Place Value

Before children can learn place value they need to be able to 'count on'

To count on, children understand that a group of items is a 'count' and they don't have to count the items individually by 1

Example

I have 5 bananas and mum has 2 apples. How much fruit do we have altogether?

5 6, 7

Child will use 5 as a 'count' and then count on 2 more to get 7 instead of counting from 1 (1, 2, 3, 4, 5, 6, 7)

Numbers

Numbers are made up of **digits** with different **values** depending on their position

Single digit numbers eg 1, 2, 3, 4, 5, 6, 7, 8, 9

2 digit numbers eg 10, 14, 24, 36, 99

3 digit numbers eg 299

4 digit numbers eg 6 245

5 digit numbers eg 32 567

6 digit numbers eg 567 210

7 digit numbers eg 1 357 822

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
2 1 millions (2 000 000)	3 3 hundred thousands (300 000)	5 5 ten thousands (50 000)	7 7 thousands (7 000)	8 8 hundreds (800)	2 2 tens (20)	2 2 ones

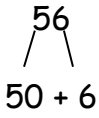
Partitioning

Children learn to partition numbers based on place value

Partition means to 'break up'

Example

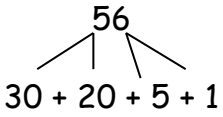
When we partition 56 based on place value



Children also learn to partition numbers flexibly (not based on place value)

Example

We can partition 56 flexibly



Multiplicative place value

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
1 000 000	100 000	10 000	1 000	100	10	1

Students can use place value to multiply by 10 to move a number up the place value chart. For example, 1 x 10 where 1 moves up to the tens leaving zero ones.