**Progression in written calculation strategies for multiplication** (Examples indicate **end of year** expectations)

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| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| **LION**Statutory GuidanceSolve problems, including doubling, halving and sharingDouble 5Non-statutoryCount in 2s, 5s and 10sImage result for numicon 5 piece Image result for numicon 5 piece Image result for numicon 5 piece Image result for numicon 5 piece 5 10 15 20 | **LEOPARD** Statutory GuidanceSolve one-step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.Possible representationse.g. 2 lots of 3 = There are two bowls with three apples in each. How many apples are there altogether?C:\Documents and Settings\lwoollven\Local Settings\Temporary Internet Files\Content.IE5\OERG33ZS\MC900436911[1].pngC:\Documents and Settings\lwoollven\Local Settings\Temporary Internet Files\Content.IE5\OERG33ZS\MC900436911[1].pngC:\Documents and Settings\lwoollven\Local Settings\Temporary Internet Files\Content.IE5\OERG33ZS\MC900436911[1].pngC:\Documents and Settings\lwoollven\Local Settings\Temporary Internet Files\Content.IE5\OERG33ZS\MC900436911[1].pngC:\Documents and Settings\lwoollven\Local Settings\Temporary Internet Files\Content.IE5\OERG33ZS\MC900436911[1].pngC:\Documents and Settings\lwoollven\Local Settings\Temporary Internet Files\Content.IE5\OERG33ZS\MC900436911[1].pngNon- Statutory guidanceThey make connections between arrays, number patterns, and counting in twos, fives and tens. | **PANTHER**Statutory Guidance Solve problems involving multiplication using materials, arrays, repeated addition, mental methods, and multiplication facts, including problems in contexts.Possible representations1x3151296301x31x31x31x3e.g. 5 x 3 =5 x 3 =3 x 5 = Multiplication facts include: 2, 3, 5 and 10 | **TIGER**Statutory Guidance Write and calculate mathematical statements for multiplication using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. Multiplication facts include: 2,3,4,5,8 and 10Key strategy:Partitioning the two-digit number into tens and onesChildren should use base ten to understand multiplication by multiples of 10 e.g. if 2 x 4 = 8 then 20 x 4 = 80 | **JAGUAR**Statutory Guidance Multiply two-digit and three-digit numbers by a one digit number using the formal written layout. Key strategy:Short multiplicationExpandedCompact743x7392424Multiplication facts up to 12 x 12 | **LYNX**Statutory Guidance Multiply numbers up to 4 digits by a one – or two-digit number using the formal written method, Key strategies:Short multiplication 147x626446421Long multiplication – introduced using an area model first e.g. 28 x 26 | **PUMA**Statutory Guidance Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.Key strategies:Long multiplication e.g. 2741 x 66 |