

# Master Representing Numbers to 10,000

## Rationale

In this practical step, pupils will deepen their understanding of numbers to 10,000 by representing them in different ways.

They will practise and become familiar with representing 4-digit numbers using a variety of concrete apparatus in order to fully access the subsequent small steps.

*Pupils will need access to a variety of concrete apparatus, as shown below, to complete this practical step.*



## Key Stem Sentences

- There are \_\_\_ thousands \_\_\_ hundreds, \_\_\_ tens and \_\_\_ ones.
- The number is \_\_\_



## Key Vocabulary

- ones / tens / hundreds / thousands
- ten thousand



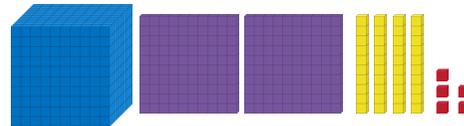
## Common Errors or Misconceptions

- When using more abstract representations such as place value counters, pupils may misunderstand the 'value' of each counter as they are all the same size.



## Key Representations

### Dienes



There is 1 thousand, 2 hundreds, 4 tens and 5 ones. The number is 1,245

### Place Value Counters



There are 2 thousands, 3 hundreds and 3 ones. The number is 2,303

### Place Value Chart with Digits

1,000s	100s	10s	1s
7	0	3	6

There are 7 thousands, 3 tens and 6 ones. The number is 7,036

### Arrow Cards



There are 6 thousands, 8 hundreds and 9 tens. The number is 6,890

### Gattegno Chart

1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
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

There are 9 thousands, 1 hundred, 5 tens and 7 ones. The number is 9,157



## Pupils will FLOURISH if they can...

- accurately represent 4-digit numbers using a variety of concrete apparatus.
- explain their understanding using 'Decide, Assess, Back up' with representations.

