

## **Year 3**

### **Number – number and place value**

Pupils should be taught to:

- 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.

### **Number – addition and subtraction**

Pupils should be taught to:

- 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, using number facts, place value, and more complex addition and subtraction.

### **Number – multiplication and division**

Pupils should be taught to:

- 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.

### **Number – fractions**

Pupils should be taught to:

- 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 denominator and solve problems that involve all of the above.

### **Measurement**

Pupils should be taught to:

- 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].

### **Geometry – properties of shapes**

Pupils should be taught to:

- 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;
- identify horizontal and vertical lines and pairs of perpendicular and parallel lines.

### **Statistics**

Pupils should be taught to:

- 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.