

# Master The Place Value of 5 and 6-Digit Numbers

## Rationale

In this step, pupils will build on their understanding from Year 4 and recognise the place value of each digit in 5 and 6-digit numbers. They will use place value counters and Gattegno charts to look at the number as a whole and explain the value of the digits in all columns, recognising that columns with the digit '0' do not need to be described. Pupils will continue to use the same representations to look at the individual digits of given numbers and explain the value of a single digit in its place.

Pupils' learning will be developed with representations of given numbers in place value charts, applying their knowledge to recognise the value of specific digits abstractly.



## Key Stem Sentences

- \_\_\_ has \_\_\_ hundred thousands / ten thousands / thousands / hundreds / tens / ones.
- \_\_\_ has \_\_\_ \_\_\_. The value of the digit \_\_\_ is \_\_\_.
- In \_\_\_, the value of the digit \_\_\_ is \_\_\_.



## Key Vocabulary

- ones / tens / hundreds / thousands / ten thousands / hundred thousands
- digit / place holder
- place
- value



## Common Errors or Misconceptions

- Pupils may misinterpret the value of a digit in its place. For example, in 57,432, the value of the digit 5 is 5,000.
- Pupils may not recognise zero as a place holder.



## Key Representations

### Place Value Counters



302,314 has 3 hundred thousands, 2 thousands, 3 hundreds, 1 ten and 4 ones.

302,314 has 2 thousands. The value of the digit 2 is 2,000.

### Place Value Charts with Digits

10,000s	1,000s	100s	10s	1s
7	1	8	6	5

In 71,865, the value of the digit 6 is 60.

### Gattegno Charts

10,000	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000
1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9

96,187 has 9 ten thousands, 6 thousands, 1 hundred, 8 tens and 7 ones.

96,187 has 9 ten thousands. The value of the digit 9 is 90,000.



## Pupils will FLOURISH if they can...

- describe the place value of each digit in a 5 and 6-digit number.
- recognise zero as a place holder.
- identify the value of a single digit in its place.
- begin to explain their understanding using their own words and representations.

