



In this activity you will investigate relationships between body measurements taken on children.

Information sheet Body measurements

The Excel spreadsheet gives data for a large number of children.

For each child the data includes:

- weight (newtons)
- stature (mm)
- head, chest and waist circumferences (mm)
- shoulder breadth (mm)
- hand length and breadth (mm)
- foot length and breadth (mm)
- age (months)



Think about ...

Which variables are likely to be related, the nature of these relationships, and how strong they might be.

On some worksheets the data has been sorted by age and stature.

The children are numbered so that different samples can be easily identified.

***There is a large quantity of data on each worksheet in the Excel file.
It is not recommended that you try to print it all.***

Try this

Choose pairs of variables which you think are related.

Investigate whether the data provides evidence to support your theory.

Write a report on your findings.

In your report you should:

- identify clearly the purpose of your investigation;
- select and use only appropriate statistical measures, diagrams and techniques;
- justify any decisions you make;
- check your work;
- use mathematics to summarise your work and draw valid, accurate conclusions;
- consider critically how the data available has limited your work, and what additional data would improve your study;
- produce work that is clear, logical and well-structured.

Reflect on your work

What were your main findings?

Which statistical measures, diagrams and techniques did you use?
Explain why they were appropriate.

Did the available data limit your work in any way?

What additional data would it have been useful to have?