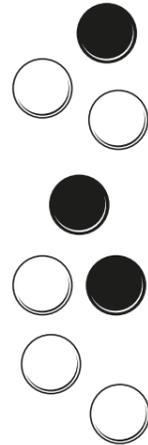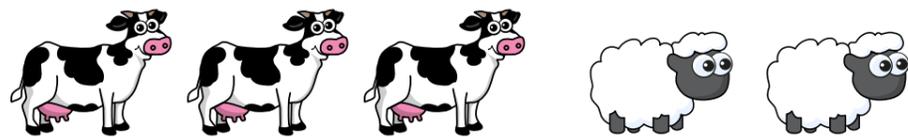# Ratio and fractions

**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.
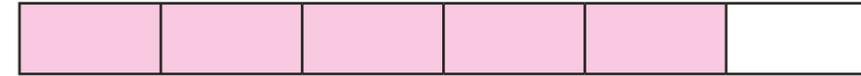
Complete the sentences.

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 ☐

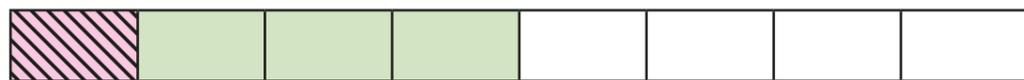**4** Here are some shapes.

**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



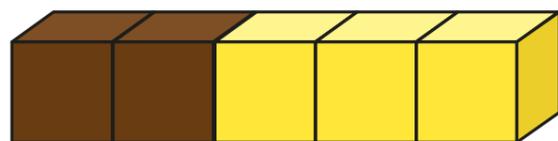Talk to a partner about how it shows this.

a) What fraction of the bar is striped?

b) What fraction of the bar is fully shaded?
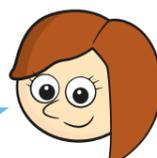
c) What fraction of the bar is blank?

**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?