AUTUMN – YEAR 3

SAINT JOHN'S

NATIONAL CURRICULUM

NUMBER - NUMBER AND PLACE VALUE

Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number(A1, A3)

Identify, represent and estimate numbers using different representations (A1)

Read and write numbers up to 1000 in numerals and in words (A1)

Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) (A1)

Compare and order numbers up to 1000 (A1)

Solve number problems and practical problems involving these ideas (A1)

NUMBER - ADDITION AND SUBTRACTION

Note – although formal algebraic notation is not introduced until Y6, algebraic thinking starts much earlier as exemplified by the 'missing number' objectives

NUMBER – MULTIPLICATION AND DIVISION

Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables (A3, Sp1)

Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods (A3, Sp1)

READY TO PROGRESS

NUMBER AND PLACE VALUE - NPV

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 three-digit multiples of 10 (A1 Step 4, A2 Step 10, A3 Step 4)

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 (A1 Steps 5, 6, 7, 8)

3NPV-3 Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10 (A1 Steps 9, 10, 11, 12, 13)

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 (A1 Steps 10, 11, 14)

NUMBER FACTS - NF

3NF-2 Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number (A3 Steps 3, 4, 5, 9, 10, 11)

3NF-1 Secure fluency in addition and subtraction facts that bridge 10, through continued practice (A2 Steps 6, 7, 8, 9, 13, 14, 15, 16)

ADDITION AND SUBTRACTION - AS

3AS-1 Calculate complements to 100 (A2 Step 19)

3AS-2 Add and subtract up to three-digit numbers using columnar methods (A2 Steps 11, 12, 13, 14, 15, 16, 17, 18)

3AS-3 Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction (A2 Step 21, 22)

MULTIPLICATION AND DIVISION – MD

3MD-1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division (A3, all steps)

SPRING – YEAR 3

NATIONAL CURRICULUM

NUMBER - ADDITION AND SUBTRACTION

Add and subtract numbers mentally, including:
➢ a three-digit number and ones
➢ a three-digit number and tens
➢ a three-digit number and hundreds (A2)

Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction (A2)

Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction (A2)

Note – although formal algebraic notation is not introduced until Y6, algebraic thinking starts much earlier as exemplified by the 'missing number' objectives

NUMBER – MULTIPLICATION AND DIVISION

Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables (A3, Sp1)

Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables (A3, Sp1)

Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods (A3, Sp1)

Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables (A3, Sp1)

Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods (A3, Sp1)

Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects (A3, Sp1)

NUMBER - FRACTIONS

Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 (Sp3)

Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators (Sp3)

Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators (Sp3)

Recognise and show, using diagrams, equivalent fractions with small denominators (Sp3)

Compare and order unit fractions, and fractions with the same denominators (Sp3)

Solve problems that involve all of the above (Sp3, Su1)

MEASUREMENT

Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) (Sp2, Sp4)

Measure the perimeter of simple 2-D shapes (Sp3)

READY TO PROGRESS

NUMBER AND PLACE VALUE - NPV

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 three-digit multiples of 10 (Sp2 Steps 5, 6)

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 (Sp 2 Steps 1, 2, 3)

NUMBER FACTS - NF

3NF-1 Secure fluency in addition and subtraction facts that bridge 10, through continued practice (A2 Steps 6, 7, 8, 9, 13, 14, 15, 16)

3NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10) (Sp1 Steps 1, 2, 10 / Sp3 Steps 6, 9, 10)

MULTIPLICATION AND DIVISION – MD

3MD-1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division (Sp1, all steps)

FRACTIONS - F

3F-1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts (Sp3, Steps 1, 3, 4)

3F-3 Reason about the location of any fraction within 1 in the linear number system (Sp3, Steps 2, 6, 7, 8)

SUMMER – YEAR 3

NATIONAL CURRICULUM

NUMBER - FRACTIONS

Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$] (Su1)

Solve problems that involve all of the above (Sp3, Su1)

MEASUREMENT

Add and subtract amounts of money to give change, using both £ and p in practical contexts (Su2)

Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks (Su3)

Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight (Su3)

Know the number of seconds in a minute and the number of days in each month, year and leap year (Su3)

Compare durations of events [for example to calculate the time taken by particular events or tasks] (Su3)

GEOMETRY – PROPERTIES OF SHAPES

Draw 2-D shapes (Su4)

Make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them (Su4)

Recognise angles as a property of shape or a description of a turn (Su4)

Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle (Su4)

Identify horizontal and vertical lines and pairs of perpendicular and parallel lines (Su4)

STATISTICS

Interpret and present data using bar charts, pictograms and tables (Su5)

Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables (Su5)

READY TO PROGRESS

ADDITION AND SUBTRACTION - AS

3AS-1 Calculate complements to 100 (Su – steps to follow)

3AS-3 Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction (Su – steps to follow)

FRACTIONS

3F-2 Find unit fractions of quantities using known division facts (multiplication tables fluency) (Su1, steps to follow)

3F-4 Add and subtract fractions with the same denominator, within 1 (Su1, steps to follow)

GEOMETRY – G

3G-1 Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations (Su4, steps to follow)

3G-2 Draw polygons by joining marked points, and identify parallel and perpendicular sides (Su4, steps to follow)

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