Combined Science - Physics - Key Stage 4 - Forces

Forces and Elasticity

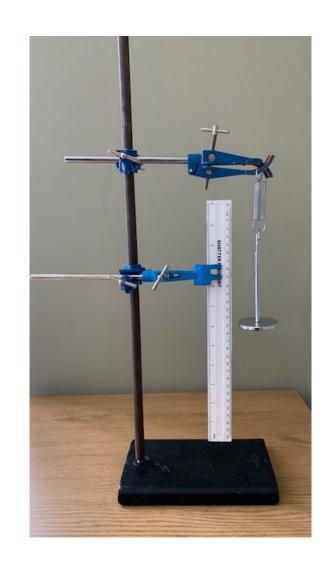


Independent Practice

What is the independent variable? (The variable you change)

What is the dependent variable? (The variable you measure)

What would you need to control? (The variables you keep the same)





Independent Practice - Method

| Method step | Explanation |
|---|-------------|
| 1. Hang a spring off a clamp and stand and clamp a ruler so the zero line is lined up with the bottom of the spring | |
| 2. Add 100 g mass on the bottom of the spring and read the measurement from the base of the spring | |
| 3.Repeat, adding 100 g masses each time until a mass of 500 g has been reached | |
| 4. Remove the masses and take repeated readings by doing all the masses again | |



Mr Saville carried out a practical to investigate the extension of a spring. Write him a valid method that he could have used. (6)



Use **diagram 1** to determine the additional force needed to increase the extension in the spring from 1.5 m to 2.5 cm.

Force needed = ______ N

