

Block 1

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| W1 | 3.1.8 & 3.1.9 Make numbers up to 1000 using dienes | 3.1.8 & 3.1.9 Make numbers up to 1000 using dienes and relate these to numbers on a 0-1000 number line where only 100s are marked | 3.1.8 & 3.1.9 Estimate the location of numbers on a 0-1000 number line where only 0 and 1000 are shown | 3.1.1 & 3.1.2 Read numbers up to 1000 aloud from digits; write numbers up to 1000 in words | 3.1.3 Know that hundreds can be seen as ten tens (e.g. 14 tens = 140; 180 = 18 tens) using dienes to convert between the two |
| W2 | 3.1.3 Know that hundreds can be seen as ten tens (e.g. 14 tens = 140; 180 = 18 tens) using dienes to convert between the two | 3.1.4 Partition numbers up to 1000 into hundreds, tens and ones; recognise that there are 10 hundreds in 1000 | 3.1.5 Recognise the value of each digit in a 3-digit number | 3.1.6 Compare numbers up to 1000 using “is greater than”, “is less than”, “is equal to”, “most/greatest”, “least”, “closest” and “furthest”. | 3.1.6 Compare numbers up to 1000 using >, < and = |
| W3 | 3.1.7 Order three to five numbers up to 1000, understanding the terms “ascending order” and “descending order” | 3.1.8 Divide 100 into 2, 4, 5 and 10 equal parts and read scales marked in multiples of 100 with 2, 4, 5 or 10 equal parts | Consolidation of 3.1 Link to reasoning and problem-solving activities | 3.4.1 Begin counting in multiples of 4 and find related multiplication and division facts | 2.5.23 Convert to ‘friendly’ numbers (find equivalent expressions) to solve addition questions mentally (e.g. $53 + 19 \rightarrow 52 + 20 = 44$) |
| W4 | 2.5.23 Convert to ‘friendly’ numbers (find equivalent expressions) to solve subtraction questions mentally (e.g. $53 - 9 \rightarrow 54 - 10 = 44$) | 3.2.2 Add 1 and 10 to numbers up to 990 mentally, without bridging 100, using dienes to visualise | 3.2.2 Add 1 and 10 to numbers up to 990 mentally, bridging 100, using dienes to visualise | 3.2.3 Add 100 to numbers up to 900, using dienes to visualise | 3.2.4 Subtract 1-digit numbers from 2-digit numbers using number bond knowledge (e.g. $12-4=8$ so $62-4=58$) |
| W5 | 3.2.5 Subtract 1 and 10 from numbers up to 1000, without bridging 100, using dienes to visualise | 3.2.5 Subtract 1 and 10 from numbers up to 1000, bridging 100, using dienes to visualise | 3.2.6 Subtract 100 from numbers up to 1000, using dienes to visualise | 3.2.7 Add two 2-digit numbers using expanded column addition without need to rename e.g. $\begin{array}{r} 40 \quad 5 \\ + \quad 30 \quad 2 \\ \hline 70 \quad 7 \rightarrow 77 \end{array}$ | 3.2.8 Add two 2-digit numbers using expanded column addition including need to rename e.g. $\begin{array}{r} 60 \quad 9 \\ + \quad 20 \quad 6 \\ \hline 80 \quad 15 \rightarrow 95 \end{array}$ |
| W6 | 3.2.9 Use expanded column addition to add 2-digit numbers to 3-digit numbers and 3-digit numbers to 3-digit numbers | 3.2.10 Use expanded column addition to add three 2-digit numbers and to add three 3-digit numbers | 3.2.11 Subtract a 2-digit number from another using expanded column subtraction without need to rename e.g. $\begin{array}{r} 80 \quad 4 \\ - \quad 50 \quad 3 \\ \hline 30 \quad 1 \end{array}$ | 3.2.11 Subtract a 2-digit number from another using expanded column subtraction including need to rename e.g. $\begin{array}{r} 60 \quad 50 \quad 12 \\ - \quad 30 \quad 7 \\ \hline 20 \quad 5 \end{array}$ NB: Prepare all the necessary renaming before any subtraction | 3.2.12 Use expanded column subtraction to subtract 2-digit numbers from 3-digit numbers NB: Prepare all the necessary renaming before any subtraction |

Block 2

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| W1 | <p>3.2.13 Use expanded column subtraction to subtract 3-digit numbers from 3-digit numbers</p> <p><u>NB: Prepare all the necessary renaming before any subtraction</u></p> | 3.2.13 Use column addition and column subtraction when questions are mixed | 3.1.10 Relate missing numbers to the parts of a bar model in addition and subtraction equations | 3.1.10 & 3.2.14 Relate missing numbers to the parts of a bar model in addition and subtraction equations and solve | 3.1.11 Understand aggregation, augmentation and additive comparison contexts for addition, then solve using written addition |
| W2 | 3.1.11 Understand partition (parts of a whole), reduction (take away or other change) and comparison contexts for subtraction, then solve using written subtraction | 3.2.15 Solve addition and subtraction word problems within a variety of contexts | Consolidation of 3.2 Link to reasoning and problem-solving activities | Consolidation of 3.2 Link to reasoning and problem-solving activities | 3.4.1 Begin counting in multiples of 8 and find related multiplication and division facts |
| W3 | 3.3.1 & 3.3.2 In preparation for solving money problems, find complements of 100 (e.g. $45 + \underline{\quad} = 100$) | 3.3.1 & 3.3.2 Know that there are 100p in a pound be able to convert between pounds and pence; solve simple money problems involving counting coins and notes using this knowledge | 3.3.3 Solve money problems where multiple items are bought, visualising with a bar model | 3.3.4 Solve money problems where single items are bought and change is given using a bar model NB: the change is part of the bar; the total of the bars is the money at the start | 3.3.5 Know the rough length of 1mm, 1 cm, 1 m and 1 km, and choose appropriate units of length for estimation |
| W4 | 3.3.6 Know the rough mass of 1g, 10g, 100g, 1kg and 1 tonne, and choose appropriate units for estimation | 3.3.7 Know the rough volume of 1L, 100mL and 10mL and use appropriate units for estimation | 3.3.8 Use rulers and metre sticks to measure length to the nearest cm, beginning to relate cm to m | 3.4.3 & 3.4.4 Count in multiples of 50 and 100 by relating these to counting in 5s and 10s; recognise how 100 can be split into two groups of 50 and ten groups of 10 | 3.4.4 Count in multiples of 20 and 25, spotting the repeating pattern; recognise how 100 can be split into five groups of 20 and four groups of 25 |
| W5 | 3.3.9 Use weighing scales to measure mass to the nearest 100 g, beginning to relate g to kg | 3.3.10 Read marked scales on measuring cylinders and other containers, beginning to relate ml to L | 3.3.11 Begin to convert between g and kg; ml and L; and cm and m on practical measuring devices | 3.3.12 Solve addition and subtraction for measures questions using simple conversion between cm and m | 3.3.13 Understand what perimeter is and measure the perimeter of given rectangles |
| W6 | 3.3.14 Calculate the perimeter of regular polygons | 3.3.15 Measure the perimeter of irregular polygons | Consolidate 3.3 Link to reasoning and problem-solving activities | 3.4.1 Begin counting in multiples of 3 and find related multiplication and division facts | 3.4.7 Know that sometimes we want to be able to talk about amounts that are not whole numbers and that we can use fractions to do this; introduce the concept of tenths using a bar model as examples of a fraction |

Block 3

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| W1 | 3.4.7 Recognise that there are spaces between numbers on a number line and these can be divided up into different fractions; know that when the gaps between ones are divided by ten we see tenths; identify tenths between 0 and 1 on a number line | 3.4.7 Recognise that there are spaces between numbers on a number line and these can be divided up into different fractions; know that when the gaps between ones are divided by ten we see tenths; identify tenths between 0 and <u>10</u> on a number line | 3.4.9 Count in tenths up to 10 and continue sequences that increase or decrease in tenths | 3.4.8 Understand that division can mean that something is scaled down that many times; divide ones by 10 to get fractions | 3.4.10 Recognise that there are spaces between numbers on a number line and these can be divided up into different fractions; know that when the gaps between ones are divided by ten we see tenths, but that we can divide these into other fractions (e.g. 1/2s, 1/3s, 1/4s, 1/5s, etc) |
| W2 | 3.4.10 Recognise that there are spaces between numbers on a number line and these can be divided up into different fractions; know that when the gaps between ones are divided by ten we see tenths, but that we can divide these into other fractions (e.g. 1/2s, 1/3s, 1/4s, 1/5s, etc) | 3.4.11 Understand that the denominator shows how many equal pieces 1 is broken into; understand that this remains true if multiple 'ones' are present (e.g. 2 ones split into fifths are still fifths, even though there are 10 pieces); show this by beginning to recognise improper fractions and relating these to mixed numbers | 3.4.12 Represent fractions using a bar model, and begin to recognise the names of fractions in words (specifically 'half', 'third', 'quarter', 'fifth', 'sixth', 'eighth' and 'tenth') | 3.4.12 Use a bar model to find unit fractions of amounts (e.g. $\frac{1}{4}$ of 16 or $\frac{1}{3}$ of 15) | 3.4.13 Use a bar model to find fractions of amounts where the numerator is greater than 1 |
| W3 | 3.4.14 Use bar models to add fractions with the same denominator | 3.4.15 Use bar models to subtract fractions with the same denominator | 3.4.16 Use bar models to find pairs of fractions that make 1 | 3.4.17 Use bar models to subtract fractions from 1 (e.g. $1 - \frac{2}{5}$) | 3.4.17 Solve a mixture of addition and subtraction questions involving fractions, including adding and subtracting fractions with the same denominator and subtracting fractions from 1 |
| W4 | 3.4.19 Use 'is greater than' and 'is less than' to compare different unit fractions | 3.4.19 Use > and < to compare different unit fractions | 3.4.20 Place three or more unit fractions in ascending or descending order including use of "largest/greatest" and "smallest" | 3.4.21 Solve problems relating to comparing and ordering fractions, explaining reasoning, perhaps using pictures as part of explanations | Consolidate 3.4 Link to reasoning and problem-solving activities |
| W5 | Consolidate 3.4 Link to reasoning and problem-solving activities | Consolidate 3.4 Link to reasoning and problem-solving activities | 3.4.1 Begin counting in multiples of 6 and find related multiplication and division facts | 3.5.1 Tell the time in 5-minute intervals on an analogue clock | 3.5.2 Relate time on analogue clocks in 5-minute intervals to the equivalent time on a digital clock |
| W6 | 3.5.2 Relate time on analogue clocks in 5-minute intervals to the equivalent time on a digital clock | 3.5.3 Understand that time can be told on a 24-hour clock and relate this to the equivalent times of the 12-hour clock | 3.5.4 Draw a given time on a blank analogue clock, starting with the hour hand before considering the minute hand | 3.5.5 Tell the time in 5-minute intervals from analogue clocks with Roman numerals | 3.5.6 Tell the time to 5 minute intervals on clocks with only 3, 6, 9 and 12 marked or where no numbers are marked |

Block 4

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| W1 | 3.5.7 Read analogue clocks to the nearest minute | 3.5.8 Read analogue clocks to the nearest minute and understand the purpose of the second hand | 3.5.9 Measure the length of short events to the nearest second using a stopwatch | 3.5.10 Make tables of results that show times recorded for short events in seconds or minutes and seconds, converting between the two | 3.5.11 Choose reasonable estimates for the duration of events |
| W2 | 3.5.12 Compare times on analogue clocks using language of 'before', 'after', 'fast' and 'slow' | 3.5.13 Use a blank number line to find the gap in time between events | 3.5.14 Use a blank number line to find when events end when given the duration and the start time, and find when events begin given the duration and the end time | Consolidate 3.5 Link to reasoning and problem-solving activities | 3.4.2 Continue sequences where 3, 4, 6 or 8 is added each time, including sequences that are not multiples of these numbers |
| W3 | 3.6.1 Solve multiplication questions related to the 2, 3, 4, 5, 6, 8 and 10 times table times table, and understand multiplication grids | 3.6.3 Solve division questions related to the 2, 3, 4, 5, 6, 8 and 10 times table times table | 3.6.2 Solve a mixture of multiplication and division questions related to 2, 3, 4, 5, 6, 8 and 10 times table | 3.6.2 Solve a mixture of multiplication and division questions related to 2, 3, 4, 5, 6, 8 and 10 times table | 3.6.8 Understand what multiplication in an equation means in words and use this to find the other related facts from a given multiplication fact (e.g. $3 \times 7 = 21$ gives $7 \times 3 = 21$, $21 \div 3 = 7$ and $21 \div 7 = 3$) |
| W4 | 3.6.8 Understand what division in an equation means and use this to find the other related facts from a given division fact (e.g. $45 \div 5 = 9$ gives $45 \div 9 = 5$, $9 \times 5 = 45$, $5 \times 9 = 45$) | 3.6.4 Use known multiplication facts to multiply multiples of 10 (e.g. $4 \times 5 = 20$ so $4 \times 50 = 200$) | 3.6.4 Use known multiplication facts to multiply multiples of 10 (e.g. $4 \times 5 = 20$ so $4 \times 50 = 200$) | 3.6.10 Understand that an area context of multiplication is an example of an array by drawing areas to match multiplication facts | 3.6.12 Understand that the area context of multiplication can be used to see that multiplication is distributive across addition (e.g. $2 \times 15 \rightarrow 2 \times 10 + 2 \times 5$) |
| W5 | 3.6.12 Understand that the area context of multiplication can be used to see that multiplication is distributive across addition (e.g. $3 \times 48 \rightarrow 3 \times 40 + 3 \times 8$) | 3.6.14 Use a simplified area model to multiply 1-digit numbers by 2-digit numbers in a grid method, relating this to the area context | 3.6.14 Use a simplified area model to multiply 1-digit numbers by 2-digit numbers in a grid method, relating this to the area context | 3.6.5 Solve multiplication word problems using known facts and grid methods in the context of repeated addition and scaling | 3.6.5 Solve division word problems using known facts in the context of sharing and grouping |
| W6 | 3.6.6 Solve a mixture of multiplication and division word problems | Consolidation of 3.6 Link to reasoning and problem-solving activities | Consolidation of 3.6 Link to reasoning and problem-solving activities | 3.7.1 Read data from a pictogram including the use of halves of symbols | 3.7.2 & 3.7.6 Collect data using tally charts with increasing confidence |

Block 5

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| W1 | 3.7.3 Represent collected data in a pictogram | 3.7.4 Read data from a bar chart, including differences between bars and totals where values for bars are added | 3.7.5 Add data to Venn diagrams | 3.7.5 Add data to Carroll diagrams | 3.7.7 Solve word problems relating to pictograms and tally charts |
| W2 | 3.7.8 Solve word problems relating to bar charts | 3.7.9 Draw several conclusions from a given chart or table | Consolidation of 3.7 Link to reasoning and problem-solving activities | 3.8.1 & 3.8.2 Understand that an angle represents an amount of turn, and identify the number of angles inside a given shape | 3.8.3 Recognise right angles, acute angles and obtuse angles in real and abstract contexts |
| W3 | 3.8.4 Understand the terms 'clockwise' and 'anti-clockwise', and use these to describe a turn as a number of right angles in a given direction | 3.8.6 Understand the terms 'horizontal' and 'vertical', and identify horizontal and vertical lines | 3.8.7 & 3.8.8 Understand the terms 'perpendicular' and 'parallel', and identify perpendicular and parallel lines | 3.8.9 Identify examples of horizontal, vertical, perpendicular and parallel lines in given shapes | 3.8.10 Recognise and define a trapezium, rhombus (including parallelogram), semi-circle and a kite in different orientations in terms of their sides and angles |
| W4 | 3.8.11 Draw rectangles (including squares), triangles, trapezia, rhombuses and kites | 3.8.12 Recognise and define the common 3D shapes (even when presented in different orientations) including cube, cuboid, prism, pyramid, sphere and hemisphere | 3.8.13 Use cubes and other materials to make common 3D shapes | 3.8.5 & 3.8.14 Sort shapes into groups using Venn diagrams based on the types of angle they contain | 3.8.5 & 3.8.14 Sort shapes into groups using Carroll diagrams based on the types of angle they contain |
| W5 | Consolidation of 3.8 Link to reasoning and problem-solving activities | 3.9.1 Convert between seconds and minutes (e.g. 75 seconds = 1 minute 15 seconds) | 3.9.2 and 3.9.3 Begin to know how many days are in each month of the year and to read a calendar; know that there are 365 days in a year and that every fourth year is a leap year with 366 days | 3.9.4 Use a blank number line to calculate the duration of events, given start and end time | 3.9.5 Begin to read basic timetables and use them to calculate the duration of given events or journeys |
| W6 | 3.9.6 Calculate amounts and costs for time-based events (e.g. Cost for 2½ hours if something costs £20 per hour) | Consolidate 3.9 Link to reasoning and problem-solving activities | 3.10.1 Solve addition problems in the context of aggregation and augmentation, visualising these using part-whole bar models and using subtraction to check | 3.10.2 Solve subtraction problems in the context of partitioning and reduction, visualising these using part-whole bar models and addition to check | 3.10.3 Solve subtraction problems in the context of finding a difference/comparing, visualising these using comparison bar models and addition to check |

Block 6

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| W1 | 3.10.4 Decide whether addition or subtraction is required to solve particular one-step word problems and construct bar models to show why | 3.10.5 Solve two-step word problems involving addition and subtraction, visualising these with bar models where appropriate | 3.10.6 Solve two-step word problems involving addition and subtraction, visualising these with bar models where appropriate | 3.10.7 Solve missing number problems involving known multiplication and division facts and facts derived through multiples of 10 (e.g. $30 \times _ = 210$) | 3.10.8 Use bar models to solve simple correspondence problems using multiplication, given one unit (e.g. one car takes 30 minutes to wash. How long would it take to wash four cars?) |
| W2 | 3.10.9 Use bar models to solve correspondence problems where the answer can be found by simple scaling (e.g. It takes 20 sweets to fill 2 boxes. How many sweets would fill 4 boxes?) | 3.10.10 Use bar models to solve correspondence problems by first finding the value for one unit (e.g. It takes 40 minutes to wash 2 bikes. How long would it take to wash 3 bikes) | 3.10.11 Solve multiplication problems relating to measures | 3.10.12 Estimate the answer to addition and subtraction calculations by rounding numbers (roughly) to create friendly numbers with which to calculate (e.g. $203 + 487 \rightarrow 200 + 500$) | 3.10.13 Use estimates before calculating the answer to addition and subtraction questions as a means of checking |
| W3 | 3.10.14 Use estimates before calculating the answer to multiplication questions as a means of checking | Consolidation 3.10 Link to reasoning and problem-solving activities | 3.11.1 Understand that fractions are made from equal shares of a whole and understand the term 'unit fractions' and 'non-unit fractions' | 3.11.2 Understand that the denominator of a fraction shows how many pieces each 'one' is divided equally into (including when there is more than one 'one') | 3.11.3 Use a bar model to find unit fractions of an amount, using known division facts |
| W4 | 3.11.3 Use a bar model to find unit fractions of an amount, using known division facts | 3.11.4 Use a bar model to find non-unit fractions of an amount, using known division and multiplication facts | 3.11.4 Use a bar model to find non-unit fractions of an amount, using known division and multiplication facts | 3.11.5 Solve word problems which require the finding of unit fractions of amounts | 3.11.5 Solve word problems which require the finding of non-unit fractions of amounts |
| W5 | 3.11.6 Using a 'fraction wall' diagram, find equivalent fractions, understanding these as fractions that have the same value | 3.11.6 Using a coloured parts of a whole, diagram, find equivalent fractions, understanding these as fractions that have the same value | 3.11.7 Shade in a half, a third, a quarter and a fifth on diagrams where the number of divisions is a multiple of the denominator | 3.11.9 Using bar models, find fraction pairs that add together to make 1 | 3.11.8 Find the fraction of given shapes that is shaded and the fraction that is not shaded |
| W6 | 3.11.10 Solve multistep problems where unit fractions of amounts need to be calculated | 3.11.11 Solve multistep problems where unit and non-unit fractions of amounts need to be calculated | 3.11.11 Solve multistep problems where unit and non-unit fractions of amounts need to be calculated | Consolidation of 3.11 Link to reasoning and problem-solving activities | Consolidation of 3.11 Link to reasoning and problem-solving activities |

Arithmetic

Fractions

Geometry

Measures & Time

Properties of number and place value

Statistics