THE UNIVERSITY OF WAIKATO
Tukua Kia Rere
NATIONAL CENTRE OF LITERACY & NUMERACY FOR ADULTS
Inspiring Potential

Agriculture

Understanding and using ratios

Contents

THE UNIVERSITY OF WAIKATO
Tukua Kia Rere
NATIONAL CENTRE OF LITERACY & NUMERACY FOR ADULTS
Inspiring Potential

This resource contains ratio problems that can be used with learners. Each of the problems presents a ratio expressed in two ways:

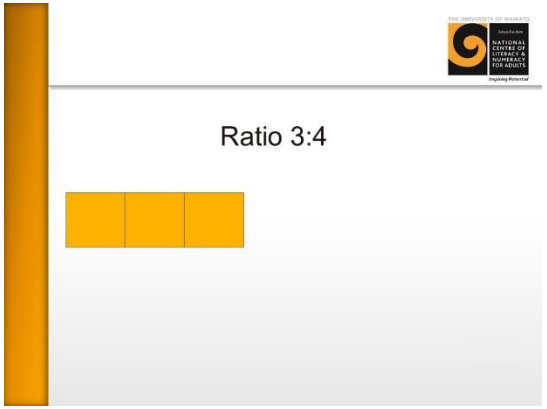
1. as a numerical notation. For example: **3:4**
2. modelled, using coloured squares

There are two pages for each ratio. The first page shows the ratio in numerical form with only one side of the modelled squares visible. The second page shows the completed model of the ratio.

For more information see Ratios in the workplace - part two

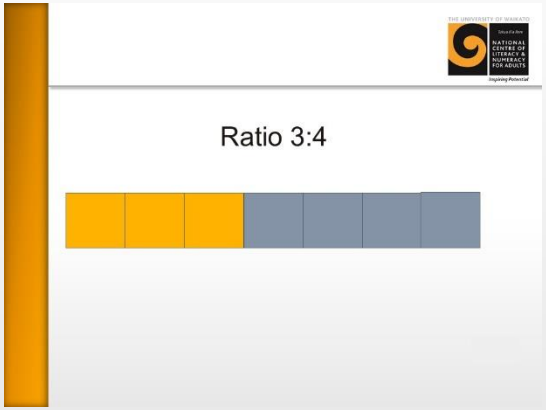
Instructions

Step 1: Show learners the ratio with only one side represented by the squares



Step 2: Learners work in pairs and complete the ratio using stick-it notes

Step 3: Show learners the complete ratio and discuss their answers



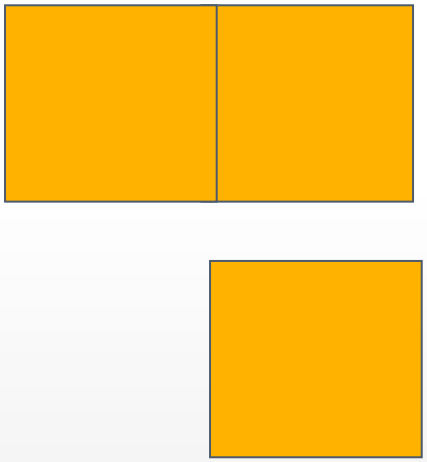
Ratio 1:2

Ratio 1:2

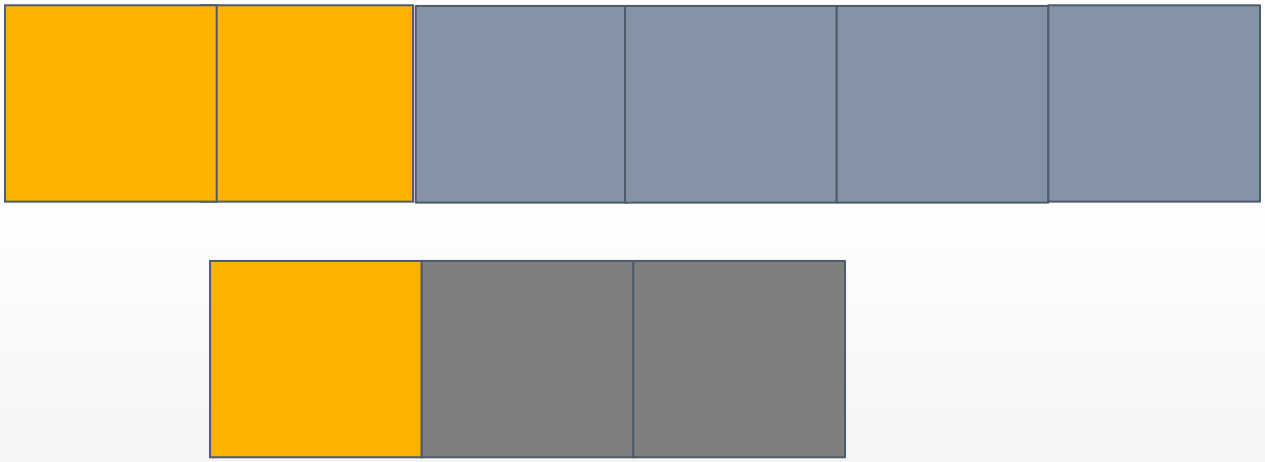
Ratio 3:4

Ratio 3:4

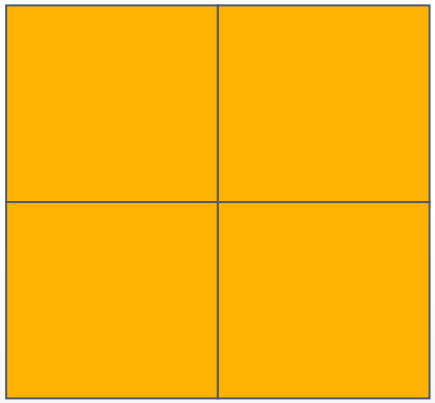
Ratio 2:4



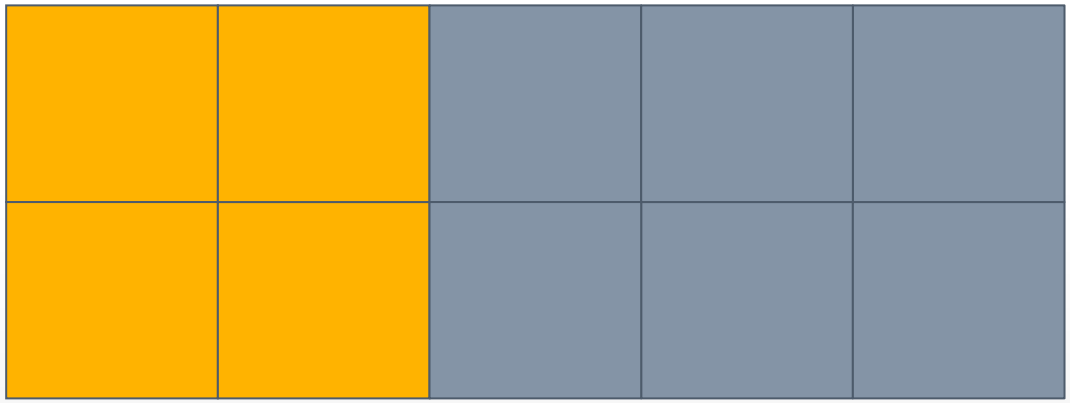
Ratio 2:4



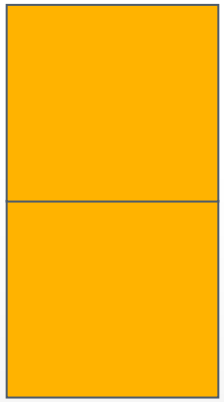
Ratio 2:3



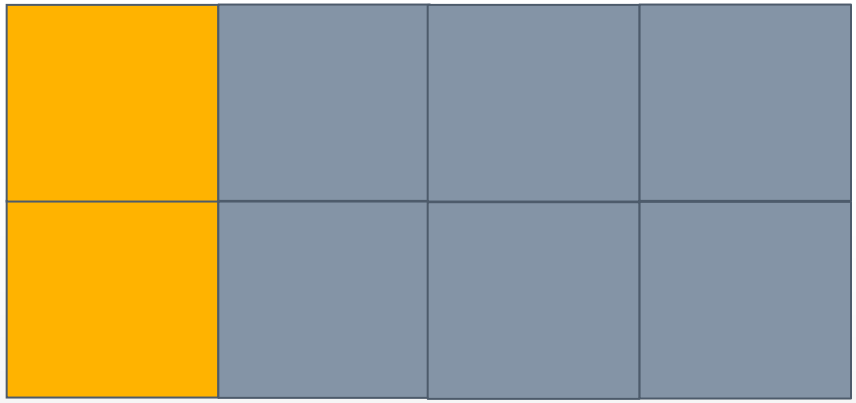
Ratio 2:3



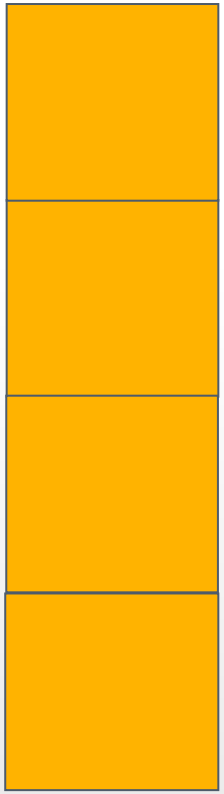
Ratio 1:3



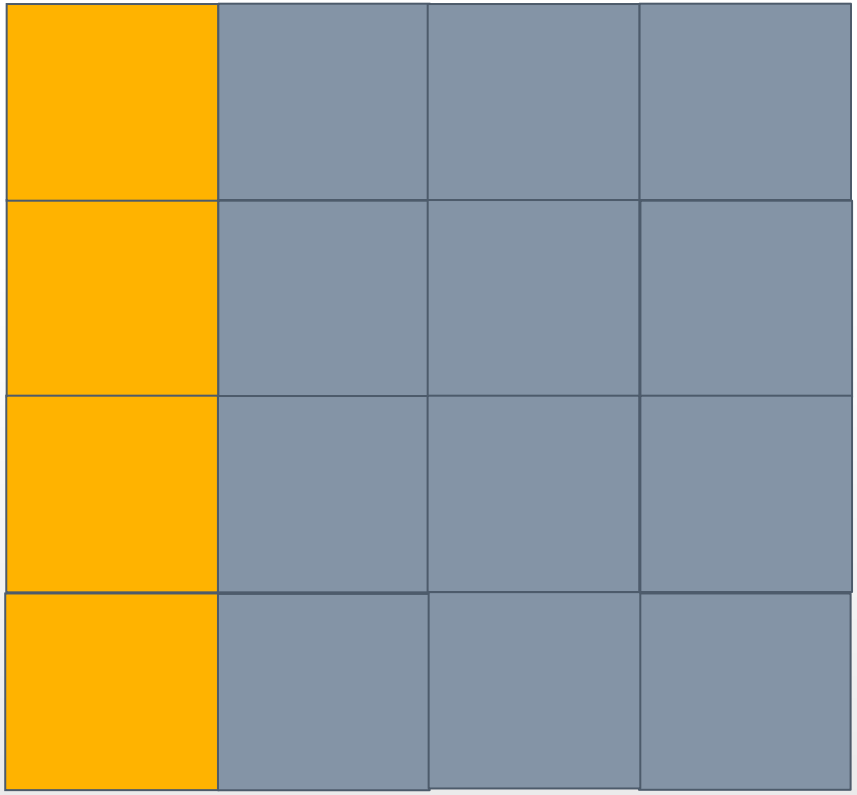
Ratio 1:3



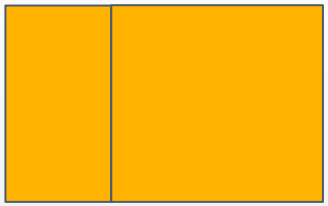
Ratio 1:3



Ratio 1:3



Ratio 3:4



Ratio 3:4

More complex ratios

THE UNIVERSITY OF WAIKATO
Tukua Kia Rere
NATIONAL CENTRE OF LITERACY & NUMERACY FOR ADULTS
Inspiring Potential

The following 4 pages can be used to discuss more complex ratios, such as 25:1 petrol-to-oil fuel mixes. The model represents one millilitre as a cube. The following 4 pages show:

1 & 2. 25ml of petrol to 1ml of oil
3. 1000ml of petrol to 40 ml of oil
4. 1 litre of petrol to 40ml of oil

Ideas

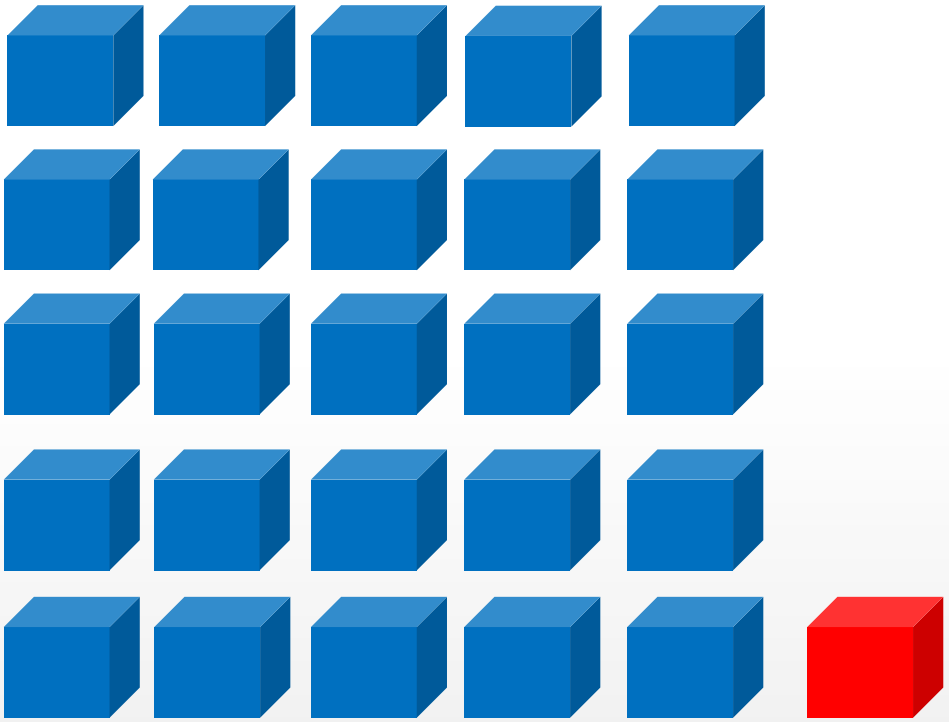
1. Show the learners the model of the ratio and ask them to discuss and determine the ratio.

2. Show the learners the models and ask them to determine how many millilitres of petrol and oil are represented.

3. Simply use the pages as prompts for discussions.

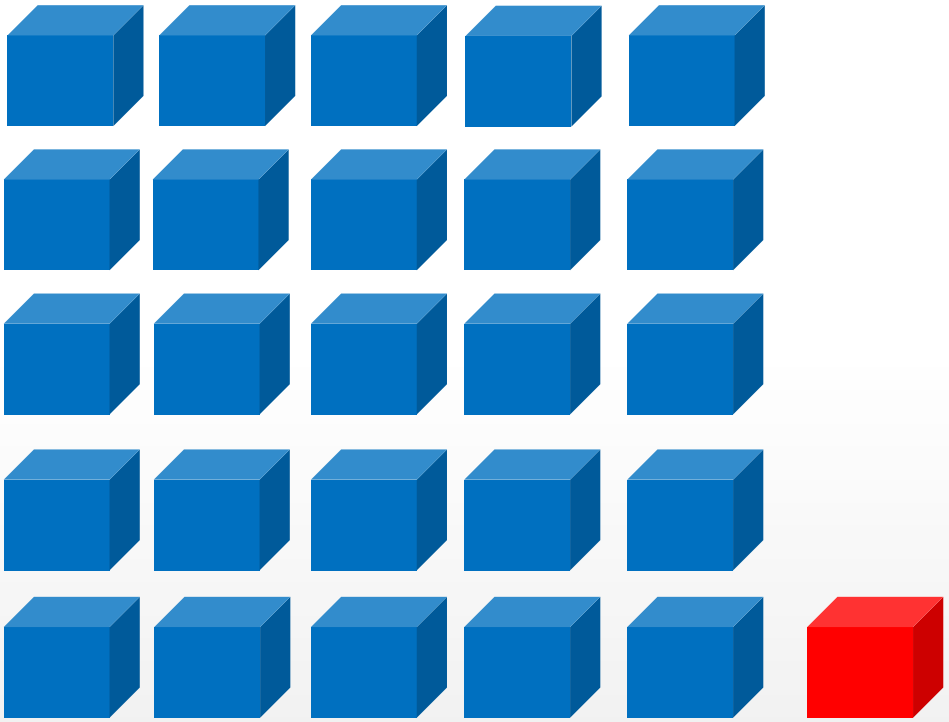
What is the ratio?

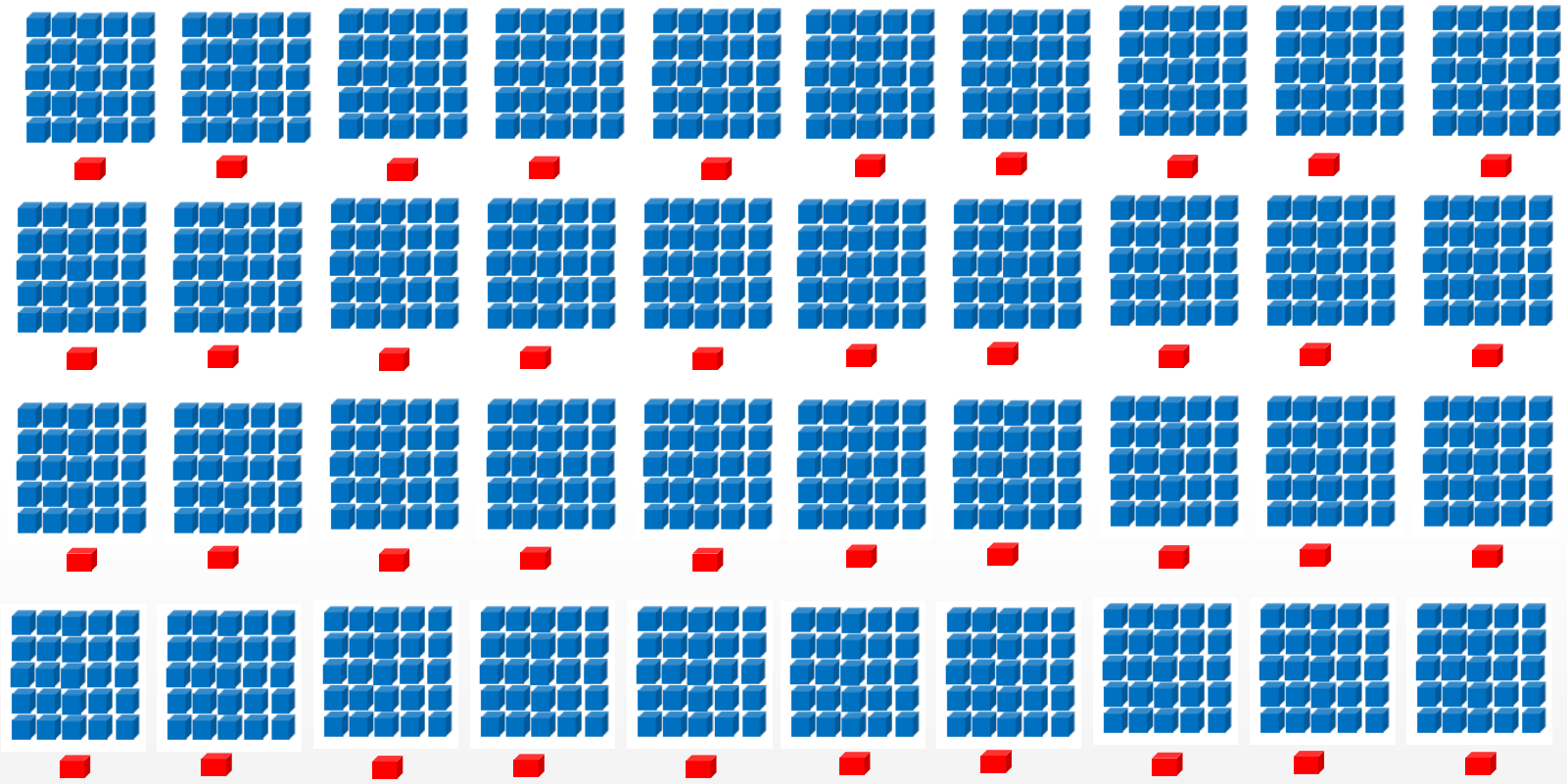
THE UNIVERSITY OF WAIKATO
Tukua Kia Rere
NATIONAL CENTRE OF LITERACY & NUMERACY FOR ADULTS
Inspiring Potential

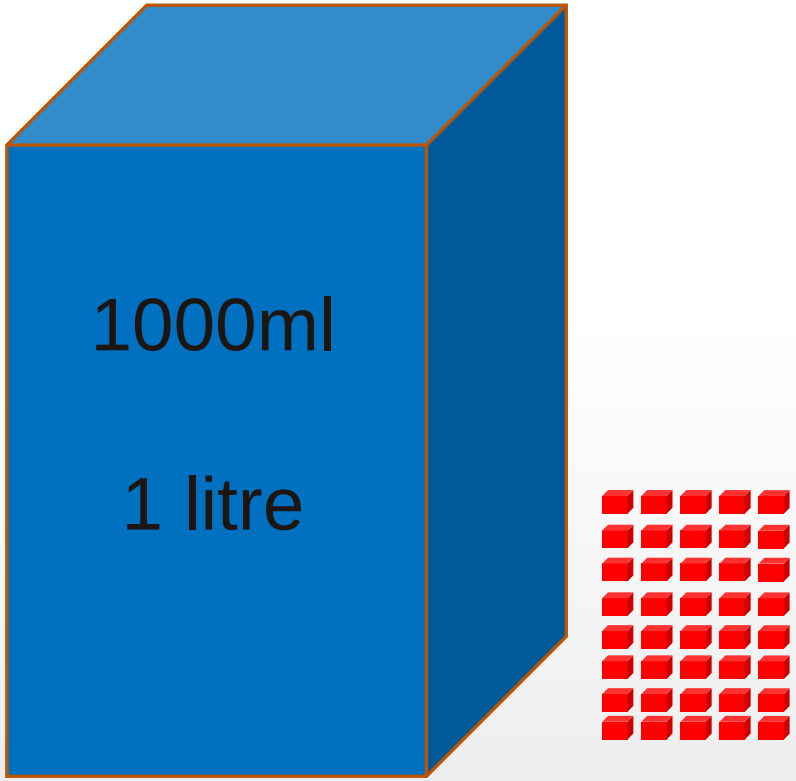


Ratio 25:1

THE UNIVERSITY OF WAIKATO
Tukua Kia Rere
NATIONAL CENTRE OF LITERACY & NUMERACY FOR ADULTS
Inspiring Potential






1000ml
1 litre