

Maths Curriculum Year 3

| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | |
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| Term 1/2 | Unit 1 Adding and subtracting across 10 | | Unit 2 Numbers to 1,000 | | | | | | | | | | Assessment Unit 2 recap. | Revise, reflect, review |
| Term 3/4 | Unit 3 Right angles | | Unit 4... additive relationships | | | Unit 5 Column addition | | Unit 6 2,4,8 times tables | | | Unit 7 Column subtraction | Assessment Unit 7 recap. | Revise, reflect, review | |
| Term 5/6 | Unit 8 Unit fractions | | | | Unit 9 Non unit fractions | | | | Unit 10 Parallel and perpendicular sides in polygons | | Unit 11 time | Assessment Unit 11 recap. | Revise, reflect, review | |

| Unit | Block | Number of lessons and weeks |
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| 1 | Adding and subtracting across 10 | 10 lessons, 2 weeks |
| 2 | Numbers to 1,000 | 45 lesson, 9 weeks (instead of 10) |
| 3 | Right angles | 10 lessons, 2 weeks |
| 4 | Manipulating the additive relationship and securing mental addition | 15 lessons, 3 weeks (instead of 4) |
| 5 | Column addition | 10 lessons, 2 weeks |
| 6 | 2,4,8 times tables | 15 lessons, 3 weeks |
| 7 | Column subtraction | 5 lessons, 1 week |
| 8 | Unit fractions | 20 lessons, 4 weeks (instead of 5) |
| 9 | Non-unit fractions | 20 lessons, 4 weeks |
| 10 | Parallel and perpendicular sides in polygons | 10 lessons, 2 weeks |
| 11 | Time | 5 lessons, 1 week |

Unit 1 – adding and subtracting across 10

| Lesson | Curriculum Prioritisation Learning Outcomes | Spine pedagogy document | Supporting materials |
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| Key links | Adding and subtracting across 10 | Addition and subtraction – bridging 10 | Ready to Progress Y3 |
| 1 | Learning Outcome 1 Pupils add 3 addends WALT add | Teaching point 1 Steps 1:1-1:3 (pgs. 4-5) | 3NF-1 P25-27 |
| 2 | Learning Outcome 2 Pupils use a ‘First.. Then... Now’ story to add 3 addends WALT add | Teaching point 2 Steps 2:1-2:5 (pgs. 6-7) | |
| 3 | Learning Outcome 3 Pupils explain that addends can be added in any order WALT explain | Teaching point 3 Steps 3:1-3:4 (pgs. 8-10) | |
| 4 | Learning Outcome 4 Pupils add 3 addends efficiently WALT add efficiently | Teaching point 4 Steps 4:1-4:4 (pgs. 11-12) | |
| 5 and 6 | Learning Outcome 5 Pupils add 3 addends efficiently by finding two addends that total 10 WALT identify | Teaching point 4 Steps 4:5-4:10 (pgs. 13-15) | |
| 7 | Learning Outcome 6 Pupils add two numbers that bridge through 10 WALT add | Teaching point 5 Steps 5:1-5:7 (pgs. 16-19) | |
| 8 and 9 | Learning Outcome 7 Pupils subtract two numbers that bridge through 10 WALT subtract | Teaching point 6 Steps 6:1-6:8 (pgs. 20-26) | |
| 10 | Opportunities for consolidation and assessment | RTP 3NF-1 P26/27 Assessment questions | I See Reasoning P44 Which answer? Teaching for Mastery Y3 P13 GD task for children needing a deeper delve into addition of integers |

Unit 2 – numbers to 1,000

| Lesson | Curriculum Prioritisation Learning Outcomes | Spine pedagogy document | Supporting materials |
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| Key links | Numbers to 1,000 | Composition and calculation: 100 and bridging 100 | Ready to Progress Y3 |
| 1 | Learning Outcome 1 Pupils explain that 100 is composed of ten tens and one hundred ones WALT identify | Teaching point 1 Steps 1:1-1:4 (pgs. 5-8) | |
| 2 and 3 | Learning Outcome 2 (Spread across two lessons) Pupils explain that 100 is composed of 50s 25s and 20s WALT identify | Teaching point 1 Steps 1:5-1:7 (pgs. 8-12) | |
| 4 | Learning Outcome 3 Pupils use known facts to find multiples of ten that compose 100 WALT identify | Teaching point 2 Steps 2:1-2:2 (pgs. 13-17) | |
| 5 | Learning Outcome 4 Pupils will use known facts to find a two-digit number and a one- or two-digit number that compose 10 WALT identify | Teaching point 2 Steps 2:3-2:6 (pgs. 17-20) | |
| 6 | Learning Outcome 5 Pupils use known facts to find correct complements to 10 WALT identify | Teaching point 2 Steps 2:7-2:8 (pgs. 20-21) <i>NB although this is a short teaching point, it is essential that children secure this before moving on.</i> | |
| 7 | Learning Outcome 6 Pupils use known facts to find complements to 100 accurately and efficiently WALT identify | Teaching point 2 Steps 2:9-2:11 (pgs. 21-23) | N Rich Reach 100 GD task for those very secure in bonds to 100 |
| 8 | Learning Outcome 7 Pupils represent a three-digit number which is a multiple of ten using their numerals and names WALT represent | Teaching point 3 Steps 3:1-3:5 (pgs. 24-27) | |
| 9 | Learning Outcome 8 Pupils use place value knowledge to write addition and subtraction equations WALT devise | Teaching point 3 Steps 3:6-3:8 (pgs. 27-29) | |
| 10 | Learning Outcome 9 Pupils bridge 100 by adding or subtracting in multiples of ten WALT bridge 100 | Teaching point 3 Steps 3:9-3:10 (pgs. 30-32) | |

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| 11 | Learning Outcome 10 Pupils use knowledge of addition and subtraction of multiples of ten bridging the hundreds boundary to solve problems WALT apply | Teaching point 3 Steps 3:11-3:13 (pgs. 33-35) | |
| 12 | Learning Outcomes 11 & 12 Pupils count across and on from 100 Pupils represent a three-digit number up to 199 in different ways WALT represent | Teaching point 4 Steps 4:1-4:4 (pgs. 36-39) | |
| 13 | Learning Outcome 13 Pupils bridge 100 by adding or subtracting a single-digit number WALT bridge 100 | Teaching point 4 Steps 4:5-4:6 (pgs. 39-40) | Lots of independent practice needed (teacher-devised questions). |
| 14 and 15 | Learning Outcomes 14 & 15 Pupils find ten more or ten less than a given number Pupils cross the hundreds boundary when adding and subtracting any two-digit multiple of ten WALT calculate | Teaching point 4 Steps 4:7 – 4:10 (pgs. 40-46) | I See Reasoning P6 Which answer? P7 Different ways |
| | | Ready to Progress Y3 | |
| 16 | Learning Outcome 16 Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) WALT identify | 3 NPV-1 Pgs. 13-15 Ppt slides 160-161 | |
| 17 | Learning Outcomes 17 & 18 Pupils measure length and height from zero using whole metres and cm WALT measure | NB there are no slides for outcomes 17-23 Teachers are encouraged to offer practical learning coupled with modelling of effective use of a ruler to measure. | I See Reasoning P94 Explain |
| 18 | Learning Outcome 19 Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa) WALT convert | | |
| 19 | Learning Outcome 20 Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) WALT identify | WRM could be used for extra tasks but should not be followed as a 'unit'. Where possible, practical maths can be linked to learning enquiries (measuring the height of a plant for science investigations/ estimating the height of | |
| 20 | Learning Outcome 21 Pupils measure length from zero using mm / whole cm and mm WALT measure | | Teaching for Mastery Y3 P27 both activities |

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| 21 | Learning Outcome 22 Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) WALT convert | a bridge, etc). A good example of how this can work is below: N Rich Working with dinosaurs | I See Reasoning P94 True or false? P95 Which answer? |
| 22 | Learning Outcome 23 Pupils estimate a length/height, measure a length/height and record in a table WALT estimate | | I See Reasoning P96 Explain N Rich How Tall? Class investigation |
| | | Composition and calculation: three digit numbers | |
| 23 | Learning Outcome 24 Pupils use knowledge of place value to represent a three-digit number in different ways WALT represent | Teaching point 1 Steps 1:1-1:5 (pgs. 4-9) | I See Reasoning P4 True or false? P5 |
| 24 | Learning Outcome 25 Pupils represent a three-digit number up to 1000 in different ways WALT represent | Teaching point 1 Steps 1:6-1:7 (pgs. 10-12) | |
| 25 | Learning Outcome 26 Pupils use knowledge of the additive relationship to solve problems WALT apply | Teaching point 1 Steps 1:8-1:12 (pgs. 12-16) | |
| 26 | Learning Outcomes 27 & 28 Pupils count in hundreds and tens on a number line Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit multiples of ten WALT count | Teaching point 2 Steps 2:1-2:4 (pgs. 17-20) | |
| 27 | Learning Outcome 29 Pupils position three-digit numbers on number lines WALT identify | Teaching point 2 Steps 2:5-2:7 (20-22) | I See Reasoning P9 & P12 |
| 28 | Learning Outcome 30 Pupils estimate the position of three-digit numbers on unmarked number lines WALT estimate | Teaching point 2 Step 2:8 (pgs. 22-25) | |
| 29 | Learning Outcomes 31, 32 & 33 Pupils compare one (and two)-, two- and three-digit numbers Pupils order sets of three-digit numbers WALT compare and order | Teaching point 3 Steps 3:1-3:4 (pgs. 26-28) | I See Reasoning P14 Explain Teaching for Mastery Y3 P12 GD only |

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| 30 | Learning Outcomes 34 & 35 Pupils use known facts to add or subtract multiples of 100 within 1000 Pupils write a three-digit multiple of 10 as a multiplication equation WALT represent | Teaching point 4 Steps 4:1-4:3 (pgs. 29-31) | |
| 31 | Learning Outcomes 36 & 37 Pupils partition three-digit numbers in different ways Pupils use known facts to solve problems involving partitioning numbers WALT partition | Teaching point 5 Steps 5:1-5:4 (pgs. 32-36) | |
| 32 | Learning Outcomes 38 & 39 Pupils use known facts to add or subtract to/from multiples of 100 in tens Pupils use known facts to add or subtract to/from multiples of 100 in ones WALT calculate | Teaching point 5 Steps 5:5-5:7 (pgs. 36-40) | |
| 33 | Learning Outcome 40 Pupils add/subtract multiples of ten bridging 100 WALT calculate | Teaching point 5 Steps 5:8-5:10 (pgs. 40-42) | |
| 34 | Learning Outcome 41 Pupils add/subtract to/from a three-digit number in ones bridging 100 WALT calculate | Teaching point 5 Steps 5:11-5:12 (pgs. 42-43) | |
| 35 | Learning Outcome 42 Pupils find 10 more or less across any hundreds boundary WALT calculate | Teaching point 5 Step 5:13 (pgs. 43-44) <i>NB although a short teaching point, this step is vital to support fluency and must be secured.</i> | |
| 36 | Learning Outcome 43 Pupils use knowledge of adding or subtracting to/from three-digit numbers to solve problems WALT make links | Teaching point 5 Steps 5:14-5:15 (pgs. 44-46) | |
| 37 | Learning Outcome 44 Pupils count forwards and backwards in multiples of 2, 20, 5, 50 and 25 WALT count | Teaching point 6 Step 6:1 (pgs. 47-48) | |
| 38 | Learning Outcome 45 Pupils use knowledge of counting in multiples of 2, 20, 5, 50 and 25 to solve problems WALT | Teaching point 6 Step 6:2 (pgs. 48-49) | |
| 39 | Opportunities for consolidation of learning outcomes 24-45 | Use RTP document to secure learning and/or assessment questions | 3NPV -1, 2, 3 3NF 3, 3AS-1 |

| | | Ready to Progress Y3 | |
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| 40 | <p>Learning Outcomes 46 & 47</p> <p>Pupils become familiar with different weighing scales up to 1kg (intervals of 100g, 200g, 250g and 500g)</p> <p>Pupils become familiar with the tools to measure volume and capacity up to 1 litre (intervals of 100ml, 200ml, 250ml and 500ml)</p> <p>WALT read</p> | <p>3NPV- 4 pgs. 22-24</p> <p>N Rich What's my weight?</p> <p>GD task, but could be adapted for whole-class investigation/teaching</p> | <p>N Rich Do you measure up?</p> <p>Board game, needs printing</p> |
| 41 | <p>Learning Outcomes 48 & 49</p> <p>Pupils measure mass from zero up to 1kg using grams</p> <p>Pupils measure mass from zero above 1kg using whole kg and grams</p> <p>WALT measure</p> | <p>Ensure this is well-resourced. Children should have access to weights and containers in order to measure practically.</p> | <p>Teaching for Mastery Y3</p> <p>P23 Mastery & GD</p> <p>N Rich Watermelons</p> <p>GD kg to g conversion task</p> |
| 42 | <p>Learning Outcomes 50 & 51</p> <p>Pupils measure volume from zero up to 1 litre using ml</p> <p>Pupils measure volume from zero above 1 litre using whole litres and ml</p> <p>WALT measure</p> | | <p>Teaching for Mastery Y3</p> <p>P24 Mastery & GD (top activities only)</p> |
| 43 | <p>Learning Outcome 52</p> <p>Pupils estimate mass in grams and volume in ml</p> <p>WALT estimate</p> | <p>This could be done as part of a linked project with other areas of learning or a child-led investigation.</p> | |
| 44 | <p>Learning Outcome 53</p> <p>Pupils estimate a mass/volume, measure a mass/volume and record in a table</p> <p>WALT estimate</p> | | <p>N Rich Bottles</p> <p>Resources needed</p> |
| 45 | <p>Opportunities for consolidation of learning outcomes 46-53</p> | <p>3NVP-4 Assessment questions p24</p> | |

Unit 3 – right angles

| Lesson | Curriculum Prioritisation Learning Outcomes | Spine pedagogy document | Supporting materials |
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| Key links | Right angles | Ready to Progress Y3 | |
| 1 | Learning Outcome 1 Pupils rotate two lines around a fixed point to make different sized angles WALT rotate | RTP 3G-1 (p61-64) Ppt slides 6-10 (slides 61-62 also provide printable paper for this unit) | I See Reasoning P115/116 Order |
| 2 | Learning Outcome 2 Pupils draw triangles and quadrilaterals and identify vertices WALT draw | Slides 13-16 | Teaching for Mastery Y3 P27 (bottom mastery task only) |
| 3 and 4 | Learning Outcome 3 Pupils learn that a right angle is a 'square corner' and identify them in the environment WALT identify | Slides 19-29 | |
| 5 | Learning Outcome 4 Pupils learn that a rectangle is a 4-sided polygon with four right angles WALT describe | Slides 32-34 | |
| 6 | Learning Outcome 5 Pupils learn that a square is a rectangle in which the four sides are equal length WALT describe | Slides 37-40 | |
| 7 | Learning Outcome 6 Pupils cut rectangles and squares on the diagonal and investigate the shapes they make WALT investigate | Slides 43-46 | |
| 8 | Learning Outcome 7 Pupils join four right angles at a point using different right-angled polygons WALT create | Slides 49-51 | |
| 9 | Learning Outcome 8 Pupils investigate and draw other polygons with right angles WALT draw | Slides 53-60 | |
| 10 | Opportunities for assessment | RTP 3G-1 Assessment questions (p63/64) | |

Unit 4 – manipulating the additive relationship and securing mental addition

| Lesson | Curriculum Prioritisation Learning Outcomes | Spine pedagogy document | Supporting materials |
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| Key links | Manipulating the additive relationship and securing mental addition | Securing mental strategies: calculation up to 999 | Ready to Progress Y3 |
| 1 | Learning Outcome 1 Pupils add two 3-digit numbers using partitioning WALT partition | Teaching point 1 Steps 1:1-1:3 (pgs. 5-8) | I See Reasoning Y3 P27 Rank by difficult (second task) |
| 2 and 3 | Learning Outcome 2 (may wish to spread across two lessons) Pupils add two 3-digit numbers using adjusting WALT adjust | Teaching point 2 Steps 2:1-2:5 (pgs. 9-15) | I See Reasoning Y3 P28 |
| 4 and 5 | Learning Outcome 3 (may wish to spread across two lessons) Pupils add a pair of 2- or 3-digit numbers using redistribution WALT redistribute | Teaching point 2 Steps 2:6-2:12 (pgs. 15-20) | Teaching for Mastery Y3 P13 Mastery (only) |
| 6 | Learning Outcome 4 Pupils subtract a pair of 2- or 3-digit numbers, bridging a multiple of 10, using partitioning WALT partition | Teaching point 3 Steps 3:1-3:2 (pgs. 21-22) | I See Reasoning Y3 P29 Explain the mistakes |
| 7 | Learning Outcome 5 Pupils subtract a pair of 2-digit numbers, crossing a ten or hundreds boundary, by finding the difference between them WALT subtract | Teaching point 3 Steps 3:3-3:5 (pgs. 22-25) | |
| 8 | Learning Outcome 6 Pupils subtract a pair of three-digit multiples of 10 within 1000 by finding the difference between them WALT find the difference | Teaching point 3 Steps 3:6-3:8 (pgs. 25-26) | |
| 9 | Learning Outcome 7 Pupils evaluate the efficiency of strategies for subtracting from a 3-digit number WALT evaluate | Teaching point 3 Steps 3:9-3:11 (pgs. 27-29) | I See Reasoning Y3 P37 Gold, silver, bronze |
| 10 | Learning Outcome 8 Pupils explain why the order of addition and subtraction steps in a multi-step problem can be chosen WALT explain | Teaching point 4 Steps 4:1-4:2 (pgs. 30-31) <i>NB although there are no slides for these steps, the guidance gives examples which can be built on and extended.</i> | Provide opportunities for children to write their own, similar calculations. |

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| 11 | <p>Learning Outcome 9 Pupils accurately and efficiently solve multi-step addition and subtraction problems WALT apply</p> | <p>Teaching point 4 Steps 4:3-4:4 (pgs. 32-33) <i>As above</i></p> | <p>I See Reasoning Y3 P42 Which picture?</p> |
| 12 | <p>Learning Outcomes 10 & 11 Pupils understand and can explain that both addition and subtraction equations can be used to describe the same additive relationship (2-digit and 3-digit numbers) WALT make links</p> | <p>RTP 3AS-3 Pgs. 40-42 (guidance) Ppt slides 64-66</p> | <p>N Rich Roll these dice High- ceiling, open- ended, child-led investigation</p> |
| 13 | <p>Learning Outcome 12 Pupils use knowledge of the additive relationship to rearrange equations WALT apply</p> | <p>RTP 3AS-3 Pgs. 40-43 (guidance and assessment questions)</p> | <p>I See Reasoning Y3 P41 I know so...</p> |
| 14 | <p>Learning Outcome 13 Pupils use knowledge of the additive relationship to identify what is known and what is unknown in an equation WALT identify</p> | | <p>I See Reasoning Y3 P44 Which answer?</p> |
| 15 | <p>Learning Outcome 14 Pupils use knowledge of the additive relationship to rearrange equations before solving WALT apply</p> | | |

Unit 5 – column addition

| Lesson | Curriculum Prioritisation Learning Outcomes | Spine pedagogy document | Supporting materials |
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| Key links | Column addition | Algorithms: column addition | Ready to Progress Y3 |
| 1 and 2 | Learning Outcomes 1 and 2 Pupils identify the addends and the sum in column addition Pupils use their knowledge of place value to correctly lay out column addition WALT identify | Teaching points 1 and 2 Steps 1:1-2:4 (pgs. 4-9) | I See Reasoning P27 rank by difficulty (first task) |
| 3 | Learning Outcomes 3 and 4 Pupils add a pair of 2-digit numbers using column addition Pupils add using column addition WALT add | Teaching point 3 Steps 3:1-3:4 (pgs. 10-12) | |
| 4 | Learning Outcome 5 Pupils use their knowledge of column addition to solve problems WALT apply | Teaching point 3 Step 3:5 (pgs. 12-13) | <i>NB this is a short teaching point but offers lots of opportunity for independent practice before moving on.</i> |
| 5 | Learning Outcome 6 Pupils add a pair of 2-digit numbers using column addition with regrouping in the ones column WALT add | Teaching point 4 Steps 4:1-4:3 (pgs. 14-15) | |
| 6 | Learning Outcome 7 Pupils add a pair of 2-digit numbers using column addition with regrouping in the tens column WALT regroup | Teaching point 4 Step 4:4 (pg. 16) | |
| 7 | Learning Outcome 8 Pupils add using column addition with regrouping WALT regroup | Teaching point 4 Steps 4:5-4:7 (pgs. 16-17) | |
| 8 | Learning Outcome 9 Pupils use known facts and strategies to accurately and efficiently calculate and check column addition WALT apply | Teaching point 5 Steps 5:1-5:4 (pgs. 18-19) | |
| 19 | Learning Outcome 10 Pupils use their knowledge of column addition to solve problems WALT apply | Teaching point 5 Step 5:5 (pg. 20) | RTP 3 AS-2 (addition questions only) Teaching for Mastery Y3 P15 top two activities M and M with GD |

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| 10 | Opportunities for consolidation and assessment | | I See Reasoning P30/31 Missing digits Teaching for Mastery Y3 P14 all activities |
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Unit 6 – 2,4,8 times tables

| Lesson | Curriculum Prioritisation Learning Outcomes | Spine pedagogy document | Supporting materials |
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| Key links | 2,4,8 times tables | Times tables:2,4,8 and the relationship between them | Ready to Progress Y3 |
| 1 | Learning Outcome 1 Pupils represent counting in fours as the 4 times table WALT represent | Teaching point 1 Steps 1:1-1:6 (pgs. 4-9) | I See Reasoning P46 Which number sentence? |
| 2 | Learning Outcome 2 Pupils use knowledge of the 4 times table to solve problems WALT apply | Teaching point 1 Steps 1:7-1:8 (pgs. 10-13) | I See Reasoning P49 Read the picture 1 P50 Draw 1 |
| 3 | Learning Outcome 3 Pupils explain the relationship between adjacent multiples of four WALT explain | Teaching point 1 Steps 1:9-1:11 (pgs. 14-17) | |
| 4 | Learning Outcome 4 Pupils explain the relationship between multiples of 2 and multiples of 4 WALT explain | Teaching point 2 Steps 2:1-2:5 (pgs. 18-23) | Teaching for Mastery Y3 P16 |
| 5 | Learning Outcome 5 Pupils use knowledge of the relationships between the 2 and 4 times tables to solve problems WALT apply | Teaching point 2 Steps 2:6-2:8 (pgs. 23-25) | |
| 6 and 7 May be appropriate to plan as a two-day long session | Learning Outcome 6 Pupils represent counting in eights as the 8 times table WALT represent | Teaching point 3 Steps 3:1-3:7 (pgs. 26-32) | I See Reasoning P50 Is it the same? 2 |
| | Learning Outcome 7 Pupils explain the relationship between adjacent multiples of eight WALT explain | Teaching point 3 Steps 3:8-3:10 (pgs. 33-37) | |
| 8 | Learning Outcome 8 Pupils explain the relationship between multiples of 4 and multiples of 8 WALT explain | Teaching point 4 Steps 4:1-4:5 (pgs. 38-43) | |
| 9 | Learning Outcome 9 Pupils use knowledge of the relationships between the 4 and 8 times tables to solve problems WALT apply | Teaching point 4 Steps 4:6-4:8 (pgs. 43-45) | I See Reasoning P58 Explain 1 |

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| 10 | Learning Outcome 10 Pupils explain the relationship between multiples of 2, 4 and multiples of 8 WALT explain | Teaching point 4 Steps 4:9-4:11 (pgs. 45-49) | |
| 11 | Learning Outcome 11 Pupils use knowledge of the relationships between the 2, 4 and 8 times tables to solve problems WALT apply | Teaching point 4 Steps 4:12 – 4:13 (pgs. 50-53) | Teaching for Mastery Y3 P17 (not the bottom GD task) & P18 |
| 12 | Learning Outcome 12 Pupils use knowledge of the divisibility rules for divisors of 2 and 4 to solve problems WALT apply | Teaching point 5 Steps 5:1-5:4 (pgs. 51-56) | I See Reasoning P59/60 I know so... P61 True or false? P70/71 How many ways? GD |
| 13 | Learning Outcome 13 Pupils use knowledge of the divisibility rules for divisors of 8 to solve problems WALT apply | Teaching point 5 Steps 5:5-5:7 (pgs. 56-58) | I See Reasoning P72 Which picture? 2 N Rich Times tables shifts For any GD children who need a deeper delve into multiplicative structures |
| 14 | Learning Outcome 14 Pupils scale known multiplication facts by 10 WALT scale | Slides 125-126 | RTP 3NF-3 P30-32 |
| 15 | Learning Outcome 15 Pupils scale division derived from multiplication facts by 10 WALT scale | Slides 129-130 | RTP 3NF-3 P30-32 |

Unit 7 – column subtraction

| Lesson | Curriculum Prioritisation Learning Outcomes | Spine pedagogy document | Supporting materials |
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| Key links | Column subtraction | Algorithms: column subtraction | Ready to Progress Y3 |
| 1 | Learning Outcomes 1&2 Pupils identify the minuend and the subtrahend in column subtraction Pupils explain the column subtraction algorithm WALT identify and explain | Teaching point 1 Steps 1:1-1:6 (pgs. 4-8) | I See Reasoning P34 & 35 Is it the same? P36 Spot the pattern |
| 2 | Learning Outcome 3 Pupils subtract from a 2-digit number using column subtraction with exchanging from tens to ones WALT subtract | Teaching point 2 Steps 2:1-2:3 (pgs. 9-11) | |
| 3 and 4 | Learning Outcomes 4&5 Pupils subtract from a 3-digit number using column subtraction with exchanging from hundreds to tens WALT subtract | Teaching point 2 Steps 2:4-2:8 (pgs. 11-14) | I See Reasoning P37/38 Mistakes RTP 3 AS-2 (subtraction questions only) |
| 5 | Learning Outcome 6 Pupils evaluate the efficiency of strategies for subtraction WALT choose | Teaching point 2 Steps 2:9-2:10 (pgs. 15-16) | N Rich subtraction surprise This is a GD task ONLY for those very confident in place value and have a conceptual understanding of commutativity. |

Unit 8 – Unit fractions

| Lesson | Curriculum Prioritisation Learning Outcomes | Spine pedagogy document | Supporting materials |
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| Key links | Unit fractions | Preparing for fractions – the part/whole relationship | Ready to Progress Y3 |
| 1 | Learning Outcomes 1&2 Pupils identify a whole and the parts that make it up Pupils explain why a part can only be defined when in relation to a whole WALT identify & explain | Teaching point 1 Steps 1:1-1:7 (pgs. 4-10) | |
| 2 | Learning Outcome 3 Pupils identify the number of equal or unequal parts in a whole WALT identify | Teaching point 2 Steps 2:1-2:4 (pgs. 11-14) | |
| 3 | Learning Outcome 4 Pupils identify equal parts when they do not look the same WALT identify | Teaching point 2 Steps 2:5-2:7 (pg. 15-19) | I See Reasoning Y3 P75 read the pictures 1 |
| 4 | Learning Outcome 5 Pupils explain the size of the part in relation to the whole WALT explain | Teaching point 3 Steps 3:1-3:6 (pgs. 20-25) | |
| 5 | Learning Outcome 6 Pupils construct a whole when given a part and the number of parts WALT identify | Teaching point 4 Steps 4:1-4:5 (pgs. 26-29) | I See Reasoning Y3 P76 Draw |
| | | Unit fractions – identifying, representing and comparing | |
| 6 | Learning Outcome 7 Pupils identify how many equal parts a whole has been divided into WALT identify | Teaching point 1 Steps 1:1-1:2 (pgs. 4-5) | |
| 7 and 8 | Learning Outcome 8 Pupils use fraction notation to describe an equal part of the whole WALT describe | Teaching point 2 Steps 2:1-2:4 (pgs. 6-10) | |
| 9 | Learning Outcome 9 Pupils represent a unit fractions in different ways WALT represent | Teaching point 2 Steps 2:5-2:6 (pgs. 10-12) | |

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| 10 | Learning Outcome 10 Pupils identify parts and wholes in different contexts WALT identify | Teaching point 3 Steps 3:1-3:4 (pgs. 13-16) | |
| 11 | Learning Outcome 11 Pupils identify parts and wholes in different contexts WALT identify | Teaching point 3 Steps 3:5-3:8 (pgs. 17-20) | |
| 12 | Learning Outcome 12 Pupils identify equal parts when they do not look the same WALT identify | Teaching point 4 Steps 4:1-4:6 (pgs. 21-24) | |
| 13 and 14 | Learning Outcomes 13 & 14 Pupils compare and order unit fractions by looking at the denominator Pupils identify when unit fractions cannot be compared WALT compare (and identify) | Teaching point 5 Steps 5:1-5:4 (pgs. 25-31) | |
| 15 | Learning Outcome 15 Pupils construct a whole when given one part and the fraction that it represents WALT construct | Teaching point 6 Steps 6:1-6:3 (pgs. 32-34) | |
| 16 | Learning Outcome 16 Pupils use knowledge of the relationship between parts and wholes in unit fractions to solve problems WALT apply | Teaching point 6 Steps 6:4-6:9 (pgs. 34-37) | |
| | | Ready to Progress Y3 | |
| 17 | Learning Outcome 17 Pupils identify the whole, the number of equal parts and the size of each part as a unit fraction WALT identify | Ready to progress Y3 document 3F-2 pgs. 51-53 | |
| 18 | Learning Outcome 18 Pupils quantify the number of items in each part and connect to the unit fraction operator WALT quantify | As above plus CP slide 188 | |
| 19 | Learning Outcome 19 Pupils calculate the value of a part by using knowledge of division and division facts WALT calculate | | I See Reasoning Y3 P81 Explain |

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| 20 | <p>Learning Outcome 20 Pupils calculate the value of a part by connecting knowledge of division and division facts with finding a fraction of a quantity</p> <p>WALT calculate</p> | CP slides 193-195 | <p>I See Reasoning Y3 P82 Which picture?</p> |
| 21 | <p>Learning Outcome 21 Pupils find fractions of quantities using knowledge of division facts with increasing fluency</p> <p>WALT calculate</p> | <p>CP slides 198</p> <p>RTP 3F-2 Assessment questions</p> | <p>I See Reasoning Y3 P85 Different ways (GD)</p> |
| 22-25 | <p>These extra four days can be used to spend more time on specific learning points OR for consolidation/ intervention/ assessment or extension of learning.</p> | | <p>Teaching for Mastery Y3 P19-21 – there are a number of activities here pertaining to unit fractions both for mastery and greater depth learners</p> |

Unit 9 – Non-unit fractions

| Lesson | Curriculum Prioritisation Learning Outcomes | Spine pedagogy document | Supporting materials |
|-----------|--|---|--|
| Key links | Non-unit fractions | Non-unit fractions: identifying, representing and comparing | Ready to Progress Y3 |
| 1 | Learning Outcome 1 Pupils explain that non-unit fractions are composed of more than one unit fraction WALT explain | Teaching point 1 Steps 1:1-1:4 (pgs. 4-6) | |
| 2 | Learning Outcome 2 Pupils identify non-unit fractions WALT identify | Teaching point 1 Steps 1:5-1:6 (pgs. 7-8) | I See Reasoning P75 Read the pictures |
| 3 | Learning Outcome 3 Pupils describe, identify and label non-unit fractions, including using the correct notation WALT describe | Teaching point 2 Steps 2:1-2:5 (pgs. 9-14) | N Rich Fraction Match Run as an adult-led GD group task (deepen fraction sense) |
| 4 | Learning Outcome 4 Pupils use knowledge of non-unit fractions to solve problems WALT apply | Teaching point 2 Steps 2:6-2:7 (pgs. 15-18) | I See Reasoning P76 Read the pictures P77 Explain |
| 5 | Learning Outcome 5 Pupils use knowledge of unit fractions to find one whole WALT identify | Teaching point 3 Steps 3:1-3:5 (pgs. 19-22) | |
| 6 | Learning Outcome 6 Pupils place fractions between 0 and 1 on a number line WALT identify | Teaching point 4 Steps 4:1-4:5 (pgs. 23-26) | I See Reasoning P79 Draw P81 Draw |
| 7 | Learning Outcome 7 Pupils use repeated addition of a unit fraction to form a non-unit fraction WALT create | Teaching point 5 Steps 5:1-5:6 (pgs. 27-33) | |
| 8 | Learning Outcome 8 Pupils use repeated addition of a unit fraction to form 1 WALT add | Teaching point 6 Steps 6:1-6:3 (pgs. 34-36) | |
| 9 | Learning Outcome 9 Pupils compare using knowledge of non-unit fractions equivalent to one WALT compare | Teaching point 6 Steps 6:4-6:6 (pgs. 36-38) | I See Reasoning P80 Read the pictures |

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| 10 | Learning Outcome 10 Pupils compare non-unit fractions with the same denominator WALT compare | Teaching point 7 Steps 7:1-7:6 (pgs. 39-45) | |
| 11 | Learning Outcome 11 Pupils compare unit fractions WALT compare | Teaching point 8 Steps 8:1-8:5 (pgs. 46-50) | |
| 12 | Learning Outcome 12 Pupils compare fractions with the same numerator WALT compare | Teaching point 8 Steps 8:6-8:13 (pgs. 50-58) | |
| | | Adding and subtracting within one whole | |
| 13 | Learning Outcome 13 Pupils add up fractions with the same denominator WALT add | Teaching point 1 Steps 1:1-1:5 (pgs. 4-7) | |
| 14 | Learning Outcome 14 Pupils add on fractions with the same denominator WALT add | Teaching point 1 Steps 1:6 -1:8 (pgs. 8-10) | |
| 15 | Learning Outcome 15 Pupils add fractions with the same denominator using a generalised rule WALT add | Teaching point 1 Steps 1:9-1:15 (pgs. 10-15) | I See Reasoning P86 Which way? |
| 16 | Learning Outcome 16 Pupils subtract fractions with the same denominator WALT subtract | Teaching point 2 Steps 2:1-2:5 (pgs. 16-19) | I See Reasoning P87 Fill the gaps |
| 17 | Learning Outcome 17 Pupils add and subtract fractions with the same denominator WALT calculate | Teaching point 2 Steps 2:6-2:8 (pgs. 19-22) | I See Reasoning P87 Two ways P88 How many ways? Teaching for Mastery P20 bottom activities |
| 18 | Learning Outcome 18 Pupils explain that addition and subtraction of fractions are inverse operations WALT explain | Teaching point 3 Steps 3:1-3:5 (pgs. 23-26) | |
| 19 | Learning Outcome 19 Pupils subtract fractions from a whole by converting the whole to a fraction WALT subtract | Teaching point 4 Steps 4:1-4:4 (pgs. 27-31) | |

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| 20 | Learning Outcome 20 Pupils represent a whole as a fraction in different ways and use this to solve problems involving subtraction And opportunities for assessment | Teaching point 4 Step 4:5 (pgs. 31-33) | 3F-1 (questions 3,4 and parts of 5) 3F-3 3F-4 |
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Unit 10 – Parallel and perpendicular sides in polygons

| Lesson | Curriculum Prioritisation Learning Outcomes | Spine pedagogy document | Supporting materials |
|-----------|---|---|--|
| Key links | Parallel and perpendicular sides in polygons | Ready to Progress Y3 | |
| 1 | Learning Outcome 1 Pupils make compound shapes by joining two polygons in different ways (same parts, different whole) WALT create | 3G-2 p64-66 CP ppt slide 7 | Slides 36-41 contain backgrounds (isometric paper, geoboards) that can be printed |
| 2 | Learning Outcome 2 Pupils investigate different ways of composing and decomposing a polygon (same whole, different parts) WALT investigate | CP ppt slides 9-10 | |
| 3 | Learning Outcome 3 Pupils draw polygons on isometric paper WALT draw | CP ppt slides 12-13 | |
| 4 | Learning Outcome 4 Pupils use geostrips to investigate quadrilaterals with and without parallel and perpendicular sides WALT investigate | CP ppt slides 15-18 | I See Reasoning P114 What's the same, what's different? |
| 5 | Learning Outcome 5 Pupils make and draw compound shapes with and without parallel and perpendicular sides WALT draw | CP ppt slide 20 | |
| 6 | Learning Outcome 6 Pupils learn to extend lines and sides to identify parallel and perpendicular lines WALT identify | CP ppt slides 22-25 | I See Reasoning P111/112 Agree or disagree? |
| 7 | Learning Outcome 7 Pupils make and draw triangles on circular geoboards WALT draw | CP ppt slides 27-29 N Rich Virtual geoboard – use for whole class teaching/modelling | N Rich Inside triangles – initial task or support for those not confident N Rich 9 pin triangles – GD investigation |
| 8 | Learning Outcome 8 Pupils make and draw quadrilaterals on circular geoboards WALT draw | CP ppt slides 31-33 | |

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| 9 | Learning Outcome 9 Pupils draw shapes with given properties on a range of geometric grids WALT draw | CP ppt slide 35 | Teaching for Mastery Y3 P27 bottom two activities (one GD investigation) |
| 10 | Opportunities for consolidation and assessment | 3G-2 assessment questions (p65-66) | |

Unit 11 – Time

| Lesson | Curriculum Prioritisation Learning Outcomes | Spine pedagogy document | Supporting materials |
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| Key links | Time (please read the web page first) | | Ready to Progress Y3 |
| 1 | Learning Outcome 1 Pupils know the number of seconds in a minute and the number of days in each month, year and leap year Learning Outcome 2 Pupils compare durations of events and time in terms of seconds, minutes and hours WALT compare | Storybots time song | I See Reasoning P104 |
| 2 and 3 | Learning Outcome 3 Pupils tell the time from an analogue clock using roman numerals from 1 to X11 using vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight WALT identify | Numberblocks – about time Special episode- telling the time Introducing roman numerals on a clock face Introducing a 12 hour digital clock (see web page) | Teaching for Mastery Y3 P25 |
| 4 and 5 | Learning Outcome 4 Pupils estimate and read time to the nearest minute WALT estimate | | |