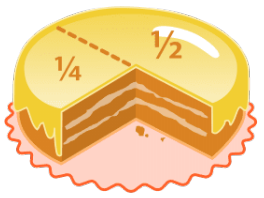
Henbury MATHS Journey: Fractions and Decimals

EYFS

- Verbally count beyond 20, recognising the pattern of the counting system

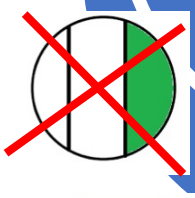
YEAR 1

- 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



VOCABULARY

half, quarter, third, equivalent, decimal, percentage, equal, unit fraction, numerator, denominator, non-unit fraction, thousandth, mixed number, improper fraction, tenth, hundredth, decimal place



- recognise, find, name and write fractions 1/3, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity.

- write simple fractions e.g. ½ of 6 = 3 and recognise the equivalence of 2/4 and 1/2

Key

Fractions

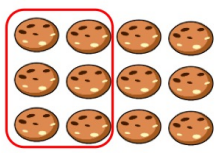
Decimals

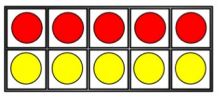
Equivalence

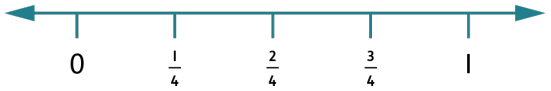
Calculating with Fractions

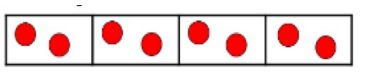
Calculating with Decimals

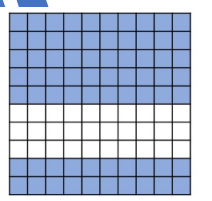
YEAR 2



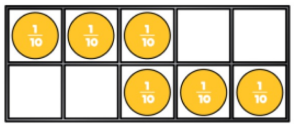


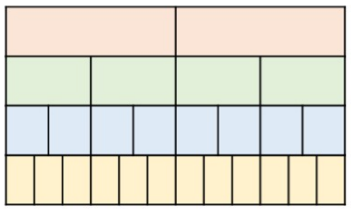






- count up and down in tenths
- recognise, find and write fractions of a discrete set of objects
- recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1 digit numbers or quantities by 10.
- recognise and use fractions as numbers
- compare and order unit fractions, and fractions with the same denominators

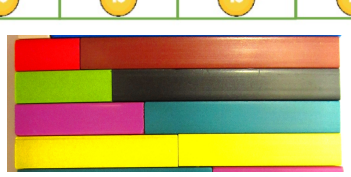




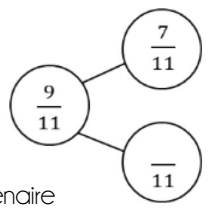
Ones	Tenths
0	8

- count up and down in hundredths
- recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten

YEAR 3



Cuisenaire Rods



- recognise and show, using diagrams, equivalent fractions with small denominators
- add and subtract fractions with the same denominator within one whole

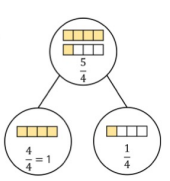
+ problem solving

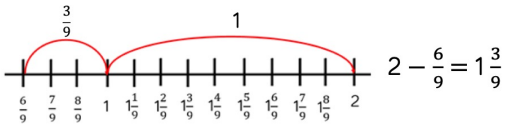
$\frac{2}{7} + \frac{2}{7} =$

- compare numbers with the same number of decimal places up to two decimal places
- round decimals with one decimal place to the nearest whole number
- recognise and show, using diagrams, families of common equivalent fractions
- recognise and write decimal equivalents of any number of tenths or hundredths
- recognise and write decimal equivalents to ½, ¼, ¾

YEAR 4

- add and subtract fractions with the same denominator





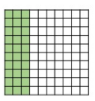
$2 - \frac{6}{9} = 1\frac{3}{9}$

- find the effect of dividing a one- or two-digit number by 10 and 100

+ problem solving

Tens	Ones	Tenths	Hundredths

Ones	Tenths	Hundredths



$0.3 = \frac{3}{10} = \frac{30}{100}$

- compare and order fractions, including fractions >1
- identify the value of each digit in numbers given to three decimal places
- use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- associate a fraction with division and calculate decimal fraction equivalents
- recall and use equivalences between simple fractions, decimals and percentages
- add and subtract fractions with different denominators and mixed numbers
- multiply simple pairs of proper fractions
- divide proper fractions by whole numbers
- multiply decimals by whole numbers
- multiply and divide numbers by 10, 100 and 1000

+ problem solving

YEAR 6

YEAR 5

- recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- compare and order fractions whose denominators are all multiples of the same number
- read, write, order and compare numbers with up to three decimal places
- round decimals with two decimal places to the nearest whole number and to one decimal place
- identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
- read and write decimal numbers as fractions
- recognise mixed numbers and improper fractions and convert from one form to the other
- recognise the per cent symbol (%) and understand that per cent relates to "number of parts per hundred", and write percentages as a fraction with 100 as the denominator
- add and subtract fractions with the same denominator and multiples of the same number
- multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams