

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

## Rationale

In this step, pupils build upon previous learning of comparing integers by comparing numbers with up to 100s, 10s, 1s and 3 decimal places. They continue to use the symbols  $>$ ,  $<$  and  $=$  and the vocabulary 'greater than', 'less than' and 'equal to' in their comparisons. They will work from left to right, looking at the greatest place value column first, to compare the digits and explain why a number is greater than or less than another using 'more', 'fewer' and 'no'. Pupils will prove their understanding of comparing decimal numbers through the use of number lines. They will also develop their learning by writing missing digits to complete comparison statements.



## Key Stem Sentences

- \_\_\_ is greater than /  $>$  \_\_\_
- \_\_\_ is less than /  $<$  \_\_\_
- \_\_\_ is equal to /  $=$  \_\_\_
- \_\_\_ has more / fewer / no \_\_\_s.



## Key Vocabulary

- compare
- greater than / less than / equal to
- more / fewer / no



## Common Errors or Misconceptions

- Pupils may misread the place value of digits.
- Pupils may compare numbers based on the value of the digits rather than place value. For example,  $98.789 > 102.3$



## Key Representations

### Place value counters



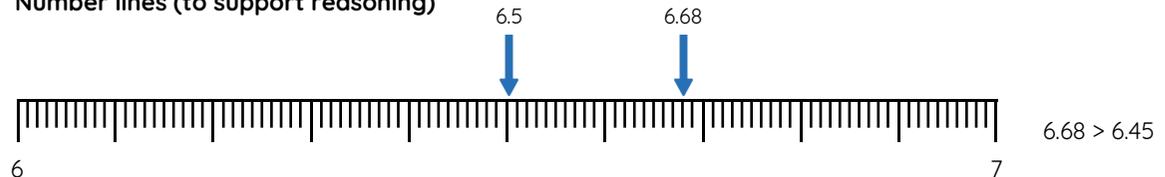
300.214 has more thousandths than 300.213  
300.214 is greater than 300.213

### Place value chart with digits

10s	1s	0.1s	0.01s	0.001s
1	0	3	7	4
	1	8	6	2

1.862 has no tens.  
1.862 is less than 10.374

### Number lines (to support reasoning)



## Pupils will FLOURISH if they can...

- identify a decimal number that is greater than, less than or equal to another.
- use a number line to show decimal numbers greater than, less than or equal to another.
- write digits to complete comparison statements.
- explain their understanding in multiple ways using their own words and representations.

