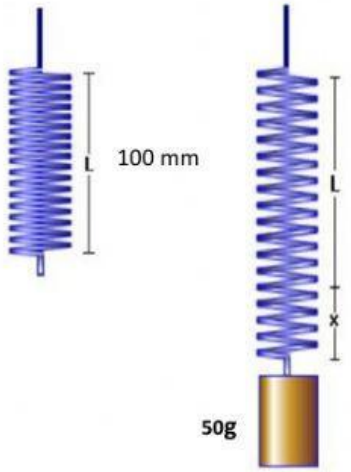
Name:_____ Date: _____

1. This question is about the stretching of springs

The diagram below shows an unlocked spring of length 100 mm hanging suspended from a clamp. When an object of mass 50g is hung on the spring, it becomes 180 mm long. WRITE THE FINAL ANSWER ON THE BOX.



a. Calculate the weight of the object.

W= mg =

Mass in kilograms =

Weight =

b. Calculate the value of the spring constant.

Spring constant = $\frac{Force}{extension}$

extension =

Spring constant =

c. Calculate the length of the spring with 80 g mass hang on it.

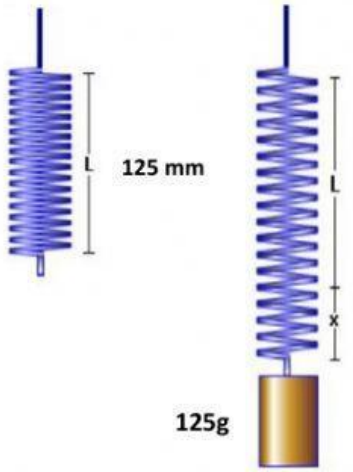
Weight of 80g =

Extension =

New length =

2. This question is about the stretching of springs

The diagram below shows an unlocked spring of length 125 mm hanging suspended from a clamp. When an object of mass 125g is hung on the spring, it becomes 240 mm long. WRITE THE FINAL ANSWER ON THE BOX.



a. Calculate the weight of the object.

W= mg =

Mass in kilograms =

Weight =

b. Calculate the value of the spring constant.

Spring constant = $\frac{Force}{extension}$

extension =

Spring constant =

c. Calculate the length of the spring with 350 g mass hang on it.

Mass in kilograms =

Weight of 350g =

Extension =

New length =