

# Number Facts: Year 3

## 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

## 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

## 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

## 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 and show, using diagrams, equivalent fractions with small denominators
- add and subtract fractions with the same denominator within one whole (e.g.  $5/7 + 1/7 = 6/7$ )

## Measure

Pupils should be taught to:

- measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
- know the number of seconds in a minute and the number of days in each month, year and leap year

## Addition and Subtraction

- ✓ Know all the complements to 100  
 $\square + \square = 100$
- ✓ Know pairs of multiples of 100 that total 1000  
 $1 + 9 = 10$  (Year 1)  
 $10 + 90 = 100$  (Year 2)  
 $100 + 900 = 1000$  (Year 3)

## Number and Place Value

- ✓ Know the sequence of counting in multiples of 3.

Always ensure that appropriate models and images are used to support children's conceptual understanding.

## Fractions

- $\frac{1}{2} + \frac{2}{4} = \frac{3}{6} = \frac{4}{8} = \frac{5}{10}$
- $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} = \frac{5}{5} = 1$  whole
- $\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} = \frac{6}{6} = 1$  whole
- $\frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7} = \frac{7}{7} = 1$  whole
- $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = \frac{8}{8} = 1$  whole
- $\frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} = \frac{9}{9} = 1$  whole
- $\frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} = \frac{10}{10} = 1$  whole
- Understand fraction facts related to whole number facts  
 $1 + 5 = 6$  (Year 1)  
 $\frac{1}{6} + \frac{5}{6} = \frac{6}{6}$  (Year 3)

## Multiplication and Division

- ✓ Know the 3, 4 and 8 times table and the related division facts
- ✓ Understand that  $\square \times 2 =$  doubling
- ✓ Understand that  $\square \div 2 =$  halving
- ✓ Know that...
  - $50 \times 2 = 100$
  - $25 \times 4 = 100$
  - $20 \times 5 = 100$

## Measure

- ✓ 60 seconds = 1 minute
- ✓ How many days in each month / year / leap year.
- ✓ Find and recognise complements to 60.
  - ✓  $50p \times 2 = \pounds 1.00$   $\pounds 50 \times 2 = \pounds 100$
  - ✓  $25p \times 4 = \pounds 1.00$   $\pounds 25 \times 4 = \pounds 100$
  - ✓  $20p \times 5 = \pounds 1.00$   $\pounds 20 \times 5 = \pounds 100$
  - ✓  $1000g = 1kg$   $1000ml = 1l$
  - ✓  $1000cm = 1km$
  - ✓  $1000 \div 2 = 500$   $1000 \div 4 = 250$
  - ✓  $\frac{1}{2} l/kg/km = 500$
  - ✓  $\frac{1}{4} l/kg/km = 250$
  - ✓  $\frac{3}{4} l/kg/km = 750$