

PHYSICS Pp2

Item 1

A business man has a small shop, among the items he sells are the nails

A customer arrive at the shop wanted buy 130 pieces of 6 inch nails but he did not have a beam balance yet. The business man's daughter in O-level wanted to help them to determine the cost of 130 nails by first determining the mass and hence the cost of one nail without using a beam balance, If the cost of 1kg of 6-inch nails is 5,500/=

Experiment set up

TASK:

As a learner of Physics and using arrangement in figures above carry out a scientific investigation to help to determine the mass of one nail so that he would know the cost of 130 nails.

Hint: Principle of moments applied.

24 marks

ITEM 2:

At night we do not see objects in the dark. When a source of light is brought about, it directly illuminates the objects and we are able to see the objects clearly.

During day time, the sun does not shine directly on objects, but we can see house hold objects clearly.

Task

As physicist carry out an investigation to verify the law which light from the sun demonstrates, in order for us to see objects clearly where rays of light from the source do not directly illuminate the object.

Hint: