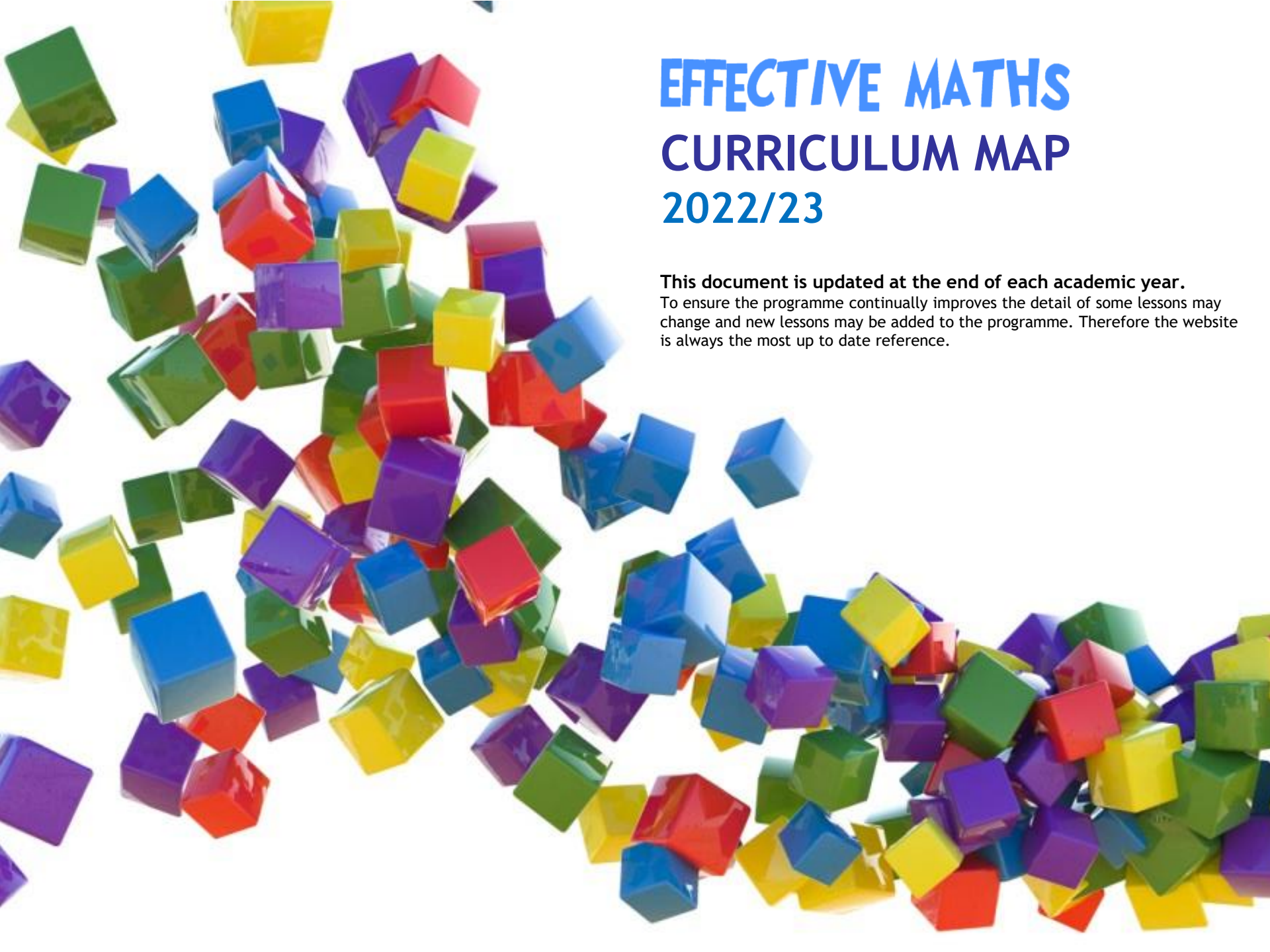




EFFECTIVE MATHS

CURRICULUM MAP

2022/23

This document is updated at the end of each academic year.

To ensure the programme continually improves the detail of some lessons may change and new lessons may be added to the programme. Therefore the website is always the most up to date reference.

Year 1Geometry

During 2021/22 two new lessons were added. These are now listed in the curriculum map for 2022/23. The unit cover sheet was already up to date.

[6] Compose 2-D and 3-D shapes from smaller shapes

[7] Compose 2-D and 3-D shapes from smaller shapes

Other individual lessons amended if deemed appropriate.

Year 2Time

During 2021/22 two new lessons were added. These are now listed in the curriculum map for 2022/23. The unit cover sheet has also been updated and the end of unit test will be revised.

[6] Minutes, hours and days

[7] Finding durations of events

Other individual lessons amended if deemed appropriate.

Year 3Addition and subtraction (Unit 1)

The time allocation for this unit has been increased from 2 weeks to 2 ½ weeks.

Time

During 2021/22 three new lessons were added. These are now listed in the curriculum map for 2022/23. The unit cover sheet has also been updated and the end of unit test will be revised.

[5] Number of seconds in a minute

[6] The number of days in each month, year and leap year

[7] Finding and comparing durations of events

As a result of the above, the time allocation for this unit has been increased from 1 week to 1 ½ weeks.

Fractions (Unit 1)

The lesson on equivalent fractions from Unit 2 has been moved to this unit to improve coherence.

Review week (Block 2)

This has been removed to accommodate the 2 × additional ½ weeks described above.

Other individual lessons amended if deemed appropriate.

Year 4

No changes to curriculum plan. Other individual lessons amended if deemed appropriate.

Year 5Addition and subtraction (Unit 2)

Lesson on population data problems omitted from curriculum map. Now listed.

Multiplication and division (Unit 3)

During 2021/22 one new lesson was added. This is now listed in the curriculum map for 2022/23. The unit cover sheet was already up to date.

[11] Volume of solid shapes (cubes and cuboids)

Fractions (Unit 2)

During 2021/22 one new lesson was added. This is now listed in the curriculum map for 2022/23. The unit cover sheet was already up to date.

[7] Multiplying mixed numbers by whole numbers

Other individual lessons amended if deemed appropriate.

Year 6Multiplication and division (Unit 3)

During 2021/22 two new lessons were added. These are now listed in the curriculum map for 2022/23. The unit cover sheet was already up to date.

[4] Scale on maps

[5] Scale factors

Arithmetic revision programme

Following a request, this will be available from 01/09/22. However, do remember that it is a revision programme. Some of the Y6 arithmetic connected with fractions, for example, cannot be revised until it has been taught in the main programme.

All year groups

Considerable focus on adapting independent tasks to include suggestions for greater depth.

<u>Bridging unit</u>	4
<u>Year 1</u>	5
<u>Year 2</u>	9
<u>Year 3</u>	13
<u>Year 4</u>	17
<u>Year 5</u>	21
<u>Year 6</u>	25

Year 2	Year 3	Year 4	Year 5	Year 6
[1] Number bonds for 5 and related facts	[1] Number bonds for 5, 6 and 7 and related facts	[1] Add two single digit numbers crossing 10 (eg $8 + 6$)	[1] Add numbers with up to 4 digits	[1] Add whole numbers with more than 4 digits
[2] Number bonds for 6 and related facts	[2] Number bonds for 8, 9 and 10 and related facts	[2] Subtract a single digit number from 11-18 (eg $15 - 6$)	[2] Add numbers with up to 4 digits (more strategies)	[2] Subtract whole numbers with more than 4 digits
[3] Number bonds for 7 and related facts	[3] Number bonds for 20 and related facts	[3] Add a three-digit number and ones	[3] Subtract numbers with up to 4 digits	[3] Solve word problems
[4] Number bonds for 8 and related facts	[4] Add 2 single digit numbers crossing 10 (eg $8 + 6$)	[4] Subtract ones from a three-digit number	[4] Use knowledge of known facts to derive new facts	[4] Multiply a number by a two-digit number
[5] Number bonds for 9 and related facts	[5] Subtract a single digit number from 11-18 (eg $15 - 6$)	[5] Add a three-digit number and tens	[5] Multiply two-digit and three-digit numbers by a one-digit number	[5] Divide numbers with up to 4 digits by a one-digit number
[6] Number bonds for 10 and related facts	[6] Add a 2-digit number and a single digit number (eg $28 + 6$)	[6] Subtract tens from a three-digit number	[6] Use efficient strategies to divide numbers	[6] Use related facts for division and interpret remainders
[7] Add single digit numbers to 10 and related subtraction facts	[7] Subtract a single digit number from a 2-digit number (eg $28 - 9$)	[7] Add a three-digit number and hundreds	[7] Divide three-digit numbers by a one-digit number	[7] Multiply and divide by 10, 100 and 1,000
[8] Add single digit numbers to 10 and related subtraction facts	[8] Add a 2-digit number and tens	[8] Subtract hundreds from a three-digit number		
[9] Add single digit numbers to 11-19	[9] Subtract tens from a 2-digit number	[9] Add numbers with up to three digits		
[10] Subtract single digit numbers from 11-19	[10] Add 2 two-digit numbers	[10] Subtract numbers with up to three digits		
[11] Number bonds for 20	[11] Subtract a 2-digit number from a 2-digit number	[11] 4 and 8 × tables		
[12] Number bonds for 20 and related facts	[12] 10 × table	[12] 3 × table		
[13] Problem solving	[13] Division facts linked to 10 × table	[13] Dividing by 4 and 8		
	[14] 5 × table	[14] Dividing by 3		
	[15] Division facts linked to 5 × table			
	[16] 2 × table			
	[17] Division facts linked to 2 × table			

EFFECTIVE MATHS Year 1 mathematics curriculum overview

Block 1												
	1	2	3	4	5	6	7	8	9	10	11	12
Y1	Transition unit	Place value (U1)		Calculation (U1)		Calculation (U2)			Review 1	Geometry		Money (U1)

Block 2												
	1	2	3	4	5	6	7	8	9	10	11	12
Y1	Place value (U2)		Calculation (U3)	Calculation (U4)			Review 2	Statistics		Calculation (U5)		Money (U2)

Block 3												
	1	2	3	4	5	6	7	8	9	10	11	12
Y1	Place value (U3)		Calculation (U6) × and ÷		Fractions (U1)	Length, height	Mass and volume	Time	Patterns and relationships	Problem solving	School to determine focus for each class	

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 - Education Inspection Framework

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 RTP¹ 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's learning at home.

Notes

Some RTP focuses are not best assessed by electronic means.

For Y1 this is 1NPV-2 (counting in ones), but skip counting is assessed in 1NF-2.

Also 1G-2 (compose 2D and 3D shapes from smaller shapes to match an example).

¹ RTP Ready to Progress

	Block 1	Block 2	Block 3
Number of quizzes	14	10	10
Number of RTP quizzes	2	0	3

Block 1												
	1	2	3	4	5	6	7	8	9	10	11	12
Y1	Transition unit	Place value (U1)		Calculation (U1)		Calculation (U2)			Review 1	Geometry		Money (U1)
	[1] Counting to ten [2] Counting to 20 [3] Ordering numbers from 0-20 [4] One more for numbers from 0-20 [5] One more or less for numbers from 0-20 [6] Number bonds for 3 and 4 [7] Subtracting from 3 and 4	[1] Reading and writing numbers [a] [2] Reading and writing numbers [b] [3] Reading and writing numbers [c] [4] Counting forwards in twos [a] [5] Counting forwards in twos [b] [6] Counting backwards in twos ☀MQ [7] Identifying and representing numbers ☀MQ [8] Comparing and ordering numbers		[1] Number bonds for 5 ☀MQ [2] Number bonds for 6 ☀MQ [3] Number bonds for 7 ☀MQ [4] Solving problems involving number bonds from 5 - 7 [5] Expressing the same addition sentence in different ways [6] Number bonds for 8 ☀MQ [7] Number bonds for 9 ☀MQ [8] Number bonds for 10 ☀MQ [9] Solving problems involving number bonds to 10		There are 5 RTP quizzes linked to this unit, so 3 weeks is allocated. [1] Subtracting from 5 [2] Subtracting from 6 [3] Subtracting from 7 ☀MQ [4] Subtracting from 8 [5] Subtracting from 9 [6] Subtracting from 10 ☀MQ [7] Solving problems with numbers to 10 [8] Number bonds for 4 and 5 and related facts (revision) [9] Number bonds for 6 and 7 and related facts (revision) [10] Number bonds for 8 and 9 and related facts (revision) [11] Number bonds for 10 and related facts (revision) ☀ RTP 1NF-1← <i>There are 3 RTP quizzes on number bonds to 10 and related facts. It may be worth assessing children at this point – and returning to these assessments again as the year moves on.</i> ☀ RTP 1AS-2← <i>There are 2 RTP quizzes lined to 1AS-2.</i>				[1] Identifying 3-D shapes [2] Identifying 2-D shapes ☀MQ [3] Creating 2-D shapes (cutting out and drawing) [4] Shapes around us and patterns with 2-D shapes [5] Patterns with 2-D and 3-D shapes [6] Compose 2-D and 3-D shapes from smaller shapes [7] Compose 2-D and 3-D shapes from smaller shapes [8] Positions (Eg: front, behind, top, bottom, above, below etc) [9] Movements (Eg: forward, backward, up, down, inside, outside) [10] Turns (Eg: whole turn, half turn)		[1] Recognising coins [2] Recognising coins ☀MQ [3] The value of coins to 10p [4] The value of coins to £2 ☀MQ [5] Solving problems (addition) [6] Solving problems (subtraction) ☀MQ

☀ indicates a quiz linked to the content of the lesson/s.
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Block 2												
	1	2	3	4	5	6	7	8	9	10	11	12
Y1	Place value (U2)	Calculation (U3)	Calculation (U4)			Review 2	Statistics		Calculation (U5)		Money (U2)	
	[1] Reading/writing numbers written in numerals and words [2] Counting to and from fifty in steps of one and two [3] Reading/writing numbers to 70 [4] Counting to and from seventy in steps of one and two [5] Identifying and representing numbers [6] Ordering and comparing numbers to 70 ☀MQ	[1] Number bonds for ten (revision) [2] Identifying missing numbers [3] Finding the difference [4] Adding to numbers to ten and related subtraction facts (11-15) ☀MQ [5] Adding to numbers to ten and related subtraction facts (11-20) ☀MQ [6] Problem solving linked to adding 1-digit numbers to ten (and related subtraction facts) [7] Problem solving linked to adding 1-digit numbers to ten (and related subtraction facts)	[1] Making 11 in different ways [2] Subtracting from 11 [3] Solving problems (involving addition facts for 11 and related subtraction facts) [4] Making 12 in different ways [5] Subtracting from 12 [6] Solving problems (involving facts for 12 and related subtraction facts) [7] Making 13 in different ways [8] Subtracting from 13 [9] Making 14 in different ways [10] Subtracting from 14 [11] Making 15 in different ways [12] Subtracting from 15 ☀MQ Making 11-15 in different ways and related facts					[1] Sorting shapes [2] Sorting shapes [3] Subsets [4] Combining sets [5] Intersections [6] Block graphs [7] Block graphs [8] Block graphs and bar charts ☀MQ Sorting diagrams		[1] Making 11-15 (revision) [2] Subtracting from 11-15 (revision) [3] Adding single digit numbers to make 16–18 [4] Subtracting from 16-18 [5] Adding single digit numbers to 11-19 ☀MQ [6] Subtracting single digit numbers from 11 to 19 ☀MQ [7] Number bonds for 20 ☀MQ [8] Number bonds for 20 and related facts ☀MQ [9] Number bonds for 20 and related facts (including number bonds with 3 addends) [10] Solving problems - number bonds for 20 (a) [11] Solving problems (b)	[1] Coin recognition (revision) [2] Comparing and ordering coins [3] Adding amounts of money [4] Subtracting amounts of money (a) [5] Subtracting amounts of money (b) ☀MQ [6] Recognising notes	

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Block 3												
	1	2	3	4	5	6	7	8	9	10	11	12
Y1	Place value (U3)	Calculation (U6) × and ÷	Fractions	Length, height	Mass and volume	Time	Patterns and relationships	School to determine focus				
	[1] Skip counting and representing numbers (revision) [2] Reading and writing numbers (numerals to 80) ☀MQ [3] Reading and writing numbers (numerals to 100; words to 20) ☀MQ [4] Counting to 100 in steps of 2 [5] Counting in steps of 2, 5 and 10 ☀ RTP 1NF-2← [6] Identifying and representing numbers [7] Partitioning 80, 90 and 100	[1] Identifying groups [2] Equal groups [3] Repeated addition [4] Making equal rows (arrays) [5] Doubles ☀MQ [6] Multiplication stories ☀MQ [7] Equal groups (division) [8] Equal sharing	[1] Halves [2] Finding half ☀MQ [3] Quarters [4] Finding quarters ☀MQ	[1] Developing vocabulary for length and height [2] Measuring with arbitrary units [3] Measuring with non-standard units [4] Measuring with centimetres ☀MQ ☀ RTP 1NPV-2←	[1] Mass (vocabulary and comparing masses) [2] Mass (measuring with a balance) ☀MQ [3] Comparing the amounts that different containers can hold [4] Measuring capacity [5] Describing volume using fractions	[1] Tell the time to one hour (a) [2] Tell the time to one hour (b) ☀MQ [3] Tell the time to half past the hour ☀MQ [4] Language of time and sequencing	[1] Odd and even numbers [2] Finding the odd one out (a) [3] Finding the odd one out (b) [4] The three little pigs (multiplication) [5] Adding and subtracting combinations of odd and even numbers ☀ RTP 1AS-1	If time exists, it is suggested it is used to revisit the Ready to Progress focuses.				

EFFECTIVE MATHS Year 2 mathematics curriculum overview

	Block 1											
	1	2	3	4	5	6	7	8	9	10	11	12
Y2	Place value (U1)		Addition and subtraction (U1)			Multiplication and division (U1)		Time	Fractions (U1)		Geometry	

	Block 2											
	1	2	3	4	5	6	7	8	9	10	11	12
Y2	Money (U1)		Place value (U2)		Addition and subtraction (U2)		Multiplication and division (U2)		Fractions (U2)	Statistics		Place value (U3)

	Block 3											
	1	2	3	4	5	6	7	8	9	10	11	12
Y2	Calculation		Money (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.

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Notes

Some RTP focuses are not best assessed by electronic means.

For Y2 this is 2AS-2 (recognise subtraction structure of 'difference' - a theme that runs through many lessons.)

And also the 3-D parts of 2G-1 (Describe and compare 2D and 3D shapes) although there is a quiz focusing on 2-D shapes.

¹ RTP Ready to Progress

	Block 1	Block 2	Block 3
Number of quizzes	17	8	6
Number of RTP quizzes	3	7	2

Block 1												
	1	2	3	4	5	6	7	8	9	10	11	12
Y2	Place value (U1)		Addition and subtraction (U1)		Multiplication and division (U1)		Time		Fractions (U1)		Geometry	
	[1] Reading and writing numbers to 100 in numerals [2] Reading and writing numbers to 100 in words [3] Partitioning [4] Trading games [a] [5] Trading games [b] [6] Identifying and representing numbers ☀MQ [7] Comparing and ordering numbers ☀MQ		☀ RTP 2NF-1 ← ¹ [1] Number bonds for 20 ☀MQ [2] Problem solving involving number bonds for 20 [3] Add a two-digit number and ones (no exchanging) [a] [4] Add a two-digit number and ones (no exchanging) [b] [5] Add multiples of ten ☀MQ [6] Using 'friendly number pairs' to add [7] Subtract a two-digit no and ones (no exchanging) [8] Subtract multiples of ten [9] Subtract ones from a multiple of ten [10] Add single digit numbers (making the next ten) ☀MQ [11] Subtract a single digit number from 11-20 (making the previous ten) ☀MQ [12] Solving problems		[1] Groups and equal groups [2] 5 × table ☀MQ [3] 10 × table ☀MQ [4] 2 × table ☀MQ [5] Division: sharing by 2 [6] Division: making groups of 2 ☀MQ [7] Odd and even numbers [8] Dividing by 5 ☀MQ [9] Dividing by 10 ☀MQ Children may be ready for ☀ RTP 2MD-1 ← ☀ RTP 2MD-2 ← (or do these after U2)		[1] O'clock and half past (revision) [2] Quarter past [3] Quarter past and quarter to ☀MQ [4] Different ways of saying the time: quarter past 3 = 3:15 ☀MQ [5] 5 minutes past and different ways of saying times ☀MQ [6] Minutes, hours and days [7] Finding durations of events		[1] Understanding fractions as equal parts [2] Halves and quarters [3] Thirds [4] Naming fractions ☀MQ [5] Comparing and ordering fractions [a] [6] Comparing and ordering fractions [b] [7] Finding half ☀MQ		[1] 2-D shapes ☀MQ [2] Drawing 2-D shapes [3] Symmetry [a] [4] Symmetry [b] [5] Moving shapes [6] Turning shapes [7] 3-D shapes [8] 3-D shapes [9] Revision of unit (You may want to save this for before KS1 SATS.)	

¹ RTP 2NF-1 focuses on number bonds and related facts, key skills for future success in Y2. Start + and – U1 reviewing these skills: the lessons are in the Y2 bridging unit.

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Block 2												
	1	2	3	4	5	6	7	8	9	10	11	12
Y2	Money (U1)		Place value (U2)	Addition and subtraction (U2)			Multiplication and division (U2)		Fractions (U2)	Statistics		Place value (U3)
	[1] Recognise coins and notes; use symbols for pounds and pence [2] Addition of pence to 20p [3] Counting money and comparing amounts of money [4] Finding the total amount [5] Find the total amount (by making the next £10) [6] Equivalence [7] Change [8] Solving problems ☀️MQ Y2 quiz covers: Equivalence, money problems, addition and subtraction		[1] Reading and writing numbers to 150 [2] Counting in tens [3] Counting in fives [4] Counting forwards in threes [5] Counting backwards in threes ☀️MQ [6] Identifying and representing numbers [7] Ordering and comparing numbers ☀️MQ	[1] 2-digit number + 1-digit number (making the next ten) ☀️RTP 2AS-1← [2] 2-digit number + 1-digit number (expanded column) [3] 2-digit number + 1-digit number (compact column method) [4] 2-digit number - 1-digit number (making previous ten) ☀️RTP 2AS-1← [5] 2-digit number - 1-digit number(compact column method) [6] Adding two 2-digit numbers (partitioning) [7] Adding two 2-digit numbers (expanded column method) [8] Adding two 2-digit numbers (compact column method) [9] Subtracting a 2-digit number from a multiple of ten (partitioning the subtrahend) ☀️RTP 2AS-3 [10] Subtracting a 2-digit number from a 2-digit number (partitioning the subtrahend) [11] Subtracting a 2-digit number from a 2-digit number (compact column method)			[1] 10 × table and related facts [2] Multiplication and division problems linked to 10 × table [3] 5 × table and associated problems [4] Dividing by 5 and associated problems [5] 2 × table (and understanding commutative relationships using the multiplication grid) [6] Dividing by 2 and associated problems [7] Multiplication problems ☀️MQ ☀️RTP 2MD-1← ☀️RTP 2MD-2← (If not done in U1)		[1] Finding half (revision) [2] Finding one quarter [3] Finding quarters [4] Finding one third ☀️MQ Finding halves and quarters	[1] Sorting data [2] Sorting data [3] Sorting data [4] Sorting data (Venn diagrams) [5] Sorting data (Venn diagrams) ☀️MQ [6] Pictograms [7] Bar charts [8] Interpreting bar charts [9] In the pet shop (Interpreting representations of data: tables, tally charts, bar charts and pictograms)		[1] Identifying and representing numbers [2] Reading and writing numbers (to 200 in numerals and words) ☀️MQ [3] Counting ☀️MQ [4] Ordering and comparing numbers [5] Identifying and representing numbers ☀️RTP 2NPV-2← [6] Partitioning ☀️RTP 2NPV-1←

Block 3												
	1	2	3	4	5	6	7	8	9	10	11	12
Y2	Calculation		Money (U2)	Length	Mass and volume	Patterns and relationships	School to determine focus					
	[1] Adding two 2-digit numbers using partitioning (revision) ☀RTP 2AS-4← [2] Adding two 2-digit numbers using column methods (revision) [3] Subtracting a 2-digit number from a 2-digit number by partitioning the subtrahend (revision) ☀RTP 2AS-4← [4] Subtracting a 2-digit number from a 2-digit number using the column method (revision) [5] Equivalent calculations [6] Subtraction word problems ☀MQ [7] Subtraction empty box problems [8] Balanced equations ☀MQ [9] Doubling and halving [10] Doubling and halving [11] Multiplication and division problems		[1] Adding amounts of money (coins) [2] Adding amounts of money (notes) [3] Subtracting amounts of money [4] Multiplying amounts of money [5] Dividing amounts of money ☀MQ Adding and subtracting amounts of money	[1] Measuring using centimetres and making estimates [2] Measuring using metres and making estimates [3] Comparing and measuring in centimetres ☀MQ [4] Comparing lengths in metres	[1] Measuring in kilograms [2] Measuring in grams ☀MQ [3] Comparing volume (revision of Year 1) [4] Measuring in litres and millilitres [5] Solving problems	[1] Growing patterns [2] Finding the odd one out ☀MQ [3] Presents for Buster [4] Sequences [5] Hopscotch	If time exists, it is suggested it is used to revisit the Ready to Progress focuses.					

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EFFECTIVE MATHS Year 3 mathematics curriculum overview

Block 1												
	1	2	3	4	5	6	7	8	9	10	11	12
Y3	Place value (U1)		Addition and subtraction (U1)		Multiplication and division (U1)		Time		Fractions (U1)		Multiplication /division (U2)	Geometry

NB: It is strongly suggested that Year 3 start the year with the bridging unit. This secures key skills from Year 2. The 'school to decide focus' at the end of Block 3 will allow time for all Year 3 content to be covered.

Block 2												
	1	2	3	4	5	6	7	8	9	10	11	12
Y3	Geometry	Money (U1)		Place value (U2)		Addition and subtraction (U2)		Multiplication and division (U3)		Fractions (U2)		Statistics

Block 3												
	1	2	3	4	5	6	7	8	9	10	11	12
Y3	Place value (U3)		Calculation		Money (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.

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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 RTP¹ 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's learning at home.

Notes

The lesson and quiz in red are being written for 2022/23 and will be online a few weeks before they are first required. Some RTP focuses are not best assessed by electronic means. For Y3 this is 3G-2 (draw polygons).

¹ RTP Ready to Progress

	Block 1	Block 2	Block 3
Number of quizzes	15	8	8
Number of RTP quizzes	6	5	4

Block 1													
	1	2	3	4	5	6	7	8	9	10	11	12	
Y3	Place value (U1)		Addition and subtraction (U1)		Multiplication and division (U1)		Time		Fractions (U1)		Multiplication /division (U2)	Geometry	
	[1] Reading and writing numbers to 300 in numerals [2] Reading and writing numbers to 400 in numerals [3] Reading and writing numbers in words [4] Counting forwards in fours to 100 [5] Identifying and representing numbers ☀️MQ [6] Ten more and ten less [7] Comparing and ordering numbers [8] Equivalence of 10 tens and 1 hundred ☀️RTP 3NPV-1		☀️RTP 3NF-1←¹ [1] + facts for 100 using multiples of 5 and 10 ☀️MQ [2] + and - facts for 100 using multiples of 5 and 10 ☀️MQ [3] Add a 3-digit number and ones [4] Subtracting ones from a three-digit number (exchanging) [5] Add a 3-digit number and tens; subtract tens from a 3-digit number [6] Adding multiples of ten (making the next hundred) [7] Subtracting multiples of ten (bridging hundreds: making the previous hundred) ☀️MQ [8] Add numbers with up to 3-digits (no exchanging) [9] Add numbers with up to 3-digits (exchanging) [10] Subtract numbers with up to 3 digits (no exchanging) [11] Subtract numbers with up to 3-digits (exchanging)		[1] 5 × table (revision) [2] 4 × table ☀️MQ [3] 8 × table ☀️MQ [4] 3 × table ☀️MQ [5] Solving problems involving 3, 4 and 8 × tables [6] Dividing by 4 ☀️MQ [7] Dividing by 8 ☀️MQ [8] Dividing by 3 ☀️MQ ☀️RTP 3NF-2 2 RTP quizzes: 1 focuses on × facts and the other on ÷ facts		[1] Telling the time to the nearest 5 minutes [2] Telling time to nearest 1 minute ☀️MQ [3] Different ways of expressing time 1:30pm; 1:30 in the afternoon; minutes past/minutes to [4] 24-hour clocks ☀️MQ [5] Number of seconds in a minute [6] The number of days in each month, year and leap year [7] Finding and comparing durations of events		[1] Recognising fractions: fifths, sixths and sevenths [2] Recognising fractions: fifths, sixths, sevenths, eighths and ninths [3] Recognising fractions: fifths, sixths, sevenths, eighths, ninths and tenths ☀️MQ ☀️RTP 3F-1← [4] Counting in tenths [5] Finding halves and quarters [6] Finding thirds [7] Finding fractions of quantities ☀️ RTP 3F-2← [8] Comparing and ordering fractions [a] [9] Comparing and ordering fractions [b] ☀️MQ ☀️ RTP 3F-3 [10] Equivalent fractions		[1] Multiplying by teen numbers [2] Multiplying multiples of ten by 1-digit numbers ☀️MQ [3] Multiplying 2-digit numbers by 4 [4] Multiplying 2-digit numbers by 8		[1] Angles <i>Understanding angles as the amount of turn</i> [2] Angles <i>Identifying angles</i> [3] Angles <i>Number of angles, number of sides; drawing and reflecting shapes and counting sides and angles</i> [4] Right angles ☀️MQ [5] Turns

¹ RTP 3NF-1 focuses on making the next/previous ten, key skills for future success in KS2. Start + and – U1 reviewing these skills: the lessons are in the Y3 bridging unit.

☀️indicates a quiz linked to the content of the lesson/s.

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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
Y3	Geometry	Money (U1)	Place value (U2)	Addition and subtraction (U2)	Multiplication and division (U3)	Fractions (U2)	Statistics					
	[6] Perpendicular lines [7] Parallel lines ☀MQ [8] 2-D shapes [9] 3-D shapes	[1] Identifying amounts of money [2] Making £1 [3] Making £2 and £5 [4] Equivalence [5] Adding amounts of money [6] Converting amounts of money [7] Adding amounts of money (bridging £1) ☀MQ Y3 quiz covers: Identifying amounts of money, equivalence, addition	[1] Reading and writing numbers to 700 [2] Counting forwards in fours to 400 [3] Counting backwards in fours from numbers up to 400 ☀MQ [4] Counting to 700 in steps of 10, 50 and 100 [5] Reading scales with 2, 4, 5 or 10 intervals ☀RTP 3NPV-4 [6] Comparing numbers to 700 [7] Three-digit numbers in the linear number system ☀ 3NPV-3 [8] Solving problems ☀MQ	[1] Number facts for 100 and related facts ☀RTP 3AS-1← [2] Estimation [3] Column method for addition ☀RTP 3AS-2← Quiz focuses on addition [4] Missing digits in column method for addition [5] Column method for subtraction [6] Column method for subtraction ☀RTP 3AS-2← Quiz focuses on subtraction	[1] 4 × table (and understanding commutative relationships using the multiplication grid) [2] 8 × table and associated problems [3] 3 × table and associated problems [4] Multiplying teen numbers and multiplying multiples of ten [5] Multiplying 2-digit numbers by 3 [6] Division facts linked to the 4 and 8 × tables ☀MQ [7] Division facts linked to the 3 × table ☀MQ [8] Dividing multiples of ten [9] Dividing by partitioning (÷ by 4 and 8) [10] Dividing by partitioning (÷ by 3) ☀MQ	[1] Adding fractions with the same denominator [2] Subtracting fractions with the same denominator [3] Addition and subtraction of fractions as inverse operations [4] Subtracting from one whole ☀ RTP 3F-4	[1] Sorting diagrams [2] Carroll diagrams [3] Venn diagrams ☀MQ [4] Sorting diagrams (making connections between Venn diagrams, Carroll diagrams and tables) [5] Sorting diagrams (tables, Carroll diagrams and Venn diagrams) [6] Pictograms [7] Bar charts [8] Interpreting bar charts					

Block 3												
	1	2	3	4	5	6	7	8	9	10	11	12
Y3	Place value (U3)	Calculation			Money (U2)	Length	Mass and volume	Patterns and relationships	School to determine focus			
	[1] Reading and writing numbers (to 1,000 in numerals and words) ☀MQ [2] Counting in multiples of 3, 4, 8, 50 and 100 ☀MQ [3] Comparing and ordering numbers [4] Identifying and representing numbers [5] Partitioning in different ways [a] [6] Partitioning in different ways [b] [7] Partitioning in different ways [c] ☀RTP 3NPV-2← [8] Number grids	[1] Scaling number facts by 10 (addition) [2] Scaling number facts by 10 (subtraction) ☀ RTP 3NF-3← [3] Different methods for addition [4] Different methods for subtraction [5] Addition and subtraction problems ☀MQ [6] Manipulate the additive relationship ☀ RTP 3AS-3 [7] Multiplication facts and multiplying 'teen' numbers (revision) [8] Column methods for multiplication [9] Multiplication problems [10] Division – revision [11] Short division [a] [12] Short division [b] [13] Multiplication and division problems ☀MQ ☀RTP 3MD-1←			[1] Revision of unit 1 [2] Subtracting amounts of money [3] Subtracting amounts of money [4] Subtracting amounts of money [5] Solving problems about money ☀MQ Subtracting amounts of money	[1] Estimating and measuring in m and cm [2] Converting lengths in m and cm to cm [3] Measuring in cm and mm [4] Comparing lengths written in different units ☀MQ [5] Perimeter [a] [6] Perimeter [b]	[1] Reading masses in grams [2] Reading masses in kilograms and grams ☀MQ [3] Volume and capacity - revision [4] Measuring in litres and millilitres [5] Solving problems about volume	[1] Shrinking patterns ☀MQ [2] Addition patterns on the number grid (a) [3] Addition patterns on the number grid (b) [4] Addition patterns on the number grid (c) [5] Subtraction patterns on the number grid (a) [6] Subtraction patterns on the number grid (b)	If time exists, it is suggested it is used to revisit the Ready to Progress focuses.			

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EFFECTIVE MATHS Year 4 mathematics curriculum overview

	Block 1													
	1	2	3	4	5	6	7	8	9	10	11	12		
Y4	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	
Y4	Money and decimals (U1)			Place value (U2)		Addition and subtraction (U2)		Multiplication and division (U2)		Fractions (U2)		Statistics	

	Block 3											
	1	2	3	4	5	6	7	8	9	10	11	12
Y4	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.

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Notes

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For Y4 these are 4G-1 (translations) and parts of 4G-2 (regular/irregular polygons) but perimeter is assessed in the area/perimeter quiz in the length unit.

¹ RTP Ready to Progress

	Block 1	Block 2	Block 3
Number of quizzes	15	8	13
Number of RTP quizzes	4	5	3

Block 1												
	1	2	3	4	5	6	7	8	9	10	11	12
Y4	Place value (U1)		Addition and subtraction (U1)		Multiplication and division (U1)		Time	Fractions (U1)	Multiplication /division (U2)	Geometry		
	[1] Reading and writing numbers to 4,000 in numerals [2] Reading and writing numbers to 4,000 in words [3] Counting forwards in steps of six to 198 [4] Counting forwards in steps of six past 198 [5] Counting forwards and backwards in steps of six [6] Identifying and representing numbers ☀️MQ [7] Comparing and ordering numbers [8] Rounding numbers [a] [9] Rounding numbers [b] [10] Equivalence of 10 hundreds and 1 thousand ☀️RTP 4NPV-1←		[1] + facts for 100 and associated problem solving ☀️MQ [2] + and - facts for 100 and associated problem solving [3] Using 'friendly number pairs' [4] Scaling addition facts by 100 [5] Scaling subtraction facts by 100 ☀️MQ [6] Mental calculation Next/previous ten; near doubles☀️ [7] Mental calculation Left to right addition; number line [8] Estimation [9] Column addition: numbers with up to 4 digits (exchanging ones) [10] Column addition: numbers with up to 4 digits (exchanging, ones, tens and hundreds) [11] Column subtraction: numbers with 3-digits (exchanging ones) [12] Column subtraction: numbers with 3-digits (exchanging ones and tens)		[1] 8 × table (revision) [2] Reasoning about multiplication [3] 6 × table ☀️MQ [4] 9 × table ☀️MQ [5] 7 × table ☀️MQ [6] Dividing by 6 ☀️MQ [7] Dividing by 9 ☀️MQ [8] Dividing by 7 ☀️MQ RTP 4NF-1← 3 RTP quizzes covering Y3 and Y4 × and ÷ facts		[1] Convert time between analogue and digital 12- and 24-hour clocks ☀️MQ [2] Convert between minutes and seconds ☀️MQ [3] Convert between hours and minutes ☀️MQ [4] Changing years to months and weeks to days	[1] Finding fractions of quantities [2] Counting in fractional steps [3] Comparing and ordering fractions ☀️RTP 4F-1← [4] Equivalent fractions [a] [5] Equivalent fractions [b] ☀️MQ [6] Mixed number equivalents [7] Improper fraction equivalents ☀️MQ Quiz linked to [6] - [7]: Mixed numbers and improper fractions	[1] 6 × table (revision) [2] Multiplying multiples of ten by 1-digit numbers ☀️MQ [3] Column method for multiplying 2-digit nos by a 1-digit no (expanded and compact - revision) [4] Multiplying 3 digit numbers (expanded method) [5] Division with remainders ☀️RTP 4NF-2	[1] Angles [2] Ordering and comparing angles [3] Triangles and quadrilaterals [4] Symmetry [5] Symmetry [6] Symmetry ☀️MQ [7] Coordinates [8] Coordinates [9] Coordinates and translations		

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Block 2												
	1	2	3	4	5	6	7	8	9	10	11	12
Y4	Money and decimals (U1)			Place value (U2)	Addition and subtraction (U2)		Multiplication and division (U3)		Fractions (U2)		Statistics	
	[1] Decimal equivalents of tenths to one [2] Identifying representations of tenths [3] Decimal equivalents of tenths greater than one [4] Identifying representations of tenths, including beyond one [5] Decimal equivalents of hundredths [6] Decimal equivalents of halves and quarters [7] Multiplying decimals by ten [8] Dividing 2-digit numbers by ten [9] Dividing 1-digit and 2-digit numbers by ten [10] Multiplying and dividing 1 and 2 digit numbers by 100 ☀RTP 4MD-1← ☀MQ Y4 quiz covers: Decimal equivalents of tenths, hundredths, halves and quarters			[1] What do we know about 3,102? <i>Revision of unit 1</i> [2] Reading and writing numbers to 7,000 [3] Counting in multiples of nine [4] Counting in multiples of seven [5] Reading scales with 2, 4, 5 or 10 intervals ☀RTP 4NPV-4← [6] Negative numbers ☀MQ [7] Solving problems	[1] Mental strategies for addition and subtraction [2] Making the next thousand ☀MQ [3] Making the previous thousand ☀MQ [4] Missing digits in the column method for addition [5] Subtract a 4-digit number from a 4-digit number [6] Missing number problems ☀MQ [7] Solving problems		[1] Understanding multiplication (multiplication facts, commutative and distributive property) ☀MQ [2] Multiplication facts (investigating repeating pattern in ones digits) [3] 7 × table and related facts (line graphs) [4] Multiplying multiples of ten and compact column method (3 digit numbers) [5] Solving problems [6] Strategies for division (partitioning, scaling) ☀MQ [7] Dividing 3-digit numbers (partitioning) [8] Dividing 3-digit numbers (partitioning and short division - exchanging tens) [9] Dividing 3-digit numbers (short division - exchanging hundreds and tens) ☀RTP 4MD-2←		[1] Comparing fractions, equivalent fractions, mixed number/improper equivalents (revision) [2] Adding and subtracting fractions within one (revision) [3] Convert between mixed numbers and improper fractions [4] Convert between improper fractions and mixed numbers ☀RTP 4F-2 [5] Adding like fractions where sum is equal to or greater than one [6] Adding improper and mixed fractions [7] Subtracting fractions from whole numbers [8] Subtraction of improper and mixed fractions ☀RTP 4F-3		[1] Sorting diagrams (decision tree diagrams) [2] Interpreting sorting diagrams (tables, Carroll diagrams and Venn diagrams) [3] Venn diagrams with three sets ☀MQ Sorting diagrams [4] Interpreting tables [5] Line graphs (a) [6] Line graphs (b) [7] Line graphs (c)	

Block 3												
	1	2	3	4	5	6	7	8	9	10	11	12
Y4	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 10,000 [2] Solving problems involving counting [3] Making numbers in different ways [4] Partitioning in different ways ☀RTP 4NPV-2← [5] Roman numerals to 40 ☀MQ [6] Roman numerals to 80 [7] Roman numerals to 100	[1] Different methods for addition (a) [2] Different methods for addition (b) ☀MQ [3] Different methods for subtraction ☀MQ [4] Addition and subtraction problems ☀MQ [5] Solving multiplication problems involving recall of × facts [6] Using known × facts to derive new facts ☀MQ [7] Scaling multiplication and division facts by 10 and 100 ☀RTP 4NF-3← [8] Multiplying a 3-digit number by a 1-digit number ☀MQ [9] Division (revision) Division facts; using related facts; dividing by partitioning ☀MQ [10] Division problems ☀MQ [11] Short division ☀RTP 4MD-3←			[1] Writing amounts of money in pounds [2] Calculating with money [3] Solving problems about money (coins) [4] Solving problems about money (representing problems with bar models) [5] Adding decimal numbers [6] Adding decimal numbers ☀MQ Solving problems involving money	[1] Decimal notation for lengths in metres [2] Decimal notation for lengths in centimetres ☀MQ [3] Converting from kilometres and metres [4] Perimeter [5] Perimeter and area ☀MQ	[1] Reading different scales [2] Reading masses using decimal notation ☀MQ [3] Decimal notation for volume [a] [4] Decimal notation for volume [b] [5] Decimal notation for volume and solving problems	[1] Growing patterns [2] Investigating magic squares ☀MQ [3] Addition patterns on the number grid (a) [4] Addition patterns on the number grid (b) [5] Anno's magic seeds [6] Subtraction patterns on the number grid (a) [7] Subtraction patterns on the number grid (b)	If time exists, it is suggested it is used to revisit the Ready to Progress focuses.			

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.

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Notes

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¹ RTP Ready to Progress

	Block 1	Block 2	Block 3
Number of quizzes	11	9	8
Number of RTP quizzes	6	5	3

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	
	[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] Complements for 1,000 and related facts [4] Mental calculation Making next/previous ten; near doubles ☀MQ [5] Calculation strategies Left to right addition; number line; partitioning the minuend [6] Estimation [7] Add numbers with more than 4-digits (with exchanging) [8] Subtract numbers with more than 4-digits (with exchanging) [9] Addition reasoning [10] Subtraction reasoning		[1] 9 × table (revision) [2] Reasoning about multiplication [3] Factors ☀MQ [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 [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 [3] Equivalent fractions ☀RTP 5F-2 [4] Comparing and ordering fractions [a] [5] Comparing and ordering fractions [b] ☀MQ Quiz linked to [3] - [4]: Comparing fractions [6] Improper fractions and mixed numbers [a] [7] Improper fractions and mixed numbers [b] [8] 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 ☀MQ [5] Quadrilaterals [6] Angles in quadrilaterals ☀RTP 5G-1 [7] Drawing shapes [8] Coordinates [9] Coordinates - translation and reflection	

☀ indicates a quiz linked to the content of the lesson/s.

☀MQ means the quiz is accessible via mathsquiz.org

☀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
Y5	Money and decimals (U1)		Place value (U2)	Addition and subtraction (U2)		Multiplication and division (U3)		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 [5] Methods for subtraction ☀MQ [6] Population data problems [7] Solving problems [8] 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 [11] Volume of solid shapes, cubes and cuboids		[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 proper fractions by whole numbers [7] Multiplying mixed numbers 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] Representing the same data in different ways [2] Venn diagrams with three sets [3] Interpreting tables [4] Line graphs (a) [5] Line graphs (b) [6] Pie charts (a) [7] Pie charts (b) [8] Representing the same data in different ways ☀ Sorting diagrams; tables		

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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		
	[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 [5] Area and perimeter problems ☀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.		

EFFECTIVE MATHS Year 6 mathematics curriculum overview

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

NB: From 2022 the Y6 arithmetic revision programme will be available from September.

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)		[a] Multiplication and division (U3) [b] Ratio		Fractions	Algebra	Statistics	Measurement

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

Block 3												
	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 - Education Inspection Framework

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 RTP¹ 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's learning at home.

Notes

The quizzes in red are being written for 2022/23 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

	Block 1	Block 2	Block 3
Number of quizzes	15	11	5
Number of RTP quizzes	4	5	2

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
	[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 ⚡MQ [4] Optional lesson on revision of calculation strategies ⚡MQ [5] Magic squares [6] Missing number addition problems [7] Missing number subtraction problems [8] Missing number problems – number sequence [9] Column addition [10] Column subtraction [11] Problem solving		[1] 7 × table (revision) [2] Multiples and factors (revision) [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] <i>NB</i> <i>There are 4 quizzes that cover the same topics as lesson 1 (revision of Y5) on mathsquiz.org</i>	[1] Angles - revision [a] [2] Angles - revision [b] ⚡MQ [3] Vertically opposite angles [4] Circles [5] Solving problem involving circles

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 (U2)	[a] Multiplication and division (U3) [b] Ratio	Fractions	Algebra	Statistics	Measurement			
	<i>Continued from Block 1</i> [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 [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 <u>Ratio</u> [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 actual size of quantities involved; simplest form; equivalent ratios) [3] Ratio (solving problems) ⚙️RTP 6AS/MD-3 [4] Scale on maps [5] Scale factors	[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			

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 (2) [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									