6M020 Overview

Master Ordering Numbers with up to 100s, 10s, 1s and 3DP

Rationale

In this step, pupils build upon their understanding of comparing decimal numbers to order numbers with up to 100s, 10s, 1s and 3 decimal places. 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.

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

Key Stem Sentences

- The greatest decimal number is ___
- The smallest decimal number is ___
- ___ has more / fewer 100s / 10s / 1s / 0.1s / 0.01s / 0.001s than ___
- ___ has no 100s / 10s / 1s / 0.1s / 0.01s / 0.001s

Key Vocabulary

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

Key Representations

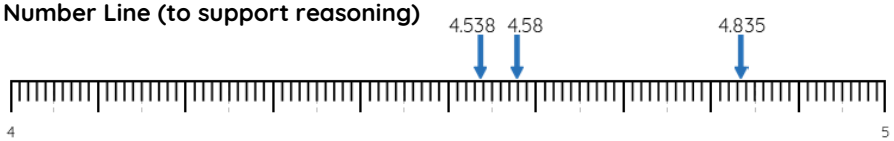
Place Value Chart with Digits

10s	1s	0.1s	0.01s	0.001s
2	7	3	1	2
	7	3	2	
2	7	3		

The greatest decimal number is 27.312

The smallest decimal number is 7.32

Number Line (to support reasoning)



4.835 has more 0.1s than 4.538 and 4.58

4.58 has more 0.01s than 4.538

The greatest decimal number is 4.835 and the smallest decimal number is 4.538

Common Errors or Misconceptions

- Pupils may misread the value of digits, including when using zero as a placeholder.
- Pupils may not line up numbers accurately. For example, 615.92
  87.134

Pupils will FLOURISH if they can...

- identify which decimal number is the smallest and which is the greatest.
- order decimal numbers in ascending and descending order.
- complete missing digits to make ordering correct.
- explain their understanding in multiple ways using their own words and representations.