**Fractions**

**Year 1 Programme of Study**

Pupils should be taught to:

* recognise, find and name a half as one of two equal parts of an object, shape or quantity
* recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.

**Year 2 Programme of Study**

Pupils should be taught to:

* recognise, find, name and write fractions ⅓, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity
* write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and ½.

**Year 3 Programme of Study**

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, ⅕ + ⅗ = ⅘]
* compare and order unit fractions, and fractions with the same denominators
* solve problems that involve all of the above.

**Year 4 Programme of Study**

Pupils should be taught to

* recognise and show, using diagrams, families of common equivalent fractions
* count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten
* solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number
* add and subtract fractions with the same denominator
* solve simple measure and money problems involving fractions.

**Year 5 Programme of Study**

Pupils should be taught to:

* compare and order fractions whose denominators are all multiples of the same number
* identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
* recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, ⅗ + ⅘ = 1⅖]
* add and subtract fractions with the same denominator and denominators that are multiples of the same number
* multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.

**Year 6 Programme of Study**

Pupils should be taught to:

* use common factors to simplify fractions; use common multiples to express fractions in the same denomination
* compare and order fractions, including fractions > 1
* add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
* multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, ¼ x ½ = ⅛]
* divide proper fractions by whole numbers [for example, ⅓ ÷ 2 = ⅙].