| Topic | Objective |
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| Number and Place Value | 1. I can read, write, order and compare numbers to at least $1,000,000$ and determine the value of each digit |
|  | 2. I can count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 |
|  | 3. I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through 0 |
|  | 4. I can round any number up to 1,000,000 to the nearest $10,100,1,000,10,000$ and 100,000 |
|  | 5. I can solve number problems and practical problems that involve all of the above |
|  | 6. I can read Roman numerals to 1,000 (M) and recognise years written in Roman numerals |
|  | 7. I can add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) |
|  | 8. I can add and subtract numbers mentally with increasingly large numbers |
|  | 9. I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy |
|  | 10. I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why |
|  | 11. I can identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers |
|  | 12. I know and can use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers |
|  | 13. I can establish whether a number up to 100 is prime and recall prime numbers up to 19 |
|  | 14. I can multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers |
|  | 15. I can multiply and divide numbers mentally, drawing upon known facts |
|  | 16. I can divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context |
|  | 17. I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 |
|  | 18. I can recognise and use square numbers and cube numbers, and the notation for squared and cubed |
|  | 19. I can solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes |
|  | 20. I can solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign |
|  | 21. I can solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates |
|  | 22. I can compare and order fractions whose denominators are all multiples of the same number |
|  | 23. I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths |


|  | 24. I can 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, $2 / 5+4 / 5=6 / 5=11 / 5$ ] |
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|  | 25. I can add and subtract fractions with the same denominator, and denominators that are multiples of the same number |
|  | 26. I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams |
|  | 27. I can read and write decimal numbers as fractions [for example, $0.71=71 / 100$ ] |
|  | 28. I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents |
|  | 29. I can round decimals with 2 decimal places to the nearest whole number and to 1 decimal place |
|  | 30. I can read, write, order and compare numbers with up to 3 decimal places |
|  | 31. I can solve problems involving number up to 3 decimal places |
|  | 32. I can 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 |
|  | 33. I can solve problems which require knowing percentage and decimal equivalents of $1 / 2,1 / 4,1 / 5$, $2 / 5,4 / 5$ and those fractions with a denominator of a multiple of 10 or 25 |
|  | 34. I can convert between different units of metric measure [for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre] |
|  | 35. I understand and can use approximate equivalences between metric units and common imperial units such as inches, pounds and pints |
| $\pm$ | 36. I can measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres |
| $\begin{aligned} & \underline{\varepsilon} \\ & \underline{U} \\ & \underline{U} \end{aligned}$ | 37. I can calculate and compare the area of rectangles (including squares), including using standard units, square centimetres and square metres, and estimate the area of irregular shapes |
| $\stackrel{\text { ® }}{ }$ | 38. I can estimate volume [for example, using 1 cm blocks to build cuboids (including cubes)] and capacity [for example, using water] |
|  | 39. I can solve problems involving converting between units of time |
|  | 40. I can use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling |
|  | 41. I can identify 3-D shapes, including cubes and other cuboids, from 2-D representations |
|  | 42. I know angles are measured in degrees: I can estimate and compare acute, obtuse and reflex angles |
|  | 43. I can draw given angles, and measure them in degrees |
|  | 44. I can identify angles at a point and 1 whole turn (total 360 degrees) |
| - | 45. I can identify angles at a point on a straight line and half a turn (total 180 degrees) |
|  | 46. I can identify other multiples of 90 degrees |
|  | 47. I can use the properties of rectangles to deduce related facts and find missing lengths and angles |
|  | 48. I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles |

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49. I can 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
50. I can solve comparison, sum and difference problems using information presented in a line graph
51. I can complete, read and interpret information in tables, including timetables
