## Fractions, Decimals and Parentages: Fractions

## By the end of this unit, children will be able to:

- count in tenths; to recognise tenths and be able to determine how many tenths are shaded
- make number pairs to create 1 ; to combine fractions to make 1
- add fractions with the same denominator
- consolidate adding fractions with the same name; to learn how fractions can add to 1
- subtract fractions with the same name
- find equivalent fractions through paper folding and shading
- find equivalent fractions using paper folding and shading
- find equivalent fractions; to place fractions on a number line
- find fractions equivalent to $1 / 2$
- use pictorial representations and multiplication to show equivalence
- find equivalent fractions using concrete objects and pictorial representations and multiplication
- find the simplest fraction using visualisation and concrete materials, pictorial representations and division
- find equivalent fractions using multiplication and division; to determine whether or not a fraction is equivalent
- compare the fractions $1 / 2$ and $1 / 4$ using pictorial representations and concrete materials
- compare fractions using pictorial representations
- understand the numerical nature of the numerator
- compare fractions with different names (denominators) using pictorial representations and number lines
- add fractions using pictorial representations; to simplify fractions after adding them
- subtract fractions using pictorial representations and to simplify fractions after they have been subtracted
- subtract fractions from a whole amount; to use pictorial representations of whole numbers to help subtract fractions
- determine a fraction of a whole number using pictorial representations
- find a fraction of a whole number using pictorial representations, multiplication and concrete objects
- consolidate finding the fraction of a whole number
- divide 1 between more than 1 ; to share 1 whole equally between more than 1
- share more than 1 using pictorial representations and division
- recognise a whole and its parts using pictures and number lines.
- show more than 1 whole after sharing a number of items equally
- use pictorial representations to share whole items equally
- apply bar modelling to represent fractions in word problems; to solve word problems using pictorial representations and
- abstract methods.


## Measurement: Length

By the end of this unit, children will be able to:

- use metres and centimetres to measure objects
- write length in centimetres only by converting metres to centimetres
- convert kilometres to metres
- convert length from metres to kilometres and metres
- compare two lengths.


## Measurement: Mass

## By the end of this unit, children will be able to:

- measure mass using weighing scales and compare the mass of objects using grams and kilograms
- use weighing scales to measure mass when the mass is between multiples of 100 g
- read values on a scale which are 1 kg or more
- weigh heavier items where the markers in the scales represent 200 g each
- solve word problems relating to mass with addition and subtraction.


## Measurement: Money

## By the end of this unit, children will be able to:

- consolidate previous learning about denominations of both notes and coins; to use simple addition to count amounts of money.
- name amounts of money including coins above 100p; to regroup and rename 100 p as $£ 1$ as a key strategy
- find multiple ways of showing an amount of money
- add money by adding together the pounds and pence separately
- add amounts of money together using different methods
- consolidate the addition of pounds and pence separately.
- consolidate 'making a pound' as a strategy for adding amounts of money where the coins equal more than 99p
- learn the 'make a pound' strategy with number bond diagrams; to consolidate the strategies associated with the addition of money.
- use multiple methods for subtracting amounts of money, including concrete materials and the column method.
- use visual comparison to subtract amounts of money; to consolidate column subtraction where there is no regrouping of pence required.
- use number bonds to subtract amounts of money; to develop number sense through decision making.
- use number bonds as the primary strategy for subtracting amounts of money; to split pounds and pence simultaneously when subtracting amounts of money.
- learn the 'counting on' strategy for calculating change; to consolidate the number bonds strategy for calculating change.
- solve word problems involving money using bar modelling as the key strategy; to learn how to use comparative models where pupils are solving by seeing the smaller amount inside of the larger amount
- use part-whole bar models to represent word problems; to apply addition and subtraction strategies to solve word problems.


## Measurement: Volume

## By the end of this unit, children will be able to:

- measure volume and capacity in litres and millilitres
- measure volume in millilitres and litres from a 'homemade' bottle with markings
- measure volume using millilitres and litres in comparison to 1 L
- measure larger capacity in litres and millilitres.
- solve word problems related to volume.

