

Maths - Year 4

Numbers and the Number System 6: Introducing decimal fractions

Key Vocabulary

Intervals	The distance between two points or the numbers between two values .
Tenth	One part of a whole that is split into ten equal pieces.
Decimetre	One tenth of a metre.
Decimal fraction	An amount represented as a decimal e.g. $\frac{1}{2} = 0.5$
Common fraction	An amount represented as a fraction.
Whole number	A positive number with no fraction or decimal part.
Decimal point	A point placed after the units figure in a decimal fraction.

Mathematical Skills

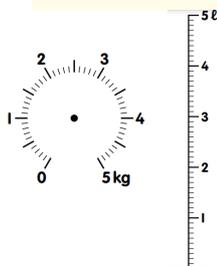
- Say a number that sits between two consecutive whole numbers on the number line.
- Express tenths of a whole as common fractions and decimal fractions.
- Explain that the value of a digit increases 10 times when moved one place to the left and decreases 10 times when moved one place to the right.
- Explain that the digit in the first decimal place represents the number of tenths.
- Show decimal fractions correctly using place value cards.
- Compare and order decimal fractions.
- Round decimal fractions to the nearest whole number.

Mathematical Methods

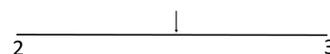
- Introducing decimals through measuring e.g. 1m and $\frac{4}{10}$ m = 1.4 metres.



- Reading scales.

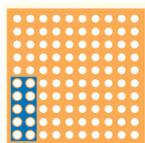


- Making connections with fractions on a number line e.g. half way between 2 and 3 is $2\frac{1}{2}$

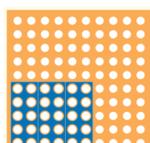


- Introducing decimal notation e.g. $\frac{1}{2} = 0.5$ so $2\frac{1}{2} = 2.5$.

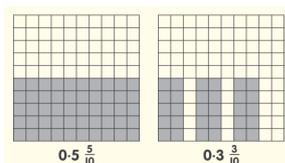
- Representing decimal fractions with Numicon shapes.



$$\frac{1}{10}$$



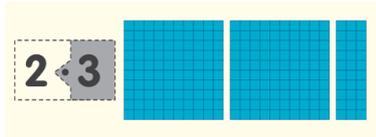
$$\frac{3}{10}$$



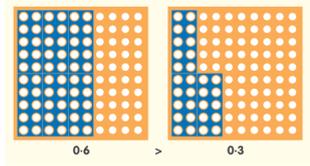
$$0.5 \frac{5}{10}$$

$$0.3 \frac{3}{10}$$

- Representing decimal fractions using place value cards and base-ten apparatus.

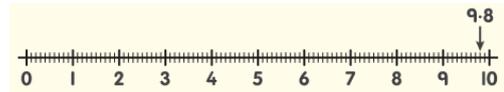


- Comparing decimal quantities.



- Ordering decimals in a list.

- Rounding decimals e.g. 9.8kg would round up to 10kg.



Can you..?

- Find the missing number.



- Can you find 3 different ways of writing 2.8kg? You can use fractions or decimals.

- Use < or > to fill in the empty boxes.

$$0.5 \quad \square \quad 0.7$$

$$2.8 \quad \square \quad 1.6$$

$$11.5 \quad \square \quad 13.2$$