# **EFFECTIVE MATHS** Year 4 mathematics curriculum overview

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	1	2	3	4	5	5	6	7	7	8	•	9	10	11	12
Y4	<b>4</b> Place value (U1)		Addition	and subtractic (U1)	n	Multip	blication and di (U1)	vision	Tir	ne	F	ractions (U1)	Multiplication /division (U2)	Geon	netry

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

	Block 3				-		-			_		_				
	1	2		3	4	5	6	<b>)</b>	7	7	8	}	9	10	11	12
Y4	Place value Calcu (U3)		Calculatio	on	Money ar decimals (	nd U2)	Len	gth	Mass volu	s and ime	Pa rela	tterns and ationships	Schoo	l 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 2023/24 block overviews that follow, the intention is to provide extremely clear signposting to the quizzes designed to support children in **remembering the key content they have been taught**. And, through the RTP<sup>1</sup> 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.

#### <u>Notes</u>

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 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>1</sup> RTP Ready to Progress

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

## EFFECTIVE MATHS

## Year 4 mathematics curriculum

		Block 1									
	1	2	3	4	5	6	7	8 9	10	11	12
Y4	Place (L	e value J1)	Addition	and subtraction (U1)	Multi	iplication and division (U1)	Time	Fractions (U1)	Multiplication /division (U2)	Geor	netry
	<ul> <li>[1] Reading a numbers to 4, numerals</li> <li>[2] Reading a numbers to 4, [2] Reading a numbers to 4, [3] Counting f steps of six to [4] Counting f steps of six parts of six part</li></ul>	nd writing ,000 in nd writing ,000 in words forwards in o 198 forwards in ast 198 forwards and steps of six and numbers g and ordering numbers [a] numbers [b] nce of 10 d 1 thousand f-1←	<ul> <li>[1] + facts for problem solvi</li> <li>[2] + and - fact associated price of associated price of</li></ul>	100 and associated ng ☆MQ tts for 100 and oblem solving ndly number pairs' dition facts by 100 btraction facts by <b>INF-3</b> culation ten; near doubles culation ddition; number line ddition; numbers with (exchanging ones) addition: numbers igits (exchanging, d hundreds) subtraction: numbers exchanging ones) subtraction: numbers exchanging ones an	<ul> <li>[1] 8 <sup>3</sup></li> <li>[2] Remultip</li> <li>[3] 6 <sup>3</sup></li> <li>[4] 9 <sup>3</sup></li> <li>[5] 7 <sup>3</sup></li> <li>[6] Div</li> <li>[7] Div</li> <li>[8] Div</li> <li>3 RTF</li> <li>and Y</li> <li>3</li> </ul>	✓ table (revision) Passoning about plication ✓ table ☆MQ ✓ table ☆MQ ✓ table ☆MQ ✓ table ☆MQ ✓ viding by 6 ☆MQ ✓ viding by 9 ☆MQ ✓ viding by 7 ☆MQ P 4NF-1← P quizzes covering Y3 ✓ 4 × and ÷ facts	<ul> <li>[1] Convert time between analogue and digital 12- and 24- hour clocks</li> <li>☆MQ</li> <li>[2] Convert between minutes and seconds</li> <li>☆MQ</li> <li>[3] Convert between hours and minutes</li> <li>☆MQ</li> <li>[4] Changing years to months and weeks to days</li> </ul>	<ul> <li>[1] Finding fractions of quantities</li> <li>[2] Counting in fractional steps</li> <li>[3] Mixed numbers in the linear number system</li></ul>	<ul> <li>[1] 6 × table (revision)</li> <li>[2] Multiplying multiples of ten by 1-digit numbers</li> <li>☆MQ</li> <li>[3] Column method for multiplying 2- digit nos by a 1-digit no (expanded and compact - revision)</li> <li>[4] Multiplying 3 digit numbers (expanded method)</li> <li>[5] Division with remainders</li> <li>☆RTP 4NF- 2</li> </ul>	<ul> <li>[1] Angles</li> <li>[2] Ordering a angles</li> <li>[3] Triangles a quadrilaterals</li> <li>[4] Symmetry</li> <li>[5] Symmetry</li> <li>[6] Symmetry</li> <li>[7] Coordinate</li> <li>[8] Coordinate translations</li> </ul>	nd comparing and es es es and

☆ indicates a quiz linked to the content of the lesson/s.
 ☆ RTP means it is a Ready to Progress quiz. Where a RTP quiz also has a backward arrow symbol, ←, this is to
 ☆ 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.

## EFFECTIVE MATHS

		Block 2										
	1	2	3	4	5	6	7	8	9	10	11	12
Y4	Money and decimals (U1)		Р	lace value (U2)	Addition and subtraction (U2)		Multiplication and division (U3)		Frac (L	tions J2)	Statistics	
	<ul> <li>[1] Decimal equito one</li> <li>[2] Identifying tenths</li> <li>[3] Decimal equitation one</li> <li>[3] Decimal equitation one</li> <li>[4] Identifying tenths, including tenths, inclu</li></ul>	uivalents of tenth representations of uivalents of tenth ne representations of ng beyond one uivalents of uivalents of halve decimals by ten digit numbers by digit and 2-digit n g and dividing 1 a s by 100 I s: Decimal tenths, hundredt arters	s [1] Wh know <i>Revis</i> s [2] Re writing 7,000 f [3] Co multip [3] Co multip [5] Re with 2 interva \$\circ RT nd [6] Ne numb [7] So	hat do we about 3,102? ion of unit 1 eading and g numbers to bunting in bles of nine bunting in bles of seven eading scales P, 4, 5 or 10 als <b>P</b> 4NPV-4 $\leftarrow$ egative ers $\bigcirc MQ$ living problems	<ul> <li>[1] Mental str addition and str addition and str [2] Making th thousand in [3] Making th thousand in [4] Missing di column meth [5] Subtract a number from number</li> <li>[6] Missing nu problems in [7] Solving pr</li> </ul>	ategies for subtraction e next MQ e previous MQ igits in the od for addition a 4-digit a 4-digit umber MQ roblems	<ul> <li>[1] Understand multiplication of facts, commut distributive pro- [2] Multiplication (investigating pattern in one)</li> <li>[3] 7 × table au facts (line grap [4] Multiplying ten and compa- method (3 dig [5] Solving pro- [6] Strategies (partitioning, s)</li> <li>[7] Dividing 3 (partitioning au division - exch [9] Dividing 3 (short division hundreds and</li> </ul>	ding (multiplication tative and operty) ☆MQ on facts repeating s digits) nd related phs) multiples of act column it numbers) oblems for division scaling) ☆MQ digit numbers nd short nanging tens) digit numbers r exchanging tens) 2←	<ul> <li>[1] Comparing equivalent fra number/impro equivalents (n</li> <li>[2] Adding an fractions with</li> <li>[3] Convert be numbers and fractions</li> <li>[4] Convert be improper frac mixed number</li> <li>[4] Convert be improper frac mixed number</li> <li>[5] Adding like where sum is greater than one [6] Adding im mixed fraction</li> <li>[7] Subtraction from whole nu</li> <li>[8] Subtraction and mixed fraction</li> <li>[8] Subtraction</li> <li>[8] Subtraction</li> <li>[9] Subtraction</li> </ul>	g fractions, mixed oper evision) d subtracting in one (revision) etween mixed improper etween tions and rs e fractions equal to or one proper and ns g fractions umbers n of improper ictions	<ul> <li>[1] Sorting diag (decision tree</li> <li>[2] Interpreting diagrams (table diagrams and diagrams)</li> <li>[3] Venn diagr three sets</li> <li>MQ Sorting</li> <li>[4] Interpreting</li> <li>[5] Line graphs</li> <li>[6] Line graphs</li> <li>[7] Line graphs</li> </ul>	grams diagrams) I sorting les, Carroll Venn ams with diagrams I tables s (a) s (b) s (c)

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	Blo	ck 3								
	1 2	2 3	4	5	6	7	8 9	10	11	12
¥4	Place value (U3)	Calculatio	on	Money and decimals (U2)	Length	Mass and volume	Patterns and relationships	School to determine focus		
	<ul> <li>[1] Reading and writing numbers to 10,000</li> <li>[2] Solving problems involving counting</li> <li>[3] Making numbers in different ways</li> <li>[4] Partitioning in different ways</li> <li>☆ RTP 4NPV-2 ←</li> <li>[5] Roman numerals to 40 ☆ MQ</li> <li>[6] Roman numerals to 80</li> <li>[7] Roman numerals to 100</li> </ul>	<ul> <li>[1] Different methods</li> <li>[2] Different methods</li> <li>(3] Different methods</li> <li>(3] Different methods</li> <li>(4] Addition and subtraction ☆MQ</li> <li>[4] Addition and subtraroblems ☆MQ</li> <li>[5] Solving multiplication</li> <li>[6] Using known × fact rew facts ☆MQ</li> <li>[7] Scaling multiplication facts by 10 a</li> <li>(7] Scaling multiplication facts by 10 a</li> <li>(7] Scaling multiplication facts by 10 a</li> <li>(8] Multiplying a 3-dig a 1-digit number ☆M</li> <li>[9] Division (revision)</li> <li>Division facts; using a dividing by partitioning</li> <li>[10] Division problem</li> <li>[11] Short division</li> <li>(<b>RTP 4MD-3</b></li> </ul>	s for addition (a) s for addition (b) s for raction tion problems acts cts to derive tion and and 100 git number by AQ ) related facts; ng ☆MQ ns ☆MQ	<ul> <li>[1] Writing amounts of money in pounds</li> <li>[2] Calculating with money</li> <li>[3] Solving problems about money (coins)</li> <li>[4] Solving problems about money (representing problems with bar models)</li> <li>[5] Adding decimal numbers (a)</li> <li>[6] Adding decimal numbers (b)</li> <li>MQ Solving problems involving money</li> </ul>	<ul> <li>[1] Decimal notation for lengths in metres</li> <li>[2] Decimal notation for lengths in centimetres</li> <li>MQ</li> <li>[3] Converting from kilometres and metres</li> <li>[4] Perimeter</li> <li>[5] Perimeter and area</li> <li>MQ</li> </ul>	<ul> <li>[1] Reading different scales</li> <li>[2] Reading masses using decimal notation ☆ MQ</li> <li>[3] Decimal notation for volume [a]</li> <li>[4] Decimal notation for volume [b]</li> <li>[5] Decimal notation for volume and solving problems</li> </ul>	<ul> <li>[1] Growing patterns</li> <li>[2] Investigating magic squares</li> <li>MQ</li> <li>[3] Addition patterns on the number grid (a)</li> <li>[4] Addition patterns on the number grid (b)</li> <li>[5] Anno's magic seeds</li> <li>[6] Subtraction patterns on the number grid (a)</li> <li>[7] Subtraction patterns on the number grid (b)</li> </ul>	If time exists, revisit the Re	it is suggested ady to Progress	it is used to s focuses.

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