

Creating and naming ratios cards

Teaching strategies for thinking about fractions

The sets of cards in this resource represent increasingly complex scenarios. To differentiate learning, you can alter the difficulty of the ratios presented to students.

Cards

- **Set A** provides part-to-part ratio scenarios that **will match** the coloured blocks or counters you provide. This allows students to develop or consolidate understanding about the relationship between the two parts in the ratio.
- **Set B** provides part-to-part ratio scenarios that **will not exactly match** the coloured blocks or counters you provide.
- **Sets C and D** provide part-to-whole ratio scenarios. These require more complex thinking because students are required to draw on the relationship between one part and the whole, to infer the relationship between the parts themselves and create the ratio.

Physical materials

Each set of cards requires a different set of coloured blocks or counters:

- **Set A** (at least)
 - 7 yellow
 - 7 green
 - 6 grey
 - 8 red
 - 5 blue
 - 1 orange
- **Set B** (at least)
 - 9 yellow
 - 6 blue
- **Sets C and D** (at least)
 - 25 of same colour
 - or
 - 25 of random, mixed colours (for greater challenge).

Ratio scenario cards: Set A

Part-to-part scenario (scenario matches physical materials)



There is 1 red block for every 4 yellow blocks.	There are 4 yellow blocks for every 1 red block.
There are 3 blue blocks for every 7 green blocks.	There are 6 grey blocks for every 1 orange block.
There are 8 red blocks for every 5 yellow blocks.	There is 1 blue block for every 3 red blocks.
There are 2 green blocks for every 7 yellow blocks.	There are 5 blue blocks for every 1 green block.



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Ratio scenario cards: Set B

Part-to-part scenario (scenario does not match physical materials)



There is 1 blue balloon for every 2 yellow balloons.	There are 7 peppermint chocolates for every 5 plain chocolates.
There are 9 chickens for every 4 roosters	There is 1 red car for every 6 white cars.
There are 2 girls for every 3 boys.	There are 3 teachers for every 8 students.
There are 6 dogs for every 5 cats.	There are 5 cars for every 3 buses.



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Ratio scenario cards: Set C

Part-to-whole scenarios



3 out of 8 blocks are blue; the rest are green.	Two-fifths of the students are boys.
In a box of 12 ice blocks, 3 are red; the rest are green.	For every 7 blocks, 5 are red.
For every 25 animals, 9 are dogs.	One-sixth of the pies are apple pies.
Three-twelfths of the balloons are blue.	7 out of 19 fruits are apples; the rest are pears.



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Ratio scenario cards: Set D

Part-to-whole scenarios



4 out of every 10 marbles are yellow; the rest are blue.	For every 6 students, 2 wear glasses.
Three-fifths of the counters are red.	In a class of 15 students, 6 are girls; the rest are boys.
For every 8 flowers, 3 are daisies.	Five-ninths of the tiles are patterned.
2 out of every 5 drinks are juice; the rest are water.	For every 12 books, 7 are fiction.



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