



## Ratio (adapting a recipe) – Oscar

### Objectives

The relevant framework objectives are:

- divide a quantity into two or more parts in a given ratio; use the unitary method to solve simple word problems involving ratio and direct proportion (key objective)
- consolidate understanding of the relationship between ratio and proportion; reduce a ratio to its simplest form, including a ratio expressed in different units, recognising links with fraction notation.

### Activity description

The pupils solved problems involving ratio, fractions, decimals and percentages.

### Commentary

Oscar has identified the ratio as 8:6. He has then formed the multiplier  $\frac{8}{6}$  to calculate the ingredients for the larger recipe.

Oscar's work is typical of performance at level 6 in Ma2 as he is able to recognise the need to use ratio and to use it efficiently and appropriately.



## Items of work

Oscar's calculations for adapting a recipe, using ratio

A recipe for six people required 450g of fruit. Simon was adapting this recipe for eight people. How much fruit should Simon use?

Chung should tell Simon to increase the amount of fruit used in the ratio 8:6

He requires  $\frac{8}{6} \times 450\text{g} = 600\text{g}$  fruit.



## About this entry

Subject: mathematics

Year: 8

Key stage: 3

NC programme of study: Ma2p1d, Ma2p2f, Ma2p4a

Attainment target: Ma2

Evidence for: level 6

Framework for teaching mathematics – objectives:

- Divide a quantity into two or more parts in a given ratio; use the unitary method to solve simple word problems involving ratio and direct proportion.