Number: Fractions (including Decimals and Percentages)

|  | COUNTING IN FRACTIONAL STEPS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  |  | Pupils should count in fractions up to 10 , starting from any number and using the $1 / 2$ and $2 / 4$ equivalence on the number line (Non Statutory Guidance) | count up and down in tenths | count up and down in hundredths |  |  |
|  | RECOGNISING FRACTIONS |  |  |  |  |  |
|  | recognise, find and name a half as one of two equal parts of an object, shape or quantity | recognise, find, name and write fractions $1 / 3^{1}$, ${ }^{1} / 4^{\prime}{ }^{2} / 4$ and ${ }^{3} / 4$ of a length, shape, set of objects or quantity | recognise, find and write fractions of a discrete set of objects: unit fractions and nonunit fractions with small denominators <br> recognise that tenths arise from dividing an object into 10 equal parts and in dividing one - digit numbers or quantities by 10. recognise and use fractions as numbers: unit fractions and nonunit fractions with small denominators | recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten | recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents (appears also in Equivalence) |  |
|  | COMPARING FRACTIONS |  |  |  |  |  |
|  |  |  | compare and order unit fractions, and fractions with the same denominators |  | compare and order fractions whose denominators are all multiples of the same number | compare and order fractions, including fractions $>1$ |

## Number: Fractions (including Decimals and Percentages)

|  | COMPARING DECIMALS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  |  |  |  | compare numbers with the same number of decimal places up to two decimal places | read, write, order and compare numbers with up to three decimal places | identify the value of each digit in numbers given to three decimal places |
|  | ROUNDING INCLUDING DECIMALS |  |  |  |  |  |
|  |  |  |  | round decimals with one decimal place to the nearest whole number | round decimals with two decimal places to the nearest whole number and to one decimal place | solve problems which require answers to be rounded to specified degrees of accuracy |
|  | EQUIVALENCE (INCLUDING FRACTIONS, DECIMALS AND PERCENTAGES) |  |  |  |  |  |
|  |  | write simple <br> fractions e.g. ${ }^{1} / 2$ of <br> $6=3$ and recognise the equivalence of ${ }^{2} / 4$ and ${ }^{1} / 2$. | recognise and show, using diagrams, equivalent fractions with small denominators | recognise and show, using diagrams, families of common equivalent fractions | identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths | use common factors to simplify fractions; use common multiples to express fractions in the same denomination |
|  |  |  |  | recognise and write decimal equivalents of any number of tenths or hundredths | read and write decimal numbers as fractions (e.g. $0.71={ }^{71} /{ }_{100}$ ) <br> recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents | associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375 ) for a simple fraction (e.g. ${ }^{3} / 8$ ) |
|  |  |  |  | recognise and write decimal equivalents to ${ }^{1} / 4^{i}{ }^{1} / 2^{3} /{ }_{4}$ | recognise the per cent symbol (\%) and understand that per cent relates to "number of parts per hundred", and write percentages as a fraction with denominator 100 as a decimal fraction | recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. |
|  | ADDITION AND SUBTRACTION OF FRACTIONS |  |  |  |  |  |

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## Number: Fractions (including Decimals and Percentages)

|  |  |  |  |  | multiply one-digit numbers with up to two decimal places by whole numbers |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths |  | multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places |
|  |  |  |  |  | identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places |
|  |  |  |  |  | associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. ${ }^{3} / 8$ ) |
|  |  |  |  |  | use written division methods in cases where the answer has up to two decimal places |
|  |  |  | BLEM SOLVING |  |  |
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  |  | solve problems that | solve problems | solve problems involving |  |

## Number: Fractions (including Decimals and Percentages)

|  |  |  | involve all of the above | involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number | numbers up to three decimal places |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | solve simple measure and money problems involving fractions and decimals to two decimal places. | solve problems which require knowing percentage and decimal equivalents of ${ }^{1} / 2^{\prime}$ $1 / 4^{\prime}{ }^{1} / 5^{\prime}{ }^{2} / 5_{5^{\prime}}{ }^{4} / 5$ and those with a denominator of a multiple of 10 or 25 . |  |
| Language |  |  |  |  |  |  |
|  | Half <br> Halves <br> Equally <br> Fourth <br> Quarter <br> Equal pieces/parts <br> Whole <br> splitting | Fraction <br> Numerator <br> Denominator <br> Thirds <br> Equal fractions <br> Half of $\qquad$ <br> Quarter of $\qquad$ <br> A third of $\qquad$ <br> Two/three quarters of | Tenths <br> Fifths, sixths, sevenths etc up to twelfths Fraction pairs to make one Equivalent fractions Mixed numbers | Hundredths <br> Simplify <br> Proper fractions <br> Improper fraction <br> Decimals <br> Decimal point <br> nought <br> Nought point <br> $1 / 10$ is the same as <br> 0.1 <br> Convert <br> Nought point one <br> five not nought <br> point fifteen | Simplest form <br> Convert <br> Thousandths <br> Nearest <br> tenth/hundredth/thousandth <br> Percentatge <br> quantity <br> Common denominator <br> Multiple | Percentage change/increase/decrease |

