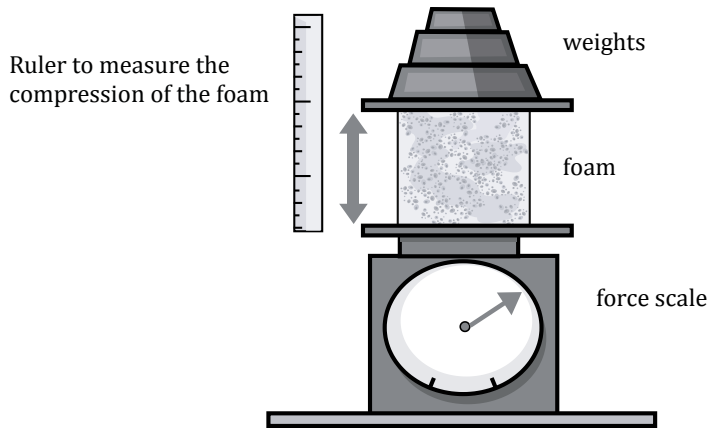


The effect of compression forces

This apparatus was used to measure the force required to compress a piece of cushion foam. Force readings were taken from the top pan scale. A ruler was used to measure the thickness of the foam.



Here are the results.

Weight added / N	0	10	20	30	40	50	60
Foam thickness / mm	120	98	80	68	60	56	55

Create a suitable graph and display these results on the graph.

1. Use your graph to find out; i. the thickness of the foam when the weight was 50 N. ii. the thickness of the foam for a weight of 35 N
2. When the foam was 80 mm thick. i. how much force was acting down on the foam? ii. how much force was the foam exerting on the weights? iii. were the scales and the table itself exerting any forces? If so, how much?