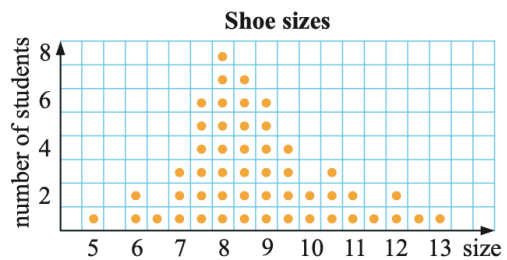Walt draw and read dot plots
Success Criteria I know each dot represent a data point.
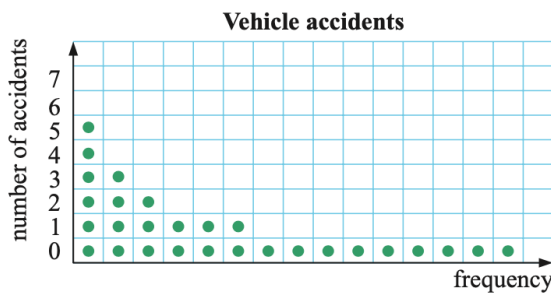
1 Use a vertical dot plot to display the data on the ages of children at a party:

12, 11, 17, 12, 14, 13, 11, 12, 15, 13, 12, 14, 11, 14, 12, 10, 12, 11, 13, 14

  a How many attended the party?   **b** How many were aged 12 or 13?

  c What percentage were 13 or more years old?

2 Draw a horizontal dot plot of the number of goals thrown by a netballer during the 23 match season. The number of goals scored per match were:

17 22 18 23 20 20 19 20 21 26 23 22 20 24 20 19 19 23 22 17 19 21 21

  a How many times did she score 20 or more goals?

  b In what percentage of games did she score 22 or more goals?

3 The given vertical dot plot shows shoe sizes for students in year 8.

  a How many students are in year 8 at the school?

  b How many have shoe sizes 9 or more?

  c What percentage have shoe sizes of 8 or more?

Shoe sizes

4 Below is a horizontal dot plot of the number of vehicle accidents each day in the city square over a one month period.

Vehicle accidents

  a What was the month?

  b What is the most frequent score?

  c On how many occasions were there at least two accidents?

  d On what percentage of days were there no accidents?

5 Two year 8 mathematics classes sat for the same mathematics test out of 20 marks. Their results were:
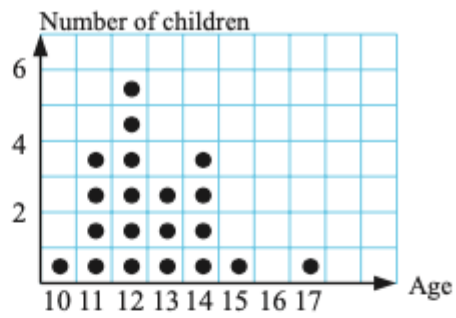
Class 8P: 19 20 11 15 16 17 17 14 16 17 20 18 17 16 15 15 16 16 17 16

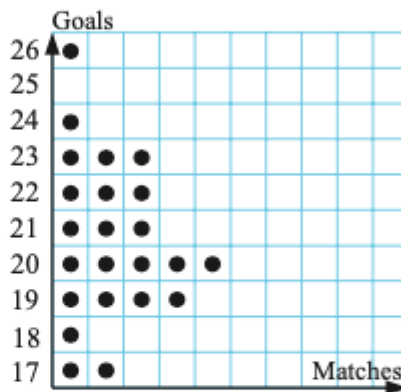*Class 8Q:*   14 13 16 17 20 13 16 15 18 12 13 14 17 14 12 13 13 14 10

  a Draw separate dot plots for each class.

  b State the highest and lowest marks for each class.

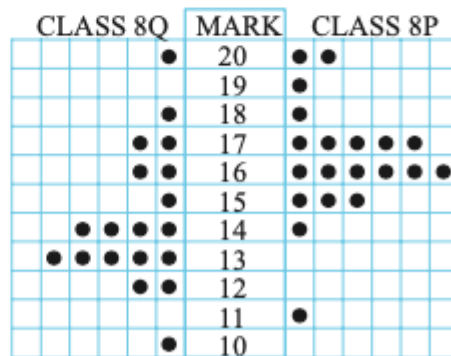 **c** Which class performed better at the test?

Answers

1 a 20
  b 9
  c 45%

Number of children

```
6 |           •
  |
4 |     • •     •
  |     • • • •
2 |     • • • •
  |
  | • • • • •   •
  +---------------------→ Age
   10 11 12 13 14 15 16 17
```

2 a 16
  b ≒ 35%

3 a 50
  b 22   **c** 74%

4 a February
  b 0   **c** 7 days
  d ≒ 54%

Goals

```
26 | •
25 |
24 | •
23 | • • •
22 | • • •
21 | • • •
20 | • • • • •
19 | • • • •
18 | •
17 | • •
   +------------------→ Matches
```

5 a

CLASS 8Q	MARK	CLASS 8P
•	20	• •
	19	•
•	18	•
• •	17	• • • • •
• •	16	• • • • • •
•	15	• • •
• • • •	14	•
• • • • •	13	
• •	12	
	11	•
•	10	

  b 8P, 20 and 11; 8Q, 20 and 10   **c** 8P