EFFECTIVE MATHS — Year 6 mathematics curriculum overview

Block 1

Y6	1	2	3	4	5	6	7	8	9	10	11	12
Y6	Place value (U1)		Addition and subtraction (U1)		Multiplication and division (U1)		Time	Fractions (U1)		Multiplication /division (U2)	Percentages	Geometry

NB: The Y6 arithmetic revision programme becomes available after half term.

Block 2

Y6	1	2	3	4	5	6	7	8	9	10	11	12
Y6	Geometry	Money and decimals (U1)		Place value (U2)	Addition and subtraction (U1)	Multiplication and division (U3) Ratio		Fractions	Algebra	Statistics		Measurement

NB: A range of revision lessons become available during Block 2 focusing on problem solving strategies.

Block 3

Y6	1	2	3	4	5	6	7	8	9	10	11	12
Y6	Place value (U3)	Calculation		Money and decimals (U2)	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 Y6 this is 6G-1 (draw, compose and decompose shapes).

[1] RTP Ready to Progress

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	Block 1											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Y6	Place value (U1)		Addition and subtraction (U1)		Multiplication and division (U1)		Time	Fractions (U1)		Multiplication /division (U2)	Percentages	Geometry

Place value (U1)	Addition and subtraction (U1)	Multiplication and division (U1)	Time	Fractions (U1)	Multiplication /division (U2)	Percentages	Geometry
[1] Reading/writing numbers to 4,000,000 in numerals [2] Reading/writing numbers to 4,000,000 in words [3] Place value in numbers up to 4,000,000 ☼**RTP 6NPV–2** [4] Counting in powers of 10 [a] [5] Counting in powers of 10 [b] [6] Identifying numbers using number lines ☼MQ [7] Comparing and ordering numbers [8] Rounding to 10, 100, 1,000, 10,000 and 100,000 [9] Rounding to 100,000, 1,000,000 and 10,000,000	[1] Facts for 100; friendly numbers [2] Facts for 1 and 10 [3] Single digit number facts and associated problems [4] Optional lesson on revision of calculation strategies ☼MQ [5] Magic squares [6] Missing number addition problems [7] Missing number subtraction problems ☼MQ [8] Missing number problems – number sequence [9] Column addition [10] Column subtraction [11] Problem solving	[1] 7 × table (revision) [2] Multiples and factors (revision) ☼MQ [3] Prime numbers, square numbers and cube numbers (revision) ☼MQ [4] Efficient strategies for multiplication and solving multiplication problems [5] Efficient strategies for division [6] Reasoning about division ☼MQ [7] Multiplying a 2-digit number by a 2-digit number (revision) [8] Solving problems involving multiplying a 2-digit number by a 2-digit number [9] Multiplying a 3-digit number by a 2-digit number	[1] Solving problems [2] Converting between units of time ☼MQ [3] Solving problems [4] Solving problems ☼MQ	[1] Counting in sixths and twelfths [2] Finding fractions of quantities ☼MQ [3] Equivalent fractions ☼MQ [4] Simplifying fractions ☼**RTP 6F-1** [5] Comparing and ordering fractions [a] [6] Comparing and ordering fractions [b] [7] Comparing and ordering fractions [c] ☼**RTP 6F–2** [8] Comparing fractions using reasoning ☼**RTP 6F–3**	[1] Divisibility rules ☼MQ [2] Solving word problems involving multiplication and division [3] Dividing by a 2-digit number and division problems (dividing using factors and partitioning) [4] Dividing by a 2-digit number [5] Dividing by a 2-digit number (long division)	[1] Percentages - revision of Year 5 ☼MQ [2] Finding percentages of quantities [3] Solving problems involving percentages [a] [4] Solving problems involving percentages [b] *NB There are 4 quizzes that cover the same topics as lesson 1 (revision of Y5) on mathsquiz.net*	[1] Angles - revision [a] [2] Angles - revision [b] ☼MQ [3] Vertically opposite angles [4] Circles ☼MQ [5] Solving problem involving circles

☼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.

	Block 2											
	1	2	3	4	5	6	7	8	9	10	11	12
Y6	Geometry	Money and decimals (U1)	Place value (U2)		Addition and subtraction (U1)		Multiplication and division (U3) Ratio		Fractions	Algebra	Statistics	Measurement

Geometry	Money and decimals (U1)	Place value (U2)	Addition and subtraction (U1)	Multiplication and division (U3) / Ratio	Fractions	Algebra	Statistics	Measurement
Continued from Block 1 [6] Drawing 2-D shapes [7] 3-D shapes [8] Coordinates [a] [9] Coordinates [b]	[1] Decimal/fraction equivalence (tenths, hundredths and thousandths) [2] Decimal/fraction equivalence (halves, quarters, fifths, tenths, hundredths and thousandths) [3] Decimal/fraction equivalence (more complex equivalences) [4] Linking fractions with division to calculate equivalents [5] Rounding decimal numbers and rounding money [6] Comparing and ordering decimals to 3 decimal places [7] × and ÷ numbers by 10, 100 and 1,000 giving answers up to 3dp ☼MQ Y6 quiz covers: Decimal/fraction equivalence; rounding decimals and money; ordering and comparing; multiplying by multiples of ten	[1] Reading and writing numbers to 10 million [2] Counting in steps of 10 and 100 [3] Counting in steps of 10, 100 and 1,000 [4] Place value relationships - powers of 10 ☼**RTP 6NPV–1** [5] Identifying numbers ☼**RTP 6NPV–3** [6] Reading scales with 2, 4, 5 or 10 intervals ☼**RTP 6NPV–4←** [7] Negative numbers ☼MQ	[1] Adding numbers that form a sequence [2] Adding numbers that form a sequence [3] Adding and subtracting decimals and associated problems (tenths and hundredths) [4] Adding and subtracting decimals and associated problems (tenths, hundredths and thousandths) [5] Additive and multiplicative relationships ☼**RTP 6AS/MD–1** [6] Additive comparison problems ☼MQ [7] Solving problems about money ☼MQ	[1] Finding missing numbers (a) [2] Finding missing numbers (b) [3] Solving problems involving all four operations [4] Multiplication pyramids [5] Solving problems involving multiplication and division ☼MQ Ratio [1] Ratio (solving ratio problems using tables and bar models) [2] Ratio (concept of ratio; importance of order in ratio; ratio does not always indicate the actual size of the quantities involved; simplest form; equivalent ratios) ☼MQ [3] Ratio (solving problems) ☼**RTP 6AS/MD–3**	[1] Addition of fractions with unrelated denominators (eg 1/2 + 3/7) [2] Subtraction of fractions with unrelated denominators ☼MQ + and - fractions [3] Multiplying fractions [4] Dividing fractions ☼MQ × and ÷ fractions	[1] Number sequences [2] Patterns and formulae [3] Formulae with letters [4] Finding the formula [5] Investigating algebra	[1] Sorting diagrams [2] Line graphs [3] Pie charts [4] Averages (a) [5] Averages (b) ☼MQ	[1] Solving problems involving converting units of measurement ☼MQ [2] Solving problems involving converting units of measurement ☼MQ [3] Metric/imperial equivalents (length) ☼MQ [4] Metric/imperial equivalents (mass and length) ☼MQ [5] Area and perimeter [6] Area and perimeter [7] Area of parallelograms [8] Area of triangles

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	Block 3											
	1	2	3	4	5	6	7	8	9	10	11	12
Y6	Place value (U3)	Calculation	Money and decimals (U2)	Planning is not provided post-SATS. It is suggested that this time is used to revisit the Ready to Progress focuses.								
	[1] Solving problems involving rounding [2] Number sequences ☼MQ [3] Making numbers in different ways ☼MQ [4] Number grids	[1] Missing digit problems [2] Word problems ☼MQ [3] Missing number problems ☼RTP 6AS/MD–4← [4] Derive related calculations (× and ÷) ☼RTP 6AS/MD-2← [5] Solving money problems with the bar model [6] Solving problems involving percentages	[1] Solving problems about money☼MQ [2] Solving problems involving decimals [3] Solving problems involving decimals									