

Fractions of amounts

When you have a number of the same item, these can be divided into fractions of amounts.

Example: Here are 20 oranges.

Which would give you the greatest number of oranges?

$\frac{1}{5}$ of 20 or $\frac{1}{2}$ of 20 or $\frac{1}{4}$ of 20?



Five groups
 $\frac{1}{5}$ of 20 = 4

Two groups
 $\frac{1}{2}$ of 20 = 10

Four groups
 $\frac{1}{4}$ of 20 = 5

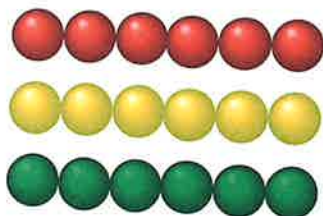
$\frac{1}{2}$ is greater than $\frac{1}{4}$ and $\frac{1}{4}$ is greater than $\frac{1}{5}$. $\frac{1}{2} > \frac{1}{4} > \frac{1}{5}$

Warm up



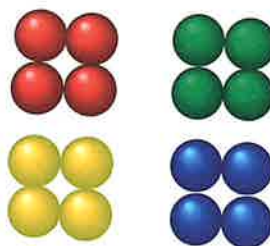
1 Choose the circled fraction that gives the largest amount. Use the pictures to help.

a) 18 balls



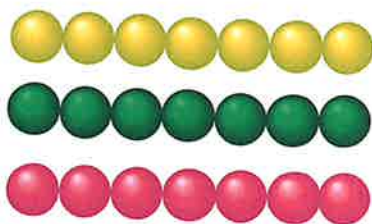
$\frac{1}{6}$ $\frac{1}{3}$

b) 16 balls



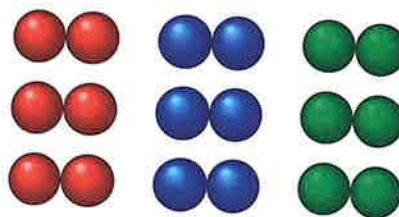
$\frac{1}{4}$ $\frac{1}{2}$

c) 21 balls



$\frac{1}{3}$ $\frac{1}{7}$

d) 18 balls



$\frac{1}{6}$ $\frac{1}{9}$

Test yourself



2 Complete by writing < or > between each pair of amounts.

- a) $\frac{2}{3}$ of 90 $\frac{7}{10}$ of 90 b) $\frac{3}{4}$ of 100 $\frac{4}{5}$ of 100
 c) $\frac{3}{10}$ of 140 $\frac{2}{7}$ of 140 d) $\frac{5}{8}$ of 160 $\frac{3}{4}$ of 160

3 Answer these questions.

a) What fraction of £1 is:	b) What fraction of £2 is:	c) What fraction of £10 is:
50p	20p	£2.50
20p	£1	£5
10p	50p	£1
25p	£1.50	£7.50
75p	40p	£2

Challenge yourself



4 Read and answer these questions.

- a) Would it be lighter to carry $\frac{1}{5}$ of 10 kg or $\frac{1}{10}$ of 10 kg?
- b) Joy wants a large slice of cake. Should she cut the cake into quarters or thirds to get a larger slice?
- c) There are 24 hours in a day. Peter spends a quarter of the day at school and a third asleep. Does he spend more time at school or more time sleeping?
- d) There are 45 fish. $\frac{3}{5}$ are spotted and $\frac{2}{9}$ are striped. Are there more striped or more spotted fish?



How did you do?

