Master Thousandths on a Number Line as Fractions

Rationale

In this step, pupils will build upon their understanding of hundredths as fractions on a number line from Year 4, and thousandths as decimals on a number line, and apply it to thousandths as fractions.

Pupils will label, identify and estimate where the fractions $\frac{1}{1,000}$ to $\frac{999}{1,000}$ are placed on a variety of simple number lines.

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
- mid-point
- interval
- estimate

Key Representations

Number lines

$\frac{81}{1,000}$ is here on the number line.

0   0.1

$\frac{235}{1,000}$ is between 0 and $\frac{500}{1,000}$

0   0.5   1

$\frac{963}{1,000}$ is near to 1
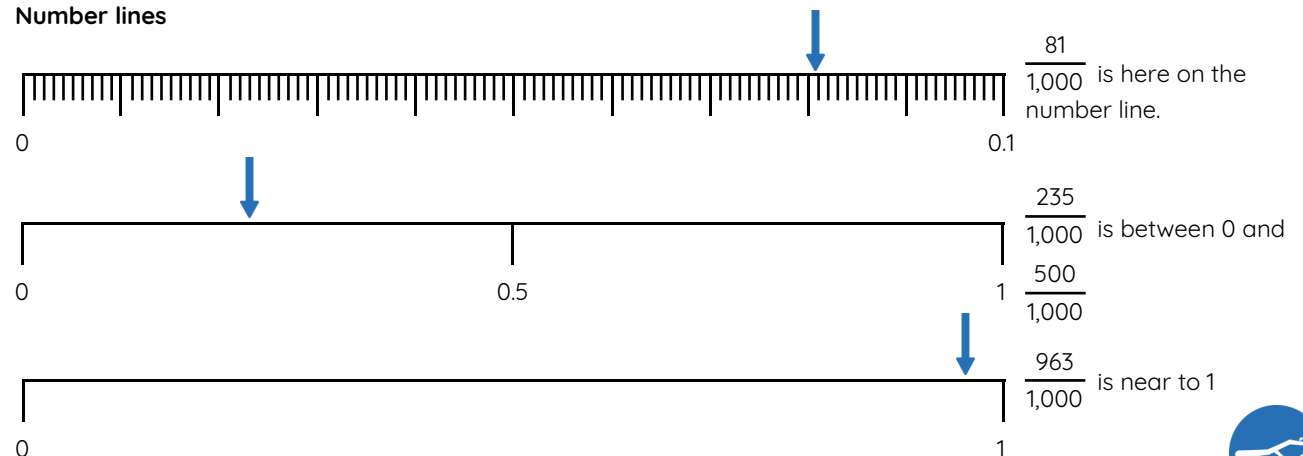
0   1

Common Errors or Misconceptions

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

Pupils will FLOURISH if they can...

- label, identify and estimate the position of thousandths on a variety of different number lines.
- begin to explain their understanding using their own words and representations.