
RICH MATHEMATICAL TASK BOOKLET
STATISTICS
YEAR 3
Task Copy Masters
© Bobbie Hunter and Jodie Hunter

Phase 1: Year 3: Statistics

Task 1

The local toy library is buying new toys for children to borrow. They want to know about the favourite toys for children in the area.

What toys do you play with?

How can you collect data to answer this question?

Record your results to present to the class.

Can you represent this in different ways?

Phase 1: Year 3: Statistics

Task 1 (independent)

The community centre is going arranging a sports holiday programme for children in the area. They decided to ask children who visited what sports they like to play. This is the results they found:

Soccer	Netball	Kilikiti	Netball
Kilikiti	Rugby	Soccer	Netball
Soccer	Kilikiti	Netball	Netball
Netball	Netball	Kilikiti	Soccer
Rugby	Soccer	Kilikiti	Rugby
Netball	Soccer	Rugby	Soccer
Drawing	Rugby	Soccer	Netball
Netball	Kilikiti	Soccer	Soccer
Soccer	Netball	Kilikiti	Soccer

Record your results using a table of data and tally-marks.

Sports	Tally	Number
Soccer		
Kilikiti		
Netball		
Rugby		

Now represent this as a graph.

Phase 1: Year 3: Statistics

Task 2

Breakfast Club is putting in an order to the supermarket.

What things might they want to find out?

What questions could you ask to gather data?

How can you collect data to answer this question?

Record your results to present to the class.

Can you represent this in different ways?

Phase 1: Year 3: Statistics

Task 2 (independent)

The Warehouse is ordering board games for the mid winter toy sale. They are looking at the sales in one shop during the sale last year. This is the data that they collected.

Scrabble	Monopoly	Game of life	Mancala
Guess who	Mancala	Monopoly	Game of life
Scrabble	Scrabble	Monopoly	Scrabble
Monopoly	Monopoly	Monopoly	Guess who
Guess who	Game of life	Guess who	Guess who
Monopoly	Guess who	Game of life	Monopoly
Game of life	Monopoly	Scrabble	Monopoly
Monopoly	Monopoly	Guess who	Game of life
Guess who	Scrabble	Mancala	Monopoly

Record your results using a table of data and tally-marks.

Activities	Tally	Number
Mancala		
Guess who		
Scrabble		
Monopoly		
Game of life		

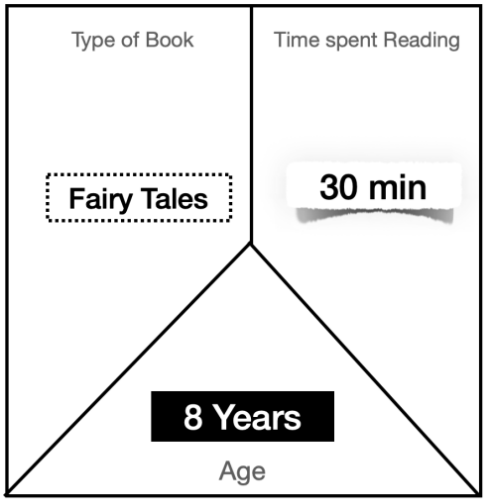
Now represent this as a graph

Phase 1: Year 3: Statistics

Task 3

New Zealand Library Association is looking at how to encourage children in New Zealand to read more. They want to know what types of books children like and how long they spend reading.

The data cards have information about the types of books that children like and how long they spend reading each day.



What do you wonder about the data? Make "I wonder…" statements.

What questions could you ask about this data set?

Sort the data cards into sets.

Record your results in a table.

Task 3 (independent)

The data cards have information about how long students of different ages spend reading each day and the types of books they like.

What questions could you ask about this data set?

Record your results in a table.

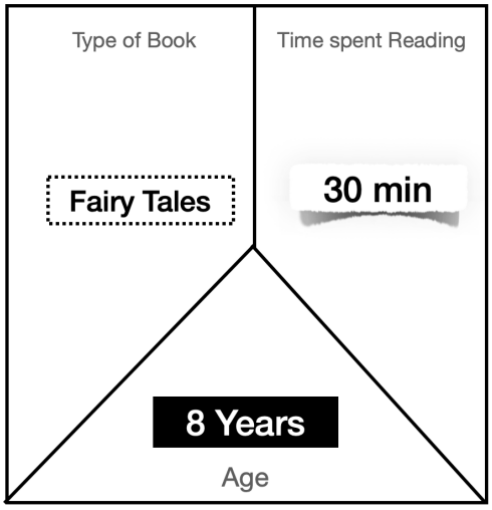
What do you notice?

Phase 1: Year 3: Statistics

Task 4

New Zealand Library Association is looking at how to encourage children in New Zealand to read more. They want to know what types of books children like and how long they spend reading.

The data cards have information about the types of books that children like and how long they spend reading each day.



Use the tables that you made in the previous lesson. Represent these in different ways using a graph.

What statements can you make about the data?

Task 4 (independent)

The data cards have information about how long students of different ages spend reading each day and the types of books they like.

Use the tables that you developed previously.

Represent this in different ways using graphs.

Make “I notice” statements from the graphs.

Task 5

Spending time doing fun things together is one way of showing aroha for your whanau.

Read the questions that you wrote for your data cards and make predictions about what the results will be.

Sort the data cards into sets.

Record your results in a table to present to the class.

Use the data cards to make a graph.

Task 5 (independent)

Continue working on your graphs and representations from your data card investigation.

Represent your data using at least two graphs.

What statements can you make about the data?

Task 6

Spending time doing fun things together is one way of showing aroha for your whanau.

Represent the data using at least two graphs.

What statements can you make about the data?

Develop a presentation for the class that includes your investigation question and the graphs and data displays that answer your question.

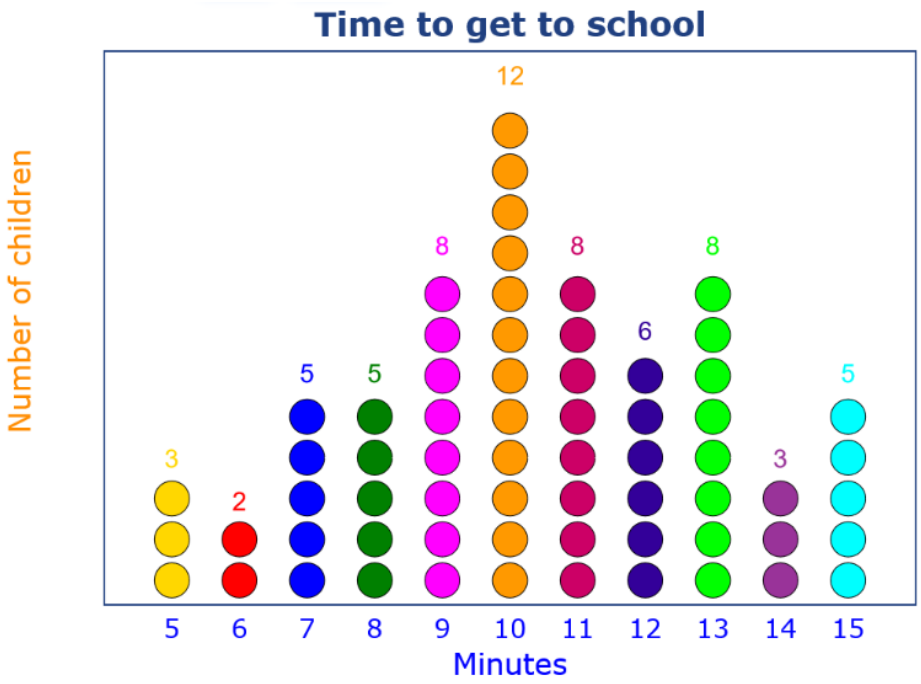
Write “I notice” statements about what you have found out.

Task 6 (independent)

Look at the investigative question and data display that matches this.

Write statements using “I wonder” and “I notice” from the data displays.

Task 7

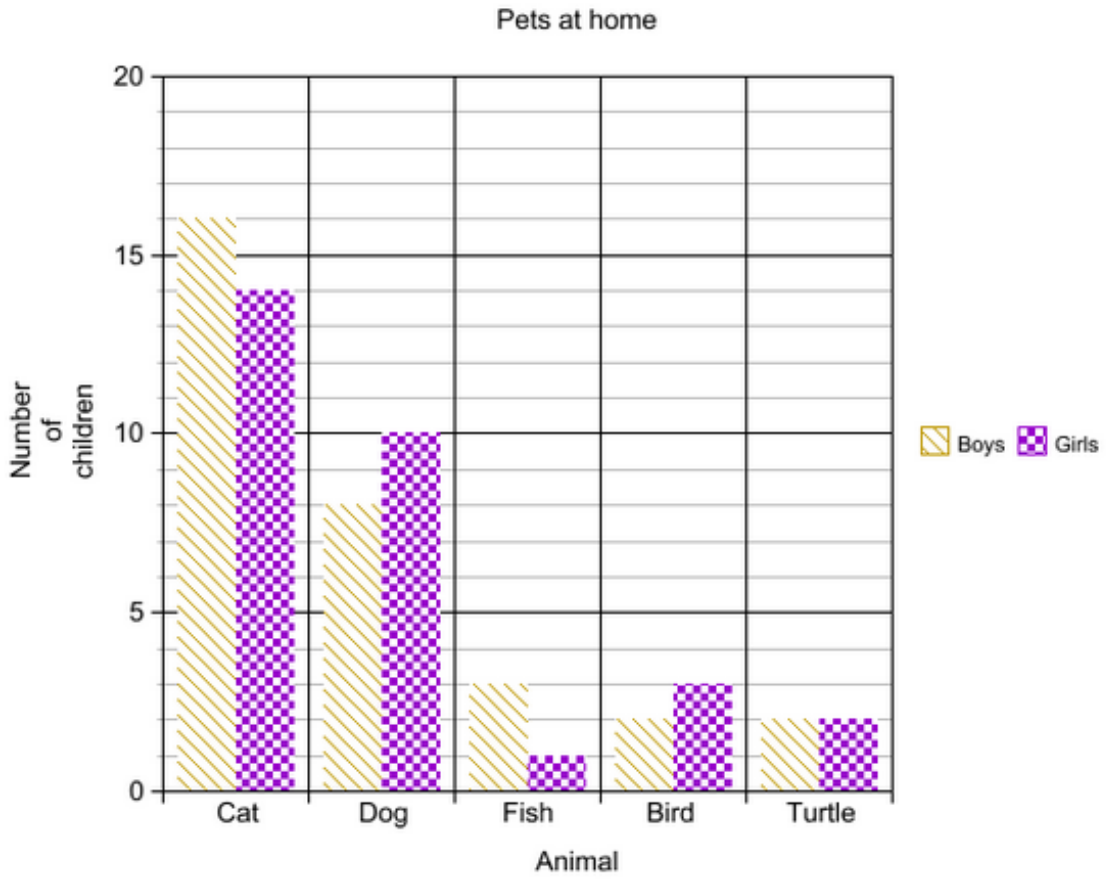


Read the statements and say whether you agree or disagree with each one.

1) Most children take 10 minutes to get to school.
2) Four people take 15 minutes to get to school.
3) More people take 13 minutes to get to school than 9 minutes to get to school.
4) No one takes less than 5 minutes to get to school.

Write your own statements about the data shown in the graph.

Task 7 (continued)



Read the statements and say whether you agree or disagree with each one.

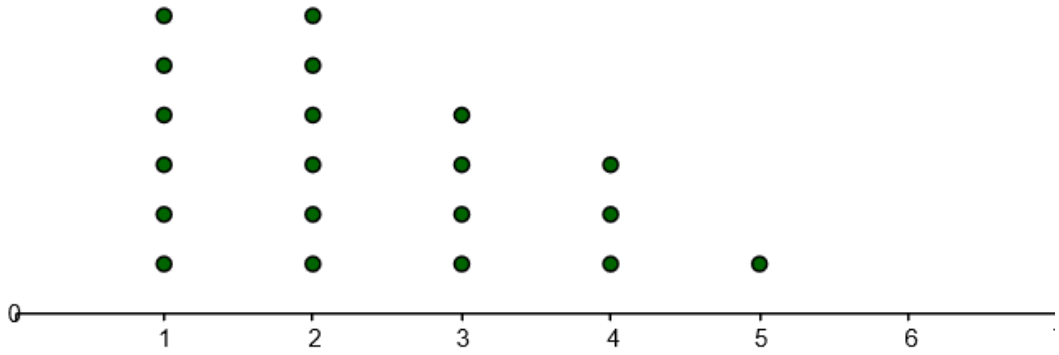
1) 16 boys have cats at home.
2) More girls have birds as a pet than boys.
3) Dogs are the second most popular pet.
4) Turtles are the least popular pet.

Write your own statements about the data shown in the graph

Phase 1: Year 3: Statistics

Task 7 (independent)

This is a graph of the results of a survey with the class.



What might the survey be about?

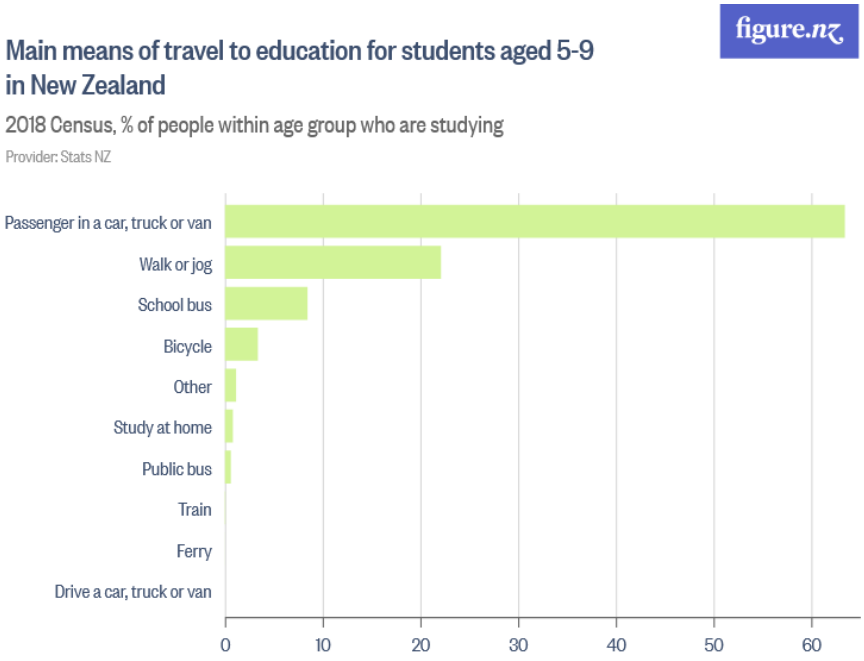
Give a range of possibilities.

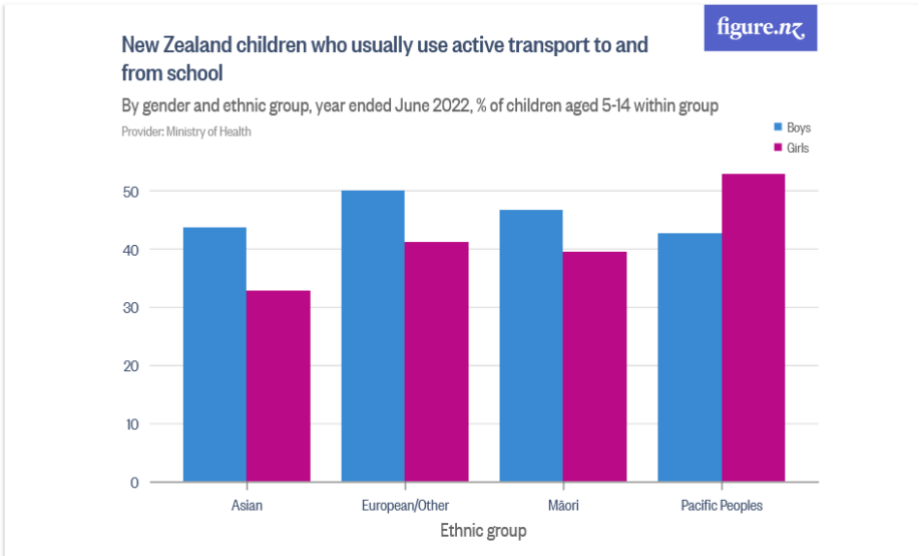
Can you present the data in a different way?

Phase 1: Year 3: Statistics

Task 8

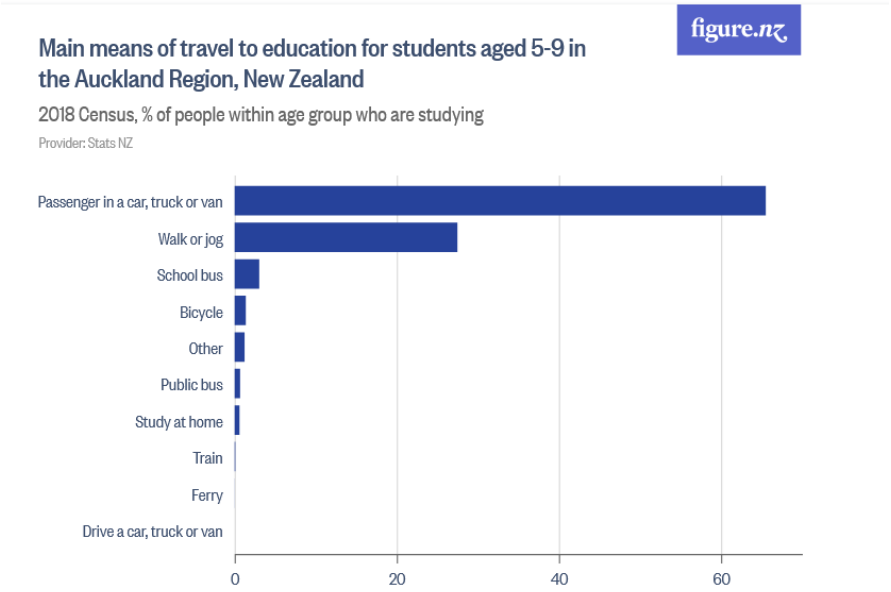
How children travel to school is important to the council and people who help to manage traffic. Encouraging children and families to use active transport (walking or biking) is good for the environment. Have a look at the graphs below and think of the stories that they are telling us.

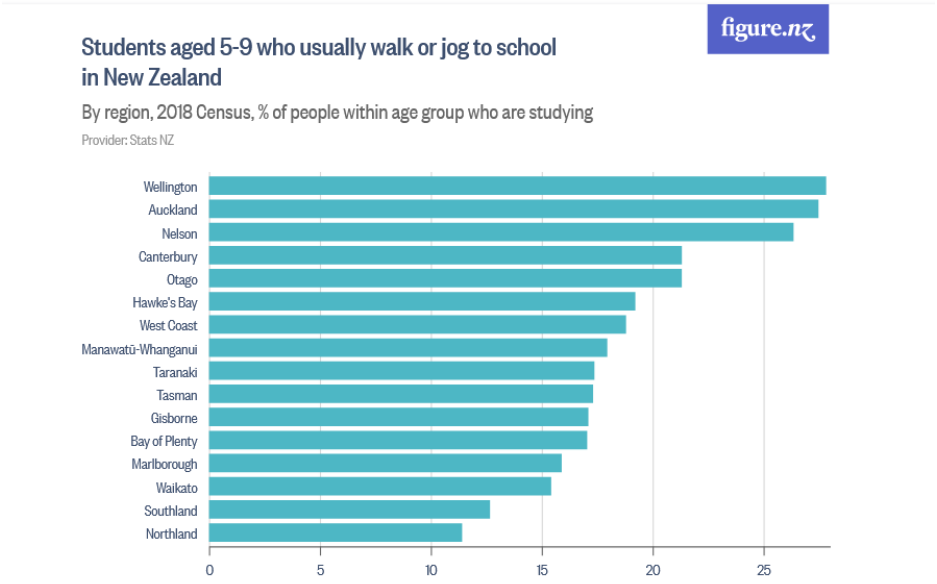




Phase 1: Year 3: Statistics

Task 8 (continued)





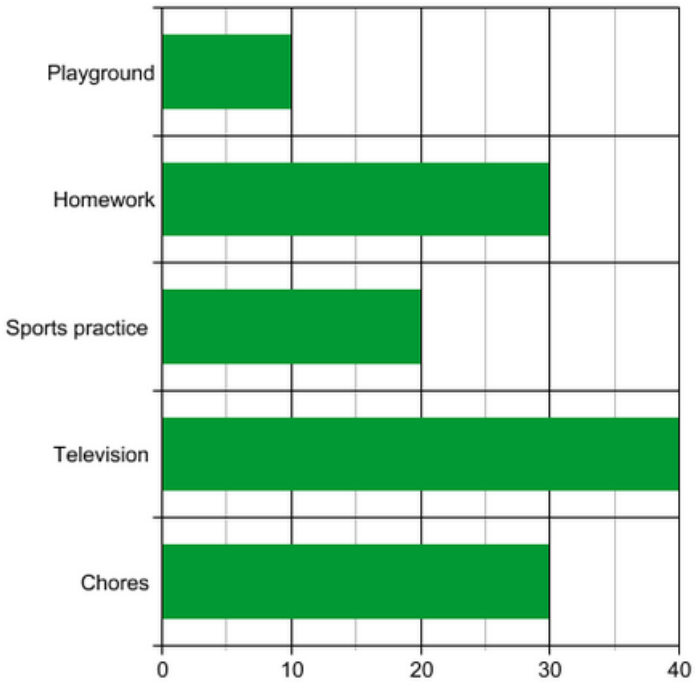
Begin by writing “I wonder” statements for each of the graphs.

Discuss what you notice in each graph and write “I notice” statements.

What stories and conclusions can you write about the data shown in the graphs?

Task 8 (independent)

These are the results of a survey:



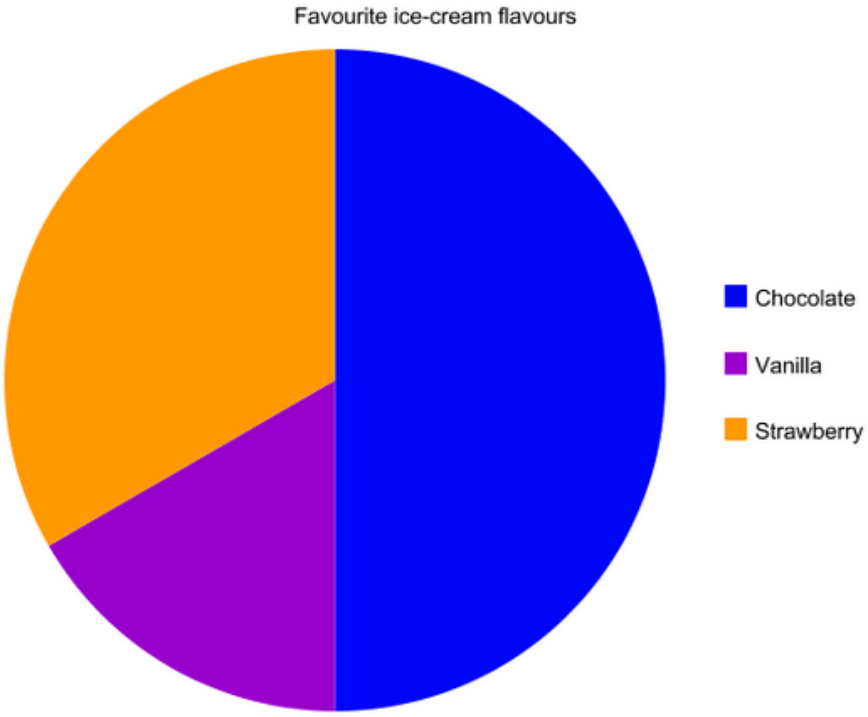
What might the survey be about?

Make “I wonder” and “I notice statements about the results.

Phase 1: Year 3: Statistics

Task 9

The graph shows the proportion of students in a class who prefer different ice-cream flavours.



How many students might be in the class? How many students prefer each flavour?

Present the data using a different representation.

Task 9 (independent)

A graph of shoe sales from the Warehouse showed that the most shoes that sold in a week was sneakers, the next was jandals, and the least sales were for boots.

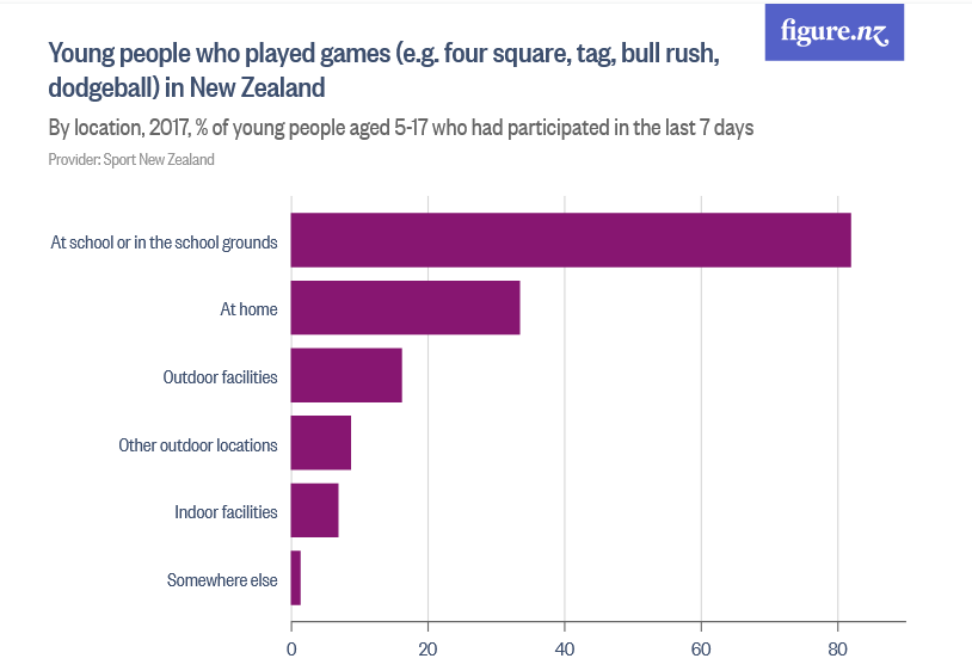
What might the graph look like?

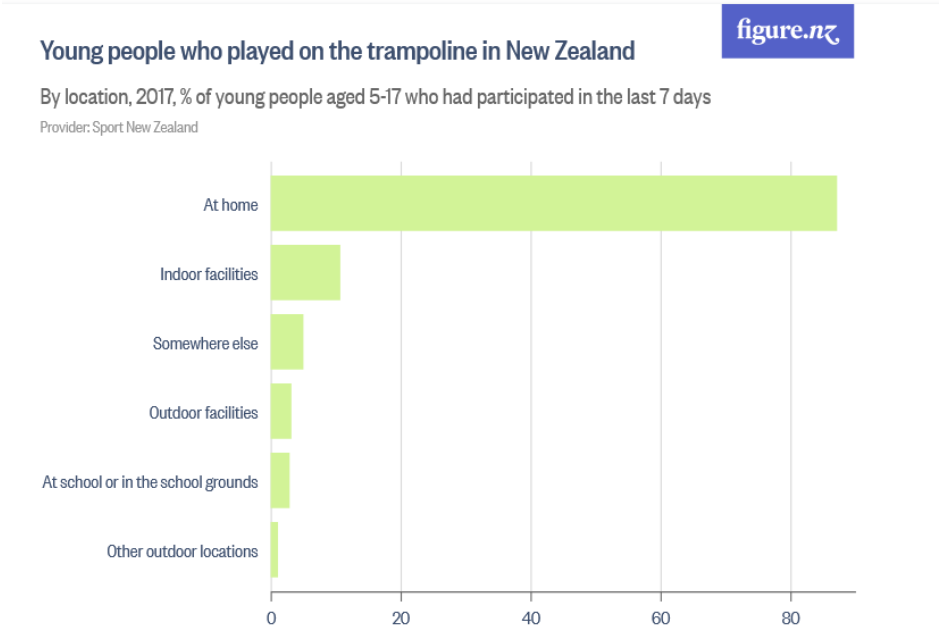
How many of each type of shoe sold during the week?

Phase 1: Year 3: Statistics

Task 10

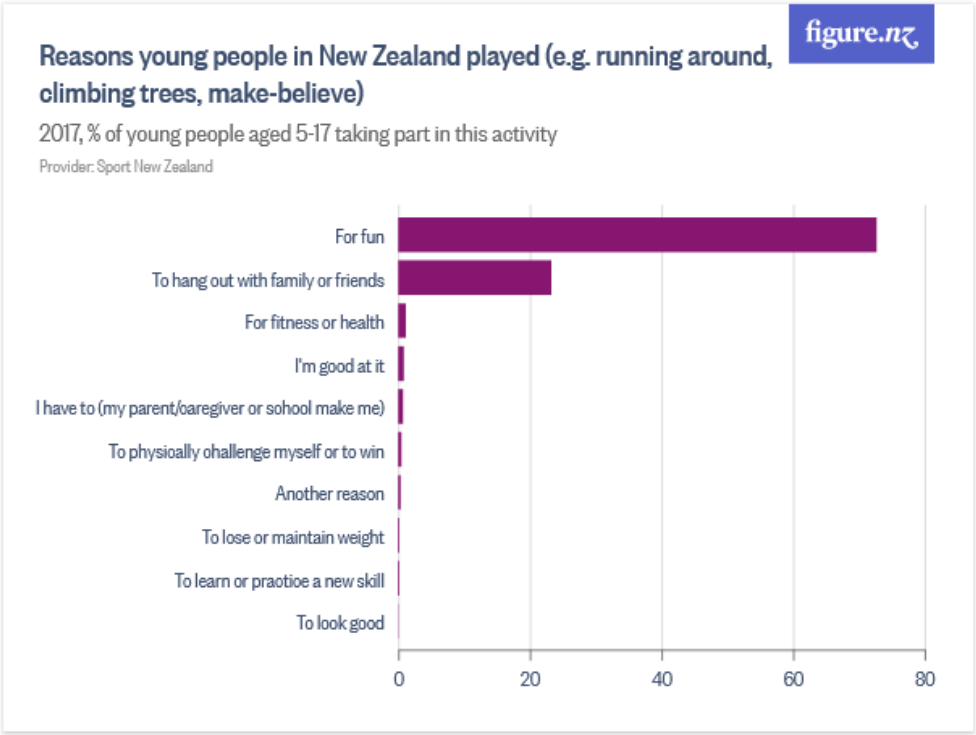
These graphs provide information games and physical activities of young people. Have a look at the graphs below and think of the stories that they are telling us.





Phase 1: Year 3: Statistics

Task 10 (continued)



Begin by writing “I wonder” statements for each of the graphs.

Discuss what you notice in each graph and write “I notice” statements.

What stories and conclusions can you write about the data shown in the graphs?