**Division – Year Five**

**Essential Knowledge**



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| Term | Definition | | Example |
| Equal groups of | Give one object to each group | |  |
| ÷ Divide, division | Dividing into equal groups – give one to each numbered group in turn. | |  |
| Divided by | Repeated subtraction from the dividend to group into the divisor | | 12 divided by 4 = 3  12 – 4 – 4 – 4 = 0 |
| Divided into | Sharing the dividend equally into the divisor | |  |
| Remainder | The amount left over where one quantity cannot be exactly divided by another.  10 ÷ 3 = 3 remainder 1. | | 16 ÷ 5 = 3 R 1 |
| **Instructional Vocabulary** | | | |
| Number facts, | | Number pairs, Number bonds | |
| Greatest value | | Least value | |

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| Term | Definition | | Example |
| Factor | In multiplication the numbers multiplied together are called factors | | Factor x factor = product    6 x 7 = 42 |
| Quotient | In division the answer when a dividend is divided by the divisor the answer is the quotient | | 42 ÷ 6 = 7  Quotient |
| Divisible by | When a number gives a whole number answer | | 24 is divisible by 1, 2, 3, 4, 6, 8, 12, 24 |
| Inverse | The opposite or reverse of an operation. Division is the inverse of multiplication | | 6 x 9 = 54  54 ÷ 9 = 6 |
| Remainders as fractions or decimals | When a number does not divide evenly into another, the leftover can be expressed as a **remainder**, fraction, or **decimal** | | Text  Description automatically generated  3 and a half = 3.5 |
| **Instructional Vocabulary** | | | |
| Calculate, work out, solve | | Investigate, question | |
| Answer, Check | | Different missing number/s | |

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| Division facts for all tables | Division facts for 7 x table  2 x table 8 x table  3 x table 9 x table  4 x table 10 x table  5 x table 11 x table  6 x table 12 x table |  | Halve larger numbers and decimals | | 2674 ÷ 2 = 1337  0.34 ÷ 2 = 17  74, 202 ÷ 2 = 37, 101 |
| Apply place vale to derive division facts | 8 ÷ 2 = 4 therefore 0.8 ÷ 2 = 0.4  49 ÷ 7 = 7 therefore 49,000 ÷ 7,000 = 7  108 ÷ 12 = 9 therefore 10.8 ÷ 12 = 0.9 |  | Partition to divide mentally including decimals | | A drawing of a person  Description automatically generated 7505 ÷ 5 = 1501 |
| Divisibility tests to 2, 3, 5, 6, 9, 10 | 2 Any even number (ending in 0,2,4,6,8) will divide equally by 2  3 Any number with a digit sum of a multiple of 3  5 Any number ending in 0 or 5 will divide equally by 5  6 Any number with a digit sum of a multiple of 3 and is even will divide equally by 6  9 Any number with a digit sum of a multiple of 9 and will divide equally by 9  10 Any number with ending in 0 is a multiple of 10 |  | Any number where last two digits are divisible by 4, will all divide by 4 | Example: is 45, 215 divisible by 4?  Test: 15 ÷ 4 = 3 remanider 3  So 45,215 **is not** divisible by 4.  Example: is 24,576 divisible by 4?  Test: 76 ÷ 4 = 19  76 divides equally by so it i**s** divisible by 4. | |

