

# Master Non-Standard Partitioning (3 digits) A

## Rationale

In this practical step, pupils build on their understanding of standard partitioning of 3-digit numbers and learn that numbers can be combined and partitioned in different ways. They will combine non-standard place value parts to compose 3-digit numbers. Then, they will partition into non-standard place value parts to decompose 3-digit numbers. For example, 189 partitions into 150 and 39

Pupils will use Dienes to combine and partition numbers and they will identify which place value parts have been broken.



## Key Stem Sentences

- The \_\_\_\_\_ place value part has been broken.
- \_\_\_\_\_ combine to make \_\_\_\_
- \_\_\_\_ partitions into \_\_\_\_\_



## Key Vocabulary

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



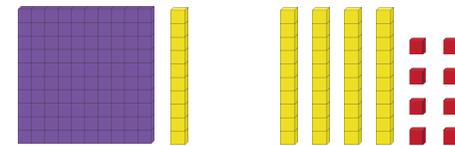
## Common Errors or Misconceptions

- Pupils may combine or partition incorrectly. For example, 440 and 27 combine to make 476

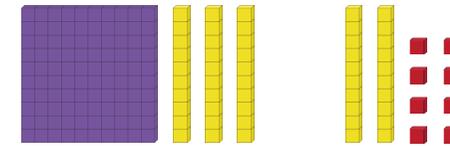


## Key Representations

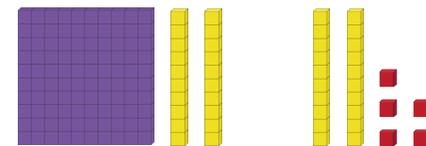
### Dienes



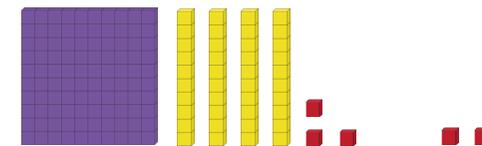
110 and 48 combine to make 158



158 partitions into 130 and 28



120 and 25 combine to make 145



145 partitions into 143 and 2



## Pupils will FLOURISH if they can..

- accurately combine and partition 3-digit numbers in different ways.
- begin to explain their understanding using 'Decide, Assess, Back up', given stems and representations.

