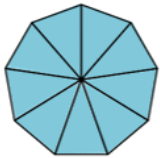# Fractions

Year 3

Fractions within 1 in the Linear Number System.
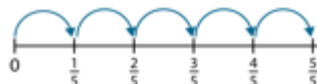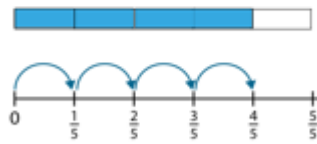
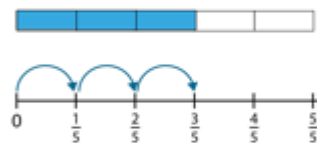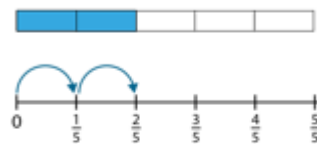$$\frac{9}{9}$$

We can represent fractions on both horizontal and vertical number lines.

The whole is divided into ___ equal parts. Each part is ___ of the whole.

The whole is made up of 9 one-ninths.
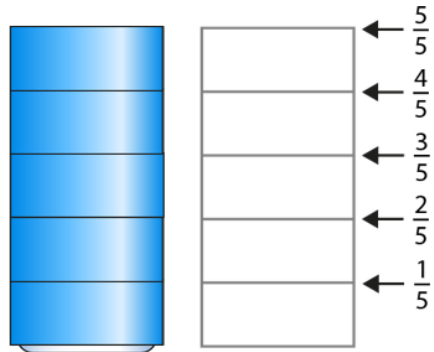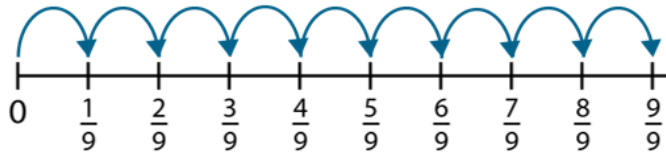
Fractions as part of a whole
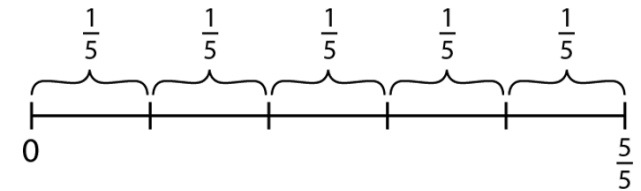
Fractions as numbers
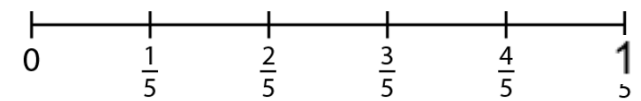
Fractions should be seen as part of a whole and as numbers which have their own unique place on a number line.

Generalisation:

When the numerator and denominator are the same, the fraction has a value of 1.

Fractions

Year 4

Mixed Numbers in the Linear Number System

Quantities that are made up of both wholes and parts are called Mixed Numbers.

There are two whole oranges. There is half an orange. There are two and a half oranges altogether.
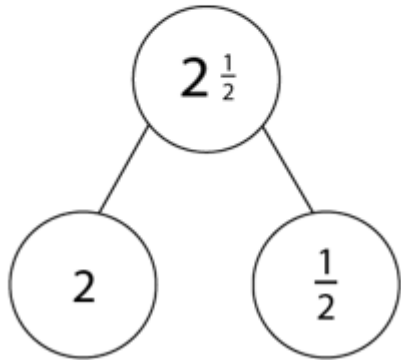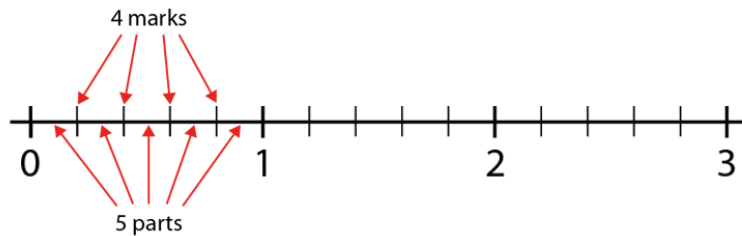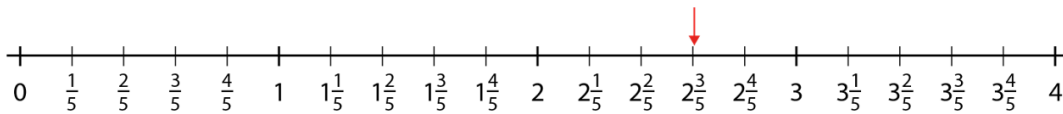
There are more than two whole oranges.

There are less than three whole oranges.

Part-Part-Whole model: $2\frac{1}{2}$ made up of 2 and $\frac{1}{2}$

We can place Mixed Numbers on a number line.

There are ___ parts between zero and one. This means we are counting in units of ___.

The line is divided into ___ equal parts. This means we are counting in ___s.

We can use our knowledge of ordering proper fractions to order Mixed Numbers.

$1\frac{1}{7}$ is between 1 and 2. The previous number is 1. The next number is 2.

We can use our knowledge of placing mixed numbers on a number line to estimate the position of a Mixed Number on a blank number line.

Number line from 0 to 4 marked: 0, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{3}{5}$, $\frac{4}{5}$, 1, $1\frac{1}{5}$, $1\frac{2}{5}$, $1\frac{3}{5}$, $1\frac{4}{5}$, 2, $2\frac{1}{5}$, $2\frac{2}{5}$, $2\frac{3}{5}$, $2\frac{4}{5}$, 3, $3\frac{1}{5}$, $3\frac{2}{5}$, $3\frac{3}{5}$, $3\frac{4}{5}$, 4

4 marks

5 parts

$\frac{1}{7}$ $1\frac{1}{7}$ $1\frac{5}{7}$ $2\frac{4}{7}$