

## Are Height and Foot Size related?

Use the data from

to investigate the heights and footsizes of over 860 aged between 12 and 20.

- 1. Draw a Histogram of the height data. (Be careful of the unequal class intervals.)
- 2. Draw a Histogram of the footsize data. Compare the shape of the distribution to the height data what conclusions can you draw?
- 3. What is the modal a) height? b) footsize? c) combined height/footsize?
- 4. Work out the probability of a pupil from this survey being 155cm tall with a footsize of 24cm.
- 5. Below is a scatter plot of all pupils. Draw some conclusions about the correlation shown. Also consider the scatter plots for boys and girls.









Now compare these finding with your own class's data. Explain why you will find a number of differences.