

Represent data in two-way tables

1 20 students were asked whether they had a pet.

The results are shown in the table.

Name	Year	Yes/No	Name	Year	Yes/No
Maria	Y7	Yes	Tim	Y7	Yes
Nancy	Y7	Yes	Graeme	Y7	Yes
Amy	Y7	Yes	Jeff	Y8	No
Aisha	Y8	No	Harry	Y7	No
Dominique	Y7	No	Hassan	Y8	No
Lucy	Y8	Yes	Marcus	Y7	No
Hannah	Y8	No	Theo	Y7	No
Zoe	Y7	Yes	William	Y7	Yes
Millie	Y8	No	Fred	Y7	No
Nima	Y8	No	Mika	Y8	Yes

a) Use tallies to complete the two-way table.

	Owns a pet	Does not own a pet	Total
Year 7			
Year 8			
Total			

b) Now complete the table of frequencies.

	Owns a pet	Does not own a pet	Total
Year 7			
Year 8			
Total			

2 The masses of 25 melons and pumpkins are shown.

Melons

11.6 kg 8.8 kg 9.5 kg 10.5 kg 7.8 kg 9.2 kg 12.8 kg
7.2 kg 10.9 kg 11.0 kg 9.9 kg 10.2 kg 10.0 kg 6.8 kg

Pumpkins

16.4 kg 18.2 kg 10.5 kg 9.5 kg 12.8 kg 14.2 kg 15.0 kg
17.2 kg 11.5 kg 11 kg 10.7 kg

a) Complete the two-way table.

	10 kg or lighter than 10 kg	Heavier than 10 kg	Total
Melon			
Pumpkin			
Total			

b) Write two things that you can see from the two-way table.

c) How can you tell from the table how many pumpkins were weighed in total?

- 3 The table shows information about 200 people who were in a gym at a particular time.

	60 years old or younger	Over 60 years old	Total
Males	22	45	
Females	19		
Total			

- a) Complete the table.
- b) How many males over 60 years were in the gym?

- c) How many males in total were in the gym?

- d) How many females were in the gym?

- e) How many females over 60 years were in the gym?

- f) What time of the day do you think this data was collected?

Give reasons for your answer.



- 4 The two-way table shows the number of children in a school who have school lunch.

Complete the two-way table.

	Year 4	Year 5	Year 6	Total
School lunch	12			58
No school lunch		8		
Total	30	32		90

- 5 40 people take part in a show.
The show is made up of singers, dancers and actors.
Here is some information.

- There are 22 males in the show.
- 15 of the males are dancers.
- There are 8 female singers.
- Of the 7 actors, 2 are male.

- a) Draw a two-way table to show this information.

- b) How many dancers are in the show?

