|  | Milestone 1 | Milestone 2 | Milestone 3 |
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|  | - Recognise, find and name a half as one of two equal parts of an object, shape or quantity ( Y 1 ) <br> - Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity ( Y 1 ) <br> - Count in halves $\frac{1}{2}, 1$, $1 \frac{1}{2}, 2$... <br> - Recognise, find, name and write $1 / 2,1 / 4,1 / 3$ of a length, shape, set of objects or quantity (Y2) <br> - Recognise, find, name and write 2/4 and $3 / 4$ of a length, shape, set of objects or quantity (Y2) | - Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts (Y3) <br> - Count up and down in tenths e.g. 1/10, $2 / 10,3 / 10 \ldots$ and $0.6,0 / 7,0.8 \ldots$ (Y3) <br> - Count up and down in hundredths (Y4) <br> - Know that a hundredth is an object divided by 100 and tenths divided by 10 (Y4) <br> - Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators ( Y 3 ) <br> - Understand that tenths are objects or quantities divided into 10 equal parts (Y3) <br> - Find fractions of a set of objects e.g. 2/5 or $\frac{3}{4}$ (Y3) <br> - Find unit fractions of quantities using known division facts (Y3) <br> - Understand that tenths are objects or quantities divided into 10 equal parts (Y3) <br> - Compare and order unit fractions and fractions with the same denominators. Reasoning about the location of any fraction within 1 in the linear number system <br> - Reason about the location of mixed numbers in the linear number system (Y4) <br> - Round decimals with one decimal place to the nearest whole number (Y4) <br> - Compare numbers with up to 2 decimal places (Y4) | - Compare and order fractions whose denominators are all multiples of the same number <br> - Compare and order fractions, including fractions > 1 <br> - Convert mixed numbers to improper fractions (Y5) <br> - Convert improper fractions to mixed numbers (Y5) <br> - Write mathematical statements > 1 as a mixed number [for example, $2 / 5+4 / 5=6 / 5=11 / 5)(\mathrm{Y} 5)$ <br> - Round decimals with two decimal places to the nearest whole number and to one decimal place (Y5) <br> - Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning (У5) <br> - Read, write, order and compare numbers with up to three decimal places (Y5) <br> - Identify the value of each digit in numbers given to three decimal places (Y6) <br> - Recognise the per cent symbol (\%) and write as a decimal and fraction (with the denominator 100) (Y5) |

In bold - National curriculum objectives for the year group.
In blue - Ready-to-progress criteria identified as the most important conceptual knowledge and understanding that pupils need as they progress to the next year's curriculum.


- Recognise and show equivalent fractions e.g. $3 / 6=\frac{1}{2}$ ( Y 3 )
- Recognise and show, using diagrams, families of common equivalent fractions (y4)
- Recognise and write decimal equivalents to any number of tenths or hundredths (Y4)
- Recognise and write decimal equivalents to $1 / 4,1 / 2, \frac{3}{4}$ (Y4)
- Convert mixed numbers to improper fractions and vice versa.
- Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
- Find equivalent fractions and understand that they have the same value and the same position in the linear number system ( Y 5 )
- Read and write decimal numbers as fractions e.g. $0.71=71 / 100$ (Y5) Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1.
- Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01.
- Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01.
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- Recognise when fractions can be simplified and use common factors to simplify fractions.
- Use common multiples to express fractions in the same denomination and use this to compare fractions that are similar in value.
- Calculate decimal fraction equivalents for simple fractions e.g. 3/8 is $0.375 \times 3$ ( V 6 )
- Associate a fraction with division and calculate decimal fraction equivalents for simple fractions e.g. $3 / 8$ is $0.375 \times 3$ (Y6)
- Recall and use equivalences between simple fractions, decimals and percentages (Y6)


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|  | - Write simple fractions for example, $1 / 2$ of $6=3$ | - Add fractions with common denominators $\text { e.g. } 5 / 7+1 / 7=6 / 7(Y 3)$ <br> - Subtract fractions with common denominators $\text { e.g. } 6 / 8-4 / 8=2 / 8(У 3)$ <br> - Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including nonunit fractions where the answer is a whole number ( Y 4 ) <br> - Add and subtract fractions with the same denominator. <br> - Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers (Y4) <br> - Divide 1 - or 2 -digit number by 10 identifying the <br> - value of the digits in the answer as ones, tenths and hundredths (Y4) <br> - Divide 1- or 2-digit number by 100 identifying the <br> - value of the digits in the answer as ones, tenths and hundredths (Y4) <br> - Solve simple measure and money problems involving fractions and decimals to two decimal places (Y4) | - Add fractions with denominators that are multiples of the same number ( Y 5 ) <br> - Subtract fractions with denominators that are multiples of the same number (Y5) <br> - Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions (Y6) <br> - Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams (Y5) <br> - Multiply simple pairs of proper fractions e.g. $1 / 4 \times 1 / 2=1 / 8$ writing the answer in its simplest form (Y6) <br> - Divide proper fractions by whole numbers e.g. $1 / 3$ divided by $2=1 / 6$ (Y6) <br> - Multiply and divide numbers by 10,100 and 1000 giving answers up to three decimal places (V6) <br> - Solve problems which require knowing percentage and decimal equivalents of $1 / 2,1 / 4,1 / 5,2 / 5,4 / 5$ and those fractions with a denominator of a multiple of 10 or 25 <br> Ratio and proportion <br> - Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with $2,4,5$ and 10 equal parts. <br> - Find non-unit fractions of quantities. <br> - Solve problems involving proportion using multiplication and division facts. <br> - Solve problems involving similar shapes where the scale factor is known or can be found. <br> - Solve problems involving the relative sizes of two quantities where missing values can be found using multiplication and division facts (Y6) <br> - Solve problems involving the calculation of percentages [for example, of measures, and such as $15 \%$ of 360 ] and the use of percentages for comparison (Y6) <br> - Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples (Y6) |
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