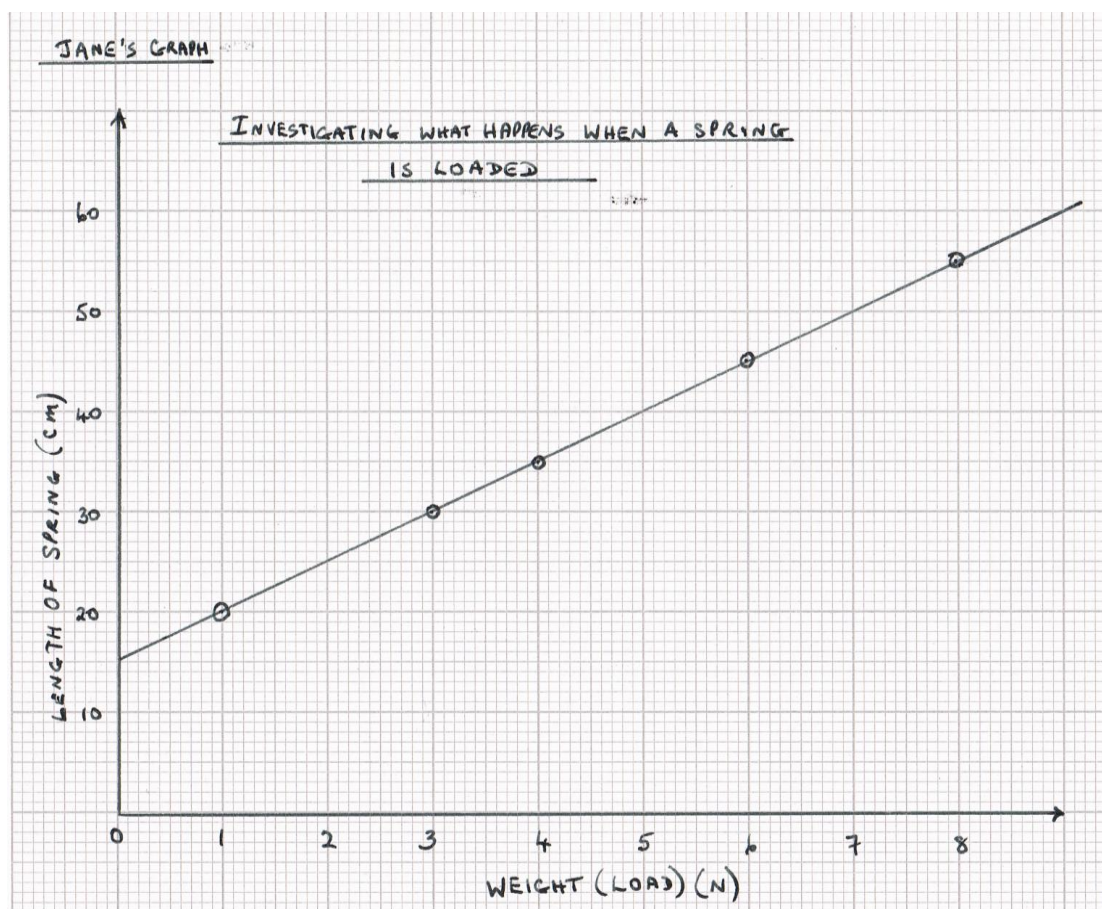




## Peer assessment

Jane drew this graph based on the results they recorded in the table.

Write your comments on Jane's graphing skills in the box below.



### Jane's conclusions

The original length of the upstretched spring is shown by the intercept on the y-axis which is 15cm.

The force constant of the spring is the gradient of the graph which is  $35 \div 7 = 5\text{cm/N}$ .

The length of the spring is proportional to the weight added.

The spring obeys Hooke's Law.

The total extension of the spring was 40cm.

### Sarah's conclusions

The original length of the upstretched spring is shown by the intercept on the y-axis which is 20cm.

The spring stretches equal amounts for each weight added.

The force constant of the spring is  $\text{weight} \div \text{extension}$  which is the reciprocal of the gradient.

The gradient is  $(55 - 15) \div (8 - 1)$   
the gradient =  $5\text{cm/N}$ .

The reciprocal is  $1/5 = 0.2\text{N/cm}$ .

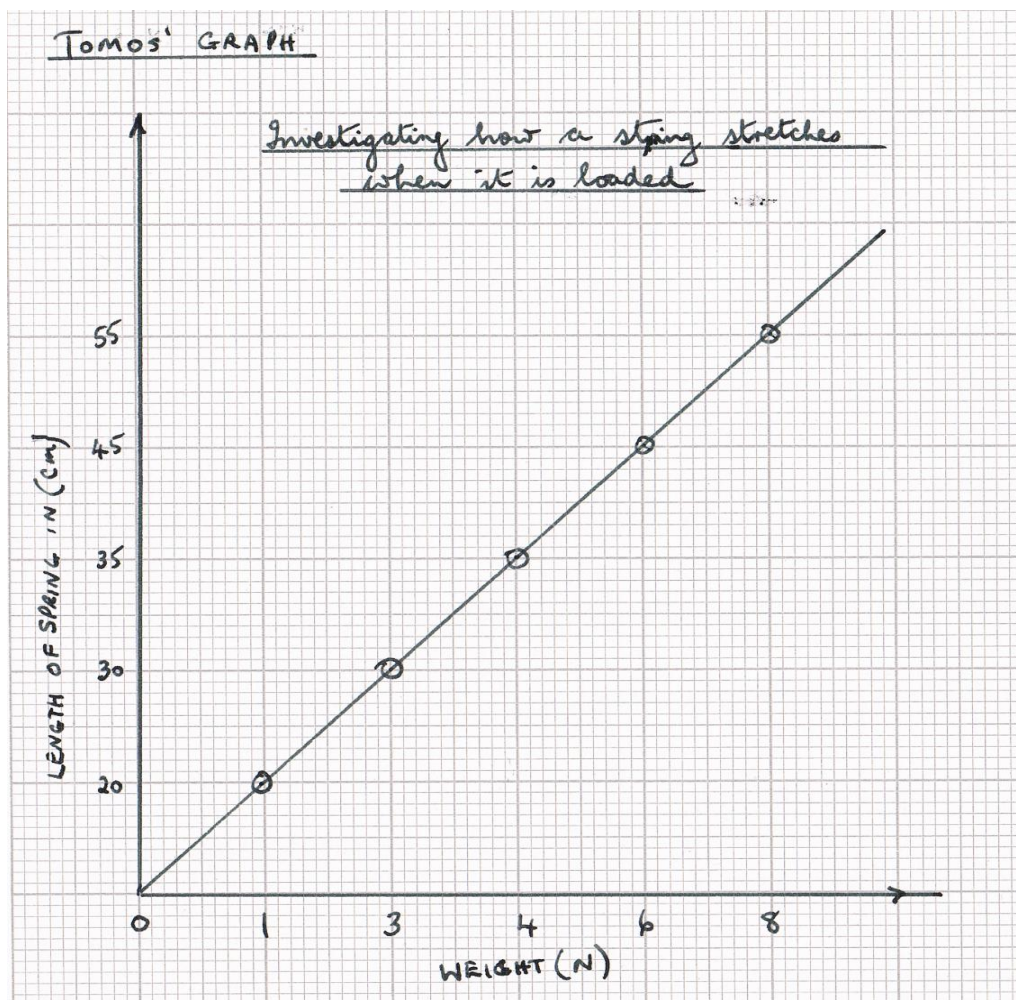
The spring constant =  $0.2\text{N/cm}$ .

The total extension of the spring was 35cm.

The spring obeys Hooke's Law.

Tomos drew this graph based on the results they recorded in the table.

Write your comments on Tomos' graphing skills in the box below.





Sarah drew this graph based on the results they recorded in the table.

Write your comments on Sarah's graphing skills in the box below.

