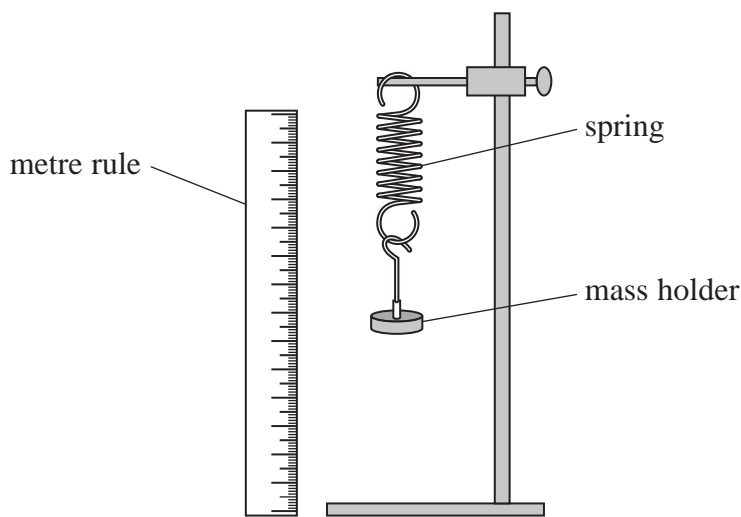


1

A student investigated the behaviour of a spring under tension. The spring was hung vertically with a mass holder attached, as shown. The position of the bottom of the mass holder was determined using a metre rule.



- (a) The position of the bottom of the mass holder was recorded. The spring was stretched by adding masses to the mass holder and the new positions were determined. The extension of the spring for each mass was calculated.

The results are shown in the table.

Mass/kg	Extension/m
0.05	0.019
0.10	0.042
0.15	0.058
0.20	0.085
0.25	0.1
0.35	0.14

Criticise the recording of these results.

(2)

- (b) Describe how the student should determine the extension of the spring as accurately as possible.

(3)