

#### Year 1

#### Block 1

Year 1 teachers should be aware of the new EM Reception lessons. Some of these lessons will be invaluable in providing support to children working below expectations. Reception lessons from Block 3 will support a range of learning in Year 1, Block 1.

#### Block 2

No changes to sequence, some editing of individual lessons.

#### Block 3

No changes to sequence, some editing of individual lessons.

#### Year 2

#### Block 1

No changes to sequence, some editing of individual lessons.

#### Block 2

No changes to sequence, some editing of individual lessons.

### Block 3

No changes to sequence, some editing of individual lessons.

#### Year 3

#### Block 1

No changes to sequence, some editing of individual lessons.

### Block 2

No changes to sequence, some editing of individual lessons.

### Block 3

#### Calculation Unit

The introduction of short division has been removed. Short division is now introduced in Y4 (Multiplication and Division Unit 2). This mirrors the change made in the NCETM PD spines where short division isn't introduced until Y4.

#### Year 4

#### Block 1

Multiplication and Division Unit 2

Short division is now introduced in Y4.

This mirrors the change made in the NCETM PD spines where short division isn't introduced until Y4.

The time allocation for this unit is increased by  $\frac{1}{2}$  a week.

#### Block 2

Money and decimals Unit 1

Currently the lessons on multiplying and dividing numbers by 100 culminate with multiplying/dividing a number of tenths, eg 0.3, or a number of hundredths, eg 0.09. This will now be extended to include work on multiplying numbers with 2 decimal places which has tenths and hundredths by 100, eg 0.65 x 100.

### Multiplication and Division Unit 3

#### Lesson 3 Revision of 7 times table and related facts

Line graph activity will be replaced as line graphs first encountered in Statistics unit at end of Block 2.

#### Block 3

No changes to sequence, some editing of individual lessons.



#### Year 5

#### Block 1

No changes to sequence, some editing of individual lessons.

#### Block 2

Money and decimals Unit 1

Multiplying and dividing decimals by 10, 100 and 1,000 is introduced in Multiplication and Division Unit 2. This will be revisited more often, including during starter activities in Money and decimals Unit 1.

### Block 3

No changes to sequence, some editing of individual lessons.

#### Year 6

### Block 1

No changes to sequence, some editing of individual lessons.

### Block 2

Money and decimals Unit 1

There will be more tasks revisiting learning from previous year groups.

### Block 3

Money and decimals Unit 2

New lessons on multiplying and dividing numbers with up to two decimal places by one-digit and two-digit whole numbers (to reflect Y6 NC non-statutory guidance)

Bridging unit	5
Year 1	6
Year 2	10
Year 3	14
Year 4	18
Year 5	22
Year 6	24

## Bridging unit (Y2-Y6)

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	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	[3] Number bonds for 20 and related facts		[3] Subtract numbers with up to 4 digits	[3] Solve word problems
related facts	[4] Add 2 single digit numbers crossing 10 (eg 8 + 6)	ones	[4] Use knowledge of known facts	[4] Multiply a number by a two-
[4] Number bonds for 8 and related facts	[5] Subtract a single digit number from 11-18 (eg 15 – 6)	[4] Subtract ones from a three-digit number		digit number
[5] Number bonds for 9 and related facts	[6] Add a 2-digit number and a single digit number (eg 28 + 6)	[5] Add a three-digit number and	[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	[7] Subtract a single digit number from a 2-digit number (eg 28 - 9)	[6] Subtract tens from a three-digit number	[6] Use efficient strategies to	[6] Use related facts for division and interpret remainders
related facts	[8] Add a 2-digit number and tens		divide numbers	[7] Multiply and divide by 10, 100
1. 1	[9] Subtract tens from a 2-digit number	[7] Add a three-digit number and hundreds	[7] Divide three-digit numbers by a one-digit number	
[O] Add also de distinguales as to 40	[10] Add 2 two-digit numbers	[8] Subtract hundreds from a		
Tano refaleo suonachon facis	[11] Subtract a 2-digit number from a 2-digit number	three-digit number		
[9] Add single digit numbers to 11-	[12] 10 × table	[9] Add numbers with up to three digits		
	[13] Division facts linked to 10 × table	[10] Subtract numbers with up to		
[10] Subtract single digit numbers from 11-19	[14] 5 × table	three digits		
[11] Number bonds for 20	[15] Division facts linked to 5 × table	[11] 4 and 8 × tables		
	[16] 2 × table	[12] 3 × table		
[12] Number bonds for 20 and related facts	[17] Division facts linked to 2 × table	[13] Dividing by 4 and 8		
[13] Problem solving		[14] Dividing by 3		

### EFFECTIVE MATHS Year 1 mathematics curriculum overview

	Blo	ck 1										
	1	2 3	4	5	6	7		8	9	10	11	12
<b>Y</b> 1	Transition unit	Place value (U1)		Calculation (U1)			Calculatio (U2)	n		Geomet	Geometry	
	Blo	ck 2										
	1	2 3	4	5	6	7		8	9	10	11	12
Y1	Place value (U2)	Calculation (U3)		Calculation (U4)			Statistics	5	С	alculation (U5)		Money (U2)
	Blo	ck 3										
	1	2 3	4	5	6	7		8	9	10	11	12
<b>Y</b> 1	Place value (U3)	Calculation (U6 × and ÷	,		ss and lume			atterns and Problem lationships solving				

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 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' 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).

	Block 1	Block 2	Block 3	l
Number of quizzes	14	10	10	ĺ
Number of RTP guizzes	2	0	3	ĺ

<sup>&</sup>lt;sup>1</sup> RTP Ready to Progress

### Year 1 mathematics curriculum

	Bloo	ck 1				
	1 2	2 3	4 5	6 7 8	9 10 11	12
Y1	Transition unit	Place value (U1)	Calculation (U1)	Calculation (U2)	Geometry	Money (U1)
	[6] Number bonds for 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← 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.  ★ RTP 1AS-2← There are 2 RTP quizzes lined to 1AS-2.	[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 [9] Positions [9] Movements [9] Movements [9] Movements [9] Movements [9] Turns [9] Turns [9] Turns [9] 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

### Year 1 mathematics curriculum

	Bloc	ck 2									
	1 2	2 3	4	5	6	7	8	9	10	11	12
Y1	Place value (U2)	Calculation (U3)		Calculation (U4)	1	Stat	istics	С	alculation (U5)		Money (U2)
	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) MC  [5] Adding to numbers to ten and related subtraction facts (11-20) MC  [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)	[4] Making 12 [5] Subtractin [6] Solving pr 12 and relate [7] Making 13 [8] Subtractin [9] Making 14 [10] Subtract [11] Making 1 [12] Subtract	g from 11 oblems (involuded subtraction) g from 12 oblems (involuded subtraction) g from 13 in different was from 13 in different was from 14 5 in different was from 14	lving addition btraction facts) ways lving facts for facts) ways	[1] Sorting shape [2] Sorting shape [3] Subsets [4] Combining [5] Intersection [6] Block grape [7] Block grape [8] Block grape charts  MQ Sorting	apes g sets ons ohs ohs	make 16–18 [4] Subtractin [5] Adding sin 11-19 SMQ [6] Subtractin numbers from [7] Number be [8] Number be related facts ( bonds with 3	g from 11-15  gle digit numbers to g from 16-18 gle digit numbers to g single digit 11 to 19 MQ onds for 20 MQ onds for 20 and MQ onds for 20 and including number addends) roblems - number (a)	[2] Cor orderin [3] Add of mon [4] Sub amoun (a) [5] Sub amoun (b) \$\ightarrow\$ \text{N}	mparing and and and coins  ding amounts ney otracting ats of money otracting

### Year 1 mathematics curriculum

	Blo	ck 3								
	1 2	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	Schoo	l to determine	e focus
	(U3)  [1] Skip counting and representing numbers (revision)  [2] Reading and writing numbers (numerals to 80)		[1] Halves [2] Finding half AMQ [3] Quarters [4] Finding quarters AMQ	height [1] Developing	volume [1] Mass (vocabulary and comparing masses) [2] Mass (measuring with a balance)  MQ [3] Comparing	past the hour	[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)	If time exists, i revisit the Rea	t is suggeste	d it is used to
	[6] Identifying and representing numbers [7] Partitioning 80, 90 and 100			centimetres	Measuring capacity  [5] Describing volume using fractions					

Block 1

17

Number of auizzes

Number of RTP auizzes

Block 2

8

Block 3

6

### EFFECTIVE MATHS Year 2 mathematics curriculum overview

		Block 1												
	1	2	3	4		5	6	7	7	8	9	10	11	12
Y2		e value J1)	Addition	and subtra (U1)	and subtraction Multiplication and divi (U1) (U1)		division	vision Time		Fractions (U1)		Geometry		
	1	Block 2	3	4		5	6	-	7	8	q	10	11	12
Y2		oney J1)	Place val (U2)			and sub (U2)	and subtraction (U2)		Multiplication and division (U2)		Fractions Si (U2)		stics	Place value (U3)
				_	_		_							
	1	2	3	4		5	6		7	8	9	10	11	12
Y2	C	Calculation		ney I2)	Length	Mass volu		erns and ionships	1		School to	determine foo	us	

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#### Notes

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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 guiz focusing on 2-D shapes.

<sup>&</sup>lt;sup>1</sup> RTP Ready to Progress

### Year 2 mathematics curriculum

	E	Block 1											
	1	2	3	4	5	6		7	8	9	10	11	12
Y2	Place va (U1)	lue	Addition	and subtraction (U1)	Multiplic	ation and d (U1)	ivision		Time	Fr	ractions (U1)	Ge	ometry
	[1] Reading and numbers to 100 inumerals  [2] Reading and numbers to 100 inumbers to 100 inumb	writing in words es [a] es [b] d enbers end ordering	[2] Problem so number bonds [3] Add a two-ones (no exched) [4] Add a two-ones (no exched) [5] Add multiples [6] Using 'frier add [7] Subtract a ones (no exched) Subtract or of ten [10] Add single (making the need)	nds for 20 ☆MQ  living involving for 20  digit number and anging) [a]  digit number and anging) [b] es of ten ☆MQ  dly number pairs' to  two-digit no and anging)  ultiples of ten hes from a multiple e digit numbers ext ten) ☆MQ a single digit number aking the previous	groups  [2] 5 × tal  [3] 10 × tal  [4] 2 × tal  [5] Division  [6] Division  [7] Odd a  [8] Dividir  [9] Dividir  Children  RTP 2  RTP 2	os and equaloble AMQ able AMQ ble AMQ on: sharing to	by 2 groups mbers IQ MQ dy for	past (reference past) [2] Quarter [3] Quarter [4] Difference past [5] 5 min and difference past [5] 5 min and difference past [6] Minimal day	evision)  arter past arter past and arto MQ  erent ways of the time: past 3 = MQ  inutes past ferent ways ng times  utes, hours ys  ding durations	as equal pa [2] Halves a [3] Thirds [4] Naming [5] Compar fractions [a [6] Compar fractions [b [7] Finding	randing fractions arts  and quarters  fractions MQ  ring and ordering  ing and ordering	[2] Drawing [3] Symmetr [4] Symmetr [5] Moving s [6] Turning s [7] 3-D shap [8] 3-D shap [9] Revision	2-D shapes  y [a]  y [b]  hapes  shapes  es  of unit ant to save this

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.

### Year 2 mathematics curriculum

	Block 2			_						
	1 2	3	4 5	6	7	8	9	10	11	12
Y2	Money (U1)	Place value (U2)	Addition and su (U2)	ubtraction	Multiplication (U		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 (by making the next £10)  [6] Equivalence  [7] Change  [8] Solving problems  CMQ Y2 quiz covers: Equivalence, money problems, addition and subtraction	[3] Counting in fives [4] Counting forwards in threes	[3] 2-digit number + 1 (compact column met [4] 2-digit number - 1-(making previous ten)	-digit number thod) -digit number digit number digit number  digit umn method) numbers ethod) numbers ethod) git number from itioning the 2AS-3 ligit number (partitioning	[1] 10 × table of facts  [2] Multiplication of division problems  [3] 5 × table aproblems  [4] Dividing by associated problems  [5] 2 × table (aunderstanding relationships umultiplication of the factor of the fac	on and ems linked to and associated of 5 and oblems and grommutative using the grid)  of 2 and oblems on problems	quarters  [4] Finding one third	[1] Sorting data [2] Sorting data [3] Sorting data [4] Sorting data diagrams)  [5] Sorting data diagrams)  MQ  [6] Pictograms [7] Bar charts [8] Interpreting [9] In the pet si (Interpreting representation tables, tally charts and pict	bar charts hop s of data: arts, bar	[1] Identifying and representing numbers [2] Reading and writing numbers (to 200 in numerals and words)

### Year 2 mathematics curriculum

	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 foci	us	
	[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  ②MQ  [8] Balanced equations ③MQ  [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  \$\times 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	[2] Finding the odd one	If time exists, it is sugfocuses.	ggested it is us	sed to revisit the	e Ready to P	rogress

15

Number of auizzes

Number of RTP auizzes

8

5

8

### EFFECTIVE MATHS Year 3 mathematics curriculum overview

		Block 1					_	_			_				
	1	2	3	4	ļ	5	6	7	7	8	9		10	11	12
Y3		value I1)	Addition	and subtraction (U1)	n	Multi	plication and di (U1)	ivision	ision Time			Fract (U		Multiplication /division (U2)	Geometry
		Block 2		]					nat Year 3 start the year with the bridging unit. This secures key skills from \identified ide focus' at the end of Block 3 will allow time for all Year 3 content to be co						
	1	2	3	4	ļ	5	6	7	7	8	9		10	11	12
Y3	Geometry	Money (U1)		Place value (U2)			ddition and traction (U2)	Multi	plication	on and division	(U3)	F	ractions (U2)	Stati	stics

		Block 3			_	_	_			_		_
	1	2	3	4	5	6	7	8	9	10	11	12
Y3	Place valu (U3)	ıe	Calculation	on	Money (U2)	Length	Mass and volume	Patterns a relationsh		School to	determine foc	us

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| Block 1 | Block 2 | Block 3 | B

### <u>Notes</u>

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).

<sup>&</sup>lt;sup>1</sup> RTP Ready to Progress

### Year 3 mathematics curriculum

		Block 1											
	1	2	3	4	5	6		7	8	9	10	11	12
Y3	Place (U		Addition	and subtraction (U1)	Multipli	cation and d (U1)	ivision		Time		ctions U1)	Multiplication /division (U2)	Geometry
	[1] Reading ar numbers to 30 numerals [2] Reading ar numbers to 40 numerals [3] Reading ar numbers in wo [4] Counting for fours to 100 [5] Identifying representing numbers [6] Ten more at [7] Comparing numbers [8] Equivalence and 1 hundred RTP 3NPV-	nd writing 10 in and writing 10 in and writing 10 orwards in and 10 in and 1	and 10 MQ  [2] + and - facts multiples of 5 a  [3] Add a 3-digi  [4] Subtracting number (excha  [5] Add a 3-digi subtract tens fro  [6] Adding mult the next hundre [7] Subtracting (bridging hundr previous hundre [8] Add number (no exchanging)  [9] Add number (exchanging)  [10] Subtract no digits (no excha-	of some suitiples of 5 for 100 using and 10 MQ to number and ones ones from a three-digital nging) It number and tens; om a 3-digit number ples of ten (making and) multiples of ten eds: making the ed) MQ so with up to 3-digits of the suitiples with up to 3-digits of the anging) umbers with up to 3-digits of the anging)	[2] 4 × ta [3] 8 × ta [4] 3 × ta [5] Solvi involving tables [6] Divid [7] Divid [8] Divid \$\times \text{RTP} 3 \\ 2 \text{RTP} 9	able (revision able \$\prec{1}{2}MQ able \$\prec	x 1Q 1Q 1Q cuses	to the numinutes  [2] Tellinearest  MQ  [3] Differexpress 1:30pm afternor past/mi  [4] 24-h  MQ  [5] Num second minute  [6] The days in year an  [7] Find	ng time to to the time time time time time time time tim	fifths, sixths [2] Recognis fifths, sixths eighths and [3] Recognis fifths, sixths eighths, nint MQ RTP 3F— [4] Counting [5] Finding of [6] Finding of [7] Finding f quantities of [8] Comparin fractions [a] [9] Comparin fractions [b] RTP 3F— [10] Equival	ninths ing fractions: sevenths, hs and tenths  in tenths alves uarters actions of RTP 3F-2 ng and ordering mg and ordering MQ  3	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 4	[1] Angles Understanding angles as the amount of turn  [2] Angles Identifying angles  [3] Angles Number of angles, number of sides; drawing and reflecting shapes and counting sides and angles  [4] Right angles  MQ  [5] Turns

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.

### Year 3 mathematics curriculum

		Block 2											
	1	2	3	4	5	6	7	8		9	10	11	12
Y3	Geometry	Money (U1)		Place value (U2)		tion and ction (U2)	Multiplicatio	n and division	(U3)	F	ractions (U2)	Sta	atistics
	Perpendicular lines  [7] Parallel lines MQ  [8] 2-D shapes  [9] 3-D shapes	[1] Identifying amounts of more [2] Making £1 [3] Making £2 £5 [4] Equivalence [5] Adding amof money [6] Converting amounts of more [7] Adding amof money (brick £1)  MQ Y3 quiz covers: Identification amounts of more equivalence, addition	oney numb  [2] Co fours  and [3] Co fours  4003  and [4] Co of 10  ounts [5] Re 4, 5 c RT  oney  ounts lging  [7] Tr the lin t	eading and writing pers to 700 counting forwards in to 400 counting backwards in from numbers up to MQ counting to 700 in step, 50 and 100 ceading scales with 2, or 10 intervals P 3NPV-4 comparing numbers to pree-digit numbers in near number system PV-3 colving problems MO	100 and facts RTP 3 [2] Estim [3] Colur for additi [4] Colur for additi RTP 3 Quiz foc addition [5] Missi column raddition [6] Colur for subtra [7] Colur	ation  nn method on [a]  nn method on [b]  AS-2←  uses on  ng digits in nethod for  nn method action [a]  nn method action [b]  AS-2←  uses on	the multiplicat  [2] 8 × table a problems  [3] 3 × table a problems  [4] Multiplying multiplying multiplying multiplying multiplying and 8 × tables  [7] Division factable Amage in the Mage in the Mage in the multiplying multiplying multiplying and 8 × tables  [8] Dividing multiplying multiplying multiplying multiplying multiplying and 8 × tables  [8] Dividing multiplying mult	relationships usion grid)  nd associated  nd associated  teen numbers ultiples of ten  2-digit numbe  cts linked to the s MQ  cts linked to the ultiples of ten  r partitioning (÷	and rs by e 4 e 3 ×	with the denomination [2] Sulfraction same [3] Add subtration operation [4] Sulfone with the denomination of the denomination	otracting ns with the denominator dition and ction of ns as inverse tions	[4] Sorting of (making corbetween Ve Carroll diagraphs) [5] Sorting of (tables, Carand Venn diagraphs) [6] Pictographs [7] Bar char	iagrams grams MQ liagrams nn diagrams, rams and liagrams roll diagrams agrams)

### Year 3 mathematics curriculum

	Blo	ck 3										
	1 2	2 3	4	5	6	7	8	Ć	)	10	11	12
Y3	Place value (U3)	Calculatio	on	Money (U2)	Length	Mass and volume	Patterns and relationships			School	to determine fo	ocus
	[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 fa (addition)  [2] Scaling number fa (subtraction) ☆ RTP  [3] Different methods [4] Different methods [4] Different methods subtraction  [5] Addition and subtr problems ☆ MQ  [6] Manipulate the adrelationship ☆ RTP 3  [7] Multiplication facts multiplying 'teen' num (revision)  [8] Column methods fi multiplication [9] Multiplication prob  [10] Division – revisio [11] Short division [a]  [12] Short division [b]  [11] Multiplication and problems ☆ MQ  ☆ RTP 3MD-1←	cts by 10 3NF-3← for addition for action ditive BAS-3 and abers for	[2] Subtracting amounts of money (a)  [3] Subtracting amounts of money (b)  [4] Subtracting amounts of money (c)  [5] Solving problems about money  MQ Subtracting	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 AMQ	[2] Reading masses in kilograms and grams MQ  [3] Volume and capacity revision  [4] Measuring in litres and millilitres	[1] Shrinking patterns AQ  [2] Addition patterns the number growth on the number growth of th	erns rid erns rid			uggested it is u	used to revisit

### EFFECTIVE MATHS Year 4 mathematics curriculum overview

		Block 1				_	_				_	_
	1	2	3	4	5	6	7	8	9	10	11	12
Y4	(U1)		and subtraction (U1)	on	Multiplication an division (U1)	d Time	Fraction (U1)		Itiplication and livision (U2)	Geo	metry	
	Block 2											
	1	2	3	4	5	6	7	8	9	10	11	12
Y4	Money and decimals P		lace value (U2)	Additio	n and subtractio (U2)		n and division J2)		actions (U2)	Staf	tistics	
		Block 3										
	1	2	3	4	5	6	7	8	9	10	11	12

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

Calculation

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.

Length

Money and

decimals (U2)

### Remembering content and making connections - Education Inspection Framework

In the 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' learning at home.

#### **Notes**

**Y4** 

Place value

(U3)

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.

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

School to determine focus

Patterns and

relationships

Mass and

volume

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.

<sup>&</sup>lt;sup>1</sup> RTP Ready to Progress

### Year 4 mathematics curriculum

	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 and division (U2)	Geome	try
	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	[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  ☼RTP 4NF-3 [6] Mental calculation Next/previous ten; near doubles  ṁMQ [7] Mental calculation Left to right addition; number line  ṁMQ [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)	[5] 7 × table ☆MQ  [6] Dividing by 6	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	[1] Finding fractions of quantities  [2] Counting in fractional steps  [3] Mixed numbers in the linear number system	[6] Short division [b] [7] Division with	[1] Angles [2] Ordering and angles [3] Triangles and quadrilaterals [4] Symmetry [5] Symmetry [6] Symmetry MQ [7] Coordinates [8] Coordinates [9] Coordinates translations	. °

### Year 4 mathematics curriculum

	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	[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	column method for addition  [5] Subtract a 4-digit number from a 4-digit number  [6] Missing number problems AMQ  [7] Solving problems	[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	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  [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	[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)

### Year 4 mathematics curriculum

	Blo	ck 3								
	1 2	2 3	4	5	6	7	8 9	10	11	12
Y4	Place value (U3)	Calculation	on	Money and decimals (U2)	Length	Mass and volume	Patterns and relationships	Schoo	l 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	[1] Different methods [2] Different methods  MQ [3] Different methods subtraction MQ [4] Addition and subtraction MQ [5] Solving multiplication of x factorial for x factorial factorial for x factorial f	for addition (b) for raction raction racts acts acts acts to derive aion and and 100 it number by	` ,	lengths in metres [2] Decimal notation for lengths in centimetres	[1] Reading different scales [2] Reading masses using decimal notation MQ [3] Decimal notation for volume [a]	relationships  [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	If time exists, revisit the Rea		
	[7] Roman numerals to 100	[9] Division (revision) Division facts; using redividing by partitionin [10] Division problem [11] Short division  ★RTP 4MD-3←	related facts; g ☆MQ	numbers (b)	[5] Perimeter and area ∴MQ	[5] Decimal notation for volume and solving problems	number grid (a) [7] Subtraction patterns on the number grid (b)			

9

8

11

Number of guizzes

### EFFECTIVE MATHS Year 5 mathematics curriculum overview

		Block 1											
	1	2	3	4	5	6	7		8	9	10	11	12
Y5	Place value Addition and (U1)			Multiplication (U	and division	on Time			ctions J1)	Multiplication /division (U2)	Geo	metry	
	Block 2												
	1	2	3	4	5	6	7	-	8	9	10	11	12
Y5	1 1		Place valu (U2)	ue Add	ition and subtra (U2)	action Mu	ultiplication and (U2)	division	ſ	ractions (U2)	Percentages	Stat	istics
	Block 3												
	1	2	3	4	5	6	7	-	8	9	10	11	12
Y5		e value J3)	Calcu	lation	Money and decimals(U2)	Length	Mass and	volume	1	atterns and lationships	Schoo	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 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 guizzes 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 guiz 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 guiz session in school to ascertain progress. The RTP guiz focuses are designed to be mini-assessments carried out in school. Taken together, the guizzes 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. Block 1 Block 2 Block 3

### Notes

Number of RTP guizzes The guizzes 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 Y5 these are 5MD-3 and 5MD-4 (multiplying and dividing numbers with up to 4 digits by 1-digit numbers).

<sup>&</sup>lt;sup>1</sup> RTP Ready to Progress

### Year 5 mathematics curriculum

	Block 1							
	1 2	3 4	5 6	7	8 9	10	11 12	2
Y5	Place value (U1)	Addition and subtraction (U1)	Multiplication and division (U1)	Time	Fractions (U1)	Multiplication /division (U2)	Geometry	
	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,	[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 MQ [4] Mental calculation Making next/previous ten;	[2] Reasoning about multiplication [3] Factors AMQ	[1] Solving problems  [2] Converting between units of time    MQ  [3] Reading timetables	[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]	factors and multiples [2] Multiplying by 10 and 100	[1] Angles [2] Angles [3] Angles [4] Angles ☆MQ [5] Quadrilaterals [6] Angles in quadrilat ☆RTP 5G-1	erals
	[5] Identifying and representing numbers	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)	[6] Multiplication arithmagons [7] Common factors and common multiples  ☆RTP 5MD-2←	[4] Solving problems	[5] Comparing and ordering fractions [b]   MQ Quiz linked to [3] - [4]: Comparing fractions  [6] Improper fractions and	and dividing by 10, 100 and 1,000 ☆RTP 5MD-1← [4] Multiplying 4-	[7] Drawing shapes [8] Coordinates [9] Coordinates - transand reflection	slation
	and 100 [8] Rounding to nearest 10, 100, 1,000 and 10,000	exchanging) [8] Subtract numbers with more than 4-digits (with exchanging) [9] Addition reasoning [10] Subtraction reasoning	[8] Prime numbers [8] Square numbers		mixed numbers [a] [7] Improper fractions and mixed numbers [b] [8] Recognising hundredths and linking to tenths and other fractions	digit numbers		

### Year 5 mathematics curriculum

	Block 2							
	1 2	3	4 5	6 7	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	[4] Counting in steps of 10, 100 and	[2] Problems with decimal numbers to two decimal	[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 (grid method and expanded column method) ☆MQ  [7] Investigating the multiplication square (more practice with multiplying 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	[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	[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 sandata 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 sandata in different ways  Sorting diagrams; tal	me

☆indicates a quiz linked to the content of the lesson/s. ☆MQ means the quiz is accessible via mathsquiz.org indicate that the RTP focus also encompasses key content from earlier lessons: see RTP page on main website for details.

### Year 5 mathematics curriculum

	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	Schoo	l 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	[1] Addition strategies [2] Subtraction strategies [3] Word problems AMC [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-c numbers by 2-digit numbers [8] Division (revision) Division methods; relate facts; remainders AMQ [9] Division problems	[1] Calculating amounts of money [2] Solving problems about money [3] Adding decimal numbers [4] Subtracting decimal numbers [5] Solving problems involving decimals	[1] Conversion of units of length  [2] Converting from kilometres and metres MQ  [3] Perimeter of rectilinear shapes  [4] Area	[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 AMQ  [2] Stick patterns  [3] Tile patterns  [4] Stairs on the number grid (a)  [5] Stairs on the number grid (b)	If time exists, revisit the Rea	• • •	

### EFFECTIVE MATHS Year 6 mathematics curriculum overview

		Block 1														
	1	2	3	4	5	6	3	7	8		9		10	1	11	12
Y6	Place (U			d subtraction J1)	Multiplication (L	n and div J1)	vision	Time		Frac (U	tions 1)		Multiplicatio /division (U2		ntages	Geometry
		Block 2					NB:	From 2022 th	e Y6 ari	thmetic	revision	progr	amme will b	e availal	ble from	September.
	1	2	3	4	5	6	)	7	8		9		10	1	11	12
Y6	Geometry	Money ar decimals (l		ace value (U2)	Addition a subtraction			Multiplication a sion (U3) [b] R		Frac	tions	Alge	bra Sta	atistics	Me	asurement
					NB: A	range o	of revisi	on lessons be	come av	ailable	during B	lock 2	focusing or	n probler	n solvin	g strategies.
		Block 3														
	1	2	3	4	5	6	3	7	8		9		10	1	l1	12
Y6	Place value (U3)	Calculatio		ey and als(U2)				Sc	chool to	determ	nine focus	3				

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 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' learning at home.

| Block 1 | Block 2 | Block 3 | B

#### **Notes**

The quizzes in red are being written for 2022/23 and will be online a few weeks before they are first required. Number Some RTP focuses are not best assessed by electronic means. For Y6 this is 6G-1 (draw, compose and decompose shapes).

 Block 1
 Block 2
 Block 3

 Number of quizzes
 15
 11
 5

 Number of RTP quizzes
 4
 5
 2

<sup>&</sup>lt;sup>1</sup> RTP Ready to Progress

### Year 6 mathematics curriculum

	Block 1										
	1 2	3 4		5	6	7	8	9	10	11	12
Y6	Place value (U1)	Addition and subtraction (U1)	n Multi	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	[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 MQ  [6] Missing number addit problems  [7] Missing number subtraction problems  [8] Missing number problems—number sequence	[2] Mu (revisi [3] Pri numbe numbe [4] Eff multip multip [5] Eff divisio ion [6] Re divisio [7] Mu numbe (revisi [8] So involvi digit n numbe [9] Mu	x table (reultiples are sion)  ime numbers and copers (revision)  ficient strolication application application propers (revision)  autiplying per by a 2 sion)  blying proving multiplying multiplying multiplying proving multiplying per beer	evision) and factors bers, square cube sion) MQ ategies for and solving problems ategies for about a 2-digit -digit number blems plying a 2-y a 2-digit		[1] Counting in twelfths  [2] Finding fra quantities A  [3] Equivalent A  [4] Simplifying A  [5] Comparing fractions [a]  [6] Comparing fractions [b]  [7] Comparing fractions [c] A  [8] Comparing using reasoning using reasoning with the comparing using reasoning and the comparing using reasoning with the comparing using reasoning and the comparing using reasoning with the comparing using reasoning and the comparing using the comparing u	n sixths and ctions of MQ fractions gractions g and ordering and ordering RTP 6F-2 gractions	[1] Divisibility rules AQ  [2] Solving word problems involving multiplication and division  [3] Dividing by a 2-digit number and division problems (dividing using factors and	[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.org	[1] Angles - revision [a] [2] Angles - revision [b]  MQ [3] Vertically opposite angles [4] Circles [5] Solving problem involving circles

### Year 6 mathematics curriculum

		Block 2							
	1	2	3 4	5	6 7	8	9 1	0 1	1 12
Y6	Geometry	Money and decimals (U1)	Place value (U2)	Addition and subtraction (U2)	[a] Multiplication and division (U3) [b] Ratio	Fractions (U2)	Algebra	Statistics	Measurement
	[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  CMQ Y6 quiz covers: Decimal/fraction equivalence; rounding decimals and money; ordering and comparing; multiplying by multiples of ten	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	sequence [3] Adding and	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	[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  AMQ × and ÷ fractions	<ul><li>[3] Formulae with letters</li><li>[4] Solving</li></ul>	[3] Pie charts (a) [4] Pie charts	[1] Solving problems involving converting units of measurement MQ (mass) [2] Solving problems involving converting units of measurement MQ (volume) [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 [9] Volume

### Year 6 mathematics curriculum

	Block 3											
	1	2	3	4	5	6	7	8	9	10	11	12
Y6	Place value (U3)	Calculation	Money decima									
	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 problem with the bar model  [6] Solving problem involving percentages	involvin decima  [3] Solv problem involvin decima  [4] × an number	ing ing ing is g is (a) ing is g s (b) d d is s with oo it and it s [a]								

## Year 1 Ready to Progress lessons

RTP	Block	Unit	Lesson/s					
Number and place value	Number and place value							
1NPV-1 Count within 100, forwards and backwards, starting with any number.	Develop	Developed across many place value lessons in Blocks 1-3						
1NPV-2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =	Covered	Developed across many place value lessons in Blocks 1-3. Covered in full after Block 3, length/height unit lesson 4: measuring with centimetres.						
Number facts								
1NF-1 Develop fluency in addition and subtraction facts within 10.	1	Calculation (Unit 1)	Lesson 1: Number bonds for 5 Lesson 2: Number bonds for 6 Lesson 3: Number bonds for 7 Lesson 4: Solving problems involving number bonds from 5 - 7 Lesson 5: Expressing the same addition sentence in different ways Lesson 6: Number bonds for 8 Lesson 7: Number bonds for 9 Lesson 8: Number bonds for 10 Lesson 9: Solving problems involving number bonds to 10					

## Year 1 Ready to Progress lessons

	<u> </u>					
RTP	Block	Unit	Lesson/s			
Number facts (continued)						
1NF-1 Develop fluency in addition and subtraction facts within 10.	1	Calculation (Unit 2)	Lesson 1: Subtracting from 5 Lesson 2: Subtracting from 6 Lesson 3: Subtracting from 7 Lesson 4: Subtracting from 8 Lesson 5: Subtracting from 9 Lesson 6: Subtracting from 10 Lesson 7: Solving problems with numbers to 10 Lesson 8: Number bonds for 4 and 5 and related facts (revision) Lesson 9: Number bonds for 6 and 7 and related facts (revision) Lesson 10: Number bonds for 8 and 9 and related facts (revision) Lesson 11: Number bonds for 10 and related facts (revision)			
1NF-2 Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers.		I in full after Block 3, p	value lessons in Blocks 1-3. place value (unit 3) lesson 5: counting in steps of 2,			
Addition and subtraction						
1AS-1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers.	Specific	Developed across many calculation lessons in Blocks 1-3.  Specific focus on odd and even numbers in Block 3, patterns and relationships,				
1AS-2 Read, write and interpret equations containing addition, subtraction and equals symbols, and relate additive expressions and equations to real-life contexts.	lessons	[1] and [5].				

## Year 1 Ready to Progress lessons

RTP	Block	Unit	Lesson/s				
Geometry							
1G-1 Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another.	1	Geometry	Lesson 1: 3D shapes Lesson 2: 2D shapes (3D and 2D shape recognition occurs across many other lessons in this unit.)				
1G-2 Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations.	1	Geometry	Lesson 6: Compose shapes from smaller shapes [a] Lesson 7: Compose shapes from smaller shapes [b]				

## Year 2 Ready to Progress lessons

RTP	Block	Unit	Lesson/s					
Number and place value								
2NPV-1 Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and non-standard partitioning.	2	Place value (Unit 3)	Lesson 6: Partitioning					
2NPV-2 Reason about the location of any twodigit number in the linear number system, including identifying the previous and next multiple of 10.	2	Place value (Unit 3)	Lesson 5: Identifying and representing numbers					
Number facts								
2NF-1 Secure fluency in addition and subtraction facts within 10, through continued practice.	1	Bridging unit	Lesson 1: Number bonds for 5 and related facts Lesson 2: Number bonds for 6 and related facts Lesson 3: Number bonds for 7 and related facts Lesson 4: Number bonds for 8 and related facts Lesson 5: Number bonds for 9 and related facts Lesson 6: Number bonds for 10 and related facts					

## Year 2 Ready to Progress lessons

RTP	Block	Unit	Lesson/s
Addition and subtraction			
2AS-1 Add and subtract across 10.	1	Addition and subtraction (Unit 1)	Lesson 10: Add single digit numbers (making the next ten) Lesson 11: Subtract a single digit number from 11-20 (making the previous ten)
	2	Addition and subtraction (Unit 2)	Lesson 1: Addition of 2-digit number and a 1-digit number (making the next ten) Lesson 4: Subtraction of a 1-digit number from a 2-digit number (making the previous ten)
2AS-2 Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more?".	Developed across a range of lessons.		
2AS-3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number.	2	Addition and subtraction (Unit 2)	Lesson 2: 2-digit number + 1-digit number (expanded column) Lesson 3: 2-digit number + 1-digit number (compact column method) Lesson 5: 2-digit number - 1-digit number(compact column method)
2AS-4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers.			Lesson 6: Adding two 2-digit numbers (partitioning) Lesson 7: Adding two 2-digit numbers (expanded column method) Lesson 8: Adding two 2-digit numbers (compact column method) Lesson 10: Subtracting a 2-digit number from a 2-digit number (partitioning the subtrahend) Lesson 11: Subtracting a 2-digit number from a 2-digit number (compact column method)

## Year 2 Ready to Progress lessons

RTP	Block	Unit	Lesson/s
Multiplication and division			
2MD-1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.		Multiplication and division (Unit 1)	Lesson 1: Groups and equal groups Lesson 2: 5 × table Lesson 3: 10 × table Lesson 4: 2 × table
	2	Multiplication and division (Unit 2)	Lesson 1: 10 × table and related facts Lesson 3: 5 × table and associated problems Lesson 5: 2 × table (and understanding commutative relationships using the multiplication grid)
2MD-2 Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).	1	Multiplication and division (Unit 1)	Lesson 5: Division- sharing by 2 Lesson 6: Division- making groups of 2 Lesson 8: Dividing by 5 Lesson 9: Dividing by 10
	2	Multiplication and division (Unit 2)	Lesson 2: Multiplication and division problems linked to 10 × table Lesson 4: Dividing by 5 and associated problems Lesson 6: Dividing by 2 and associated problems
Geometry			
2G-1 Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties.	1	Geometry	Lesson 1: 2D shapes Lesson 2: Drawing 2D shapes Lesson 7: 3D shapes Lesson 8: 3D shapes

## Year 3 Ready to Progress lessons

RTP	Block	Unit	Lesson/s					
Number and place value								
3NPV-1 Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other threedigit multiples of 10.	1	Place value (Unit 1)	Lesson 8: Equivalence of 10 tens and 1 hundred					
3NPV-2 Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning.	3	Place value (Unit 3)	Lesson 5: Partitioning in different ways [a] Lesson 6: Partitioning in different ways [b] Lesson 7: Partitioning in different ways [c]					
3NPV-3 Reason about the location of any threedigit number in the linear number system, including identifying the previous and next multiple of 100 and 10.	2	Place value (Unit 2)	Lesson 7: Three-digit numbers in the linear number system					
3NPV-4 Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.	2	Place value (Unit 2)	Lesson 5: Reading scales with 2, 4, 5 or 10 intervals					

RTP	Block	Unit	Lesson/s			
Number facts						
3NF-1 Secure fluency in addition and subtraction facts that bridge 10, through continued practice.	1	Bridging unit	Lesson 4: Add two single digit numbers crossing 10 (eg 8 + 6) Lesson 5: Subtract a single digit number from 11-18 (eg 15 - 6) Lesson 6: Add a two-digit number and a single digit number (eg 28 + 6) Lesson 7: Subtract a single digit number from a two-digit number (eg 28 - 9)			
3NF-2 Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number.	1	Bridging unit	Lesson 12: 10 × table Lesson 13: Division facts linked to 10 × table Lesson 14: 5 × table Lesson 15: Division facts linked to 5 × table Lesson 16: 2 × table Lesson 17: Division facts linked to 2 × table			
	1	Multiplication and division (Unit 1)	Lesson 1: 5 × table (revision) Lesson 2: 4 × table $\circlearrowleft$ Lesson 3: 8 × table $\circlearrowleft$ Lesson 4: 3 × table $\circlearrowleft$ Lesson 5: Solving problems involving 3, 4 and 8 × tables Lesson 6: Dividing by 4 $\circlearrowleft$ Lesson 7: Dividing by 8 $\circlearrowleft$ Lesson 8: Dividing by 3 $\circlearrowleft$			
	2	Multiplication and division (Unit 3)	[1] 4 × table (and understanding commutative relationships using the multiplication grid) [2] 8 × table and associated problems [3] 3 × table and associated problems [6] Division facts linked to the 4 and 8 × tables [7] Division facts linked to the 3 × table			

RTP	Block	Unit	Lesson/s
Number facts (continued)			
3NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).	3	Calculation	Lesson 1: Scaling number facts by 10 (addition) Lesson 2: Scaling number facts by 10 (subtraction)
	1	Multiplication and division (Unit 2)	Lesson 2: Multiplying multiples of 10 by 1 digit numbers

RTP	Block	Unit	Lesson/s
Addition and subtraction			
3AS-1 Calculate complements to 100.	1	Addition and subtraction (Unit 1)	Lesson 1: + facts for 100 using multiples of 5 and 10 Lesson 2: + and - facts for 100 using multiples of 5 and 10
	2	Addition and subtraction (Unit 2)	Lesson 1: Number facts for 100 and related facts
3AS-2 Add and subtract up to three-digit numbers using columnar methods.	1	Addition and subtraction (Unit 1)	Lesson 8: Add numbers with up to 3 digits (no exchanging) Lesson 9: Add numbers with up to 3 digits (exchanging) Lesson 10: Subtract numbers with up to 3 digits (no exchanging) Lesson 11: Subtract numbers with up to 3 digits (exchanging)
	2	Addition and subtraction (Unit 2)	Lesson 3: Column method for addition Lesson 4: Missing digits in column method for addition Lesson 5: Column method for subtraction Lesson 6: Column method for subtraction
3AS-3 Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part-part-whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.	3	Calculation	Lesson 6: [6] Manipulate the additive relationship

RTP	Block	Unit	Lesson/s
Multiplication and division			
3MD-1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.	3	Calculation	Lesson 9: Multiplication problems Lesson 13: Multiplication and division problems
Fractions			
3F-1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.	1	Fractions (Unit 1)	Lesson 1: Recognising fractions - fifths, sixths and sevenths Lesson 2: Recognising fractions - fifths, sixths, sevenths, eighths and ninths Lesson 3: Recognising fractions - fifths, sixths, sevenths, eighths, ninths and tenths
3F-2 Find unit fractions of quantities using known division facts (multiplication tables fluency).	1	Fractions (Unit 1)	Lesson 5: Finding halves and quarters Lesson 6: Finding thirds Lesson 7: Finding fractions of quantities
3F-3 Reason about the location of any fraction within 1 in the linear number system.	1	Fractions (Unit 1)	Lesson 8: Comparing and ordering fractions [a] Lesson 9: Comparing and ordering fractions [b]
3F-4 Add and subtract fractions with the same denominator, within 1.	2	Fractions (Unit 2)	Lesson 1: Adding fractions with the same denominator Lesson 2: Subtracting fractions with the same denominator Lesson 3: Addition and subtraction of fractions as inverse operations Lesson 4: Subtracting from one whole

RTP	Block	Unit	Lesson/s
Geometry			
3G-1 Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations.	1	Geometry	Earlier lessons build to: Lesson 4: Right angles
3G-2 Draw polygons by joining marked points, and identify parallel and perpendicular sides.	1	Geometry	Lesson 6: Perpendicular lines Lesson 7: Parallel lines

RTP	Block	Unit	Lesson/s
Number and place value			
4NPV-1 Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100.	1	Place value (Unit 1)	Lesson 10: Equivalence of 10 hundreds and 1 thousand
4NPV-2 Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and nonstandard partitioning.	3	Place value (Unit 3)	Lesson 4: Partitioning in different ways
4NPV-3 Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each.			
4NPV-4 Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.	2	Place value (Unit 2)	Lesson 5: Reading scales with 2, 4, 5 or 10 intervals
Number facts			
4NF-1 Recall multiplication and division facts up to 12 × 12, and recognise products in multiplication tables as multiples of the corresponding number.	1	Multiplication and division (Unit 1)	Year 3 lessons on 4, 8 and 3 × tables and corresponding division facts  Lesson 1: 8 × table (revision) Lesson 3: 6 × table ♥ MQ Lesson 4: 9 × table ♥ MQ Lesson 5: 7 × table ♥ MQ Lesson 6: Dividing by 6 Lesson 7: Dividing by 9 Lesson 8: Dividing by 7
	1	Multiplication and division (Unit 2)	Lesson 1: 6 × table (revision)
	2	Multiplication and division (Unit 3)	Lesson 2: Multiplication facts Lesson 3: 7 × table and related facts (line graphs)

RTP	Block	Unit	Lesson/s		
Number facts (continued)					
4NF-2 Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context.	1	Multiplication and division (Unit 2)	Lesson 5: Division problems with remainders		
4NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)	1	Addition and subtraction (Unit 1)	Lesson 4: Scaling addition facts by 100 Lesson 5: Scaling subtraction facts by 100		
	1	Multiplication and division (Unit 2)	Lesson 2: Multiplying multiples of ten by 1 digit numbers		
	3	Calculation	Lesson 7: Scaling multiplication and division facts by 10 and 100		

RTP	Block	Unit	Lesson/s		
Multiplication and division					
4MD-1 Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size.	2	Money and decimals	Lesson 7: Multiplying decimals by ten Lesson 8: Dividing 2-digit numbers by ten Lesson 9: Dividing 1 digit and 2 digit numbers by ten Lesson 10: Multiplying and dividing 1- and 2-digit numbers by 100		
4MD-2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication.	2	2 Multiplication and division (Unit 3)	The concepts in 4MD-2 and 4MD-3 run through many lessons. The lesson below has a specific focus on these concepts. Lesson 1: Understanding multiplication (multiplication facts, commutative and distributive property)		
4MD-3 Understand and apply the distributive property of multiplication.					
Fractions					
4F-1 Reason about the location of mixed numbers in the linear number system.	1	Fractions (Unit 1)	Lesson 3: Comparing and ordering fractions		
4F-2 Convert mixed numbers to improper fractions and vice versa.	2	Fractions (Unit 2)	Lesson 3: Convert between mixed numbers and improper fractions Lesson 4: Convert between improper fractions and mixed numbers		
4F-3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.	2	Fractions (Unit 2)	Lesson 5: Adding like fractions where sum is equal to or greater than one Lesson 6: Adding improper and mixed fractions Lesson 7: Subtracting fractions from whole numbers Lesson 8: Subtraction of improper and mixed fractions		

RTP	Block	Unit	Lesson/s
Geometry			
4G-1 Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.	1	Geometry	Lesson 7: Coordinates Lesson 8: Coordinates Lesson 9: Coordinates and translations
4G-2 Identify regular polygons, including equilateral	1	Geometry	Lesson 3: Triangles and quadrilaterals
triangles and squares, as those in which the sidelengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons.	3	Length	There are two lessons focusing on perimeter in the Year 3 length unit.  Lesson 4: Perimeter
			(Lesson 3 in Y3 - angles in shapes - is also relevant.)
4G-3 Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry.	1	Geometry	Lesson 4: Symmetry Lesson 5: Symmetry Lesson 6: Symmetry

RTP	Block	Unit	Lesson/s
Number and place value			
5NPV-1 Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01.	2	Money and decimals (Unit 1)	Lesson 2: Hundredths, halves and quarters revision
5NPV-2 Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and nonstandard partitioning.	3	Place value (Unit 3)	Lesson 4: Partitioning in different ways [a] Lesson 5: Partitioning in different ways
5NPV-3 Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each.	2	Money and decimals (Unit 1)	Lesson 7: Comparing and ordering to two decimal places
5NPV-4 Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts.	2	Place value (Unit 2)	Lesson 5: Reading scales with 2, 4, 5 or 10 intervals
5NPV-5 Convert between units of measure, including using common decimals and fractions.	3	Length	Lesson 1: Conversion of units of length Lesson 2: Converting from kilometres and metres
	3	Mass and volume	Lesson 2: Converting from kilograms to grams and from grams to kilograms Lesson 4: Converting from litres to millilitres and from millilitres to litres

RTP	Block	Unit	Lesson/s
Number facts			
5NF-1 Secure fluency in multiplication table facts, and corresponding division facts, through continued practice.			Recall of multiplication and division facts is included in the starter activities of many lessons, as well as through practice on maths quiz.org and general class practice. Recall of × and ÷ facts is an integral part of all Year 5 lessons on multiplication, eg factors, column method etc  All the Year 3 and Year 4 × and ÷ fact lessons are also relevant.  Specific Year 5 × and ÷ fact lessons are listed below.
	1	Multiplication and division (Unit 1)	Lesson 1: 9 × table (revision) Lesson 4: Understanding division and recalling division facts
	2	Multiplication and division (Unit 3)	Lesson 3: 6 × table and related facts
5NF-2 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth).	2	Addition and subtraction (Unit 2)	[1] Addition and subtraction with decimal numbers to two decimal places (facts for one and related facts) [2] Problems with decimal numbers to two decimal places
		Multiplication and division (Unit 3)	Lesson 4: Scaling multiplication and division facts

RTP	Block	Unit	Lesson/s			
Multiplication and division						
5MD-1 Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size.	1	Multiplication and division (Unit 2)	Lesson 2: Multiplying tens and hundreds Lesson 3: Multiplying and dividing by 10, 100 and 1,000			
5MD-2 Find factors and multiples of positive whole numbers, including common factors and common	1	Multiplication and division (Unit 1)	Lesson 3: Factors Lesson 7: Common factors and common multiples			
multiples, and express a given number as a product of 2 or 3 factors.	1	Multiplication and division (Unit 2)	Lesson 1: Revision of unit 1: reasoning, factors and multiples			
5MD-3 Multiply any whole number with up to 4 digits by any one-digit number using a formal written method.	1	Multiplication and division (Unit 2)	Lesson 4: Multiplying 4-digit numbers			
5MD-4 Divide a number with up to 4 digits by a one- digit number using a formal written method, and interpret remainders appropriately for the context.	1	Multiplication and division (Unit 3)	Lesson 8: Dividing numbers with up to 4 digits by 8 Lesson 9: Dividing numbers with up to 4 digits			
Fractions						
5F-1 Find non-unit fractions of quantities.	1	Fractions (Unit 1)	Lesson 2: Find non-unit fractions of quantities			
5F-2 Find equivalent fractions and understand that they have the same value and the same position in the linear number system.	1	Fractions (Unit 1)	Lesson 3: Equivalent fractions			
5F-3 Recall decimal fraction equivalents for one-half, one-quarter, one-fifth and one-tenth, and for multiples of these proper fractions.	2	Money and decimals (Unit 1)	Lesson 4: Decimal numbers as fractions			

RTP	Block	Unit	Lesson/s
Geometry			
5G-1 Compare angles, estimate and measure angles in degrees (°) and draw angles of a given size.	1	Geometry	Lesson 1: Angles Lesson 2: Angles Lesson 3: Angles Lesson 4: Angles Lesson 6: Angles in quadrilaterals
5G-2 Compare areas and calculate the area of rectangles (including squares) using standard units.	3	Length	Lesson 4: Area Lesson 5: Area and perimeter problems

RTP	Block	Unit	Lesson/s			
Number and place value						
6NPV-1 Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000).	2	Place value (Unit 2)	Lesson 4: Place value relationships - powers of 10			
6NPV-2 Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and nonstandard partitioning.	1	Place value (Unit 1)	Lesson 3: Place value in numbers up to 4,000,000			
6NPV-3 Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts.	2	Place value (Unit 2)	Lesson 5: Identifying numbers			
6NPV-4 Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts.	2	Place value (Unit 2)	Lesson 6: Reading scales with 2, 4, 5 or 10 intervals			

RTP	Block	Unit	Lesson/s			
Addition, subtraction, multiplication and division						
6AS/MD-1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number).	2	Addition and subtraction (Unit 2)	Lesson 5: Additive and multiplicative relationships			
6AS/MD-2 Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding.	3	Calculation	Lesson 4: Derive related calculations ( × and ÷ )			
6AS/MD-3 Solve problems involving ratio relationships.	2	Multiplication and division (Unit 3) (Part 2: Ratio)	Lesson 1: Ratio (solving ratio problems using tables and bar models) Lesson 2: Ratio (concept of ratio; importance of order in ratio; ratio does not always indicate actual size of quantities involved; simplest form; equivalent ratios) Lesson 3: Ratio (solving problems)			
6AS/MD-4 Solve problems with 2 unknowns.	2	Multiplication and division (Unit 3) (Part 1)	Lesson 1: Missing number problems [a] Lesson 2: Missing numbers [b] Lesson 3: Solving problems involving all four operations			
	3	Calculation	Lesson 3: Missing number problems			

RTP	Block	Unit	Lesson/s		
Fractions					
6F-1 Recognise when fractions can be simplified, and use common factors to simplify fractions.	1	Fractions (Unit 1)	Lesson 4: Simplifying fractions		
6F-2 Express fractions in a common denomination and use this to compare fractions that are similar in value.	1	Fractions (Unit 1)	Lesson 5: Comparing and ordering fractions [a] Lesson 6: Comparing and ordering fractions [b] Lesson 7: Comparing and ordering fractions [c]		
6F-3 Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy.	1	Fractions (Unit 1)	Lesson 8: Comparing fractions using reasoning		
Geometry					
6G-1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems.	1	Geometry	Lesson 5: Drawing 2D shapes		
	2	Measures	Lesson 5: Area and perimeter Lesson 7: Area of parallelograms Lesson 8: Area of triangles		