

## Dot Plots

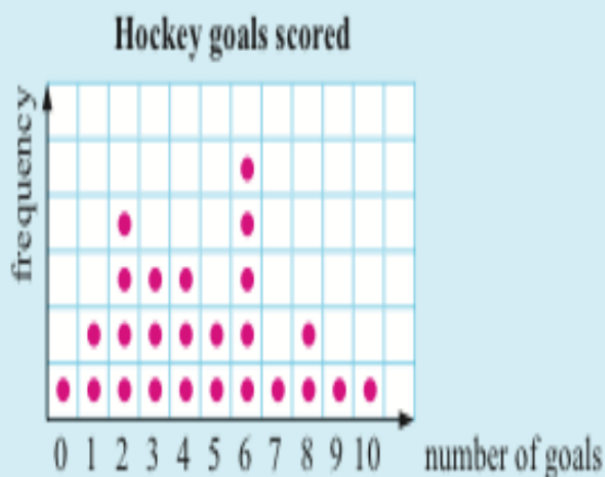
**WALT** Read and draw dot plots

**Success criteria** I can use a number line to draw dots as per its frequency

An exceptional hockey player scores the following number of goals each match for 25 matches: 4 3 6 1 5 8 4 2 2 4 6 0 5 1 9 3 7 2 6 6 8 3 6 2 10

Display the data on a vertical dot plot.

- a** On how many occasions did the player score 5 or more goals in a match?
- b** On what percentage of occasions did the player score 4 or more goals in a match?



**a** 12

**b** scored 4 or more goals on 15 occasions

$$\begin{aligned}\therefore \text{percentage} &= \frac{15}{25} \times 100\% \\ &= 0.6 \times 100\% \\ &= 60\%\end{aligned}$$

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?

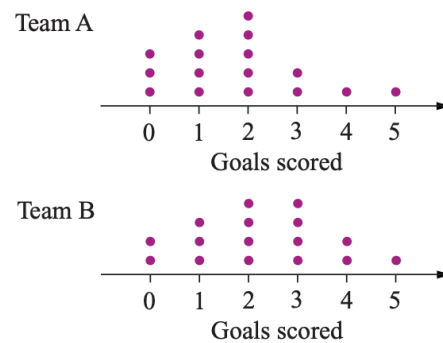
2 Draw a horizontal dot plot of the number of goals thrown by a netballer during the 23 match season. The number of goals scored per match were:

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?

The parallel dot plot shows the number of goals scored by two soccer teams in a 16 match competition.

- a Describe the shape of each distribution.
- b Use the mean, median and range to compare the data.



This back-to-back dot plot shows the number of saves made by goalkeepers for the two teams in question 6.

- a Comment on the shape of each distribution.
- b Use the mean, median and range to compare the data.

