

# Master Recognising Thousandths in Decimal and Fractional Form

## Rationale

In this step, pupils will build upon their understanding of thousandths as decimals and fractions. They will use number lines to recognise the equivalence of thousandths in decimal and fractional form, initially using a separate number line for each form before progressing to recognising both on one number line from 0 to 1 with 1,000 unlabelled intervals.

Pupils will develop their learning by converting thousandths as decimals to fractions and vice versa abstractly, without the support of the number line.



## Key Stem Sentences

- \_\_\_ thousandth(s) as a decimal is \_\_\_
- \_\_\_ thousandth(s) as a fraction is \_\_\_
- \_\_\_ is equivalent to \_\_\_



## Key Vocabulary

- thousandths
- decimal
- fractional
- equivalent



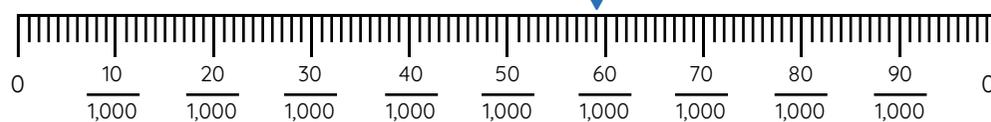
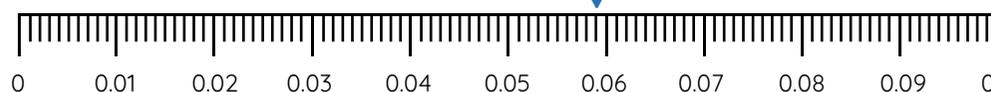
## Common Errors or Misconceptions

- Pupils may struggle with the place value of thousandths. For example, 7 thousandths is equivalent to 0.07
- Pupils may struggle to recognise the fraction when given the decimal. For example, 0.2 is equivalent to 2 thousandths.



## Key Representations

### Number lines



59 thousandths as a decimal is 0.059. 59 thousandths as a fraction is  $\frac{59}{1,000}$ . 0.059 is equivalent to  $\frac{59}{1,000}$ .

825 thousandths as a decimal is 0.825. 825 thousandths as a fraction is  $\frac{825}{1,000}$ . 0.825 is equivalent to  $\frac{825}{1,000}$ .



## Pupils will FLOURISH if they can...

- write fractions given in thousandths in decimal form.
- write decimals given in thousandths in fractional form.
- recognise thousandths in decimal and fractional form in the context of place value.
- begin to explain their understanding using their own words and representations.

