Maths - Year 3

Number and the Number System 8: Using fraction notation to describe parts of a discrete set.

Key Vocabulary	
Ordinal number words	Third, fourth, fifth, sixth etc.
Numerator	The upper number of a fraction.
Denominator	The lower number of a fraction

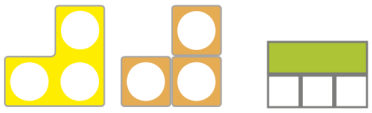
Mathematical Skills

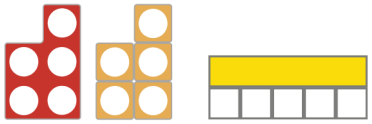
- Use the term 'numerator' and 'denominator' to describe fraction notation with unit fractions and proper fractions.
- Name fractions of a whole (unit fractions and non-unit or proper fractions)
- Write a list of fractions equivalent to one half.
- Can add and subtract fractions with the same denominators.
- Make links between finding fractions of a set and dividing by an integer.

Mathematical Methods

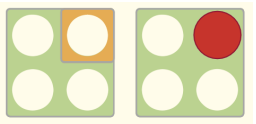
- Explore fractions of a set e.g. ⅓

- Use apparatus to represent part-whole relationships of unit fractions $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}, \frac{1}{6}, \frac{1}{7}, \frac{1}{8}, \frac{1}{9}$





- Represent unit and non-unit fractions with Numicon Shapes or number rods.



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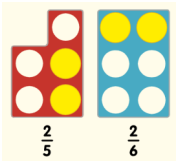
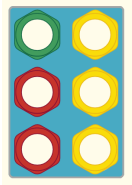


- Write adding and subtracting sentences with fractions with the same denominator e.g.



$$\frac{1}{6} + \frac{2}{6} + \frac{3}{6} = \frac{6}{6}$$

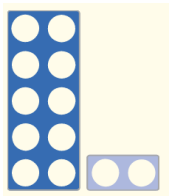
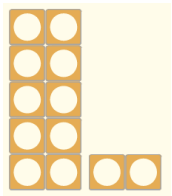
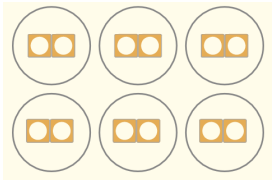
- Finding half of a set and exploring equivalent fractions.

Number of coins	Finding $\frac{1}{2}$ the number of coins	Fractions equivalent to $\frac{1}{2}$
2 coins	$\frac{1}{2}$ of 2 = 1	$\frac{1}{2}$
4 coins	$\frac{1}{2}$ of 4 = 2	$\frac{2}{4}$
6 coins	$\frac{1}{2}$ of 6 = 3	$\frac{3}{6}$
8 coins	$\frac{1}{2}$ of 8 = 4	$\frac{4}{8}$
10 coins	$\frac{1}{2}$ of 10 = 5	$\frac{5}{10}$

- Making connections between fractions and multiplying and dividing, e.g.

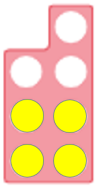
$\frac{2}{8}$ of a chicken is the same as 2 out of 8 pieces (8 ÷ 4 = 2 or 2 x 4 = 8)

- Recognise and name fractions of a total or quantity e.g. ⅙ of 12 = 2

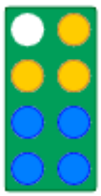
Can you..?

- What fraction of the Numicon shape is covered?



- What fraction of the number rod is red?

- Can you write an adding sentence to show the fractions of the Numicon Shape?



- What is ⅓ of 9?