Year 1 calculation guidance
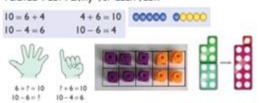
+ Addition +	– Subtraction –	× Multiplication ×	÷ Division ÷
More Sum Altogether Add Plus Total	minus Subtract take away less than difference between	Multiply times lots of groups of multiple of product	Share equally group equally divide remainder factor

+ Addition +	– Subtraction –	× Multiplication ×	÷ Division ÷
Methods from reception to be used in Year 1: Pictures, tens frames, cubes and concrete resources to add two numbers together as a group or in a bar. See Reception calculation guidance.	Methods from reception to be used in Year 1: Use physical objects, counters, cubes etc to show how objects can be taken away. See Reception calculation guidance.	Methods from reception to be used in Year 1: double numbers to 10. Use concrete apparatus to show how to double a number. See Reception calculation guidance.	Understand division as sharing equally into groups. Share into groups using concrete apparatus then move to pictorial representations.

Teach all the number bonds up to and including 10 and the related 'Fact Family' for each fact.

$10 = 6 + 4$ $4 + 6 = 10$
$10 - 4 = 6$ $10 - 6 = 4$

$6 + ? = 10$ $? + 6 = 10$
$10 - 6 = ?$ $10 - 4 = ?$

Use concrete objects to combine groups to add and solve missing number problems.

$2 + \_\_ = 5$ Show this using the part/whole model.

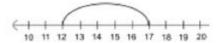Understand place value – can partition numbers and recombine numbers

Usually start with the biggest number (if counting on)
$12 + 5 = 17$
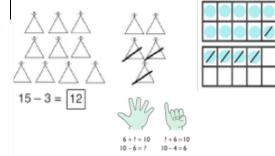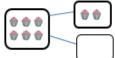
Represent additions and subtractions using bar models

Subtraction

$15 - 3 = \boxed{12}$

$6 + ? = 10$ $? + 6 = 10$
$10 - 6 = ?$ $10 - 4 = ?$

Understand that subtraction can be seen as taking away and finding the difference. Use the part-whole model to take away.
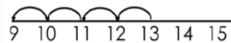
The difference between 11 and 14 is 3.

First with concrete apparatus, then number line or 100 square, then mentally. Count back on a number line or number track when secure with concrete apparatus.

9 10 11 12 13 14 15
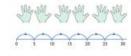

Multiplication

Recall doubles to 10. Use this knowledge to support halving and doubling larger numbers.

half of 8 is 4   double 4 is 8
$8 ÷ 2 = 4$ $4 × 2 = 8$

Understand multiplication as repeated addition.

$5 + 5 + 5 + 5 + 5 + 5 = 30$
$5 × 6 = 30$
5 multiplied by 6
6 groups of 5
6 hops of 5

$2 + 2 + 2 + 2 + 2 = 10$

Group sets of objects reliably in 2s, 5s and 10s.
There are __ groups of __ pencils.
There are __ groups of __ flowers.

Recognise number sequences e.g. 2s, 5s and 10s.

Represent numbers, groups and sets as arrays.

2 groups of 4
$4 + 4$

4 groups of 2
$2 + 2 + 2 + 2$

Division

shared between 5

Finding half and quarter using the same methods.