

## Year 1

## Block 1

The time allocation for the transition unit has been increased to $1 \frac{1}{2}$ weeks and the time allocation for the geometry unit is now $21 / 2$ weeks. The review week has gone as reviewing tends to be incorporated into daily starters.

## Block 2

The time allocation for calculation unit 5 has been increased to $21 / 2$ weeks and the time allocation for money unit 2 is now $1 \frac{1}{2}$ weeks. The review week has gone.

Block 3
No changes.

## Year 2

Block 1
Place value (Unit 1)
New quiz: Comparing and ordering numbers.

## Year 3

## Block 1

Multiplication and division (Unit 2)
New quiz: Multiplying multiples of ten by 1 -digit numbers.
Block 2
Place value (Unit 2)
New lesson linked to RTP 3NPV-3 incorporated: three-digit numbers in the linear number system.
New RTP quizzes linked to 3F-3 (fractions within one) and 3F-4 (add and subtract fractions within one).

Addition and subtraction (Unit 2)
Lesson 3, column method for addition, split into two lessons. The first focuses on exchanging from ones to tens; the second on from ones to tens and then tens to hundreds.

## Block 3

No changes.

Year 4
Block 1
Addition and subtraction (Unit 1)
There is now a RTP quiz linked to 4NF-3: scaling number facts by 100.
Two new quizzes linked to lessons 6 and 7 are now on the quiz site:
L6 Mental calculation strategies (Near doubles; making the next/previous ten);
L7 Mental calculation strategies (Left to right addition).
Fractions (Unit 1)
New lesson: mixed numbers in the linear number system.
Block 2
Multiplication and division (Unit 3)
New RTP quiz linked to 4MD-2: division with remainders.
Block 3
No changes.
Year 5

## Block 1

Place value (Unit 1)
New quiz: Rounding to nearest 10, 100, 1,000 and 10,000.

Addition and subtraction (Unit 1)
New quizzes: [a] Number bonds for 1,000 and related facts;
[b] Reasoning about subtraction.

Multiplication and division (Unit 1)
New RTP quiz linked to 5MD-2: find factors and multiples.
Blocks 2 and 3
No changes.

Year 6
Block 1
Place value (Unit 1)
New RTP quiz linked to 6NPV-2: Place value in numbers up to 4,000,000.

Addition and subtraction (Unit 1)
New quizzes: [a] Magic squares;
[b] Missing number problems.
Multiplication and division (Unit 2)
New quiz: Divisibility rules.
Revision quizzes: Revision of percentages from Year 5
[a] Percentages 1: Equivalents for $50 \%, 25 \%$ and $75 \%$ and associated problem solving;
[b] Percentages 2: Equivalents for multiples of 5\% (eg 15\%) and associated problem solving
[c] Percentages 3: Applying knowledge of fraction, decimal and percentage equivalents;
[d] Percentages 4: Word problems.

Block 2
Statistics
Lesson on pie charts split into two lessons.

Block 3
No changes.
All year groups
The process of adapting all the independent tasks to include a suggestion for greater depth is now complete.

## Year 1

## Geometry

During 2021/22 two new lessons were added. These are now listed in the curriculum map for 2022/23. The unit cover sheet was already up to
date.
[6] Compose 2-D and 3-D shapes from smaller shapes
[7] Compose 2-D and 3-D shapes from smaller shapes
Other individual lessons amended if deemed appropriate.
Year 2
Time
During 2021/22 two new lessons were added. These are now listed in the curriculum map for 2022/23. The unit cover sheet has also been updated and the end of unit test will be revised.
[6] Minutes, hours and days
[7] Finding durations of events
Other individual lessons amended if deemed appropriate.

## Year 3

Addition and subtraction (Unit 1)
The time allocation for this unit has been increased from 2 weeks to $21 / 2$ weeks.

## Time

During 2021/22 three new lessons were added. These are now listed in the curriculum map for 2022/23. The unit cover sheet has also been updated and the end of unit test will be revised.
[5] Number of seconds in a minute
[6] The number of days in each month, year and leap year
[7] Finding and comparing durations of events
As a result of the above, the time allocation for this unit has been increased from 1 week to $1 \frac{1}{2}$ weeks.
Fractions (Unit 1)
The lesson on equivalent fractions from Unit 2 has been moved to this unit to improve coherence.
Review week (Block 2)
This has been removed to accommodate the $2 \times$ additional $1 / 2$ weeks described above.
Other individual lessons amended if deemed appropriate.

## Year 4

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

## Year 5

Addition and subtraction (Unit 2)
Lesson on population data problems omitted from curriculum map. Now listed.

Multiplication and division (Unit 3)
During 2021/22 one new lesson was added. This is now listed in the curriculum map for 2022/23. The unit cover sheet was already up to date.
[11] Volume of solid shapes (cubes and cuboids)

## Fractions (Unit 2)

During 2021/22 one new lesson was added. This is now listed in the curriculum map for 2022/23. The unit cover sheet was already up to date.
[7] Multiplying mixed numbers by whole numbers
Other individual lessons amended if deemed appropriate.

## Year 6

Multiplication and division (Unit 3)
During 2021/22 two new lessons were added. These are now listed in the curriculum map for 2022/23. The unit cover sheet was already up to date.
[4] Scale on maps
[5] Scale factors
Arithmetic revision programme
Following a request, this will be available from 01/09/22. However, do remember that it is a revision programme. Some of the Y 6 arithmetic connected with fractions, for example, cannot be revised until it has been taught in the main programme.

## All year groups

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

| Bridging unit | 6 |
| :--- | ---: |
| Year 1 | 7 |
| Year 2 | 11 |
| Year 3 | 15 |
| Year 4 | 19 |
| Year 5 | 23 |
| Year 6 | 27 |


| Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: |
| [1] Number bonds for 5 and related facts <br> [2] Number bonds for 6 and related facts <br> [3] Number bonds for 7 and related facts <br> [4] Number bonds for 8 and related facts <br> [5] Number bonds for 9 and related facts <br> [6] Number bonds for 10 and related facts <br> [7] Add single digit numbers to 10 and related subtraction facts <br> [8] Add single digit numbers to 10 and related subtraction facts <br> [9] Add single digit numbers to 1119 <br> [10] Subtract single digit numbers from 11-19 <br> [11] Number bonds for 20 <br> [12] Number bonds for 20 and related facts | [1] Number bonds for 5, 6 and 7 and related facts <br> [2] Number bonds for 8, 9 and 10 and related facts <br> [3] Number bonds for 20 and related facts <br> [4] Add 2 single digit numbers crossing 10 (eg $8+6$ ) <br> [5] Subtract a single digit number from 11-18 (eg 15-6) <br> [6] Add a 2-digit number and a single digit number (eg $28+6$ ) <br> [7] Subtract a single digit number from a 2-digit number (eg 28-9) <br> [8] Add a 2-digit number and tens <br> [9] Subtract tens from a 2-digit number <br> [10] Add 2 two-digit numbers <br> [11] Subtract a 2-digit number from a 2 -digit number <br> [12] $10 \times$ table <br> [13] Division facts linked to $10 \times$ table <br> [14] $5 \times$ table <br> [15] Division facts linked to $5 \times$ table <br> [16] $2 \times$ table <br> [17] Division facts linked to $2 \times$ table | [1] Add two single digit numbers crossing $10($ eg $8+6)$ <br> [2] Subtract a single digit number from 11-18 (eg 15-6) <br> [3] Add a three-digit number and ones <br> [4] Subtract ones from a three-digit number <br> [5] Add a three-digit number and tens <br> [6] Subtract tens from a three-digit number <br> [7] Add a three-digit number and hundreds <br> [8] Subtract hundreds from a three-digit number <br> [9] Add numbers with up to three digits <br> [10] Subtract numbers with up to three digits <br> [11] 4 and $8 \times$ tables <br> [12] $3 \times$ table <br> [13] Dividing by 4 and 8 <br> [14] Dividing by 3 | [1] Add numbers with up to 4 digits <br> [2] Add numbers with up to 4 digits (more strategies) <br> [3] Subtract numbers with up to 4 digits <br> [4] Use knowledge of known facts to derive new facts <br> [5] Multiply two-digit and threedigit numbers by a one-digit number <br> [6] Use efficient strategies to divide numbers <br> [7] Divide three-digit numbers by a one-digit number | [1] Add whole numbers with more than 4 digits <br> [2] Subtract whole numbers with more than 4 digits <br> [3] Solve word problems <br> [4] Multiply a number by a twodigit number <br> [5] Divide numbers with up to 4 digits by a one-digit number <br> [6] Use related facts for division and interpret remainders <br> [7] Multiply and divide by 10, 100 and 1,000 |

## EFFECTIVE MATHS Year 1 mathematics curriculum overview

|  | Block 1 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Y1 | Transition unit |  | Place value (U1) |  | Calculation <br> (U1) |  | Calculation <br> (U2) |  |  | Geometry |  | Money <br> (U1) |


|  | Block 2 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Y1 | Place value <br> (U2) |  | Calculation (U3) |  | Calculation (U4) |  | Statistics |  | Calculation (U5) |  |  | Money <br> (U2) |



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 ${ }^{1}$ focuses, integrate knowledge into larger concepts. Teachers and leaders need to use assessment well, for example to help children embed and use knowledge fluently or to check understanding and inform teaching. But they also need to do this in a way that does not create unnecessary burdens for staff or children. The quizzes are ideal for this purpose. (These points - remembering key content, integrating knowledge and not creating burdens - are directly linked to bullet points 3 and 4 in the 'implementation' section of the current Education Inspection Framework.)
The RTP quiz focuses are linked to what the DfE describe as 'the most important knowledge and understanding within each year group'. These criteria very often require children to have command of a wider domain of knowledge than the mathsquiz.net quizzes do. The quizzes on mathsquiz.net deliberately take smaller steps. The aim of both is to provide teachers and leaders with several ways of supporting children's ongoing progress. For example, through sharing links for mathsquiz. net quizzes with parents/carers (so children continue to practise a core skill such as knowing the $8 \times$ 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 Y 1 this is 1 NPV -2 (counting in ones), but skip counting is assessed in $1 \mathrm{NF}-2$. Also 1G-2 (compose 2D and 3D shapes from smaller shapes to match an example).
${ }^{1}$ RTP Ready to Progress

|  | Block 1 | Block 2 | Block 3 |
| :---: | :---: | :---: | :---: |
| Number of quizzes | 14 | 10 | 10 |
| Number of RTP quizzes | 2 | 0 | 3 |




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

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## EFFECTIVE MATHS Year 2 mathematics curriculum overview

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




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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 $8 \times$ 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 Y 2 this is 2 AS -2 (recognise subtraction structure of 'difference' - a theme that runs through many lessons.)

|  | Block 1 | Block 2 | Block 3 |
| :---: | :---: | :---: | :---: |
| Number of quizzes | 17 | 8 | 6 |
| Number of RTP quizzes | 3 | 7 | 2 | And also the 3-D parts of 2G-1 (Describe and compare 2 D and 3 D shapes) although there is a quiz focusing on 2-D shapes.

${ }^{1}$ RTP Ready to Progress

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

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

[^2]RTP means it is a Ready to Progress quiz．Where a RTP quiz also has a backward arrow symbol，$\leftarrow$ ，this is to indicate that the RTP focus also encompasses key content from earlier lessons：see RTP page on main website for details．

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

[^3]
## EFFECTIVE MATHS Year 3 mathematics curriculum overview



NB: It is strongly suggested that Year 3 start the year with the bridging unit. This secures key skills from Year 2.

|  | Block 2 |  |  | The 'school to decide focus' at the end of Block 3 will allow time for all Year 3 content to be covered. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Y3 | Geometry | Money <br> (U1) |  | Place value (U2) |  | Addition and subtraction (U2) | Multiplication and division (U3) |  |  | Fractions (U2) | Statistics |  |


|  | Block 3 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Y3 | Place value (U3) |  | Calculation |  | Money (U2) | Length | Mass and volume | Patterns and relationships |  | School to determine focus |  |  |

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## Notes

The lesson and quiz in red are being written for 2022/23 and will be online a few weeks before they are

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


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

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

[^4]

[^5]|  | Block 3 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 2 | 2 | 3 3 4 | 5 | 6 | 7 | 8 8 9 | 10 | 11 | 12 |
| Y3 | Place value (U3) | Calculation |  | Money <br> (U2) | Length | Mass and volume | Patterns and relationships | School to determine focus |  |  |
|  | [1] Reading and writing numbers (to 1,000 in numerals and words) <br> [2] Counting in multiples of $3,4,8$, 50 and 100 MQ <br> [3] Comparing and ordering numbers <br> [4] Identifying and representing numbers <br> [5] Partitioning in different ways [a] <br> [6] Partitioning in different ways [b] <br> [7] Partitioning in different ways [c] RTP 3NPV- $2 \leftarrow$ <br> [8] Number grids |  | ing number facts by 10 <br> n) <br> ing number facts by 10 <br> ction) RTP 3NF-3K <br> ent methods for addition <br> rent methods for ation <br> ition and subtraction <br> ns MQ <br> ipulate the additive <br> ship RTP 3AS-3 <br> iplication facts and <br> ing 'teen' numbers <br> n) <br> mn methods for <br> cation <br> iplication problems <br> ision - revision <br> ort division [a] <br> ort division [b] <br> Itiplication and division <br> s <br> 3MD-1 $\leftarrow$ | [1] Revision of unit 1 <br> [2] <br> Subtracting amounts of money (a) <br> [3] <br> Subtracting amounts of money (b) <br> [4] <br> Subtracting amounts of money (c) <br> [5] Solving problems about money <br> MQ <br> Subtracting amounts of money | [1] <br> Estimating and measuring in $m$ and cm <br> [2] <br> Converting lengths in $m$ and cm to cm <br> [3] <br> Measuring in cm and mm <br> [4] <br> Comparing lengths written in different units <br> [5] Perimeter [a] <br> [6] Perimeter [b] | [1] Reading masses in grams <br> [2] Reading masses in kilograms and grams MQ <br> [3] Volume and capacity - revision <br> [4] <br> Measuring in litres and millilitres <br> [5] Solving problems about volume | [1] Shrinking patterns <br> [2] Addition patterns on the number grid <br> (a) <br> [3] Addition patterns on the number grid <br> (b) <br> [4] Addition patterns on the number grid <br> (c) <br> [5] Subtraction patterns on the number grid (a) <br> [6] Subtraction patterns on the number grid (b) | If time exists, it is suggested it is used to revisit the Ready to Progress focuses. |  |  |
| - indicates a quiz linked to the content of the lesson/s. MQ means the quiz is accessible via mathsquiz.org |  |  |  | RTP means it is a Ready to Progress quiz. Where a RTP quiz also has a backward arrow symbol, $\leftarrow$, this is to indicate that the RTP focus also encompasses key content from earlier lessons: see RTP page on main website for details. |  |  |  |  |  |  |

## EFFECT/VE MATHS Year 4 mathematics curriculum overview



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


|  | Block 3 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 |  | 7 | 8 | 9 | 10 | 11 | 12 |
| Y4 | Place value (U3) |  | Calculation |  | Money and decimals (U2) | Length | Mass and volume |  | Patterns and relationships | School to determine focus |  |  |

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

## 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 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 $8 \times$ table) and then following up a child's work at home with a quiz session in school to ascertain progress. The RTP quiz focuses are designed to be mini-assessments carried out in school. Taken together, the quizzes and the paper-based end of unit assessments, provide schools with a range of simple strategies to assess the planned/intended curriculum, as opposed to using generic assessments not linked to the curriculum. In particular, the quizzes have the added advantage of being self-marking, easy to repeat and can be shared with parents/carers to support children' learning at home.

## Notes

The quizzes in red are being written for 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 |

For Y4 these are 4G-1 (translations) and parts of 4G-2 (regular/irregular polygons) but perimeter is assessed in the area/perimeter quiz in the length unit.
${ }^{1}$ RTP Ready to Progress

|  | Block 1 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 2 | 3 4 5 | 5 6 7 | $7{ }^{7}$ | 8 － 9 | 10 | 11 11 12 |
| Y4 | Place value <br> （U1） | Addition and subtraction <br> （U1） | Multiplication and division （U1） | Time | Fractio |  | Geomet |
|  | ［1］Reading and writing numbers to 4,000 in numerals <br> ［2］Reading and writing numbers to 4,000 in words <br> ［3］Counting forwards in steps of six to 198 <br> ［4］Counting forwards in steps of six past 198 <br> ［5］Counting forwards and backwards in steps of six <br> ［6］Identifying and representing numbers MQ <br> ［7］Comparing and ordering numbers <br> ［8］Rounding numbers［a］ <br> ［9］Rounding numbers［b］ <br> ［10］Equivalence of 10 hundreds and 1 thousand RTP 4NPV－1ヶ | ［1］＋facts for 100 and associated problem solving \＄MQ <br> ［2］＋and－facts for 100 and associated problem solving <br> ［3］Using＇friendly number pairs＇ <br> ［4］Scaling addition facts by 100 <br> ［5］Scaling subtraction facts by 100 RTP 4NF－3 <br> ［6］Mental calculation <br> Next／previous ten；near doubles MQ <br> ［7］Mental calculation Left to right addition；number line \＄MQ <br> ［8］Estimation <br> ［9］Column addition：numbers with up to 4 digits（exchanging ones） <br> ［10］Column addition：numbers with up to 4 digits（exchanging， ones，tens and hundreds） <br> ［11］Column subtraction：numbers with 3 －digits（exchanging ones） <br> ［12］Column subtraction：numbers with 3 －digits（exchanging ones and tens） | ［1］ $8 \times$ table（revision） <br> ［2］Reasoning about multiplication <br> ［3］ $6 \times$ table <br> ［4］ $9 \times$ table <br> ［5］ $7 \times$ table <br> ［6］Dividing by 6 洨 MQ <br> ［7］Dividing by 9 － MQ <br> ［8］Dividing by 7 湤MQ <br> RTP 4NF－1 $\leftarrow$ <br> 3 RTP quizzes covering Y3 and $Y 4 \times$ and $\div$ facts | ［1］Convert time between analogue and digital 12－and 24－ hour clocks \％MQ <br> ［2］Convert between minutes and seconds WMQ <br> ［3］Convert between hours and minutes MQ <br> ［4］Changing years to months and weeks to days | ［1］Finding fractions of quantities <br> ［2］Counting in fractional steps <br> ［3］Mixed numbers in the linear number system \＄RTP 4F－1ヶ <br> ［4］Comparing and ordering fractions <br> ［5］Equivalent fractions［a］ <br> ［6］Equivalent fractions［b］ <br> ［7］Mixed number equivalents <br> ［8］Improper fraction equivalents <br> WMQ <br> Quiz linked to［6］－ <br> ［7］：Mixed numbers and improper fractions |  | ［1］Angles <br> ［2］Ordering and comparing angles <br> ［3］Triangles and quadrilaterals <br> ［4］Symmetry <br> ［5］Symmetry <br> ［6］Symmetry <br> 文MQ <br> ［7］Coordinates <br> ［8］Coordinates <br> ［9］Coordinates and translations |
| －${ }^{2}$ indicates a quiz linked to the content of the lesson／s． MQ means the quiz is accessible via mathsquiz．org |  |  | RRTP means it is a Ready to Progress quiz．Where a RTP quiz also has a backward arrow symbol，$\leftarrow$ ，this is to indicate that the RTP focus also encompasses key content from earlier lessons：see RTP page on main website for details． |  |  |  |  |



[^6]|  | Block 3 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 | 2 | 5 | 6 | 7 | 8 8 9 | 10 | 11 | 12 |
| Y4 | Place value （U3） | Calculation | Money and decimals（U2） | Length | Mass and volume | Patterns and relationships | School to determine focus |  |  |
|  | ［1］Reading and writing numbers to 10，000 <br> ［2］Solving problems involving counting <br> ［3］Making numbers in different ways <br> ［4］Partitioning in different ways <br> RTP 4NPV－2 $\leftarrow$ <br> ［5］Roman numerals <br> to 40 MQ <br> ［6］Roman numerals to 80 <br> ［7］Roman numerals to 100 | ［1］Different methods for addition <br> ［2］Different methods for addition（b） WMQ <br> ［3］Different methods for subtraction MQ <br> ［4］Addition and subtraction problems 源MQ <br> ［5］Solving multiplication problems involving recall of $x$ facts <br> ［6］Using known $\times$ facts to derive new facts 洨MQ <br> ［7］Scaling multiplication and division facts by 10 and 100源RTP 4NF－3 $\leftarrow$ <br> ［8］Multiplying a 3－digit number by a 1－digit number MQ <br> ［9］Division（revision） <br> Division facts；using related facts； dividing by partitioning MQ <br> ［10］Division problems MQ <br> ［11］Short division <br> （\＄RTP 4MD－3 $\leftarrow$ | ［1］Writing amounts of money in pounds <br> ［2］Calculating with money <br> ［3］Solving problems about money（coins） <br> ［4］Solving problems about money （representing problems with bar models） <br> ［5］Adding decimal numbers（a） <br> ［6］Adding decimal numbers（b） <br> MQ Solving problems involving money | ［1］Decimal notation for lengths in metres <br> ［2］Decimal notation for lengths in centimetres MQ <br> ［3］ <br> Converting from kilometres and metres <br> ［4］Perimeter <br> ［5］Perimeter and area MQ | ［1］Reading different scales <br> ［2］Reading masses using decimal notation MQ <br> ［3］Decimal notation for volume［a］ <br> ［4］Decimal notation for volume［b］ <br> ［5］Decimal notation for volume and solving problems | ［1］Growing patterns <br> ［2］Investigating magic squares MQ <br> ［3］Addition patterns on the number grid <br> （a） <br> ［4］Addition patterns on the number grid <br> （b） <br> ［5］Anno＇s magic seeds <br> ［6］Subtraction patterns on the number grid（a） <br> ［7］Subtraction patterns on the number grid（b） | If time exists，it is suggested it is used to revisit the Ready to Progress focuses． |  |  |

[^7]
## EFFECTIVE MATHS Year 5 mathematics curriculum overview

|  | Block 1 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Y5 | Place value (U1) |  | Addition and subtraction <br> (U1) |  | Multiplication and division (U1) |  | Time | Fractions (U1) |  | Multiplication /division (U2) | Geometry |  |



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

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

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## Notes

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|  | Block 1 | Block 2 | Block 3 |
| :---: | :---: | :---: | :---: |
| Number of quizzes | 11 | 9 | 8 |
| Number of RTP quizzes | 6 | 5 | 3 | Some RTP focuses are not best assessed by electronic means. For Y5 these are 5MD-3 and 5MD-4 (multiplying and dividing numbers with up to 4 digits by 1-digit numbers).

${ }^{1}$ RTP Ready to Progress

|  | Block 1 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 2 | 3 年 4 | 5 6 | 7 | 8 8 9 | 10 | 11 12 |
| Y5 | Place value （U1） | Addition and subtraction <br> （U1） | Multiplication and division （U1） | Time | Fractions <br> （U1） | Multiplication | Geometry |
|  | ［1］Reading／writing numbers to 400，000 in numerals <br> ［2］Reading／writing numbers to 400，000 in words <br> ［3］Counting in tens and hundreds <br> ［4］Counting in tens， hundreds and thousands <br> ［5］Identifying and representing numbers MQ <br> ［6］Comparing and ordering numbers <br> ［7］Rounding to nearest 10 and 100 <br> ［8］Rounding to nearest 10 ， 100，1，000 and 10，000安MQ | ［1］Facts for 1 with decimal numbers to 1 dp and associated problem solving安MQ <br> ［2］Facts for 1 and 10 with decimal numbers to 1 dp and associated problem solving <br> ［3］Complements for 1，000 and related facts <br> ［4］Mental calculation Making next／previous ten； near doubles <br> ［5］Calculation strategies Left to right addition；number line；partitioning the minuend <br> ［6］Estimation <br> ［7］Add numbers with more than 4－digits（with exchanging） <br> ［8］Subtract numbers with more than 4－digits（with exchanging） <br> ［9］Addition reasoning <br> ［10］Subtraction reasoning WQ | ［1］ $9 \times$ table（revision） <br> ［2］Reasoning about multiplication <br> ［3］Factors <br> ［4］Understanding division and recalling division facts \＄RTP 5NF－1 $\leftarrow$ <br> ［5］Division problems WQ <br> ［6］Multiplication arithmagons <br> ［7］Common factors and common multiples <br> WRTP 5MD－2 $\leftarrow$ <br> ［8］Prime numbers <br> ［8］Square numbers | ［1］Solving problems <br> ［2］ <br> Converting between units of time WM <br> ［3］Reading timetables文MQ <br> ［4］Solving problems | ［1］Counting in thirds and ninths <br> ［2］Find non－unit fractions of quantities <br> DTP 5F－1 <br> ［3］Equivalent fractions RTP 5F－2 <br> ［4］Comparing and ordering fractions［a］ <br> ［5］Comparing and ordering fractions［b］ <br> WMQ <br> Quiz linked to［3］－［4］： <br> Comparing fractions <br> ［6］Improper fractions and mixed numbers［a］ <br> ［7］Improper fractions and mixed numbers［b］ <br> ［8］Recognising hundredths and linking to tenths and other fractions | ［1］Revision of unit 1 ： reasoning， factors and multiples <br> ［2］ <br> Multiplying <br> by 10 and <br> 100 <br> ［3］ <br> Multiplying and dividing <br> by 10,100 <br> and 1，000 <br> RTP <br> 5MD－1 $\leftarrow$ <br> ［4］ <br> Multiplying 4－ <br> digit <br> numbers | ［1］Angles <br> ［2］Angles <br> ［3］Angles <br> ［4］Angles <br> ［5］Quadrilaterals <br> ［6］Angles in quadrilaterals <br> （ ${ }^{2}$ RTP 5G－1 <br> ［7］Drawing shapes <br> ［8］Coordinates <br> ［9］Coordinates－translation and reflection |
| 嫁indicates a quiz linked to the content of the lesson／s． ． MQ means the quiz is accessible via mathsquiz．org |  |  | RTP means it is a Ready to Progress quiz．Where a RTP quiz also has a backward arrow symbol，$\leftarrow$ ，this is to indicate that the RTP focus also encompasses key content from earlier lessons：see RTP page on main website for details． |  |  |  |  |


|  | Block 2 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 2 | 3 3 | 4 5 6 | 6 7 8 | 8 9 | 10 | 11 12 |
| Y5 | Money and decimals (U1) | Place value (U2) | Addition and subtraction (U2) | Multiplication and division (U3) | Fractions <br> (U2) | S | Statistics |
|  | [1] Tenths - revision <br> [2] Hundredths, halves and quarters - revision RTP 5NPV-1 <br> [3] Rounding and comparing - revision <br> [4] Decimal numbers as fractions <br> [5] Decimal equivalents of thousandths <br> [6] Rounding decimals <br> [7] Comparing and ordering to two decimal places - RTP 5NPV-3 <br> [8] Comparing and ordering to three decimal places <br> MQ Y5 quiz covers: Decimal equivalents for tenths, fifths, quarters, halves and thousandths; rounding decimals; comparing and ordering decimals | [1] Reading and writing numbers to 700,000 <br> [2] Counting in steps of 10 with numbers >400,000 <br> [3] Counting in steps of 10 and 100 with numbers > 400,000 <br> [4] Counting in steps of 10,100 and 1,000 with numbers >400,000 <br> [5] Reading scales with $2,4,5$ or 10 intervals WRTP 5NPV-4 $\leftarrow$ <br> [6] Ordering and comparing numbers to 700,000 <br> [7] Negative numbers 洨 MQ | [1] Addition and subtraction with decimal numbers to two decimal places (facts for one and related facts) MQ <br> [2] Problems with decimal numbers to two decimal places <br> [3] Adding lots of numbers <br> [4] Methods for addition <br> [5] Methods for subtraction WQ <br> [6] Population data problems <br> [7] Solving problems <br> [8] Solving problems | [1] Square numbers (revision) <br> [2] Revision of unit 2 <br> [3] $6 \times$ table and related facts <br> [4] Scaling multiplication and division facts <br> - ${ }^{-}$RTP 5NF-2 $\leftarrow$ <br> [5] Multiplying 2-digit numbers by 2-digit numbers (open arrays and grid method) <br> [6] Multiplying 2-digit numbers by 2-digit numbers (grid method and expanded column method) <br> [7] Investigating the multiplication square (more practice with multiplying 2digit numbers by 2-digit numbers) <br> [8] Dividing numbers with up to 4 digits by 8 <br> [9] Dividing numbers with up to 4 digits <br> [10] Cube numbers <br> [11] Volume of solid shapes, cubes and cuboids | [1] Addition of related fractions <br> [2] Addition of related fractions (quarters, eighths, halves and sixteenths) <br> [3] Addition of related fractions (thirds, sixths and twelfths; fifths, tenths and twentieths) <br> [4] Subtraction of related fractions <br> [5] Subtraction of related fractions <br> [6] Multiplying proper fractions by whole numbers <br> [7] Multiplying mixed numbers by whole numbers <br> MQ <br> Adding, subtracting and multiplying fractions | Percentage equivalents $(1 / 2,1 / 4$ and $3 / 4)$ [2] More percentage equivalents $(10$ ths, 5 ths and 20ths) diMQ [3] Applying knowledge of fraction, decimal and percentage equivalents $[4]$ Word problems involving converting fractions to percentages $[5] ~ F i n d i n g ~$ percentages of quantities | [1] Representing the same data in different ways <br> [2] Venn diagrams with three sets <br> [3] Interpreting tables <br> [4] Line graphs (a) <br> [5] Line graphs (b) <br> [6] Pie charts (a) <br> [7] Pie charts (b) <br> [8] Representing the same data in different ways <br> Sorting diagrams; tables |
| -indicates a quiz linked to the content of the lesson/s. - MQ means the quiz is accessible via mathsquiz.org |  |  | RTP means it is a Ready to Progress quiz. Where a RTP quiz also has a backward arrow symbol, $\leftarrow$, this is to indicate that the RTP focus also encompasses key content from earlier lessons: see RTP page on main website for details. |  |  |  |  |


|  | Block 3 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 2 | 4 | 5 | 6 | 7 7 | 8 | 10 | 11 | 12 |
| Y5 | Place value (U3) | Calculation | Money and decimals(U2) | Length | Mass and volume | Patterns and relationships | School to determine focus |  |  |
|  | [1] Reading and writing numbers to 1,000,000 <br> [2] Counting forwards and backwards in steps of powers of 10 <br> [3] Making numbers in different ways <br> [4] Partitioning in different ways [a] MQ <br> [5] Partitioning in different ways [b] <br> RTP 5NPV-2 <br> [6] Roman numerals to 500 <br> [7] Roman numerals to 1,000 <br> [8] Roman numerals for years | [1] Addition strategies <br> [2] Subtraction strategies <br> [3] Word problems MQ <br> [4] Solving problems with the bar model (a) <br> [5] Solving problems with the bar model (b) <br> [6] Multiplication - using known facts <br> [7] Multiplying 3- and 4-digit numbers by 2-digit numbers <br> [8] Division (revision) Division methods; related facts; remainders ${ }^{2} \mathrm{MQ}$ <br> [9] Division problems WMQ | [1] <br> Calculating amounts of money <br> [2] Solving problems about money <br> [3] Adding decimal numbers <br> [4] <br> Subtracting decimal numbers <br> [5] Solving problems involving decimals <br> MQ <br> Solving problems involving money | [1] Conversion of units of length <br> [2] <br> Converting from kilometres and metres家MQ <br> [3] Perimeter of rectilinear shapes <br> [4] Area <br> [5] Area and perimeter problems RTP 5G-2 | [1] Reading different scales <br> [2] Converting from kilograms to grams and from grams to kilograms <br> [3] Imperial/metric conversion for mass <br> [4] Converting from litres to millilitres and from millilitres to litres <br> RTP 5NPV-5 $\leftarrow$ <br> [5] Solving problems about volume <br> [6] Imperial/metric conversion for volume | [1] Number sequences <br> [2] Stick patterns <br> [3] Tile patterns <br> [4] Stairs on the number grid (a) <br> [5] Stairs on the number grid (b) | If time exists, it is suggested it is used to revisit the Ready to Progress focuses. |  |  |

[^8]
## EFFECTIVE MATHS Year 6 mathematics curriculum overview

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

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


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

|  | Block 3 |  |  | NB: A range of revision lessons become available during Block 2 focusing on problem solving strategies. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Y6 | Place value (U3) | Calculation | $\begin{array}{c\|} \hline \text { Money and } \\ \text { decimals(U2) } \end{array}$ |  | School to determine focus |  |  |  |  |  |  |  |

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

## Remembering content and making connections - Education Inspection Framework

In the 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 ${ }^{1}$ focuses, integrate knowledge into larger concepts. Teachers and leaders need to use assessment well, for example to help children embed and use knowledge fluently or to check understanding and inform teaching. But they also need to do this in a way that does not create unnecessary burdens for staff or children. The quizzes are ideal for this purpose. (These points - remembering key content, integrating knowledge and not creating burdens - are directly linked to bullet points 3 and 4 in the 'implementation' section of the current Education Inspection Framework.)
The RTP quiz focuses are linked to what the DfE describe as 'the most important knowledge and understanding within each year group'. These criteria very often require children to have command of a wider domain of knowledge than the mathsquiz.net quizzes do. The quizzes on mathsquiz.net deliberately take smaller steps. The aim of both is to provide teachers and leaders with several ways of supporting children's ongoing progress. For example, through sharing links for mathsquiz.net quizzes with parents/carers (so children continue to practise a core skill such as knowing the $8 \times$ table) and then following up a child's work at home with a quiz session in school to ascertain progress. The RTP quiz focuses are designed to be mini-assessments carried out in school. Taken together, the quizzes and the paper-based end of unit assessments, provide schools with a range of simple strategies to assess the planned/intended curriculum, as opposed to using generic assessments not linked to the curriculum. In particular, the quizzes have the added advantage of being self-marking, easy to repeat and can be shared with parents/carers to support children' learning at home.

## Notes

The quizzes in red are being written for 2022/23 and will be online a few weeks before they are first required.

|  | Block 1 | Block 2 | Block 3 |
| :---: | :---: | :---: | :---: |
| Number of quizzes | 15 | 11 | 5 |
| Number of RTP quizzes | 4 | 5 | 2 | Some RTP focuses are not best assessed by electronic means. For Y 6 this is $6 \mathrm{G}-1$ (draw, compose and decompose shapes).

${ }^{1}$ RTP Ready to Progress


[^9]

[^10]

[^11]| RTP | Block | Unit | Lesson/s |
| :--- | :--- | :--- | :--- |
| Number and place value |  | Developed across many place value lessons in Blocks 1-3 |  |
| 1NPV-1 Count within 100, forwards and backwards, <br> starting with any number. | 1NPV-2 Reason about the location of numbers to 20 <br> within the linear number system, including comparing <br> using < > and = Developed across many place value lessons in Blocks 1-3. <br> Covered in full after Block 3, length/height unit lesson 4: measuring with <br> centimetres.   <br> Number facts    <br> 1NF-1 Develop fluency in addition and subtraction <br> facts within 10. 1 Calculation (Unit 1) Lesson 1: Number bonds for 5 <br> Lesson 2: Number bonds for 6 <br> Lesson 3: Number bonds for 7    |  |  |


| 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 <br> Lesson 2: Subtracting from 6 <br> Lesson 3: Subtracting from 7 <br> Lesson 4: Subtracting from 8 <br> Lesson 5: Subtracting from 9 <br> Lesson 6: Subtracting from 10 <br> Lesson 7: Solving problems with numbers to 10 <br> Lesson 8: Number bonds for 4 and 5 and related facts (revision) <br> Lesson 9: Number bonds for 6 and 7 and related facts (revision) <br> Lesson 10: Number bonds for 8 and 9 and related facts (revision) <br> 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. | Developed across many place value lessons in Blocks 1-3. Covered in full after Block 3, place value (unit 3) lesson 5: counting in steps of 2, 5 and 10. |  |  |
| 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. | Developed across many calculation lessons in Blocks 1-3. <br> Specific focus on odd and even numbers in Block 3, patterns and relationships, lessons [1] and [5]. |  |  |
| 1AS-2 Read, write and interpret equations containing addition, subtraction and equals symbols, and relate additive expressions and equations to real-life contexts. |  |  |  |

## EFFECTIVE MATHS

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


| RTP | Block | Unit | Lesson/s |
| :--- | :--- | :--- | :--- | :--- |
| Number and place value |  |  |  |
| 2NPV-1 Recognise the place value of each digit in <br> two-digit numbers, and compose and decompose two- <br> digit numbers using standard and non-standard <br> partitioning. | 2 | Place value (Unit 3) | Lesson 6: Partitioning |
| 2NPV-2 Reason about the location of any twodigit <br> number in the linear number system, including <br> 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 <br> within 10, through continued practice. | 1 | Bridging unit | Lesson 1: Number bonds for 5 and related facts <br> Lesson 2: Number bonds for 6 and related facts |


| 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) <br> 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) <br> 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) <br> 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) <br> Lesson 7: Adding two 2-digit numbers (expanded column method) <br> Lesson 8: Adding two 2 -digit numbers (compact column method) <br> Lesson 10: Subtracting a 2-digit number from a 2digit number (partitioning the subtrahend) Lesson 11: Subtracting a 2-digit number from a 2 digit number (compact column method) |


| RTP | Block | Unit | Lesson/s |  |
| :--- | :--- | :--- | :--- | :--- |
| Multiplication and division |  | 1 | $\begin{array}{l}\text { Multiplication and } \\ \text { division (Unit 1) }\end{array}$ | $\begin{array}{l}\text { Lesson 1: Groups and equal groups } \\ \text { 2MD-1 Recognise repeated addition contexts, } \\ \text { representing them with multiplication equations and } \\ \text { calculating the product, within the 2, } 5 \text { and 10 } \\ \text { multiplication tables. }\end{array}$ |
| Lesson 3: $10 \times$ table |  |  |  |  |
| Lesson 4: $2 \times$ table |  |  |  |  |$]$


| 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] <br> Lesson 6: Partitioning in different ways [b] <br> 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 |  |  |  | Bridging unit <br> 3NF-1 Secure fluency in addition and subtraction facts <br> that bridge 10, through continued practice. |

## EFFECTIVE MATHS

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


| RTP | Block | Unit | Lesson/s |  |
| :--- | :--- | :--- | :--- | :--- |
| Addition and subtraction |  | 1 | Addition and <br> subtraction (Unit 1) | Lesson 1: + facts for 100 using multiples of 5 and <br> 3AS-1 Calculate complements to 100. <br> Lesson 2: + and - facts for 100 using multiples of <br> 5 and 10 |
|  | 2 | Addition and <br> subtraction (Unit 2) | Lesson 1: Number facts for 100 and related facts |  |
| 3AS-2 Add and subtract up to three-digit numbers <br> using columnar methods. | 1 | Addition and <br> subtraction (Unit 1) | Lesson 8: Add numbers with up to 3 digits (no <br> exchanging) <br> Lesson 9: Add numbers with up to 3 digits <br> (exchanging) |  |


| RTP | Block | Unit | Lesson/s |  |
| :--- | :--- | :--- | :--- | :--- |
| Multiplication and division |  |  |  | Calculation |
| 3MD-1 Apply known multiplication and division facts <br> to solve contextual problems with different <br> structures, including quotitive and partitive division. | 3 | Lesson 9: Multiplication problems <br> Lesson 13: Multiplication and division problems |  |  |
| Fractions |  |  |  |  |
| 3F-1 Interpret and write proper fractions to represent <br> 1 or several parts of a whole that is divided into equal <br> parts. | 1 | Fractions (Unit 1) | Lesson 1: Recognising fractions - fifths, sixths and <br> sevenths <br> Lesson 2: Recognising fractions - fifths, sixths, <br> sevenths, <br> eighths and ninths <br> Lesson 3: Recognising fractions - fifths, sixths, <br> sevenths, eighths, ninths and tenths |  |
| 3F-2 Find unit fractions of quantities using known <br> division facts (multiplication tables fluency). | 1 | Fractions (Unit 1) | Lesson 5: Finding halves and quarters <br> Lesson 6: Finding thirds |  |
| Lesson 7: Finding fractions of quantities |  |  |  |  |,

## EFFECTIVE MATHS

| RTP | Block | Unit | Lesson/s |
| :--- | :--- | :--- | :--- |
| Geometry |  |  |  |
| 3G-1 Recognise right angles as a property of shape or <br> a description of a turn, and identify right angles in 2D <br> shapes presented in different orientations. | 1 | Geometry | Earlier lessons build to: <br> Lesson 4: Right angles |
| 3G-2 Draw polygons by joining marked points, and <br> identify parallel and perpendicular sides. | 1 | Geometry | Lesson 6: Perpendicular lines <br> 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 $12 \times 12$, 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 $3 \times$ tables and corresponding division facts <br> Lesson 1: $8 \times$ table (revision) <br> Lesson 3: $6 \times$ table $\$ \mathrm{MQ}$ <br> Lesson 4: $9 \times$ table $\$ \mathrm{MQ}$ <br> Lesson 5: $7 \times$ table $\$ M Q$ <br> Lesson 6: Dividing by 6 <br> Lesson 7: Dividing by 9 <br> Lesson 8: Dividing by 7 |
|  | 1 | Multiplication and division (Unit 2) | Lesson 1: $6 \times$ table (revision) |
|  | 2 | Multiplication and division (Unit 3) | Lesson 2: Multiplication facts Lesson 3: $7 \times$ table and related facts (line graphs) |

## EFFECTIVE MATHS

| 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 <br> Lesson 8: Dividing 2-digit numbers by ten <br> Lesson 9: Dividing 1 digit and 2 digit numbers by ten <br> 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. <br> 4MD-3 Understand and apply the distributive property of multiplication. | 2 | Multiplication and division (Unit 3) | The concepts in 4MD-2 and 4MD-3 run through many lessons. <br> The lesson below has a specific focus on these concepts. <br> Lesson 1: Understanding multiplication (multiplication facts, commutative and distributive property) |
| 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 <br> 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 <br> Lesson 6: Adding improper and mixed fractions <br> Lesson 7: Subtracting fractions from whole numbers <br> Lesson 8: Subtraction of improper and mixed fractions |


| RTP | Block | Unit | Lesson/s |
| :--- | :--- | :--- | :--- |
| Geometry |  |  | Geometry |
| 4G-1 Draw polygons, specified by coordinates in the <br> first quadrant, and translate within the first <br> quadrant. | 1 | Lesson 7: Coordinates <br> Lesson 8: Coordinates <br> Lesson 9: Coordinates and translations |  |
| 4G-2 Identify regular polygons, including equilateral <br> triangles and squares, as those in which the side- <br> lengths are equal and the angles are equal. Find the <br> perimeter of regular and irregular polygons. | 1 | 3 | Geometry |


| 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 <br> Lesson 2: Converting from kilometres and metres |
|  | 3 | Mass and volume | Lesson 2: Converting from kilograms to grams and from grams to kilograms <br> Lesson 4: Converting from litres to millilitres and from millilitres to litres |


| RTP | Block | Unit | Lesson/s |  |
| :--- | :--- | :--- | :--- | :--- |
| Number facts |  |  |  | $\begin{array}{l}\text { Recall of multiplication and division facts is } \\ \text { included in the starter activities of many lessons, } \\ \text { as well as through practice on maths quiz.org and } \\ \text { general class practice. Recall of } \times \text { and } \div \text { facts is } \\ \text { an integral part of all Year 5 lessons on } \\ \text { multiplication, eg factors, column method etc }\end{array}$ |
| $\begin{array}{l}\text { 5NF-1 Secure fluency in multiplication table facts, } \\ \text { and corresponding division facts, through continued } \\ \text { practice. }\end{array}$ |  |  | $\begin{array}{l}\text { All the Year 3 and Year 4 } \times \text { and } \div \text { fact lessons are } \\ \text { also relevant. } \\ \text { Specific Year 5 } \times \text { and } \div \text { fact lessons are listed }\end{array}$ |  |
| below. |  |  |  |  |$]$


| 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 <br> 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 multiples, and express a given number as a product of 2 or 3 factors. | 1 | Multiplication and division (Unit 1) | Lesson 3: Factors <br> Lesson 7: Common factors and common multiples |
|  | 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 onedigit 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 <br> 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 |

## EFFECTIVE MATHS

| RTP | Block | Unit | Lesson/s |
| :--- | :--- | :--- | :--- |
| Geometry |  | Geometry | Lesson 1: Angles <br> Lesson 2: Angles <br> Lesson 3: Angles <br> Lesson 4: Angles <br> Lesson 6: Angles in quadrilaterals |
| 5G-1 Compare angles, estimate and measure angles in <br> degrees $\left({ }^{\circ}\right)$ and draw angles of a given size. | 1 | Lesson 4: Area <br> Lesson 5: Area and perimeter problems |  |
| 5G-2 Compare areas and calculate the area of <br> rectangles (including squares) using standard units. | 3 | Length |  |


| RTP | Block | Unit | Lesson/s |
| :--- | :--- | :--- | :--- |
| Number and place value |  |  |  |
| 6NPV-1 Understand the relationship between powers <br> of 10 from 1 hundredth to 10 million, and use this to <br> make a given number 10, 100, 1,000, 1 tenth, 1 <br> hundredth or 1 thousandth times the size (multiply <br> 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 <br> numbers up to 10 million, including decimal fractions, <br> and compose and decompose numbers up to 10 <br> 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 <br> to 10 million, including decimal fractions, in the <br> linear number system, and round numbers, as <br> appropriate, including in contexts. | 2 | Place value (Unit 2) | Lesson 5: Identifying numbers |
| 6NPV-4 Divide powers of 10, from 1 hundredth to 10 <br> million, into 2, 4, 5 and 10 equal parts, and read <br> scales/number lines with labelled intervals divided <br> into 2, 4, 5 and 10 equal parts. | 2 | Place value (Unit 2) | Lesson 6: Reading scales with 2, 4, 5 or 10 <br> intervals |


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


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


[^0]:    沙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.

[^1]:    - -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, $\leftarrow$, 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.

[^2]:    －－indicates a quiz linked to the content of the lesson／s． －MQ means the quiz is accessible via mathsquiz．org

[^3]:    - 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, $\leftarrow$, this is to
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[^4]:    攵indicates a quiz linked to the content of the lesson／s．
    －MQ means the quiz is accessible via mathsquiz．org
    ：RTP means it is a Ready to Progress quiz．Where a RTP quiz also has a backward arrow symbol，$\leftarrow$ ，this is to indicate that the RTP focus also encompasses key content from earlier lessons：see RTP page on main website for details．

[^5]:    -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.

[^6]:    - 

    RTP means it is a Ready to Progress quiz. Where a RTP quiz also has a backward arrow symbol, $\leftarrow$, 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.

[^7]:    －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．

[^8]:    - -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.

[^9]:    - -indicates a quiz linked to the content of the lesson/s. -MQ means the quiz is accessible via mathsquiz.org $\quad$ indicate that the RTP focus also encompasses key content from earlier lessons: see RTP page on main website for details.

[^10]:    -indicates a quiz linked to the content of the lesson/s. MQ means the quiz is accessible via mathsquiz.org $\quad$ indicate that the RTP focus also encompasses key content from earlier lessons: see RTP page on main website for details.

[^11]:    - -indicates a quiz linked to the content of the lesson/s.
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