

Reading Trends

You need ★ a computer spreadsheet/graphing program ★ a classmate

It's time for Ms James, the school librarian, to order new fiction books for the library. So she surveys year 6 and year 8 students to find out their favourite authors. Each student can vote for as many authors as they wish.

Justin summarises the data for Ms James, enters it into a spreadsheet program, and creates the two graphs below:

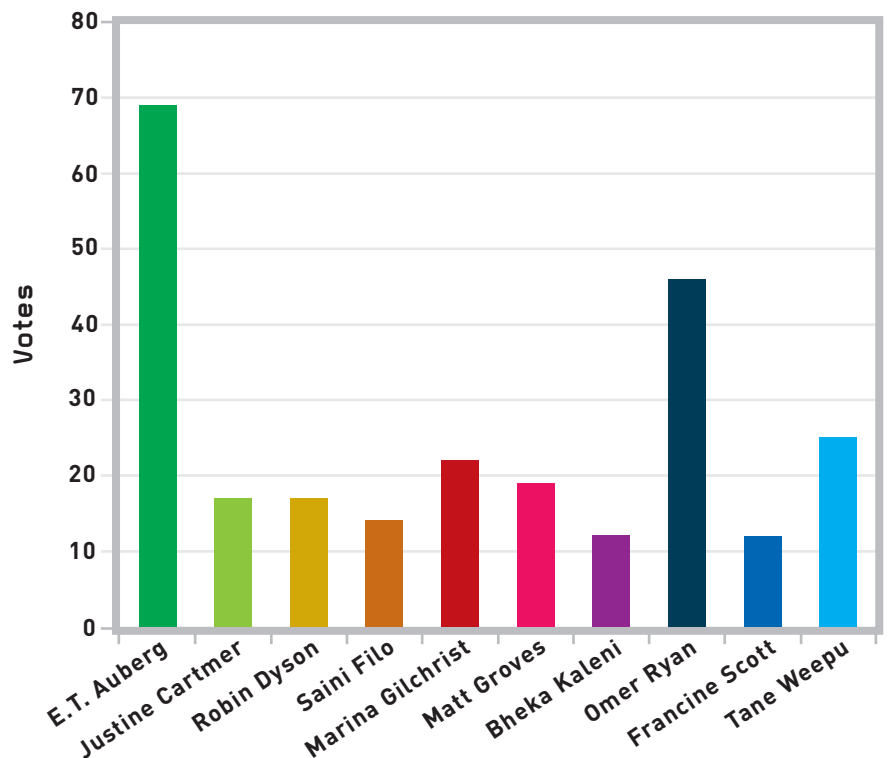
Author	Year 6		Year 8	
	Boys	Girls	Boys	Girls
E.T. Auberg	13	22	17	17
Justine Cartmer	4	4	2	7
Robin Dyson	3	8	1	5
Saini Filo	11	0	3	0
Marina Gilchrist	0	14	0	8
Matt Groves	10	2	7	0
Bheka Kaleni	0	1	8	4
Omer Ryan	8	12	11	15
Francine Scott	0	3	0	9
Tane Weepu	7	5	6	7

Favourite Authors



- E.T. Auberg
- Justine Cartmer
- Robin Dyson
- Saini Filo
- Marina Gilchrist
- Matt Groves
- Bheka Kaleni
- Omer Ryan
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Favourite Authors



Activity One

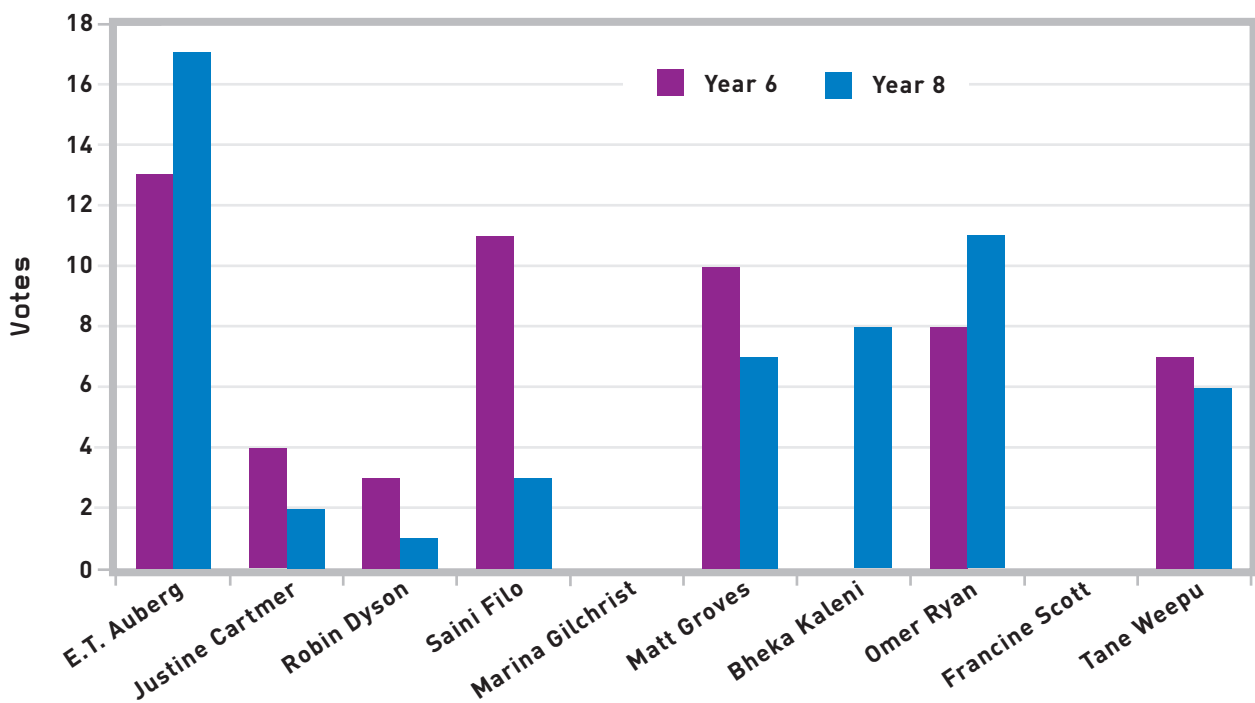
1. Both of Justin's graphs show the same information. Which shows it more clearly? Explain.
2. Enter the data in a spreadsheet program on your computer and then use the Chart function to create two other kinds of graph that show the same information.
3. Which of the four graphs (Justin's and yours) clearly shows which of the authors is the most popular? Explain to a classmate why you think this.

Activity Two

Ms James wants to explore the data further, so she asks Justin to create some more graphs. She wants him to find out which authors:

- are most popular with both year 6s and year 8s
 - are most popular with both boys and girls
 - are popular only with boys or with girls
 - are popular only with year 6s or with year 8s.
1. Working with a classmate, "read" the graph below. What does the graph tell you? Write the important information down as statements.

Authors by Popularity (Boys)



2. Create a similar graph for the girls. How much can you learn from your graph?
3. Using only the year 6 data, create a similar graph that compares the popularity of the different authors with boys and with girls. Using your graph, what conclusions can you reach?



4. Do two further investigations (from Ms James's bulleted list on page 9 or your own questions) into the data in the table on page 8. Use graphs to help you "tell the stories".
5. Based on the data, what recommendations would you make to Ms James?

Activity Three

1. Which authors are these students at Justin's school talking about?

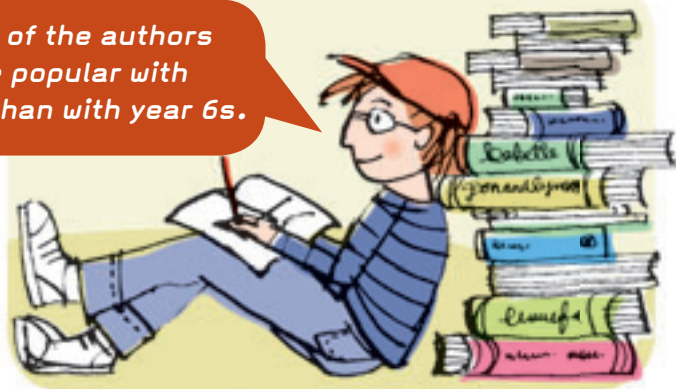
a.

Three authors are popular with both girls and boys in year 6 and in year 8.



b.

Only five of the authors are more popular with year 8s than with year 6s.



c.

One author appeals to year 8 students only.



d.

Two authors don't have any appeal for boys.



e.

Two authors appeal mostly or only to boys.



2. How many students voted in Ms James's survey? Explain your answer.