

Master Non-Standard Partitioning (1 or 2 Decimal Places) B

Rationale

In this step, pupils build on their understanding that numbers with 1 or 2 decimal places can be combined and partitioned in different ways. They will understand that decimal numbers can be composed and decomposed by breaking one or more place value parts. For example, 5, 2.9 and 0.03 combine to make 7.93 or 1.86 partitions into 1, 0.82 and 0.04. They progress to using part-whole models to write and complete addition and subtraction equations. This includes equations with missing numbers. For example, $3.12 + \underline{\quad} = 3.18$ and $9.42 - \underline{\quad} = 5.12$



Key Stem Sentences

- $\underline{\quad}$ combine to make $\underline{\quad}$
- $\underline{\quad}$ partitions into $\underline{\quad}$
- $\underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$
- $\underline{\quad} - \underline{\quad} = \underline{\quad}$



Key Vocabulary

- 1s / 0.1s / 0.01s
- compose / decompose
- combine / partition



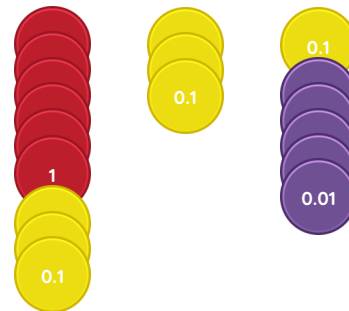
Common Errors or Misconceptions

- Pupils may compose or decompose incorrectly. For example $55 + 0.07 + 1.2 = 55.19$



Key Representations

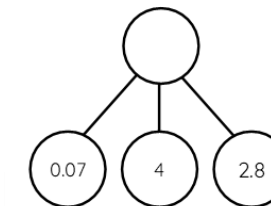
Place Value Counters



6.3, 0.3 and 0.15 combine to make 6.75
6.75 partitions into 6.3, 0.3 and 0.15

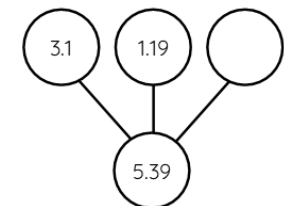
Part-Whole Models

Composing



$$0.07 + 4 + 2.8 = \underline{\quad}$$

Decomposing



$$5.39 - \underline{\quad} = 4.29$$



Pupils will FLOURISH if they can...

- accurately combine and partition numbers with 1 or 2 decimal places in different ways.
- complete addition and subtraction equations to show the composition and decomposition of decimal numbers.
- identify the missing number in addition and subtraction equations.
- begin to explain their understanding using their own words and representations.

