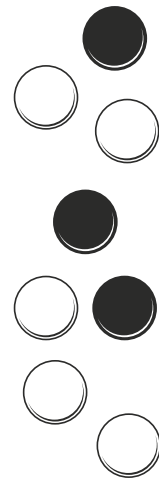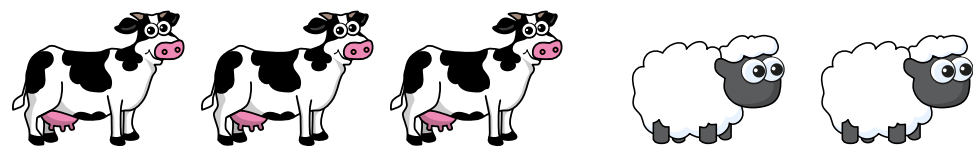# Ratio and fractions

1 Here are some counters.

Complete the sentences to describe the counters.

a) There are ☐ counters altogether.

b) There are ☐ white counters.

c) There are ☐ black counters.

d) 3 out of the 8 counters are _____

e) ☐ out of the 8 counters are white.

2 Here are some animals.

Complete the sentences.

For every ☐ cows there are ☐ sheep.

The ratio of cows to sheep is ☐ to ☐

☐ of the animals are cows.

☐ of the animals are sheep.

3 Part of the bar has been shaded.

a) What fraction of the bar is shaded? ☐

b) What fraction of the bar is not shaded? ☐

c) Write the ratio of shaded to non-shaded parts. ☐ to ☐

d) Write the ratio of non-shaded to shaded parts. ☐ to ☐

4 Here are some shapes.

a) What fraction of the shapes are circles? ☐

b) What fraction of the shapes are stars? ☐

c) What is the ratio of stars to circles? ☐ to ☐

d) What is the ratio of circles to stars? ☐ to ☐

Can you find a different answer to each of these questions?

Compare with a partner.

5 The bar model shows the ratio 1 to 3 to 4

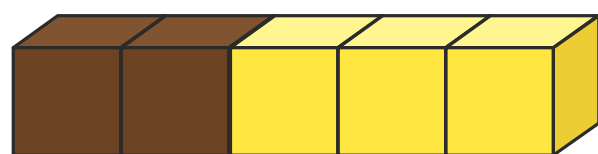Talk to a partner about how it shows this.

a) What fraction of the bar is striped?

b) What fraction of the bar is fully shaded?

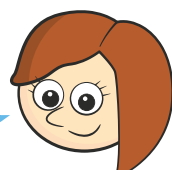**c)** What fraction of the bar is blank?

6

Jack: The fraction of brown cubes is $\frac{2}{3}$ because the ratio of brown to yellow is 2 to 3

Rosie: The fraction of brown cubes is $\frac{2}{5}$

Who is correct? _____

Explain your answer.

_____

_____

7 Scott draws a bar and divides it into 8 equal parts.

He shades 25% of the bar.

What is the ratio of shaded to non-shaded parts? ☐ to ☐

8 A pencil case contains felt tips and pencils.

$\frac{3}{8}$ of the contents are pencils.

What is the ratio of felt tips to pencils? ☐ to ☐

9 Ron has some limes and strawberries.

The ratio of strawberries to limes is 5 to 1

a) How do you know he has more strawberries than limes?

_____

b) What fraction of the fruits are strawberries?

c) What fraction of the fruits are limes?