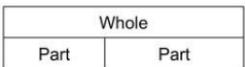


Maths - Year 4

Numbers and the Number System 5: Fractions and recognising part-whole relationships

Key Vocabulary

Fraction	A numerical quantity that is less than a whole.
Mixed number	A number written as a whole number and a fraction e.g. $3\frac{1}{2}$
Half	One of two equal parts.
Part/whole	The relationship between a whole and its component parts. <div style="text-align: center; margin-top: 5px;">  </div>
Numerator	Upper number of a fraction, shows how many of this kind of fraction.
Denominator	Lower number of a fraction, gives the fraction its name.
Quarter	One of four equal parts of a whole.
Three quarters	Three of four equal parts of a whole.
array	A rectangular arrangement of objects or numbers in rows and columns.
Equivalent fraction	Fractions of equal value, represented in different ways
Thirds, fifths, sixths, sevenths	Refers to the number of parts a whole is split into.

Mathematical Skills

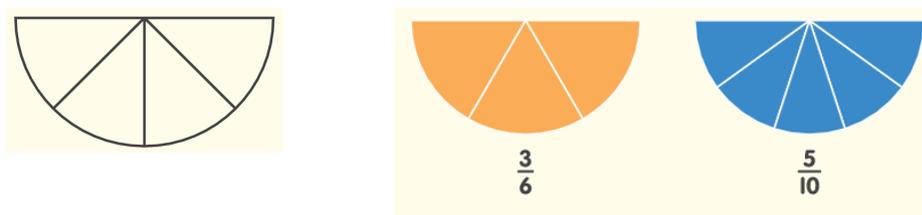
- Recognise and name halves (and quarters) as equal parts of any whole.
- Explain patterns seen in relationships between fractions equivalent to a half.
- Explain that, the larger the denominator, the smaller the part.
- Illustrate and solve adding and subtracting calculations involving fractions.

Mathematical Methods

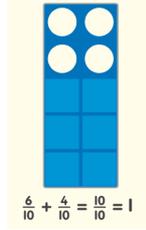
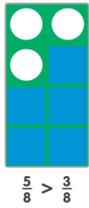
- Generalising about halves and quarters e.g. a half is one of two equal parts and a quarter is one of four equal parts. A quarter is a smaller proportion of the whole and it is also half of a half.



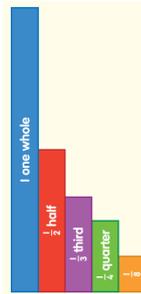
- Fractions equivalent to a half.



- Comparing fractions with different numerators and the same denominator.



- Comparing unit fractions with different denominators.



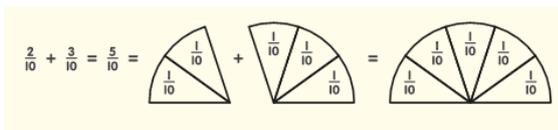
- Adding and subtracting halves and quarters.

$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{4}{4} = 1$$

$$\frac{1}{4} + \frac{1}{4} + \frac{1}{2} + \frac{1}{2} = 1 \frac{1}{2}$$

$$1 - \frac{1}{4} = \frac{3}{4}$$

- Adding and subtracting fractions beyond 1.



Can you..?

- Use the array to complete the equivalent fractions.



a $\frac{\square}{8} = \frac{4}{\square}$

b $\frac{\square}{4} = \frac{12}{\square}$

c $\frac{2}{\square} = \frac{8}{\square}$

- Solve the problem. $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{2} = \square$

- Solve the problem. $\frac{1}{2} + \frac{1}{4} - \frac{3}{4} = \square$

- Solve the problem. $\frac{1}{2} + \square = \frac{3}{4} + \square$