

# Master The Number Line with up to 3 Decimal Places

## Rationale

In this step, pupils will build on their understanding of identifying, labelling and estimating thousandths on the number line and apply it to numbers with ones and up to 3 decimal places.

Pupils' learning will be extended through estimating numbers on blank number lines and progress to identifying and labelling numbers on number lines with different start and end points in multiples of 0.01 

## Key Stem Sentences

- The value of each major / minor interval is \_\_\_\_
- \_\_\_\_ is here on the number line.
- \_\_\_\_ is the mid-point.
- \_\_\_\_ is near to \_\_\_\_ / between \_\_\_\_ and \_\_\_\_



## Key Vocabulary

- number line
- major / minor interval
- mid-point
- estimate / near to / between



## Common Errors or Misconceptions

- Pupils may have difficulty understanding the size of decimal numbers in relation to each other and place them the incorrect distance from the start or between intervals.
- Pupils may miscalculate the intervals.



## Key Representations

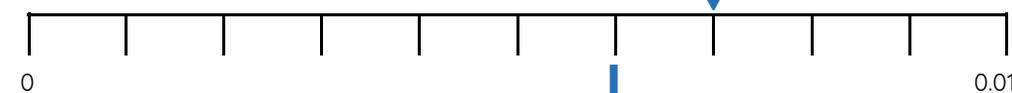
### Number Lines



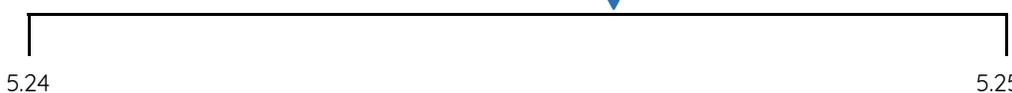
3.549 is here on the number line.



8.023 is between 8 and 8.05



0.007 is here on the number line.



5.246 is near to the mid-point.



## Pupils will FLOURISH if they can...

- calculate the value of intervals on marked number lines.
- estimate, identify and label numbers with up to 3 decimal places on blank and empty number lines.
- identify and label numbers with 3 decimal places on number lines with different start and end points in multiples of 0.01
- begin to explain their understanding using their own words and representations.

