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|  | **Mental Methods & Written Methods** | | | | |  |
| Year 1 | **Counting**   * Begin to count in 2s, 5s and 10s | | **Doubling and Halving**   * Find half of even numbers to 12 and know it is hard to halve odd numbers **(1D.1)** * Find half of even numbers by sharing | | **Grouping**   * Begin to use visual and concrete arrays or ‘sets of’ to find how many sets of a small number make a larger number **(1D.2)** | **Sharing**   * Begin to find half of a quantity using sharing e.g. half of 16 cubes by giving one each repeatedly to two children **(1D.3)** |
| **Year 2** | **Counting**   * Using fingers, say where a given number is in the 2s, 5s or 10s count e.g. *8 is the fourth number when I count in 2s* **(2D.1)** | | **Doubling and Halving**   * Halve even numbers to 20 **(2D.2)** * Begin to halve numbers to 40 and multiples of 10 to 100 **(2D.2)** | | **Grouping**   * Relate division to grouping e.g. *How many groups of 5 in 20 i.e.\_\_ x 5 = 20 and also 20 ÷5 = ?* **(2D.3)** | **Sharing**   * Find 1/2, 1/3, 1/4 and 3/4 of a quantity of objects and of amounts (whole number answers) **(2D.4)** |
| **Year 3** | **Using Number facts**   * Know by heart all the division facts derived from the ×2, ×3, ×4, ×5, ×8 and ×10 tables **(3D.1)** | **Place Value**   * Divide whole numbers by 10 or 100 to give whole number answers **(3D.2)** * Use related facts to divide multiples of 10 by 1-digit numbers e.g. 32 ÷ 8 = 4 so 320 ÷ 8 = 40 **(3D.3)** | **Doubling and Halving**   * Halve even numbers to 100, halve odd numbers to 20 **(3D.4)** | | **Grouping**   * Perform divisions just above the 10th multiple using a number line **(3D.5)**      * Divide larger numbers mentally by subtracting the 10th multiple as appropriate, including those with remainders e.g. *57 ÷ 3 is 10 + 9 as 10* × *3 = 30 and 9 ×* *3 = 27* **(3D.6)**      * Recognise that division is not commutative | |
| **Year 4** | **Using Number Facts**   * Know by heart all the division facts up to 144 ÷ 12 **(4D.1)** * Use place value and number facts in mental division e.g. *84 ÷ 4 is half of 42* * Use place value and number facts in mental division e.g. *245 ÷ 20 is half of 245 ÷ 10* | **Place Value**   * Divide whole numbers by 10, 100, to give whole number answers or answers with 1 decimal place **(4D.2)** * Divide multiples of 100 by 1-digit numbers using division facts e.g. *3200 ÷ 8 = 400* **(4D.3)** | **Doubling and Halving**   * Find halves of even numbers to 200 and beyond using partitioning **(4D.4)** * Begin to halve amounts of money e.g. *half of £52·40 is £26·20* | | **Grouping**   * Divide larger numbers mentally by subtracting the 10th or 20th multiple as appropriate e.g. *156 ÷ 6 is 20 + 6 as 20 ×* *6 = 120 and 6 ×* *6 = 36 Give* remainders as whole numbers **(4D.5)** * Use a written method to divide a 2-digit or a 3-digit number by a 1-digit number **(4D.6)** | |
| **Year 5** | **Using Number Facts**   * Know by heart all the division facts up to 144 ÷ 12 **(4D.1)** * Use doubling and halving as mental division strategies to divide by 2, 4, 8, 5, 20 and 25 e.g. *34 ÷ 5 is (34 ÷ 10) × 2;*   *628 ÷ 8 is halved three times: 314, 157, 78·5* | **Place Value**   * Divide whole numbers by 10, 100, 1000, 10 000 to give whole number answers or answers with 1, 2 or 3 decimal places **(5D.1)** | **Doubling and Halving**   * Halve amounts of money by partitioning e.g. *1/2 of £75·40 = 1/2 of £75 (£37·50) plus half of 40p (20p) which is £37·70* **(5D.2)** | **Grouping**   * Divide larger numbers mentally by subtracting the 10th or 100th multiple as appropriate e.g. *96 ÷ 6 is 10 + 6, as 10 × 6 = 60 and 6 × 6 = 36* e.g. *312 ÷ 3 is 100 + 4 as 100 × 3 = 300 and 4 × 3 = 12* **(5D.3)**   **Sharing**   * Give remainders as whole numbers or as fractions **(5D.4)** * Reduce fractions to their simplest form **(5D.4)** | | **Short Division**   * Use short division to divide a number with up to 4 digits by a number ≤ 12 **(5D.5)**      * Choose the most efficient method in any given situation |
| **Year 6** | **Using Number Facts**   * Know by heart all the division facts up to 144 ÷ 12 **(4D.1)** * Identify common factors, common multiples and primes numbers and use factors in mental division e.g. *438 ÷ 6 is 219 ÷ 3 which is 73* | **Doubling and Halving**   * Halve decimal numbers with up to 2 places using partitioning e.g. *Half of 36·86 is half of 36 (18) plus half of 0·86 (0·43)* ***(*6D.3)** | **Place Value**   * Divide whole numbers by powers of 10 to give whole number answers or answers with up to 3 decimal places **(6D.1)** * Divide 1- and 2-place decimals by numbers up to and including 10 using place value e.g. *2·4 ÷ 6 = 0·4* e.g. *0·65 ÷ 5 = 0·13* e.g. *£6·33 ÷ 3 = £2·11* **(6D.2)** | **Short Division**   * Use short division to divide a number with up to 4 digits by a 1 or 2 digit number **(6D4)**   **Long Division**   * Use long division to divide 3-digit and 4-digit numbers by ‘friendly’ 2-digit numbers **(6D.5)**      * Give remainders as whole numbers or as fractions or as decimals **(6D.6)**      * Divide a 1-place or a 2-place decimal number by a number ≤ 12 using multiples of the divisors | | |