

# Greater Heights

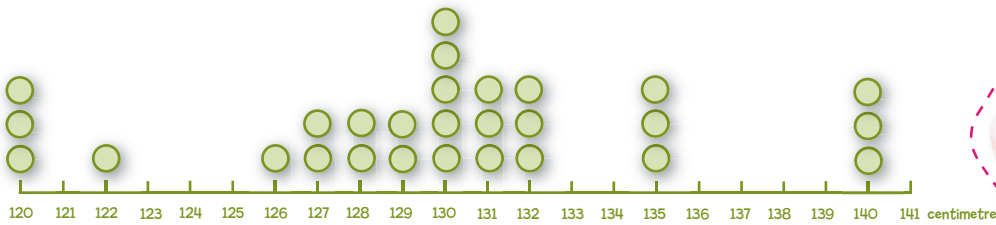
**You need**

- ★ a computer spreadsheet program with a dot-plot graphing function (optional)
- ★ a tape measure or metre ruler
- ★ classmates

## Activity

Tim and Ahere are investigating the heights of the students in Room 7. They measure each person, enter the information into a computer spreadsheet, and use the data to create this dot plot. Each dot represents a person:

Heights of Students in Room 7



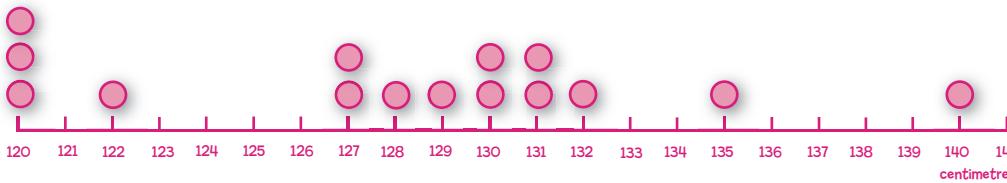
I wonder if the boys are taller than the girls?

We can't tell from this graph.

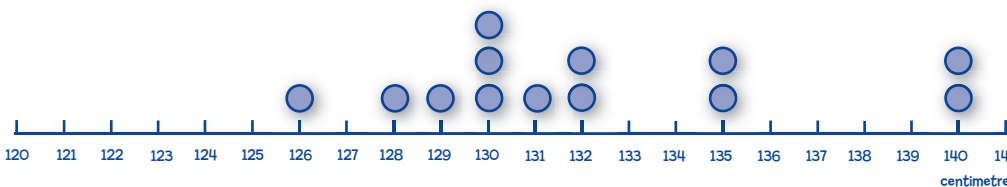


To answer their question, Tim and Ahere separate the girls' and boys' data and create these new dot plots:

Heights of Girls in Room 7



Heights of Boys in Room 7





That's better, but it's still hard to know how to compare the data.

We could start by finding the middle height for the girls and for the boys.

1. What is the same and/or different about the girls' and boys' data?
2. How might Ahere's idea of finding the "middle" help answer Tim's question "I wonder if the boys are taller than the girls?"

There is very little difference between the heights of the boys and the girls.

3. Do you agree or disagree with Ahere's statement? Support your views with at least three statements based on the data.

### Investigation

As a class, investigate Tim's "I wonder" question (page 4) for the students in your class. You could work in small groups to measure each other's heights and then combine your data with other groups.

Working with your group, display the data on two dot plots.

Can you answer Tim's question for the heights in your class?

Discuss your findings.

Note: Dot plots are used to show number data that comes from counting or measuring.



Focus

Investigating measurement data through the use of dot plots