## **Seat Heights**

You need

★ a metre ruler or a tape measure

★ chairs ★ classmates

TECHNOLOGY

Chairs should be designed so that the people who sit in them are comfortable and maintain good posture.



## Activity One

Your school needs new classroom chairs, but the principal isn't sure what sizes to order. She has asked each class to find out what size chair will be best for them.

The right seat height for you depends on your knee height.

Size	Seat height (cm)
1	29
2	33
3	37
4	41

Knee height (cm)

42

37

43

Working in pairs measure the height from the	(0)	
floor to the bend behind your knee. Combine	$\bigcirc$	Student
these measurements to make a class data set.		Abbie
		Bruce

The seats on most standard chairs are about 46 centimetres (cm) from the floor.

- How many of your classmates will have a. dangling feet if they are sitting on a seat that is 46 cm high?
- Measure the height of the seats in your classroom. How suitable is this height for b. the students in your class? How many doesn't the height suit? How did you decide?
- What seat height would suit a. most students in your class?

[2.]

3.

How comfortable would the b. rest of the students be on seats of that height?

> What if we bought chairs in two sizes?



Huia

## Activity Two

With a classmate, discuss how you could decide on 2 sizes of chair for your class. Using your method, determine the 2 sizes and the numbers you would need of each.

Exploring distributions and averages

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Focus