



This activity is about simplifying ratios.

## Information sheet

A ratio is a way of comparing two or more quantities.

To make this squash, you use 4 times as much water as concentrate.

The ratio of concentrated flavour to water is 1:4. The order is important.



## Think about

What would a ratio of 4 : 1 mean?

Different ratios of **chippings : sand : cement** are used to make mortar for different jobs in the construction trade. The ratio could be **6 : 3 : 1** or **4 : 2 : 1**.

## Think about

What would these ratios mean?



## Simplifying ratios

Divide each part by the same number

**Examples:**  $4 : 8 = 1 : 2$  (dividing both numbers by 4)

$30 : 24 = 5 : 4$  (dividing both numbers by 6)

## Try these . . . .

**a** 20 : 25

**b** 15 : 18

**c** 8 : 24

**d** 25 : 10

**e** 60 : 100

**f** 15 : 40

**g** 12 : 9

**h** 16 : 6

**i** 30 : 25

**j** 160 : 120

**k** 0.5 : 2

**l** 0.25 : 3

(Tip: Multiply to make the decimals into whole numbers!)

All parts must be in the **same units** before you simplify.

**Example:**  $75\text{p} : £1 = 75\text{p} : 100\text{p}$  (changing £1 into pence)

$= 3 : 4$  (dividing both numbers by 25)

## Try these . . . .

**m** 20p : £1

**n** 50 cm : 1 m

**o** 60p : £2.40

**p** 2 cm : 5 mm

**q** £3.60 : 80p

**r** 75 cm : 1.2 m

### At the end of the activity

- What is a ratio?
- Give an example of a ratio used in real life.
- How do you simplify a ratio like 24 : 36? What is the simplest form of this ratio?
- What must you remember to do first when simplifying a ratio like 5 m : 20 cm?