Varied Fluency
Step 3: Introducing the Ratio Symbol

National Curriculum Objectives:

Mathematics Year 6: (6R1) Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts

Differentiation:

Developing Questions to support linking the ratio symbol : with 'for every…there are…' language. Comparing 2 sets of objects in a linear arrangement, in a patterned sequence.
Expected Questions to support linking the ratio symbol : with 'for every…there are…' language, and linking ratio and fractions knowledge. Comparing up to 3 sets of objects in a linear arrangement, in a patterned sequence or objects grouped together.
Greater Depth Questions to support linking the ratio symbol : with 'for every…there are…' language, and linking ratio and fractions knowledge. Comparing 3 sets of objects, arranged randomly out of sequence.

More Year 6 Ratio resources.

Did you like this resource? Don't forget to review it on our website.

Introducing the Ratio Symbol

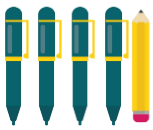
1a. True or false? The ratio of cars to buses is 3:7.

D VF

1b. True or false? The ratio of carrots to sweetcorn is 1:5.

D VF

2a. Match the cards to the correct image.

A. 1:9 pens to pencils	
B. 4:1 pens to pencils	
C. 3:2 pencils to pens	

D VF

2b. Match the cards to the correct image.

A. 4:1 butterflies to snails	
B. 1:4 butterflies to snails	
C. 1:3 snails to butterflies	

D VF

3a. Write a statement to describe the ratio of 4:1 shown below.

D VF

3b. Write a statement to describe the ratio of 3:2 shown below.

D VF

4a. Circle the odd one out by matching the ratios to the description.

1:5	striped sock to spotty sock
5:1	spotty sock to striped sock
5:2	

D VF

4b. Circle the odd one out by matching the ratios to the description.

2:3	watches to necklaces
3:1	necklaces to watches
3:2	

D VF

Introducing the Ratio Symbol

5a. True or false? The ratio of bananas to apples is 4:3.

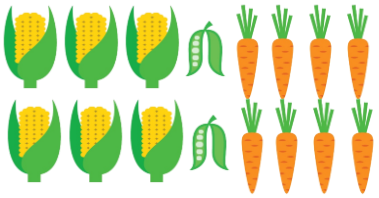
E VF

6a. Match the statements that mean the same thing.

A. 1:2 red counters to blue counters	1. There are twice as many blue counters as red counters.
B. 3:2 red counters to blue counters	2. For every 2 blue counters, there are 3 red counters.
C. 2:3 red counters to blue counters	3. For every 2 red counters, there are 3 blue counters.

E VF

7a. Write a statement to describe the ratio of 6:8 shown below.



E VF

8a. Circle the odd one out by matching the ratios to the description.

1:3	rings to necklaces to watches
1:3:2	rings to necklaces
3:2:1	

E VF

Introducing the Ratio Symbol

5b. True or false? The ratio of snails to butterflies is 2:4.

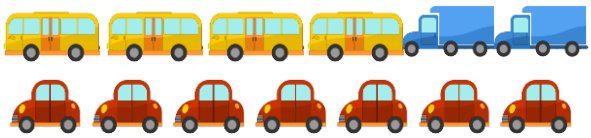
E VF

6b. Match the statements that mean the same thing.

A. 3:7 pens to pencils	1. There are four times as many pens as pencils.
B. 7:3 pens to pencils	2. For every 7 pens, there are 3 pencils.
C. 1:4 pencils to pens	3. For every 3 pens, there are 7 pencils.

E VF

7b. Write a statement to describe the ratio of 2:4 shown below.



E VF

8b. Circle the odd one out by matching the ratios to the description.

3:4:1	spotty to striped
3:4	striped to spotty to plain
4:3:1	

E VF

Introducing the Ratio Symbol

9a. True or false? The ratio of rings to watches to necklaces is 2:1:3.

GD VF

10a. Match the statements that mean the same thing.

A. 1:3:5 apples to oranges to pears	1. For every apple, there are 2 oranges and 4 pears.
B. 5:3:1 apples to pears to oranges	2. For every apple, there are 5 pears and 3 oranges.
C. 1:2:4 apples to oranges to pears	3. For every orange, there are 5 apples and 3 pears.

GD VF

11a. Write a statement to describe the ratio of 1:3:4 shown below.

GD VF

12a. Circle the odd one out by matching the ratios to the description.

2:2:5	corn to peas to carrots
2:5	corn to carrots
5:2:2	

GD VF

Introducing the Ratio Symbol

9b. True or false? The ratio of cars to buses to lorries is 3:2:1.

GD VF

10b. Match the statements that mean the same thing.

A. 3:5:1 teas to coffees to hot chocolates	1. For every tea, there are 5 hot chocolates and 4 coffees.
B. 1:4:5 teas to coffees to hot chocolates	2. For every tea, there are 5 hot chocolates and 3 coffees.
C. 5:1:3 hot chocolates to teas to coffees	3. For every hot chocolate, there are 3 teas and 5 coffees.

GD VF

11b. Write a statement to describe the ratio of 4:1:3 shown below.

GD VF

12b. Circle the odd one out by matching the ratios to the description.

3:2:1	cars to buses
2:3:1	buses to lorries to cars
1:3	

GD VF

Varied Fluency
Introducing the Ratio Symbol

Developing
1a. False; it is 3:4.
2a. A: picture 3; B: picture 1; C: picture 2.
3a. There are 4 bees for every 1 ladybird.
4a. 5:2 is the odd one out.

Expected
5a. False; it is 3:4.
6a. A: 1; B: 2; C: 3.
7a. There are 6 corn for every 8 carrots.
8a 3:2:1 is the odd one out.

Greater Depth
9a. False; it is 1:2:3.
10a. A: 2; B: 3; C: 1.
11a. For every plain sock, there are 3 spotty and 4 striped.
12a. 5:2:2 is the odd one out.

Varied Fluency
Introducing the Ratio Symbol

Developing
1b. True
2b. A: picture 2; B: picture 3; C: picture 1.
3b. There are 3 apples for every 2 bananas.
4b. 3:1 is the odd one out.

Expected
5b. False; it is 4:2.
6b. A: 3; B: 2; C: 1.
7b. There are 2 lorries for every 4 buses.
8b. 3:4:1 is the odd one out.

Greater Depth
9b. True
10b. A: 3; B: 1; C: 2.
11b. For every 4 gorillas, there is one giraffe and 3 elephants.
12b. 2:3:1 is the odd one out.