EFFECTIVE MATHS — Year 5 mathematics curriculum overview

Block 1											
1	2	3	4	5	6	7	8	9	10	11	12

| Y5 | Place value (U1) | | Addition and subtraction (U1) | | Multiplication and division (U1) | | Time | Fractions (U1) | | Multiplication /division (U2) | Geometry | |

Block 2											
1	2	3	4	5	6	7	8	9	10	11	12

| Y5 | Money and decimals (U1) | | Place value (U2) | | Addition and subtraction (U2) | | Multiplication and division (U2) | | Fractions (U2) | | Percentages | Statistics | |

Block 3											
1	2	3	4	5	6	7	8	9	10	11	12

| Y5 | Place value (U3) | | Calculation | | Money and decimals (U2) | Length | Mass and volume | | Patterns and relationships | | School to determine focus | | |

The yearly overview is a broad guide to suggested coverage over the course of the academic year.

There are 39 school weeks, one week taken for INSET, leaving 38. Two of the 38 are generally taken up with trips, sports days, concerts and so on, leaving 36. The three 'blocks' are each 12 weeks long. Clearly the 12 weeks don't map directly to terms, they are not intended to. Where the table header has been highlighted in blue, this indicates that planning will be provided by *Effective Maths*. Please see the publication dates (on website) for details of when resources will be online.

Remembering content and making connections

In the 2021/22 block overviews that follow, the intention is to provide extremely clear signposting to the quizzes designed to support children in **remembering the key content they have been taught**. And, through the RTP[1] focuses, **integrate knowledge into larger concepts**. Teachers and leaders need to use assessment well, for example to help children embed and use knowledge fluently or to check understanding and inform teaching. But they also need to do this in a way that **does not create unnecessary burdens for staff or children**. The quizzes are ideal for this purpose. (These points - remembering key content, integrating knowledge and not creating burdens - are directly linked to bullet points 3 and 4 in the 'implementation' section of the current Education Inspection Framework.)

The RTP quiz focuses are linked to what the DfE describe as 'the most important knowledge and understanding within each year group'. These criteria very often require children to have command of a wider domain of knowledge than the mathsquiz.net quizzes do. The quizzes on mathsquiz.net **deliberately** take smaller steps. The aim of **both** is to provide teachers and leaders with several ways of supporting children's ongoing progress. For example, through sharing links for mathsquiz.net quizzes with parents/carers (so children continue to practise a core skill such as knowing the 8 × table) and then following up a child's work at home with a quiz session in school to ascertain progress. The RTP quiz focuses are designed to be mini-assessments carried out in school. Taken together, the quizzes and the paper-based end of unit assessments, provide schools with a range of simple strategies to assess the planned/intended curriculum, as opposed to using generic assessments not linked to the curriculum. In particular, the quizzes have the added advantage of being self-marking, easy to repeat and can be shared with parents/carers to support children' learning at home.

Notes

The quizzes in red are being written for 2021/22 and will be online a few weeks before they are first required.

Some RTP focuses are not best assessed by electronic means. For Y5 these are 5MD-3 and 5MD-4 (multiplying and dividing numbers with up to 4 digits by 1-digit numbers).

[1] RTP Ready to Progress

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	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Y5	Place value (U1)		Addition and subtraction (U1)		Multiplication and division (U1)		Time	Fractions (U1)		Multiplication /division (U2)	Geometry	

Place value (U1)	Addition and subtraction (U1)	Multiplication and division (U1)	Time	Fractions (U1)	Multiplication /division (U2)	Geometry
[1] Reading/writing numbers to 400,000 in numerals [2] Reading/writing numbers to 400,000 in words [3] Counting in tens and hundreds [4] Counting in tens, hundreds and thousands [5] Identifying and representing numbers ☼MQ [6] Comparing and ordering numbers [7] Rounding to nearest 10 and 100 [8] Rounding to nearest 10, 100, 1,000 and 10,000 ☼MQ	[1] Facts for 1 with decimal numbers to 1 dp and associated problem solving ☼MQ [2] Facts for 1 and 10 with decimal numbers to 1 dp and associated problem solving [3] Mental calculation Making next/previous ten; near doubles ☼MQ [4] Calculation strategies Left to right addition; number line; partitioning the minuend [5] Estimation [6] Add numbers with more than 4-digits (with exchanging) [7] Subtract numbers with more than 4-digits (with exchanging) [8] Addition reasoning [9] Subtraction reasoning	[1] 9 × table (revision) [2] Reasoning about multiplication [3] Factors [4] Understanding division and recalling division facts ☼**RTP 5NF–1**← [5] Division problems ☼MQ [6] Multiplication arithmagons [7] Common factors and common multiples ☼**RTP 5MD–2**← [8] Prime numbers ☼MQ [8] Square numbers	[1] Solving problems [2] Converting between units of time ☼MQ [3] Reading timetables ☼MQ [4] Solving problems	[1] Counting in thirds and ninths [2] Find non-unit fractions of quantities ☼**RTP 5F–1** [2] Equivalent fractions ☼**RTP 5F–2** [3] Comparing and ordering fractions [a] [4] Comparing and ordering fractions [b] ☼MQ Quiz linked to [3] - [4]: Comparing fractions [5] Improper fractions and mixed numbers [a] [6] Improper fractions and mixed numbers [b] [7] Recognising hundredths and linking to tenths and other fractions	[1] Revision of unit 1: reasoning, factors and multiples ☼MQ [2] Multiplying by 10 and 100 [3] Multiplying and dividing by 10, 100 and 1,000 ☼**RTP 5MD–1**← [4] Multiplying 4-digit numbers	[1] Angles [2] Angles [3] Angles [4] Angles [5] Quadrilaterals [6] Angles in quadrilaterals ☼**RTP 5G–1** [7] Drawing shapes [8] Coordinates ☼MQ [9] Coordinates - translation and reflection

☼indicates a quiz linked to the content of the lesson/s. ☼MQ means the quiz is accessible via mathsquiz.net

☼RTP means it is a Ready to Progress quiz. Where a RTP quiz also has a backward arrow symbol, ←, this is to indicate that the RTP focus also encompasses key content from earlier lessons: see RTP page on main website for details.

EFFECTIVE MATHS — Year 5 mathematics curriculum

Block 2											
1	2	3	4	5	6	7	8	9	10	11	12

Y5	Money and decimals (U1)	Place value (U2)	Addition and subtraction (U2)	Multiplication and division (U2)	Fractions (U2)	Percentages	Statistics
	[1] Tenths - revision [2] Hundredths, halves and quarters – revision ☼RTP 5NPV–1 [3] Rounding and comparing - revision [4] Decimal numbers as fractions ☼RTP 5F–3 [5] Decimal equivalents of thousandths [6] Rounding decimals [7] Comparing and ordering to two decimal places ☼RTP 5NPV–3 [8] Comparing and ordering to three decimal places ☼MQ Y5 quiz covers: Decimal equivalents for tenths, fifths, quarters, halves and thousandths; rounding decimals; comparing and ordering decimals	[1] Reading and writing numbers to 700,000 [2] Counting in steps of 10 with numbers > 400,000 [3] Counting in steps of 10 and 100 with numbers > 400,000 [4] Counting in steps of 10, 100 and 1,000 with numbers > 400,000 [5] Reading scales with 2, 4, 5 or 10 intervals ☼RTP 5NPV-4← [6] Ordering and comparing numbers to 700,000 [7] Negative numbers ☼MQ	[1] Addition and subtraction with decimal numbers to two decimal places (facts for one and related facts) ☼MQ [2] Problems with decimal numbers to two decimal places [3] Adding lots of numbers [4] Methods for addition ☼MQ [5] Methods for subtraction [6] Solving problems [7] Solving problems	[1] Square numbers (revision) ☼MQ [2] Revision of unit 2 [3] 6 × table and related facts [4] Scaling multiplication and division facts ☼RTP 5NF-2← [5] Multiplying 2-digit numbers by 2-digit numbers (open arrays and grid method) [6] Multiplying 2-digit numbers by 2-digit numbers (grid method and expanded column method) ☼MQ [7] Investigating the multiplication square (more practice with multiplying 2-digit numbers by 2-digit numbers) [8] Dividing numbers with up to 4 digits by 8 [9] Dividing numbers with up to 4 digits [10] Cube numbers	[1] Addition of related fractions [2] Addition of related fractions (quarters, eighths, halves and sixteenths) [3] Addition of related fractions (thirds, sixths and twelfths; fifths, tenths and twentieths) [4] Subtraction of related fractions [5] Subtraction of related fractions [6] Multiplying fractions by whole numbers ☼MQ Adding, subtracting and multiplying fractions	[1] Percentage equivalents (1/2, 1/4 and 3/4) [2] More percentage equivalents (10ths, 5ths and 20ths) ☼MQ [3] Applying knowledge of fraction, decimal and percentage equivalents [4] Word problems involving converting fractions to percentages [5] Finding percentages of quantities	[1] Sorting diagrams (decision tree diagrams) [2] Interpreting sorting diagrams (tables, Carroll diagrams and Venn diagrams) [3] Venn diagrams with three sets ☼MQ [4] Interpreting tables [5] Line graphs (a) [6] Line graphs (b) [7] Line graphs (c) ☼MQ

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	Block 3											
	1	2	3	4	5	6	7	8	9	10	11	12
Y5	Place value (U3)		Calculation		Money and decimals (U2)	Length	Mass and volume		Patterns and relationships		School to determine focus		

Place value (U3)	Calculation	Money and decimals (U2)	Length	Mass and volume	Patterns and relationships	School to determine focus
[1] Reading and writing numbers to 1,000,000 [2] Counting forwards and backwards in steps of powers of 10 [3] Making numbers in different ways [4] Partitioning in different ways [a] ☼MQ [5] Partitioning in different ways [b] ☼**RTP 5NPV–2** [6] Roman numerals to 500 [7] Roman numerals 1,000 [8] Roman numerals for years	[1] Addition strategies [2] Subtraction strategies [3] Word problems ☼MQ [4] Solving problems with the bar model (a) [5] Solving problems with the bar model (b) [6] Multiplication - using known facts [7] Multiplying 3- and 4-digit numbers by 2-digit numbers [8] Division (revision) Division methods; related facts; remainders ☼MQ [9] Division problems ☼MQ	[1] Calculating amounts of money [2] Solving problems about money [3] Adding decimal numbers [4] Subtracting decimal numbers [5] Solving problems involving decimals ☼MQ Solving problems involving money	[1] Conversion of units of length [2] Converting from kilometres and metres ☼MQ [3] Perimeter of rectilinear shapes [4] Area (a) [5] Area (b) ☼**RTP 5G–2**	[1] Reading different scales ☼MQ [2] Converting from kilograms to grams and from grams to kilograms [3] Imperial/metric conversion for mass [4] Converting from litres to millilitres and from millilitres to litres ☼**RTP 5NPV–5←** [5] Solving problems about volume [6] Imperial/metric conversion for volume	[1] Number sequences ☼MQ [2] Stick patterns [3] Tile patterns [4] Stairs on the number grid (a) [5] Stairs on the number grid (b)	If time exists, it is suggested it is used to revisit the Ready to Progress focuses.