**Multiplication and Division**

Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

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.

Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).

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

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.

Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division

**Addition and Subtraction**

Secure fluency in addition and subtraction facts that bridge 10, through continued practice.

Calculate complements to 100.

Add and subtract numbers mentally, including:

a three-digit number and ones

a three-digit number and tens

a three-digit number and hundreds

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

Add and subtract up to three-digit numbers using columnar methods.

Estimate the answer to a calculation and use inverse operations to check answers

Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

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.

**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

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

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.

Recognise the place value of each digit in *three*-digit numbers, and compose and decompose *three*-digit numbers using standard and non-standard partitioning.

Compare and order numbers up to 1000

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.

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.

Identify, represent and estimate numbers using different representations

Read and write numbers up to 1000 in numerals and in words

Solve number problems and practical problems involving these ideas.

**Measurement**

**M**easure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)

Measure the perimeter of simple 2-D shapes

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

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

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

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

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

National Curriculum Year 3

**Statistics**

Interpret and present data using bar charts, pictograms and tables

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.

**Geometry – Properties of Shape**

Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them

Recognise angles as a property of shape or a description of a turn

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

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.

Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.

Draw polygons by joining marked points, and identify parallel and perpendicular sides.

**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

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

Find unit fractions of quantities using known division facts (multiplication tables fluency).

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

Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.

Recognise and show, using diagrams, equivalent fractions with small denominators

Add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 =6/7

Add and subtract fractions with the same denominator, within 1.

Compare and order unit fractions, and fractions with the same denominators

Reason about the location of any fraction within 1 in the linear number system.

Solve problems that involve all of the above.