Year 3
Mathematics Skills Sheet

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 3-digit number (100s, 10s, 1s).
Compare and order numbers up to 1,000.
Identify, represent, and estimate numbers using different representations.
Read and write numbers up to 1,000 in numerals and in words.
Solve number problems and practical problems involving these ideas.
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.***
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.***
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.***
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.***
Addition and Subtraction
Add and subtract numbers mentally, including: • a three-digit number and 1s • a three-digit number and 10s • a three-digit number and 100s
Add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction.
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.
3NF-1 - ***Secure fluency in addition and subtraction facts that bridge 10, through continued practice.***
3AS-1 - ***Calculate complements to 100, for example: 46 + ? = 100***
3AS-2 - ***Add and subtract up to three-digit numbers using columnar methods.***
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.***
Multiplication and Division
Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
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.
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.
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.***
3NF-3 - ***Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10), for example:*** ***80 + 60 = 140*** ***30 × 4 = 120*** ***140 – 60 = 80*** ***120 ÷ 4 = 30***

3MD-1 - *Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.*
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.
Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.
Recognise and show, using diagrams, equivalent fractions with small denominators.
Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$].
Compare and order unit fractions, and fractions with the same denominators.
Solve problems that involve all of the above.
3F-1 - *Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.*
3F-2 - *Find unit fractions of quantities using known division facts (multiplication tables fluency).*
3F-3 - *Reason about the location of any fraction within 1 in the linear number system.*
3F-4 - *Add and subtract fractions with the same denominator, within 1.*
Measurement
Measure, 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, am/pm, 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].
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 2 right angles make a half-turn, 3 make three-quarters of a turn and 4 a complete turn; identify whether angles are greater than or less than a right angle.
Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
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.*
3G-2 - *Draw polygons by joining marked points, and identify parallel and perpendicular sides.*
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.