

Master Ordering 3-Digit Numbers

Rationale

In this step, pupils build on their understanding of comparing 3-digit numbers to order 3-digit numbers as well as 3-digit and 2-digit numbers. They will work from left to right, looking at the greatest place value column first, and continue to use the vocabulary 'greatest' and 'smallest' in their ordering.

Pupils are introduced to the vocabulary 'ascending' and 'descending'. They will continue to demonstrate their understanding of ordering numbers through the use of number lines. They will also develop their learning by writing missing digits to make ordering correct.



Key Stem Sentences

- The greatest number is ___
- The smallest number is ___
- ___ has more / fewer 100s / 10s / 1s than ___ and ___
- ___ has no 100s / 10s / 1s.



Key Vocabulary

- greatest place value column
- greatest / smallest
- more / fewer / no
- ascending order / descending order



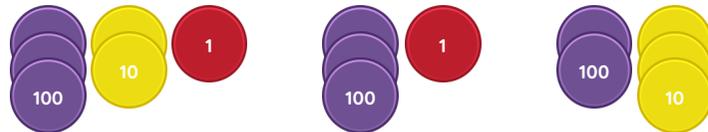
Common Errors or Misconceptions

- Pupils may misread the value of digits, including when using zero as a placeholder. For example, 500, 102, 208
- Pupils may have difficulty ordering from greatest to smallest.



Key Representations

Place value counters



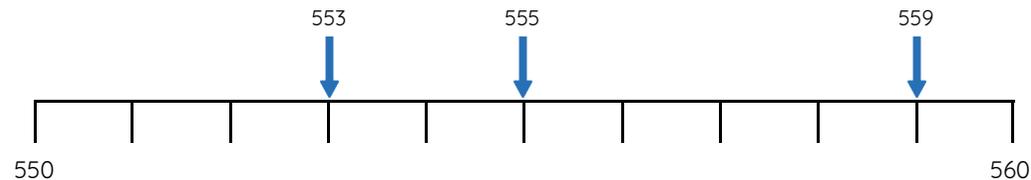
greatest \longrightarrow smallest

Place value charts

100s	10s	1s
9	7	5
	6	8
9	1	4

68 has no 100s.
914 has fewer 10s than 975. The smallest number is 68 and the greatest number is 975

Number lines (to support reasoning)



The smallest number is 553 and the greatest number is 559

Pupils will FLOURISH if they can...

- identify which number is the smallest and which is the greatest.
- order numbers from smallest to greatest and greatest to smallest.
- complete missing digits to make the ordering correct.
- begin to explain their understanding using 'Decide, Assess, Back up', given stems and representations.

