

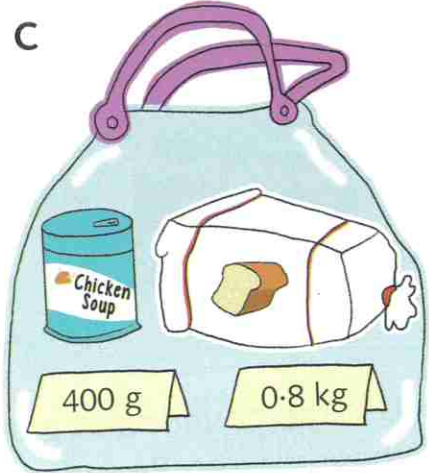
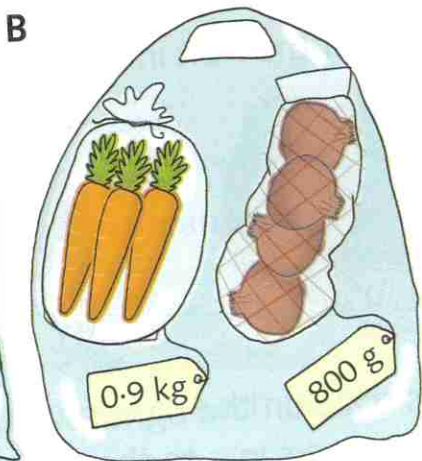
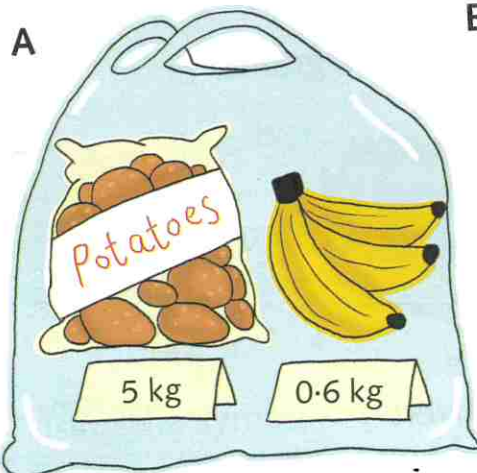
# Mass problems



Use all four operations to solve problems involving mass

Challenge 1

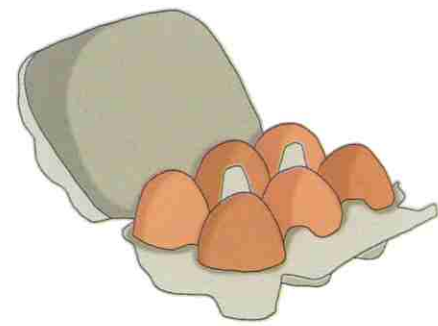
1 Find the total mass of food in each bag. Write your answer in kilograms to 1 decimal place.



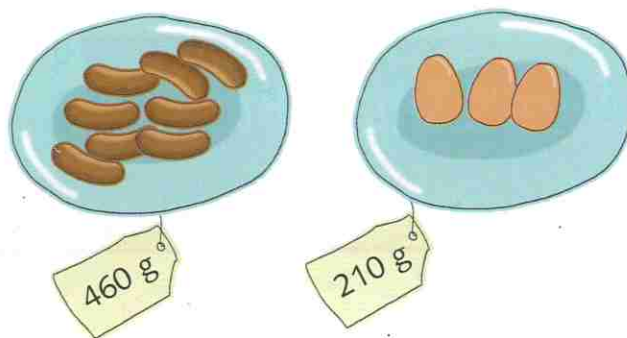
- 2 How much heavier is shopping bag A:
- a than bag B?
  - b than bag C?
- 3 Find the total mass in kilograms of:
- a 3 loaves of bread
  - b 5 tins of soup
- 4 What is the approximate mass in grams of one banana?

Challenge 2

- 1 One medium-sized egg has a mass of 60 g. What is the mass in grams of 6 medium-sized eggs?
- 2 6 large eggs have a mass of about 400 g. About how many large eggs have a mass of 1 kg?
- 3 6 apples have a mass of 1.15 kg. Bill eats one of them. The remaining 5 apples have a mass of 0.97 kg. What was the mass of the apple that Bill ate?



Ben's mum made 'Toad in the hole' for supper. She used 9 eggs and 12 sausages.



a Use the information in the pictures to work out the total mass in kilograms of the eggs and sausages she used.

b Once cooked, the 'Toad in the hole' weighed 1.24 kg. After supper, Ben's mum set aside  $\frac{1}{4}$  of the dish for Ben's brother who would be home later. How many grams was this?

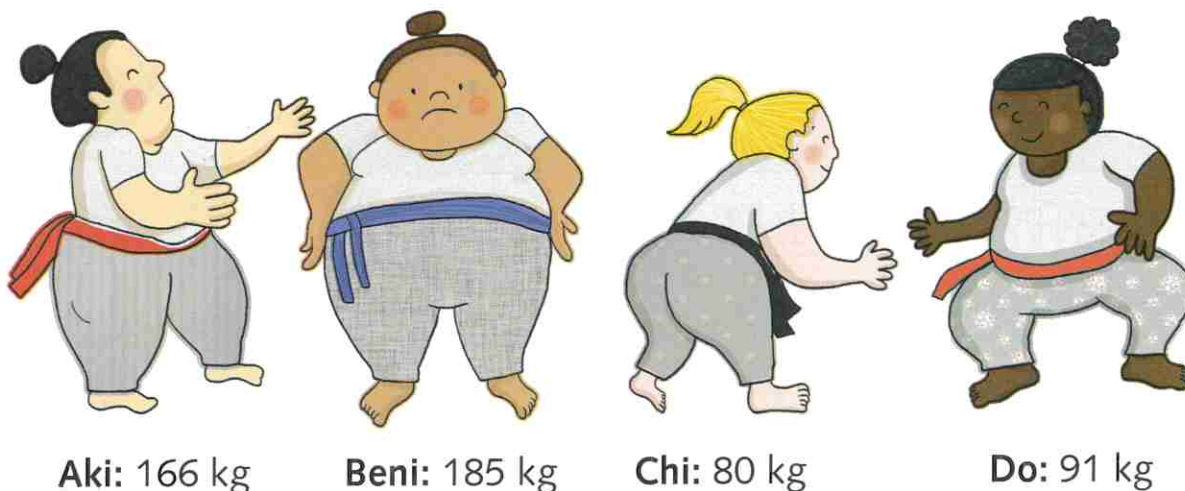
5 This display of tins of soup has a mass of 4.54 kg. The shopkeeper adds a fifth row of 5 cans of soup. What is the total mass of the tins of soup now in the display?



### Hint

Draw a diagram to help you work out how the wrestlers get across the river.

Two master and two apprentice sumo wrestlers need to cross a fast-flowing river. The only transport available is a raft. The maximum mass the raft will carry is 250 kg.



Aki: 166 kg

Beni: 185 kg

Chi: 80 kg

Do: 91 kg

Find the least number of raft trips needed to get all four wrestlers across the river.

