

MATHS

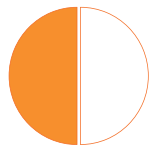
Progression of fractions

A mastery-based curriculum to build competency through the CPA approach. Concrete - Pictorial - Abstract

RECEPTION

Pupils will explore counting in equal groups and understand that halving is splitting into two equal groups.

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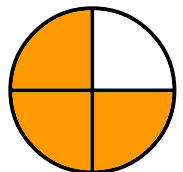


YEAR 1

Pupils will recognise, find and name a half as 1 of 2 equal parts of an objects, shape or quantity. They will recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity.

1

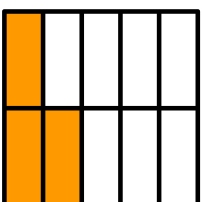
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YEAR 2

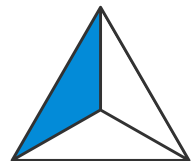
Pupils will recognise, find, name and write fractions one third, one quarter, two quarters and three quarters of a length, shape, set of objects or quantity. They will write simple fractions, for example one half of 6 = 3 and recognise the equivalence of one half and two quarters.

2



Pupils will develop an understanding of tenths; count up and down in tenths. They will recognise, use as numbers, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. Pupils will compare and order unit fractions, and fractions with the same denominators. They will recognise and show, using diagrams, equivalent fractions with small denominators.

3



YEAR 3

YEAR 4

Pupils will round decimals with 1 decimal place to the nearest whole number and develop their understanding of hundredths. They will compare numbers with the same number of decimal places up to 2 decimal places. Pupils will recognise and show, using diagrams, families of common equivalent fractions and recognise decimal equivalents for any number of tenths, hundredths, or one quarter, one half, and three quarters. Pupils will solve a range of problems, add and subtract fractions with the same denominator, and divide a one-digit number by 10 or 100.

4

YEAR 5

Pupils will recognise mixed numbers and improper fractions and convert from one form to the other. They will recognise and use thousandths and relate them to tenths, hundredths and decimals equivalents alongside rounding decimals with 2 decimal places. Pupils will read, write, order, compare and solve problems with numbers up to 3 decimal places, and compare and order fractions whose denominators are all multiples of the same number. They will read and write decimal numbers as fractions and identify, name and write equivalent fractions of a given fraction, including tenths and hundredths. They will add and subtract fractions, multiply proper fractions and mixed numbers by whole numbers, and solve problems.

5

YEAR 6

Pupils will use common factors to simplify fractions; use common multiples to express fractions in the same denomination alongside identifying the value of each digit in numbers given to 3 decimal places. They will compare and order fraction, including fractions >1 . Pupils will recall and use equivalences between simple fractions, decimals and percentages. They will add and subtract fractions and mixed numbers, multiply simple pairs of proper fractions, and divide proper fractions by whole numbers. Pupils will associate a fraction with division and calculate decimal fraction equivalents for a simple fraction. They will multiply/divide numbers by powers of 10 giving answers up to 3 decimal places as well as multiply one-digit numbers with up to 2 decimal places by whole numbers. Pupils will use written division methods in cases where the answer has up to 2 decimal places, and solve problems which require answers to be rounded to specified degrees of accuracy.

6



Paddox



ArkCurriculum+

The Ark Mastery Curriculum is designed to be
Knowledge-rich + Academically ambitious + Logically sequenced
Designed to support memory + Diverse and Inclusive