National Curriculum Objectives
YEAR 3

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	
Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	
Compare and order numbers up to 1000	
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	
Pupils now use multiples of 2, 3, 4, 5, 8, 10, 50 and 100	
They use larger numbers to at least 1000, applying partitioning related to place value using varied and increasingly complex problems, (for example, 146 = 100 + 40 and 6, 146 = 130 + 16)	

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	
Add and subtract numbers with up to three 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	

Number - 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	
Through doubling they connect the 2, 4 and 8 multiplication tables	
Pupils develop their understanding, for example, of distributative (eg 12 x 6 = 10 x 6 x 2 x 6), commutativity and associativity (for example, $4 \times 12 \times 5 = 4 \times 5 \times 12 = 20 \times 12 = 240$) and multiplication and division facts (for example, using $3 \times 2 = 6$, $6 \div 3 = 2$ and $2 = 6 \div 3$) to derive related facts (for example, $30 \times 2 = 60$, $60 \div 3 = 20$ and $20 = 60 \div 3$)	

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 connect to place value	
Recognise, find and write fractions of a discrete set of objects, shapes and measures: 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	

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, 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]	
Pupils continue to measure using the appropriate tools	

Geometry - properties of shapes

Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them using accurate language, including lengths of lines and acute and obtuse.	
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	
Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	
Pupils can recognise and understand the difference between symmetrical and non-symmetrical polygons and polyhedral.	
Interpret and present data using bar charts, pictograms and tables using simple scales	
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	