Division Progression Document

| EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ELG <br> They solve problems, including halving and sharing. | Using concrete objects to solve simple division problems e.g. I have 8 sweets, how many will each person get if I share them between 4 people? | Can recall and use division facts for the 2,5 and 10 multiplication tables to solve simple problems, demonstrating an understanding of commutativity as necessary e | Recalls and uses division facts for the 3,4 and 8 multiplication tables. | Recalls division facts for multiplication tables up to 12 x 12 | Identifies multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. | Divides numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interprets remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. |
|  | Recalls most multiplication facts for the 10 times table and uses them to derive most division facts, counting in steps of 10 to answer simple questions. | Writes division statements for simple problems. e.g. make 7 groups from 35 blocks and write $35 \div 5=7$ | Writes and calculates mathematical statements for division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. | Uses place value, known and derived facts to divide mentally, including: dividing by 1. | Knows and uses the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. | Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context. |
|  | Recalls and uses halving facts for numbers up to half of 20 and other significant halves such as e.g. half of 100 is. | Can produce the 4 correct variations of an $\div$ number sentence e.g. $35 \div 7$ $=5,35 \div 5=7,7=35 \div 5,5=35 \div 7$. | Solves problems, including missing number problems, involving division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. | Recognises and uses factor pairs and commutativity in mental calculations. | Establishes whether a number up to 100 is prime and recall prime numbers up to 19 . | Identifies common factors, common multiples and prime numbers |
|  |  | Use division facts for the $2 s, 5 s$ and 10s to solve simple problems. e.g. share 40 cherries between 10 and write $40 \div 10=4$ e.g. Altogether six 5 p coins makes 30 p. |  |  | Divides numbers mentally drawing upon known facts. | Uses their knowledge of the order of operations to carry out calculations involving the four operations. |
|  |  | Recognises odd and even numbers and explains how you know a particular number is odd or even |  |  | Divides numbers up to 4 digits by a one-digit number using the formal written method of short division and interprets remainders appropriately for the context | Uses estimation to check answers to calculations and determines, in the context of a problem, an appropriate degree of accuracy. |
|  |  | Use knowledge of halves to solve problems e.g. $16 \div 2=10,6 \div 2=3$. |  |  | Divides whole numbers and those involving decimals by 10, 100 and 1000. |  |
|  |  |  |  |  | Divides whole numbers and those involving decimals by 10, 100 and 1000. |  |
|  |  |  |  |  | Recognises and uses square numbers and cube numbers, and the notation for squared (2) and cubed (3). |  |
|  |  |  |  |  | Solves problems involving division including using their knowledge of factors and multiples, squares and cubes. |  |
|  |  |  |  |  | Solves problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. |  |
|  |  |  |  |  | Solves problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. |  |

