

How to use 'Ratio strips'

This ITP offers an alternative way of presenting the sequence of images outlined in detail on pages 20 - 22 of the *Year 7 Fractions and ratio* mini-pack. Refer to these pages as you explore the ITP.

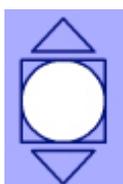
Number of black blocks : white blocks
3 : 2

Number of black blocks = $\frac{3}{2}$ x white blocks Number of white blocks = $\frac{2}{3}$ x black blocks

Key Stage 3 National Strategy



Move the cursor just above and below the first button. Selecting the arrows which appear above and below the button changes the number of blocks in the black strip (to a maximum of 5 blocks in the strip).



Selecting the arrows which appear above and below the button changes the number of blocks in the white strip (to a maximum of 5 blocks in the strip).



The 'label' button sets up labelling of each block, selecting fraction, decimal or percentage notation, as required. The labelling runs in a given sequence indicated by arrows to be selected beside the blocks. On the left the white strip is taken as the unit strip and labelled first.

Completing the equation

$$\text{Number of black blocks} = ? \times \text{Number of white blocks}$$

When the last block is labelled an equation relating the number of blocks in each strip appears, with a question mark in place of the multiplier. Select the question mark to replace it with the multiplier. The multiplier changes to match the labelling of the strips, i.e. fraction, decimal or percentage form.



Copies the diagram to the right hand side of the screen and allows the black strip to be taken as the unit strip and labelled first. A second equation appears as the labelling is completed.



Clears the screen and restarts the program.



Closes the program.



Opens the help panel which gives information about the control elements on the screen as the mouse is moved over them.