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| **Name: Year group joined/date: SEND/EI PP: Yes/No** | | |
| **MATHS** | | |
|  | Year 5 Expected | Year 5 Greater Depth |
| Number | Read, write compare and order numbers to at least 1 000 000  Read Roman numerals to 1000 and recognise years in Roman Numerals | Read, write compare and order numbers to at least 1 000 000 in context – house prices, dates, measures |
| Interpret negative numbers and count forwards and backwards in steps of any number through zero  Count up and down from any given number in 100ths |  |
| Recognise the value of any digit to at least 1 000 000 | Use place value to reason about numbers to 1 000 000  – Which two numbers have a sum of x, with a difference of y? Using the digits a,b,c and d, make a number between x and y. |
| Know by heart one tenth less or more than any given number |  |
| Round any number to nearest 10, 100, 1000, 10 000 and 100 000 | Use rounding to reason and solve problems  – Mr Smith rounded the measurements of his garden and bought enough turf to cover a plot 5x6m. How much extra or short could he be? |
| Calculations | Apply the column method using carrying and exchanging with numbers over 4 digits. (18)  Solve addition and subtraction multi step problems deciding which operation to use and why. (19) | Find missing numbers in addition and subtraction calculations using the column method with numbers over 4 digits. |
| Estimate answers to any addition and subtraction problems. (18.1) | Independently use estimating when adding and subtracting. |
| Recall quickly multiplication facts up to 12 x 12, and use them to multiply pairs of multiples of 10 and 100, for example 30x70, 40x200 | Reason about multiplication and division facts for multiples of 10 and 100   * Missing numbers from a multiplication grid |
| Recall quickly division facts of all tables up to 12x12, and use them to divide pairs of multiples of 10 and 100, for example 240 ÷ 40 = 60 |  |
| Double and halve any number with up to 1 decimal place | Double and halve any number with up to 1 decimal place at speed |
| Multiply a 4 digit number by a 1 or 2 digit number using long multiplication.  Divide a 4 digit number by a 1 digit number using short division methods using remainders | Find missing numbers in multiplication and division calculations using long and short methods |
| Solve multi step multiplication and division word problems |  |
| Use multiples and factors including factor pairs and common factors.  Solve multiplication and division problems using factors.  Recall prime numbers up to 19 using vocabulary. |  |
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| Fractions | Recognise and use mixed numbers and improper fractions and convert from one to the other. Be able to multiply these by a whole number |  |
| Recognise and use 1000ths relating them to 10ths and 100ths | Reason about counting up and down in 1000ths   * Missing numbers in a small section of a number square (not starting a new line for every multiple of 100ths) |
| Solve problems involving decimal and percentage equivalents of ½ ¼ 1/5 2/5 4/5 | Solve problems involving both decimal and percentage equivalents in the same problem |
| Add and subtract fractions with the same denominator or a denominator of a multiple of the same number | Add and subtract fractions with the same denominator or a denominator of a multiple of the same number in context |
| Compare and order fractions when denominators are multiples of the same number |  |
| Identify, name and write equivalent fractions |  |
| Round decimals with 2dp to nearest whole number and to 1dp. Read, write, order and compare numbers up to 3dp. Read decimals as fractions. | Identify the largest and smallest numbers that could be rounded to a given number |
| Divide any number by 10 or 100 applying decimal notation | Create scaled models or diagrams that are 10th or 100th of the original |
| Measurement | Convert between different units of metric measurements.  Understand and use the difference between metric and imperial units |  |
| Solve problems converting between units of time |  |
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| Measure and calculate the area of any rectilinear shape using standard measurement and estimate the area of irregular shapes | To create rectilinear shapes for given perimeters and areas |
| Solve problems using all four operations involving measures including scaling |  |
| Geometry | Use properties of rectangles to deduce facts e.g. missing lengths and angles |  |
| Identify 360º as a full turn and 180º as a straight line. Know other multiples of 90º  Know angles are measured in degrees and draw given angles and measure them in degrees | Find missing angles in a full turn, straight line or right angle. |
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| Identify 3D shapes from 2D representation | Build 3D constructions from 2D representations |
| Statistics | Complete, read and interpret information on tables including timetables |  |
| Solve comparisons, sum and difference problems using information presented on a line graph | To independently make observations and comparisons using information presented in a line graph |
| Position and direction | Describe positions on the full coordinate grid (all four quadrants) |  |
| Describe movements between positions across all 4 quadrants |  |
| Draw and translate simple shapes on the coordinate plane and reflect them in the axes | Predict accurately coordinates of shapes when translated or reflected |
| Ratio and Proportion |  |  |
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