓
Saying Numbers	2	I can count to 20	
Reading Numbers	2	I can read the numbers 11 - 20	
Mastery of Numbers	1	I can understand numbers to 10	
Actual Counting	6	I can count 20 objects	
Counting On	2	I can Count On & Count Back 2	
	3	I can Count On & Count Back 3	
	4	I can Count On & Count Back 4	
	5	I can Count On & Count Back 5	
Counting Multiples	1	I can count in 10s	
Learn Its	3	2+1 2+3	
Swapping the Units	1	Swap 'the thing' to another object	
Doubling with Pim (without crossing 10)	1	I can double 1d numbers	
Addition	3	I add the right amount	
	4	I add the right amount and count how many altogether	
	5	I can add numbers of objects to 10	
Subtraction	3	I take away the right amount	
	4	I take away the right amount and count how many are left	
	5	I can take away numbers of objects to 10	
Multiplication	1	I can set out groups of toys when I play	
	2	I can find the total amount of toys	
Division	2	I can count how many each person was given	
	3	I can share an even number of objects between two people	
	4	I can halve an even number of objects	
	5	I can share 6, 9, 12 or 15 objects between 3 people	

Wider Maths

Progress Drive	Step	Statement	✓
Explore and Draw	6	I can create a symmetrical picture	
2D Shapes	8	I can name and describe simple 2D shapes	
	9	I can recognise a rectangle (and know that a square is a special rectangle)	
	10	I can identify 2D shapes in real life	
3D Shapes	6	I can describe simple 3D shapes	
	7	I can identify 3D shapes in real life	
Position and Direction	8	I can describe a variety of different positions, for me, others or objects as I play	
Amounts of Distance	4	I can compare 3 different amounts of distance	
Amounts of Mass	4	I can compare 3 different amounts of mass	
Amounts of Money	4	I can play 'shop'! 3 - making simple calculations	
Amounts of Space	4	I can compare 3 different amounts of space	
Amounts of Temperature	4	I understand hotter and colder	
Amounts of Time	7	I can begin to measure time	
	8	I know about annual events	
	9	I can chant the days of the week	
Amounts of Turn	2	I can make a half turn	
Fractions Of a Set	2	I can find half of an amount by dividing it into two	
Diagrams and Tables	4	I can record my sorting using numbers	
Bar Charts	1	I can build counting towers	
Pattern Spotting	6	I can spot, copy and create different patterns	

Big Maths.
Better Online.

What's Included?

✓ Detailed teacher guidance!

✓ Simple and efficient tracking.

✓ Easy to create lesson plans.

✓ Online Beat That! Challenges.

✓ Saves each teacher at least five hours per week in planning time.

✓ We are with you every step of the way with telephone and email support.

✓ Over 5,000 focused, fun, tailored resources.

Find out more about the online features here:

www.BigMaths.com

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