Master Ordering Fractions Greater Than 1

Rationale

In this step, pupils build upon their understanding of comparing fractions greater than 1 by ordering improper fractions and mixed numbers on a number line beyond 1. They will use their knowledge of equivalent fractions to accurately identify and position fractions on number lines to order them based on their relative sizes. They will begin by ordering fractions that fall on intervals before moving on to number lines where some fractions fall between intervals.

Pupils will develop their learning by ordering fractions without the support of representations. They will instead use their understanding of common multiples to convert fractions to share a common denominator.

Key Stem Sentences

- ___ is the greatest fraction.
- ___ is the smallest fraction.

Key Vocabulary

- denominator / numerator
- equivalent
- fraction
- greatest / smallest

Key Representations

Number lines

$\dfrac{14}{12}$ is the smallest fraction. $\dfrac{33}{18}$ is the greatest fraction.

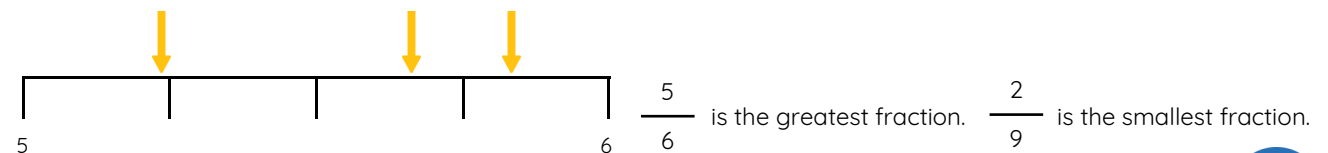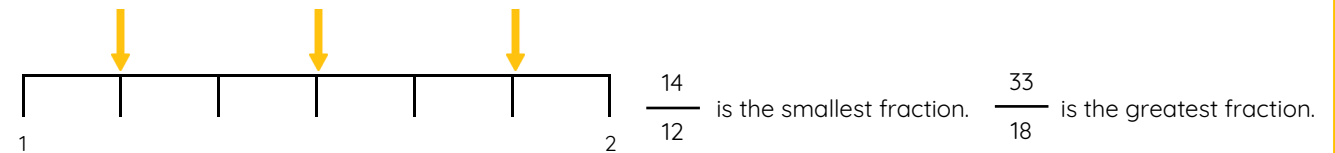$\dfrac{5}{6}$ is the greatest fraction. $\dfrac{2}{9}$ is the smallest fraction.

Common Errors or Misconceptions

- Pupils may represent the fractions incorrectly on the number line.
- Pupils may order the fractions by the numerators or denominators without converting to a common denominator.

Pupils will FLOURISH if they can...

- order fractions greater than 1 whose denominators are multiples of the same number.
- use number lines to represent the comparative size of three improper fractions and/or mixed numbers.
- convert denominators to a common multiple to order.
- begin to explain their understanding using their own words and representations.