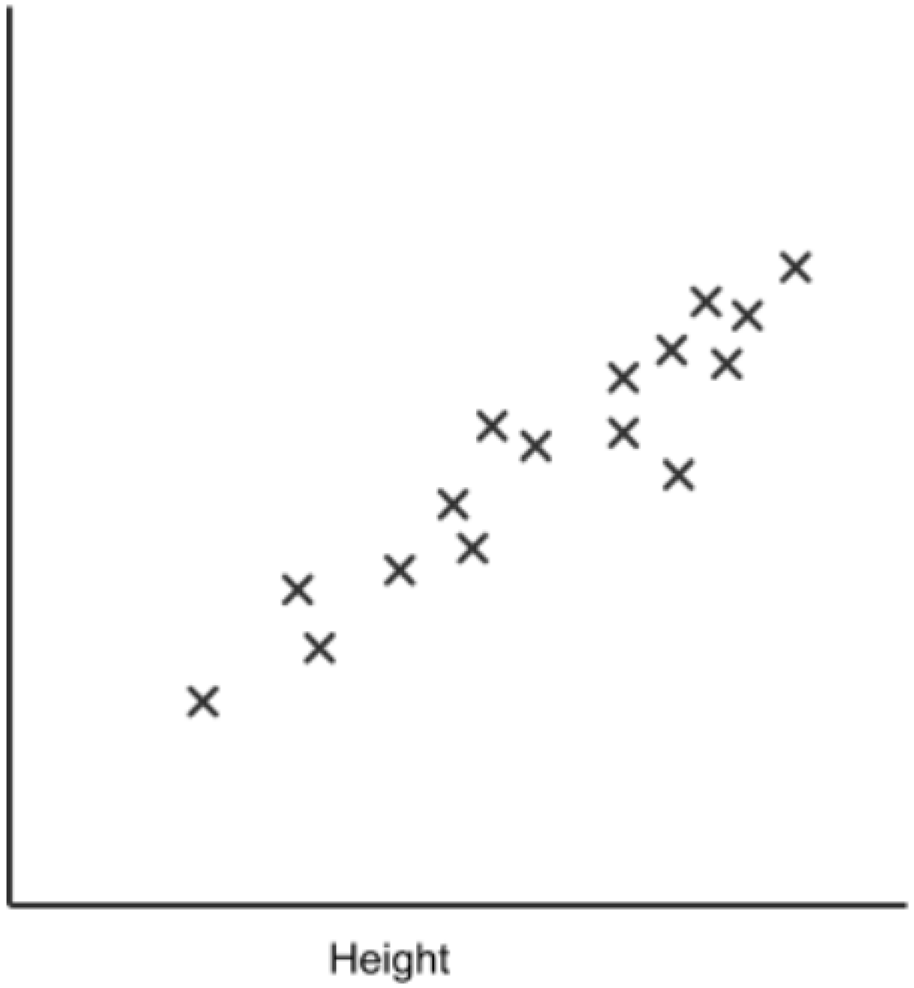
Problem of the Week: Week 5 (Summer 1): Year 8: Statistics - Scatter graph

- Describe simple mathematical relationships between two variables (bivariate data) in observational and experimental contexts and illustrate using scatter graphs.
- Identify and interpret correlation

Problem 1

Here is a scatter graph. One axis is labelled "Height".



a. From the list below, choose the most appropriate label for the other axis.
    - ○ length of hair
    - ○ number of sisters
    - ○ length of legs
    - ○ GCSE French mark

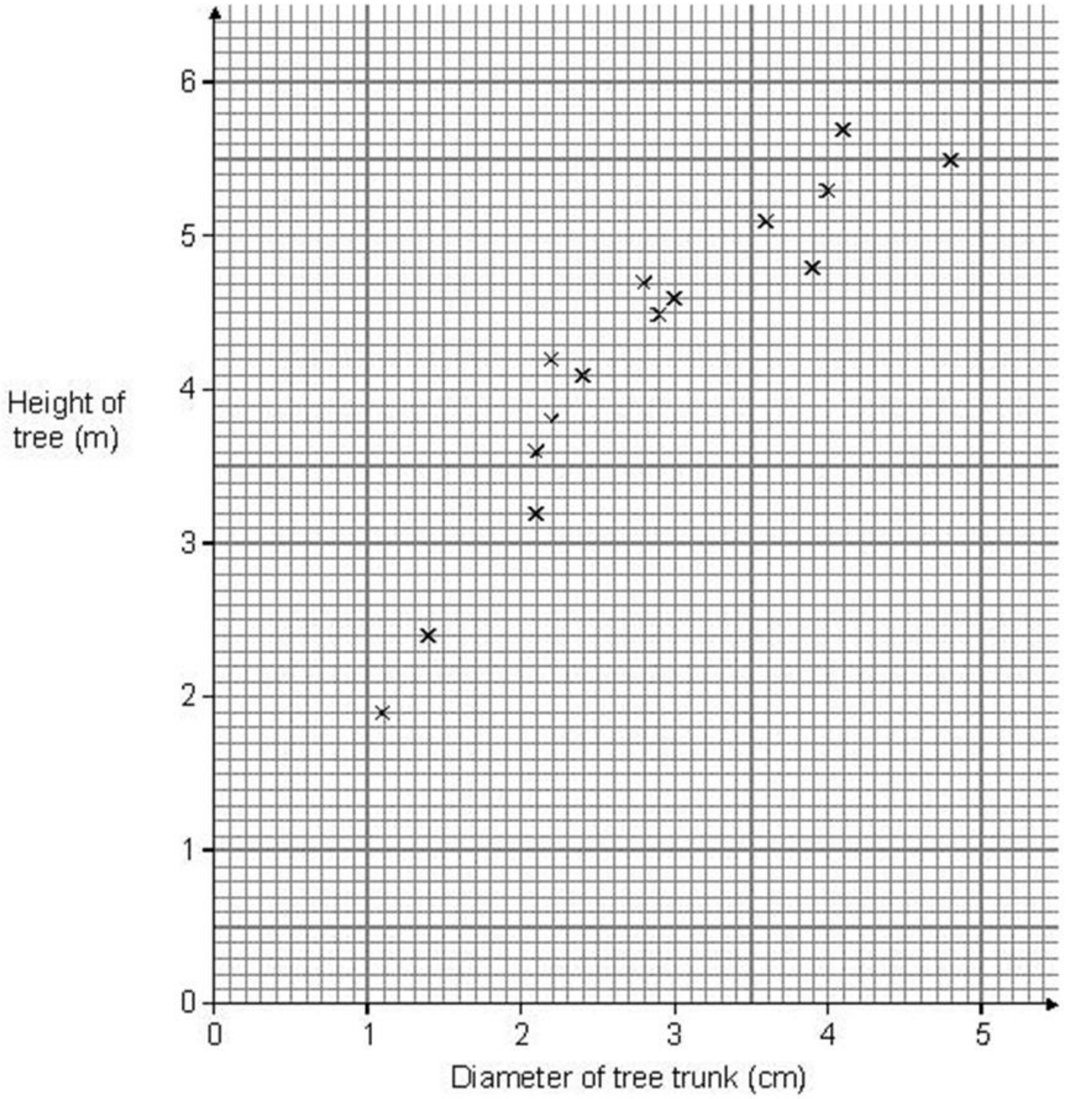
b. Why did you decide on label?

c. What other data could the vertical axis represent?

d. Describe the correlation shown on this graph. Explain why you think this.

Problem 2
Adapted from testbase

The scatter graph shows information about trees called poplars.



a. Describe what the scattergraph shows
b. Make up some questions, with answers, that can be answered using the graph
c. Four more poplar trees were measured, add this information to the graph.
What do you notice about these points?

Diameter of tree (cm)	Height of tree (m)
2.7	4.4
1.7	3
3.1	4.8
1.9	1.5

d. Give a diameter and height that does fit the pattern on the graph
e. Give a diameter and height that does not fit the pattern on the graph. Explain how you know.

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