PRACTICAL 1.3.4 -5

✓ **Recognise** the shapes of graphs for typical ductile, brittle and polymeric materials.

Investigate the extension of a rubber band when loaded and unloaded. Record the extension as it is loaded then masses are taken off one at a time.

- How will you avoid parallax errors?
- How will you record accurate and precise results?
- How many 100g masses can you safely add?

Once you have recorded your results you are to plot a graph of force on the y-axis and extension on the x-axis. How would you add a curve of best fit to this graph? What does the graph show?

What would happen if you loaded and unloaded a section of plastic from a carrier bag?

Equipment Required:

- Retort stand, clamp and boss
- Rubber band
- Plastic carrier bag
- Metre rule, set square
- 100g slotted masses