

Winning Dots

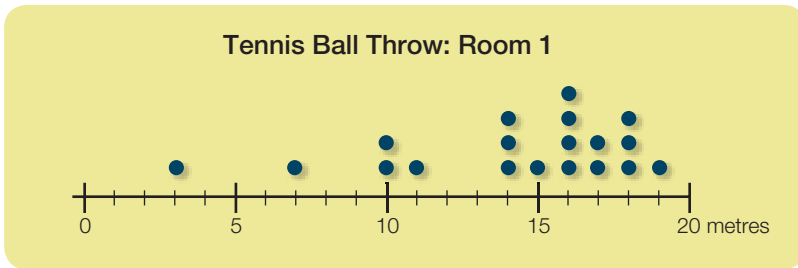
You need

- ★ a stopwatch
- ★ a tape measure
- ★ classmates
- ★ another class

Activity One

Rooms 1 and 2 always enjoy competing against each other. Now it's athletics day, and they're competing again.

Here are the results for Room 1 for the tennis ball throw:



1.
 - a. Describe how this data is clustered (grouped).
 - b. What can you say about the tennis ball throwing skills of the students from Room 1?
2. Here are the results for Room 2's tennis ball throws:
15, 6, 10, 17, 9, 19, 7, 13, 18, 20, 10, 15, 15, 14, 12, 11, 10, 19, 13, 14, 11.
 - a. Display this data on a similar dot plot.
 - b. Describe how the data is clustered.
 - c. What can you say about the tennis ball throwing skills of the students from Room 2?
3. With a classmate, study the data to find whether these statements are true or false:
 - i. "The best throw was made by a student from Room 2."
 - ii. "Most students can throw a tennis ball 14 metres or more."
 - iii. "The range of throwing distance is greater for Room 2 students."
 - iv. "The same number of students from each class threw the ball at least 10 metres."
 - v. "Room 1 has fewer students than Room 2."
 - vi. "More students from Room 2 threw the ball at least 17 metres."
 - vii. "Four students from each class threw the ball 18 metres or more."
 - viii. "Room 1 had twice as many students who threw really well."



4.

I think Room 2 did better than Room 1. Look how far Sean threw his ball.

Well, heaps of Room 1 students did really good throws.



Luke from Room 2 and Kowhai from Room 1 are arguing about which class did better in this event. What would you say? Discuss your reasons with a classmate.

Activity Two

1. As a class, collect data on one or more of the following:

- time taken to walk 100 metres
- distance jumped from a standing position
- distance covered in a single stride (or in 10 strides)
- length of time without blinking
- number of quoits (out of 10) to land on the pin.



2. Display the results as dot plots. Describe how the data is clustered. What does it tell you?

3. Ask your teacher if they could arrange for another class to do the same activities and share their data with you.

Compare their data with yours. What differences stand out? What do these tell you?

Focus

Creating and interpreting dot plots