Master Standard Partitioning (7 digits) A

Rationale

In this step, pupils build on the place value of 7-digit numbers. They will combine standard place value units to compose 7-digit numbers. Then, they partition into standard place value parts to decompose 7-digit numbers.

Pupils will vary the order of the presentation of the parts in order to fully understand the composition of the number. For example, 6,000,000, 300, 2,000 and 8 combine to make 6,002,308

Key Stem Sentences

- _____ combine to make ___
- ___ partitions into _____

Key Vocabulary

- 1,000,000s / 100,000s / 10,000s / 1,000s / 100s / 10s / 1s
- compose / decompose
- combine / partition

Key Representations

Gattegno Chart

Composing

1,000,000	2,000,000	3,000,000	4,000,000	5,000,000	6,000,000	7,000,000	8,000,000	9,000000
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

4,000,000, 70,000, 1,000, 500, 50 and 9 combine to make 4,071,559

Decomposing

1,000,000	2,000,000	3,000,000	4,000,000	5,000,000	6,000,000	7,000,000	8,000,000	9,000000
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

6,203,841 partitions into 6,000,000, 200,000, 3,000, 800, 40 and 1

Common Errors or Misconceptions

- When the order of the parts is varied, pupils may compose incorrectly. For example, 8,000,000, 70, 50,000, 4,000, 3 and 900,000 combine to make 8,754,390

Pupils will FLOURISH if they can...

- combine standard place value parts into 7-digit numbers.
- partition 7-digit numbers into standard place value parts.
- explain their understanding in multiple ways using their own words and representations.