

Calculations in Mathematics

	Addition	Subtraction	Multiplication	Division
Reception	Combining two parts to make a whole Counting on using cubes Number lines Regrouping to make 10	Taking away ones Counting back Find the difference Part whole model Number lines	Repeated addition / counting in groups Recognising equal groups	Sharing and grouping
Year 1	Mental addition in a no. sentence Number lines Simple recording Partition and recombine $5+8=5+(5+3)$ $5+8=5+5+3$ $5+8=13$	Mental subtraction in a no. sentence Number lines Simple recording Understanding - as: Taking away Find the difference How many more?	Arrays and mental methods Repeated addition / counting in groups Describing an array Doubling	Arrays and mental methods Sharing and grouping
Year 2	Mental methods - partitioning adding the tens first $26+17=(20+10)+(6+7)$ Informal method adding sig. digits first Adding 3 single digits Formal written methods with regrouping	Mental subtraction in a no. sentence Understanding - as: Taking away Find the difference How many more to make? (complementary) Formal written methods with regrouping	Repeated addition / counting in groups Mental methods using partitioning Arrays - showing commutative multiplication	Mental sharing and grouping Sharing: share 12 sweets equally between 2 people Grouping (repeated subtraction): There are 18 apples in a box. How many bags of 3 apples can be filled?
Year 3	Informal method adding sig. digits first Formal written methods with regrouping	Counting up (complementary addition) Formal written methods with regrouping	Repeated addition / counting in groups Mental methods using partitioning $15 \times 5 = (10 \times 5) + (5 \times 5)$ Formal short multiplication with regrouping (1 digit)	Mental sharing and grouping Distributive method 84 divided by 7 $84 = 70 + 14$ 70 divided by 7 = 10 14 divided by 7 = 2 $10 + 2 = 12$ Formal short and long division (1 digit) Division with remainders
Year 4	Informal method adding sig. digits first Formal written methods with regrouping	Counting up (complementary addition) Formal written methods with regrouping	Mental method using partitioning $38 \times 7 = (30 \times 7) + (8 \times 7)$ Formal short (1 digit) and long multiplication (2 digits)	Distributive method Formal short and long division by 1 digit Division with a remainder
Year 5	Informal method adding sig. digits first Formal written methods with regrouping	Counting up (complementary addition) Formal written methods with regrouping	Formal short (1 digit) and long multiplication (1 and 2 digits)	Formal short and long division by 1 and 2 digits
Year 6	Formal written methods with regrouping	Counting up (complementary addition) Formal written methods with regrouping	Formal short (1 digit) and long multiplication (up to 4 digits multiplied by a 2 digit number)	Formal short and long division by 1 and 2 digits (up to 4 digits divided by a 2 digit number)