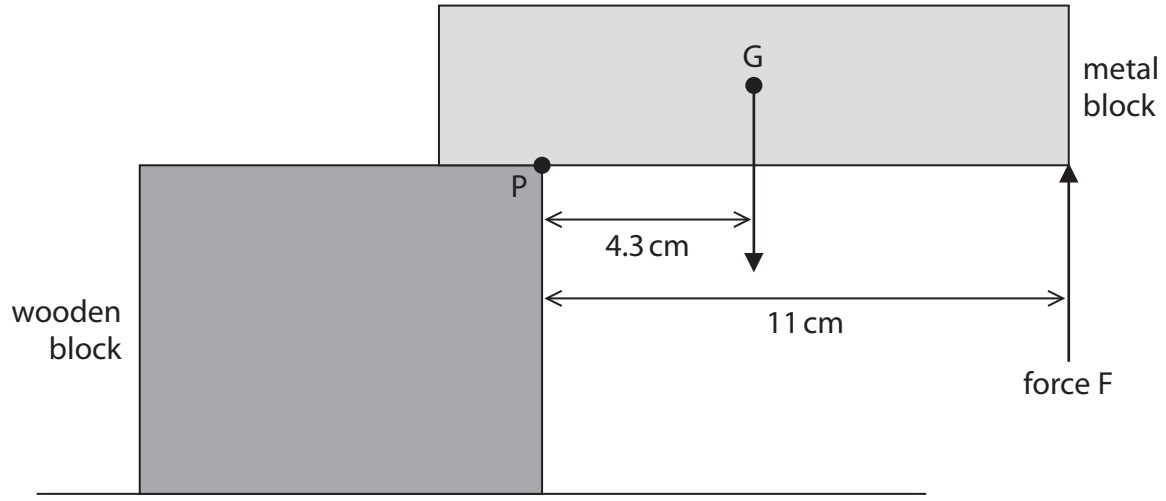
2 The diagram shows a metal block on top of a wooden block.

The metal block is held stationary by force F.



(a) (i) The weight of the metal block acts through point G.

Give the name of point G.

(1)

.....

(ii) Name a piece of apparatus that could be used to measure the weight of the metal block.

(1)

.....

(b) (i) State the formula linking moment, force and perpendicular distance from the pivot.

(1)

(ii) The weight of the metal block is 0.68 N.

Show that the moment of the weight of the metal block about point P is approximately 2.9 N cm.

(1)

(iii) Force F is applied to the metal block to stop it from moving.

Calculate the magnitude of force F.

(3)

force F = ... N

(Total for Question 2 = 7 marks)