

Backpack masses

Convert between grams and kilograms to solve problems



Oscar:
5.248 kg



Mina:
5.813 kg



Terry:
6.478 kg



Julie:
4.685 kg



Steve:
8.157 kg



Abby:
7.589 kg

Challenge 1

- Write the mass of each backpack in grams.
- Write the number of grams represented by the number 8 in the mass of each child's backpack.
- Find the difference in kilograms between the backpacks of Oscar and Steve.

Challenge 2

- Round the mass of each backpack to the nearest tenth of one kilogram and then to the nearest kilogram. Record your results in a table.

Backpack	Rounded to nearest $\frac{1}{10}$ kg (kg)	Rounded to nearest kg (kg)
Oscar	5.2	5
Mina		
Terry		
Julie		
Steve		
Abby		

2 All 6 backpacks were loaded into the back of the minivan. Use the answers in your table for Question 1 to calculate the total mass of the 6 backpacks to the nearest kilogram.

3 Find the difference in grams between the backpacks of these children.

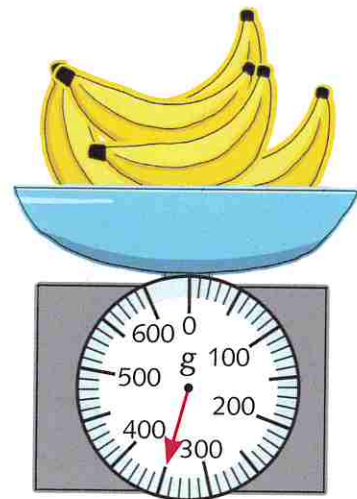
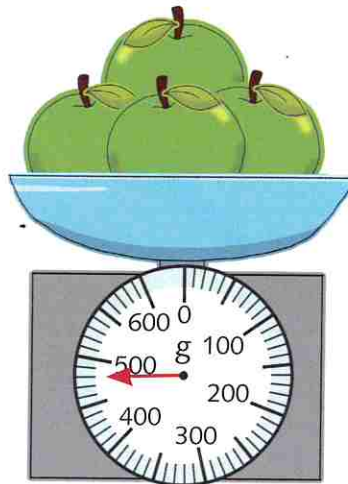
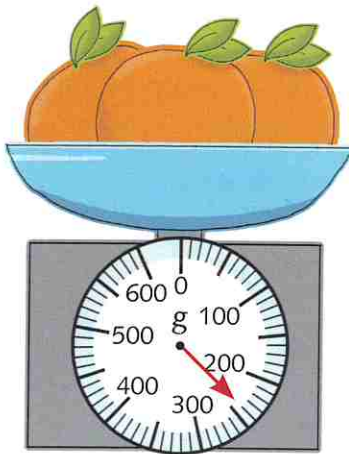
a Oscar and Terry

b Mina and Steve

c Julie and Abby

4 Which three backpacks have the same combined mass as the combined mass of Steve's and Abby's backpacks?

5 Use the pictures below to answer the questions.



a For each of the fruits, find the approximate mass of:

i 1 fruit in grams

ii 10 fruits in kilograms

iii 100 fruits in kilograms

b Mina put 2 apples and 1 banana into her lunch box. What was the total mass of her fruit in kilograms?

Three spaniel puppies have a combined mass of 11.9 kg.

- Harry is 0.4 kg heavier than Holly.
- Holly is 200 g heavier than Heather.

What is the mass of each puppy in kilograms?

