Master Recognising Improper Fractions as Mixed Numbers

Rationale

In this step, pupils will build upon their understanding of fractions. They will be introduced to proper and improper fractions and understand that an improper fraction is a fraction where the numerator is greater than or equal to the denominator. They will represent improper fractions within 2 on a number line and use this to identify the number of parts which make the whole and the parts remaining. They can then use this knowledge to convert the improper fraction to a mixed number.

Pupils will develop their learning by converting improper fractions to mixed numbers abstractly, without the support of the number line.

Key Stem Sentences

- ___ equal parts make the whole. There are ___ equal parts.
- There is ___ whole and ___ equal parts.
- ___ is equivalent to ___

Key Vocabulary

- equivalent
- improper / proper fraction
- mixed number
- part / whole

Key Representations

Number lines

5 equal parts make the whole. There are 8 equal parts. There is 1 whole and 3 equal parts.
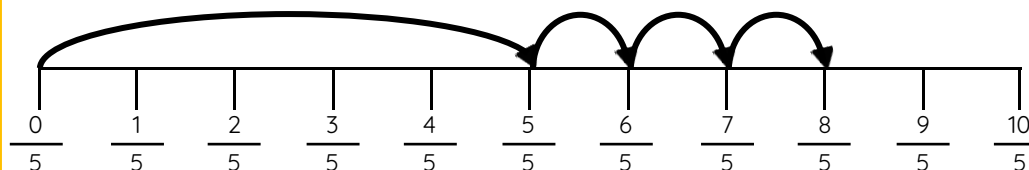
$\frac{8}{5}$ is equivalent to $1\frac{3}{5}$

Common Errors or Misconceptions

- Pupils may misrepresent the number of parts and wholes on the number line.
- Pupils may convert the improper fraction incorrectly without the support of the number line.

Pupils will FLOURISH if they can...

- represent an improper fraction on a number line.
- convert improper fractions to mixed numbers.
- explain their understanding using 'Decide, Assess, Back up' with representations.