

Master Representing Numbers to 10,000,000

Rationale

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

They will practise and become familiar with representing 7-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 ___ millions, ___ hundred thousands, ___ ten thousands, ___ thousands ___ hundreds, ___ tens and ___ ones.
- The number is ___



Key Vocabulary

- ones / tens / hundreds / thousands / ten thousands / hundred thousands / millions
- ten million



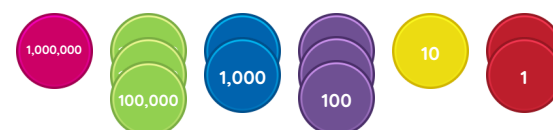
Common Errors or Misconceptions

- 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

Place Value Counters



There is 1 million, 3 hundred thousands, 2 thousands, 3 hundreds, 1 ten and 2 ones. The number is 1,302,312

Arrow Cards



Place Value Chart with Digits

1,000,000s	100,000s	10,000s	1,000s	100s	10s	1s
4	7	8	1	3	0	6

There are 4 millions, 7 hundred thousands, 8 ten thousands, 1 thousand, 3 hundreds and 6 ones. The number is 4,781,306

Gattegno Chart

1,000,000	2,000,000	3,000,000	4,000,000	5,000,000	6,000,000	7,000,000	8,000,000	9,000,000
100,000	200,000	300,000	400,000	500,000	600,000	700,000	800,000	900,000
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



Pupils will FLOURISH if they can...

- accurately represent 7-digit numbers using a variety of concrete apparatus.
- explain their understanding in multiple ways using their own words and representations.

