## Calculating Your Spring Constant (k)

A) Using your very own spring and a Newton spring scale and anything else you might need, you are to determine the spring constant.
B) You also need to be an initial calculation.


|  | Criteria |  |
| :--- | :--- | :--- |
|  <br> Understanding (5) <br> A1.6: Compile accurate <br> data....and record | A) Calculating spring constant (k) <br> Data (3+ data points) collected in properly labelled chart <br> Data points graphed \& line of best fit drawn <br> according to expectations. <br> GRASP used <br> Proper units used <br> Reasonable answer <br> interpret qualitative <br> data. |  |
| Inquiry (3) <br> C2.2: <br> analyze...work/energy... <br> and conservation of <br> energy and solve <br> related problems | Full marks for determining how far to pull back your spring for it to be launched <br> off a black bench and land 1.5m horizontally on the floor. | $/ 1$ |

Creating a table: $\quad$ (See page 752 for example - you need not do colour).
The following is expected:

- Columns are labelled on top. Units are included in brackets. ie: (m)

Units are NOT included in the body of the table.

- Tables are created with straight lines. ie: ruler

Creating a graph: (Fig. 5.18 on page 250 isn't bad - just mixing boxed title)
The following is expected:

- $\quad X$ and $Y$ axes are labelled and labelled parallel to axes. ie: labelling on $y$ axis is written vertically.
- Ruler is used
- Pencil is used.
- It is very neat.
- A boxed title is included and is located within the $x$ and $y$ axes. It is not 'floating' on top of the axes where readers quite often miss it.
- The title makes reference to what you measure on $x$ and $y$ axes.
- If slope is calculated, show the rise/run on graph - I should be able to see your math method.

