## Year 5 Maths Long-Term Plan

|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M/O starters | read, write, order and compare numbers to at least 1000000 and determine the value of each digit <br> count forwards or backwards in steps of powers of 10 for any given number |  |  |  |  |  | interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, <br> round any number up to 1000000 to the nearest $10,100,1000,10000$ and 100000 |  |  |  |  |  |
|  | 2x | 5x | 10x | 3x | 6x | 4x | 8x | 7x | 9x | 11x | 12x | recap |
| Autumn Term | Number add and subtract <br> add and <br> subtract <br> whole <br> numbers <br> with more <br> than 4 <br> digits, <br> including <br> using formal <br> written <br> methods <br> (columnar <br> addition and <br> subtraction) <br> add and <br> subtract <br> numbers <br> mentally <br> solve <br> addition and <br> subtraction <br> multi-step <br> problems | Measure - area and perimeter <br> measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres <br> calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes |  | Number multiplica division <br> multiply and whole num those invo decimals by and 1000 <br> multiply and numbers drawing u facts <br> multiply nu 4 digits by number us written me <br> divide num digits by a number us formal writ | n and <br> divide rs and ng <br> 10,100 <br> divide <br> ntally <br> known <br> bers up to one digit a formal d <br> ers up to 4 e-digit the method | Number - <br> count up a hundredths and dividin <br> identify, $\mathbf{n}$ given frac tenths and <br> read and example, <br> to recogni <br> find the eff by 10 and the answer <br> solve probl fractions to divide quan the answer <br> add and su denominat too. <br> To add an denomina number | actions <br> down in hu rise when divich enths by 10 <br> e and writ <br> n, represe undredths <br> te decimal 1 = ] <br> and find <br> of dividing <br> , identifyin ones, ten <br> s involving alculate qua ies, includin a whole nu <br> ract fraction solving pr <br> subtract fra s are all m | redths; rec ding an obj <br> equivalent d visually <br> umbers as <br> ves of amo <br> one- or two he value of and hundr <br> creasingly ities, and fr non-unit fra ber <br> with the sam ems with <br> ions whos tiples of th | nise that by 100 <br> ctions of a cluding <br> ctions [for <br> ts <br> git number digits in hs <br> der <br> ions to ons where <br> above <br> same | Assess week | Geometry - angles <br> know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles <br> draw given angles, and measure them in degrees <br> identify: angles at a point and one whole turn (total 360) <br> angles at a point on a straight line and $1 / 2$ a turn (total 180) other multiples of 90 <br> use the properties of rectangles to deduce related facts and find missing lengths and angles |  |

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|  | 3x ${ }^{\text {3 }}$ 6x | 4x ${ }^{\text {a }}$ | 7x | 7x | 9x | 9x | 11x | 11x | 12x | 12x |
| Spring Term | Measure converting between units <br> Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) <br> understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints | Number - 4 operations (to also revise Place Value throughout) <br> recognise and use square numbers and cube numbers, and the notation for squared and cubed <br> identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers <br> know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers <br> establish whether a number up to 100 is prime and recall prime numbers up to 19 <br> solve problems involving addition, subtraction, multiplication and division including using their knowledge of factors and multiples, squares and cubes | Time/Stat s <br> solve <br> problems <br> involving <br> converting <br> between <br> units of <br> time <br> complete, <br> read and <br> interpret <br> information <br> in tables, <br> including <br> timetables <br> solve <br> compariso <br> n , sum and <br> difference <br> problems <br> using <br> information <br> presented <br> in a line <br> graph | Number - fractions <br> identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths <br> compare and order fractions whose denominators are all multiples of the same number <br> add and subtract fractions with the same denominator, and denominators that are multiples of the same number <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, + = =1 ] <br> read and write decimal numbers as fractions [for example, 0.71 = ] <br> recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents as well as percentages <br> Find fractions of amounts/quantities including half of money values (£9.50) |  |  |  | Assess week | Geometry - shape <br> identify 3- <br> D shapes, including cubes and other cuboids, from 2-D representa tions <br> distinguish between regular and irregular polygons based on reasoning about equal sides and angles | Geometry position and direction <br> identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed. |

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|  | $\begin{aligned} & \hline 2 \times 5 x \\ & 10 x 3 x \\ & 6 x \\ & \hline \end{aligned}$ | $\begin{aligned} & 3 x 6 x 4 x \\ & 8 x \end{aligned}$ | $\begin{array}{\|l} \hline 4 x 8 x 7 x \\ 9 x \end{array}$ | $\begin{aligned} & \hline 7 \times 9 x \\ & 11 \times 12 x \end{aligned}$ | Mixed | Mixed | Mixed | Mixed | Mixed | Mixed | Mixed | Mixed |
| Summer Term | Number - <br> 4 <br> operation <br> revision <br> solve <br> problems <br> involving <br> addition, <br> subtraction, <br> multiplicatio <br> n and <br> division <br> including <br> using their <br> knowledge <br> of factors <br> and <br> multiples, <br> squares <br> and cubes | Measur evolume <br> estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water] | Number - Fractions and decimals <br> identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths <br> Compare and order fractions whose denominators are all multiples of the same number <br> add and subtract fractions with the same denominator, and denominators that are multiples of the same number <br> multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams <br> round decimals with 2 decimal places to the nearest whole number and to 1 decimal place <br> read and write decimal numbers as fractions [for example, 0.71 = ] <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', look at finding $5 \%$ of a shape with 20 squares for example and write percentages as a fraction with denominator 100, and as a decimal fraction <br> solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}, \frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25 |  |  |  | Revision of measure, geometry and statistics: <br> measure and calculate the perimeter and area of composite shapes <br> identify: angles at a point and one whole turn (total 360) angles at a point on a straight line and 1/2 a turn (total 180) other multiples of 90 <br> complete, read and interpret information in tables, including timetables <br> solve comparison, sum and difference problems using information presented in a line graph <br> identify, describe and represent the position of a shape following a reflection or translation <br> Convert between different units of metric measure |  |  | Assess week | Consolidation work based on the year <br> adding/subtracting fractions with different denominators <br> simplifying answers using equivalence <br> compare and order fractions whose denominators are all multiples of the same number <br> subtracting mixed numbers from a whole |  |

