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| **Year 6 - Building and assessing the conceptual understanding and learning – Number and Place Value** | | |
| **End of Year Expectations:**  Pupils should be taught to   * read, write, order and compare numbers up to 10 000 000 and determine the value of each digit * round any whole number to a required degree of accuracy * use negative numbers in context, and calculate intervals across zero * solve number and practical problems that involve all of the above.   **See NCETM “Teaching for Mastery” Year 6 book – number and place value, fractions, measures.**  <https://www.ncetm.org.uk/public/files/23305653/Mastery_Assessment_Y6_Low_Res.pdf>  From fractions domain:   * identify the value of each digit in numbers given to three decimal places | | **Non-statutory guidance:**  Pupils use the whole number system, including saying, reading and writing numbers accurately. |
| **Autumn** | **Spring** | **Summer** |
| * extend understanding of the number system to include reading, writing, ordering and comparing numbers up to 10 000 000 and determining the value of each digit * round any whole number to a required degree of accuracy * use negative numbers in context, and calculate intervals across zero * identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places * solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate * use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places * convert between miles and kilometres * solve number and practical problems that involve all of the above. | Continue to check applied place value understanding in calculation as well as building in mental and oral challenges. | Revision  Opportunities to continue to use and apply place value knowledge in transition units. |

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| **Key questions:**   * Can I confidently read, write, order and compare numbers up to 10.000 000? * Can I determine the value of each digit in numbers that I work with, including decimals to three decimal places? * Can I confidently use my working of knowledge of place value, for example when multiplying / dividing by 10, 100, 1000, explaining the effect on the digits? * Can I accurately use negative numbers in context and calculate intervals across zero? * Can I use and apply my understanding of place value when calculating with and converting measures? | **Key questions:**   * Can I demonstrate, when calculating, that I have a secure working knowledge of place value? * Am I making errors that might indicate that my understanding of place value in large numbers and / or decimals is not secure? | **Key questions:** |