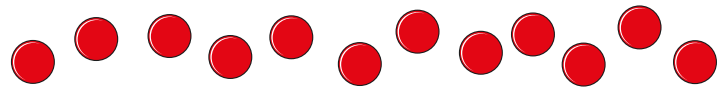# Calculate a fraction of a quantity

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1 Here are 12 counters.

a) Draw to share the counters equally into 3 groups.

b) Complete the sentences.

When 12 counters are shared equally into 3 groups, there are

☐ counters in each group.

12 shared equally between 3 is equal to ☐

$\frac{1}{3}$ of 12 is equal to ☐

2 Kim shares 15 sweets equally between 5 bags.

a) How many sweets are there in each bag?

Complete the sentences.

There are ☐ sweets in each bag.

$\frac{1}{5}$ of 15 is equal to ☐

b) Kim gives Ron 2 of the bags.
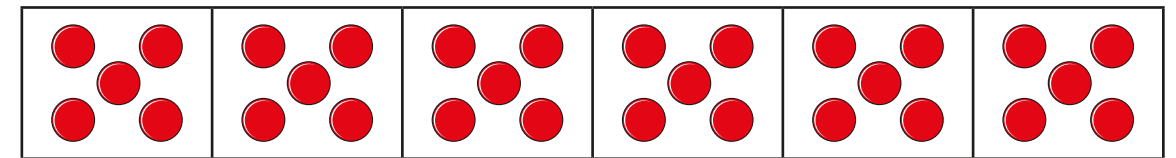
How many sweets does Ron have?

Complete the sentences.

Ron gets ☐ sweets.

$\frac{2}{5}$ of 15 is equal to ☐

3 The bar model shows how 30 counters have been shared into 6 equal groups.

Use the bar model to complete the calculations.

a) $\frac{1}{6}$ of 30 = ☐

d) $\frac{4}{6}$ of 30 = ☐

b) $\frac{2}{6}$ of 30 = ☐
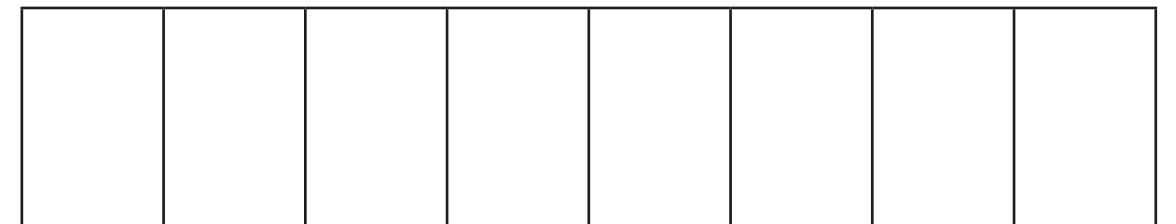
e) $\frac{5}{6}$ of 30 = ☐

c) $\frac{3}{6}$ of 30 = ☐

f) $\frac{6}{6}$ of 30 = ☐

What do you notice?

4 Use the bar model to complete the calculations.

a) $\frac{1}{8}$ of 32 = ☐

e) $\frac{5}{8}$ of 32 = ☐

b) $\frac{2}{8}$ of 32 = ☐

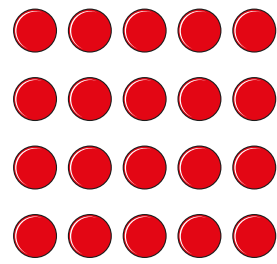f) $\frac{6}{8}$ of 32 = ☐

c) $\frac{3}{8}$ of 32 = ☐

g) $\frac{7}{8}$ of 32 = ☐

d) $\frac{4}{8}$ of 32 = ☐

h) $\frac{8}{8}$ of 32 = ☐

5 Here is an array of 20 counters.

a) Draw on the array to show that $\frac{1}{4}$ of 20 = 5

b) Use the array to find $\frac{3}{4}$ of 20

c) Use the array to find $\frac{1}{5}$ of 20
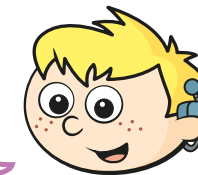
d) Use the array to find $\frac{4}{5}$ of 20

6 Tiny is using place value counters to find $\frac{2}{3}$ of 96

I can only see that $\frac{1}{3}$ of 96 is equal to 32 I do not know how to find $\frac{2}{3}$ of 96

a) Explain how Tiny can work out $\frac{2}{3}$ of 96

b) What is $\frac{2}{3}$ of 96?

7 Use place value counters and bar models to work out the fractions of amounts.

a) $\frac{2}{5}$ of 55 =

d) $\frac{3}{8}$ of 24 =

b) $\frac{3}{4}$ of 84 =

e) $\frac{4}{7}$ of 35 =

c) $\frac{2}{3}$ of 396 =

f) $\frac{7}{10}$ of 40 =

Which calculations did you find easier?

8 Max wants to find $\frac{4}{24}$ of 72

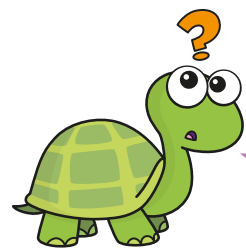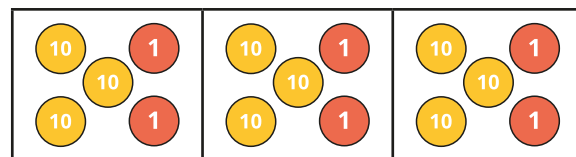*I am going to share 72 into 24 equal groups.*

a) Explain what Max could do first to make the calculation easier.

_____

_____

b) What is $\frac{4}{24}$ of 72?

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