

Master Ordering Numbers with 1s and up to 3 Decimal Places

Rationale

In this step, pupils build on their understanding of comparing decimal numbers to order numbers with up to 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'. Pupils will continue to demonstrate their understanding of ordering numbers through the use of number lines. They 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 1s / 0.1s / 0.01s / 0.001s than ___
- ___ has no 1s / 0.1s / 0.01s / 0.001s.



Key Vocabulary

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



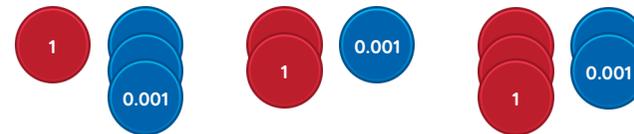
Common Errors or Misconceptions

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



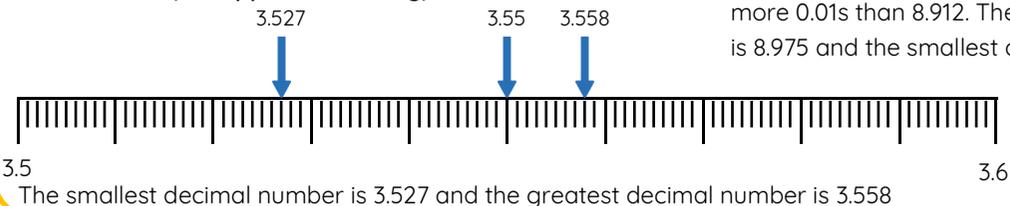
Key Representations

Place value counters



1.003 has fewer 1s than 2.001 and 3.002. 1.003 has fewer 1s than 3.002. The smallest decimal number is 1.003 and the greatest decimal number is 3.002

Number Line (to support reasoning)



Place value chart with digits

1s	0.1s	0.01s	0.001s
8	9	7	5
8	9	4	6
8	9	1	2

8.975 has more 0.01s than 8.946 and 8.912. 8.946 has more 0.01s than 8.912. The greatest decimal number is 8.975 and the smallest decimal number is 8.912



Pupils will FLOURISH if they can...

- identify which decimal number is the smallest and which is the greatest.
- order decimal numbers from smallest to greatest and greatest to smallest.
- complete missing digits to make ordering correct.
- begin to explain their understanding using their own words and representations.

