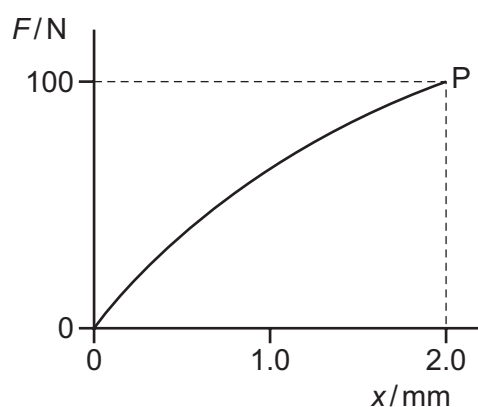


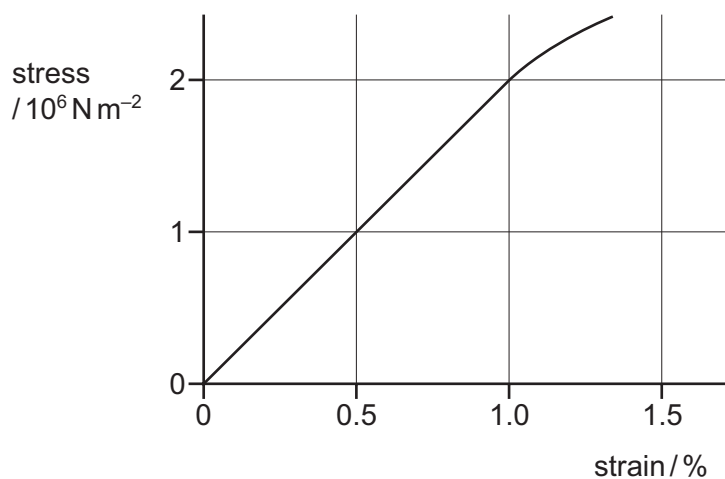
- 23** The graph shows the non-linear force-extension curve for a wire made from a new composite material.



What could be the value of the strain energy stored in the wire when it is stretched elastically to point P?

- A** 0.09 J      **B** 0.10 J      **C** 0.11 J      **D** 0.20 J

- 24** The diagram shows the stress-strain graph for bone.



What is the Young modulus of bone?

- A**  $1 \times 10^6 \text{ N m}^{-2}$   
**B**  $2 \times 10^6 \text{ N m}^{-2}$   
**C**  $1 \times 10^8 \text{ N m}^{-2}$   
**D**  $2 \times 10^8 \text{ N m}^{-2}$