5M006B Overview

Master Non-Standard Partitioning (5 and 6 digits) B

Rationale

In this step, pupils build on their understanding that 5 and 6-digit numbers can be combined and partitioned in different ways. They will understand that 5 and 6-digit numbers can be composed and decomposed by breaking one or more place value parts. For example, 60,000, 4,300, 5,000 and 8 combine to make 69,308 or 475,906 partitions into 450,000, 25,000, 900 and 6. They progress to using part-whole models to write and complete addition and subtraction equations. This includes equations with missing numbers. For example, 92,337 + ___ = 94,537 and 46,275 - ___ = 31,275. Pupils' understanding will be developed further by composing and decomposing numbers abstractly.

Key Stem Sentences

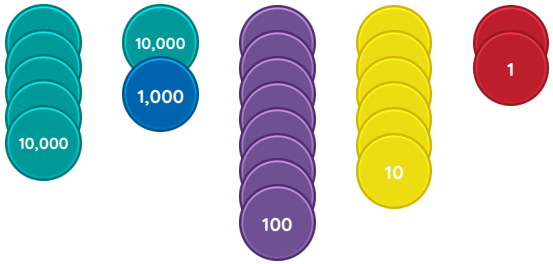
- ___ combine to make ___
- ___ partitions into ___
- ___ + ___ + ___ + ___ = ___
- ___ - ___ = ___

Key Vocabulary

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

Key Representations

Place Value Counters

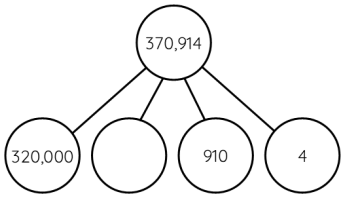


50,000, 11,000, 800, 60 and 2 combine to make 61,862

61,862 partitions into 50,000, 11,000, 800, 60 and 2

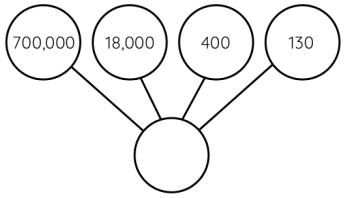
Part-Whole Models

Decomposing



370,914 - ___ = 320,914

Composing



700,000 + 18,000 + 400 + 130 = ___

Common Errors or Misconceptions

- Pupils may compose or decompose incorrectly. For example 70,349 = 65,000 + 530 + 49

Pupils will FLOURISH if they can...

- accurately combine and partition 5 and 6-digit numbers in different ways.
- complete addition and subtraction equations to show the composition and decomposition of 5 and 6-digit numbers.
- identify the missing number in addition and subtraction equations.
- begin to explain their understanding using their own words and representations.