

- 4 A student places a pile of coins on a table, as shown in photograph A.



Photograph A

There are 8 coins in the pile.

The weight of each coin is 0.036 N.

The area of each coin is 0.0013 m^2 .

- (a) (i) State the equation linking pressure, force and area.

(1)

- (ii) Calculate the pressure on the table caused by the pile of coins.

(2)

Pressure = Pa



- (b) The student then spreads the 8 coins out on the table as shown in photograph B.



Photograph B

- (i) Describe how this affects the total force from the coins on the table.

(2)

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- (ii) Explain how this affects the pressure on the table caused by the coins.

(2)

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(Total for Question 4 = 7 marks)

