| Unit | Year 3 |  |
| :---: | :---: | :---: |
| Length and perimeter (1 week) | measure the perimeter of simple 2-D shapes |  |
| Small steps | What is perimeter?Measure perimeterCalculate perimeter |  |
| Vocabulary and resources | Centimetres, metres, measure, measurement, length, intervals, more, less, millimetres, longer, shorter, equivalent, partition, equal, compare, unit, convert, perimeter, sides | Rulers, measuring tapes, multilink, 2d shapes, geoboards |
| Fractions (4 weeks) | recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators <br> recognise and show, using diagrams, equivalent fractions with small denominators <br> compare and order unit fractions, and fractions with the same denominators <br> add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7}$ $\left.+\frac{1}{7}=\frac{6}{7}\right]$ <br> 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 |  |
| Small steps | Understand the denominators of unit fractions <br> Compare and order unit fractions <br> Understand the numerators of non-unit fractions <br> Understand the whole <br> Compare and order non-unit fractions <br> Fractions and scales <br> Fractions on a number line <br> Count in fractions on a number line <br> Equivalent fractions on a number line <br> Equivalent fractions as bar models | Add fractions <br> Subtract fractions <br> Partition the whole <br> Unit fractions of a set of objects <br> Non-unit fractions of a set of objects <br> Reasoning with fractions of an amount |
| Vocabulary and resources | Denominator, numerator, unit fraction, non unit fraction, divide, equal parts, whole, compare, order, greater, smaller, interval, equivalent, add, subtract, equal, partition | Multilink, counters, counting stick, fraction circles/walls, jugs, scales, number lines, various objects to be put in equal groups |
| Time (1 week) | tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks |  |
| Small steps | Roman numerals to 12 Tell the time to 5 minutes Tell the time to the minute Read time on a digital clock |  |
| Vocabulary and resources | Roman numeral, hour hand, minute hand, past, to, digital, analogue | Clocks, number lines |

## KS2 Maths medium term plan Autumn 2

| Unit | Year 4 |  |
| :---: | :---: | :---: |
| Fractions (2 weeks) | count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10 round decimals with 1 decimal place to the nearest whole number <br> compare numbers with the same number of decimal places up to 2 decimal places <br> recognise and write decimal equivalents of any number of tenths or hundreds <br> recognise and write decimal equivalents to $\frac{1}{4} \frac{1}{2} \frac{3}{4}$ <br> 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 |  |
| Small steps | Equivalent fractions on a number line Equivalent fraction families <br> Add two or more fractions <br> Add fractions and mixed numbers <br> Subtract two fractions <br> Subtract from whole amounts <br> Subtract from mixed numbers |  |
| Vocabulary and resources | Whole, parts, equal, numerator, denominator, mixed number, partition, interval, greater, less, compare, order, integer, improper, remainder, equivalent | Shapes, fraction pies/walls, Multilink |
| Fractions and decimals (4 weeks) | recognise and show, using diagrams, families of common equivalent fractions add and subtract fractions with the same denominator recognise and write decimal equivalents of any number of tenths or hundreds recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$ find the effect of dividing a one- or two-digit number by 10 and 100, identifying the valu round decimals with 1 decimal place to the nearest whole number compare numbers with the same number of decimal places up to 2 decimal places solve simple measure and money problems involving fractions and decimals to 2 decimal pla | he digits in the answer as ones, tenths and hundredths |
| Small steps | Tenths as fractions <br> Tenths as decimals <br> Tenths on a place value chart <br> Tenths on a number line <br> Divide a 1-digit number by 10 <br> Divide a 2-digit number by 10 <br> Hundredths as fractions <br> Hundredths as decimals <br> Hundredths on a place value chart <br> Divide a 1- or 2-digit number by 100 | Make a whole with tenths Make a whole with hundredths <br> Partition decimals <br> Flexibly partition decimals <br> Compare decimals <br> Order decimals <br> Round to the nearest whole number Halves and quarters as decimals |
| Vocabulary and resources | Whole, parts, equal, numerator, denominator, mixed number, partition, interval, greater, less, compare, order, integer, improper, remainder, equivalent, decimal point, partition, tenths, hundredths, halves, quarters | Shapes, fraction pies/walls, Multilink, place value charts, |


| Unit | Year 5 |  |
| :---: | :---: | :---: |
| Fractions (2 weeks) | compare and order fractions whose denominators are all multiples of the same number identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements $>1$ as a mixed number [for example, $\frac{2}{5} \frac{4}{5}=\frac{6}{5}=1 \frac{1}{5}$ ] add and subtract fractions with the same denominator, and denominators that are multiples of the same number |  |
| Small steps | Add and subtract fractions with the same denominator <br> Add fractions within 1 <br> Add fractions with total greater than 1 <br> Add to a mixed number <br> Add two mixed numbers <br> Subtract fractions <br> Subtract from a mixed number <br> Subtract from a mixed number - breaking the whole | Multiply a unit fraction by an integer Multiply a non-unit fraction by an integer <br> Multiply a mixed number by an integer <br> Calculate a fraction of a quantity <br> Fraction of an amount <br> Find the whole <br> Use fractions as operators |
| Vocabulary and resources | Whole, parts, equal, numerator, denominator, mixed number, partition, interval, greater, less, compare, order, integer, improper, remainder, equivalent, unit, non unit, multiply, divide, factors, conversion, common denominator, reduce | Shapes, fraction pies/walls, cubes, |
| FDP (4 weeks) | multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams <br> recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements $>1$ as a mixed number [for example, $\frac{2}{5} \frac{4}{5}=\frac{6}{5}=1 \frac{1}{5}$ ] read and write decimal numbers as fractions [for example, $0.71=\frac{71}{100}$ ] <br> recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents <br> round decimals with 2 decimal places to the nearest whole number and to 1 decimal place <br> read, write, order and compare numbers with up to 3 decimal places <br> recognise the per cent symbol (\%) and understand that per cent relates to 'number of parts per 100', and write percentages as a fraction with denominator 100, and as a decimal fraction <br> solve problems involving number up to 3 decimal places <br> solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2} \frac{1}{4} 1 / 52 / 54 / 5$, and those fractions with a denominator of a multiple of 10 or 25 |  |
| Small steps | Decimals up to 2 decimal places <br> Equivalent fractions and decimals (tenths) <br> Equivalent fractions and decimals (hundredths) <br> Equivalent fractions and decimals <br> Thousandths as fractions <br> Thousandths as decimals <br> Thousandths on a place value chart <br> Order and compare decimals (same number of decimal places) | Order and compare any decimals with up to 3 decimal places Round to the nearest whole number <br> Round to 1 decimal place <br> Understand percentages <br> Percentages as fractions <br> Percentages as decimals <br> Equivalent fractions, decimals and percentages |
| Vocabulary and resources | Decimal point, tenth, hundredth, thousandth, equivalent, order, compare, decimal place, percent, partition, value, round, | Place value charts, place value counters, hundred squares, |

## KS2 Maths medium term plan Autumn 2

| Unit | Year 6 |  |
| :---: | :---: | :---: |
| Fractions (2 weeks) | use common factors to simplify fractions; use common multiples to express fractions in the same denomination compare and order fractions, including fractions $>1$ <br> add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions <br> multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams <br> recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements $>1$ as a mixed number [for example, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1 \frac{1}{5}$ ] |  |
| Small steps | Add and subtract simple fractions Add and subtract any two fractions Add mixed numbers Subtract mixed numbers Multi-step problems | Multiply fractions by integers <br> Multiply fractions by fractions <br> Divide a fraction by an integer <br> Divide any fraction by an integer <br> Mixed questions with fractions <br> Fraction of an amount <br> Fraction of an amount - find the whole |
| Vocabulary and resources | Whole, parts, equal, numerator, denominator, mixed number, partition, interval, greater, less, compare, order, integer, improper, remainder, equivalent, unit, non unit, multiply, divide, factors, conversion, common denominator, reduce, simplify, simplest form, multiple | Shapes, fraction pies/walls, |
| FDP (4 weeks) | ```read and write decimal numbers as fractions [for example, 0.71 = 稲] recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents round decimals with 2 decimal places to the nearest whole number and to }1\mathrm{ decimal place read, write, order and compare numbers with up to 3 decimal places recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per 100', and write percentages as a fraction with denominator 100, and as a decimal fraction solve problems involving number up to 3 decimal places solve problems which require knowing percentage and decimal equivalents of }\frac{1}{2}\frac{1}{4}1/52/54/5\mathrm{ , and those fractions with a denominator of a multiple of 10 or 25``` |  |
| Small steps | Decimal and fraction equivalents <br> Fractions as division <br> Understand percentages <br> Fractions to percentages <br> Equivalent fractions, decimals and percentages | Order fractions, decimals and percentages <br> Percentage of an amount - one step <br> Percentage of an amount - multi-step <br> Percentages - missing values |
| Vocabulary and resources | Decimal point, tenth, hundredth, thousandth, equivalent, order, compare, decimal place, percent, partition, value, round, parts, equal, | Place value charts, place value counters, hundred squares, number lines, |

