



## Progression in Mathematics: Fractions

| Concept                    | Nursery and EYFS | Year 1 and Year 2   | Year 3 and Year 4   | Year 5 and Year 6  |
|----------------------------|------------------|---|---|--|
| <b>Recognise and Write</b> |                  | <p>recognise, find and name a half as one of two equal parts of an object, shape or quantity</p> <p>recognise, find and name a quarter as one of four equal parts of an object, shape or quantity</p> <p>recognise, find, name and write fractions of a length, shape set of objects or quantity<br/><math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math>, <math>\frac{3}{4}</math></p> | <p>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</p> <p>recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators</p> <p>recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</p> <p>count up and down in hundredths</p> <p>recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten</p> | <p>identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths</p> <p>recognise mixed numbers and improper fractions</p> <p>convert from one form to the other</p>  |
| <b>Compare</b>             |                  | <p>recognise the equivalence of 2 quarters and 1 half</p>   | <p>recognise and show using diagrams, equivalent fractions with small denominations</p> <p>compare and order unit fractions, and fractions with the same denominators</p> <p>recognise and show using diagrams, families of common equivalent fractions</p>   | <p>compare and order fractions whose denominators are all multiples of the same number</p> <p>use common factors to simplify fractions</p> <p>Use common multiples to express fractions in the same denomination</p> <p>Compare and order fractions including fractions &gt; 1</p> |

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|------------------------------|--|--|---|---|
| <p><b>Calculations</b></p>   |  | <p>write simple fractions</p> <p>example <math>\frac{1}{2}</math> of 6 = 3</p> | <p>add and subtract fractions with the same denominator within one whole</p> <p>Example<br/> <math>\frac{5}{7} + \frac{1}{7} = \frac{6}{7}</math></p>   | <p>add and subtract fractions with the same denominator and denominators that are multiples of the same number</p> <p>multiply proper fractions and mixed numbers by whole numbers, supported by equipment and diagrams</p> <p>add and subtract fractions with the same denominator and mixed numbers using the concept of equivalent fractions</p> <p>multiply simple pairs of proper fractions answering in the simplest form</p> <p>divide proper fractions by whole numbers</p> |
| <p><b>Solve Problems</b></p> |  |  | <p>add and subtract fractions with the same denominator within one whole</p> <p>Example<br/> <math>\frac{5}{7} + \frac{1}{7} = \frac{6}{7}</math></p> <p>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</p> |   |





