

# Master Comparing Non-Unit Fractions

## Rationale

In this step, pupils begin to understand non-unit fractions as numbers on the number line. They learn that non-unit fractions, with a numerator greater than 1, represent parts of a whole. Pupils identify and represent non-unit fractions on number lines, drawing upon these to compare the relative size of two non-unit fractions with the same denominator. They will learn that when comparing fractions with the same denominator, the greater the numerator, the greater the non-unit fraction as there are more equal parts of the whole. Pupils will apply their knowledge to compare two non-unit fractions presented abstractly.



## Key Stem Sentences

- The whole is divided into \_\_\_ equal parts.  
The non-unit fraction is \_\_\_.
- When fractions have the same denominator, the \_\_\_ the numerator, the \_\_\_ the fraction.
- \_\_\_ is greater / less than / equal to \_\_\_



## Key Vocabulary

- non-unit fraction / numerator / denominator
- part / whole
- compare
- greater than (>) / less than (<) / equal to (=)



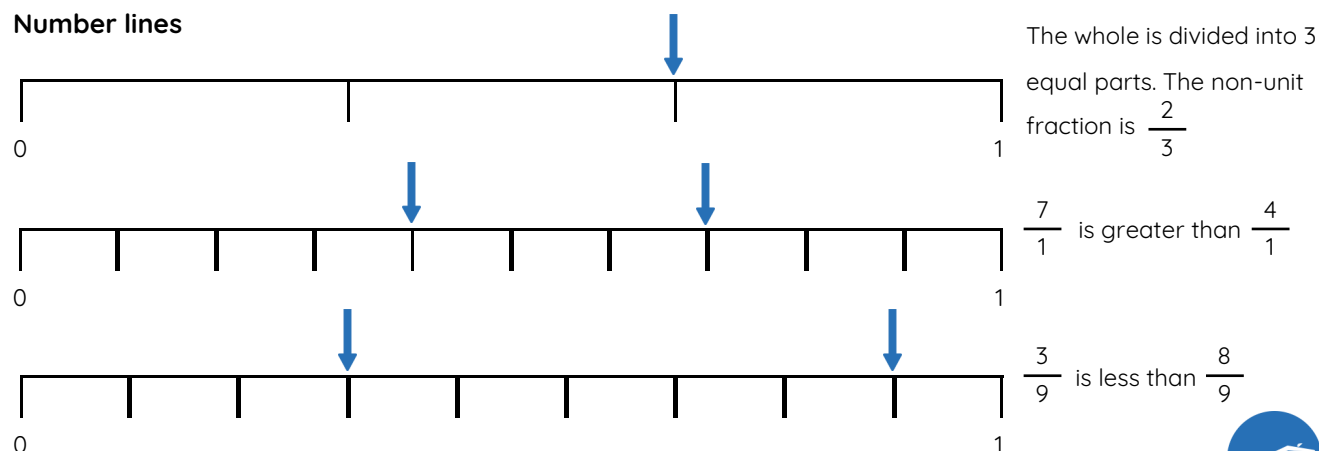
## Common Errors or Misconceptions

- Pupils may compare the denominators instead of the numerators. For example,  $\frac{3}{5}$  is equal to  $\frac{4}{5}$ .
- Pupils may represent non-unit fractions incorrectly on the number line.



## Key Representations

### Number lines



## Pupils will FLOURISH if they can...

- identify and represent non-unit fractions on number lines.
- accurately compare the relative sizes of two non-unit fractions with the same denominator using inequality symbols.
- understand the significance of the numerator in determining the size of the non-unit fraction.
- begin to explain their understanding using 'Decide, Assess, Back up', given stems and mathematical proof.

