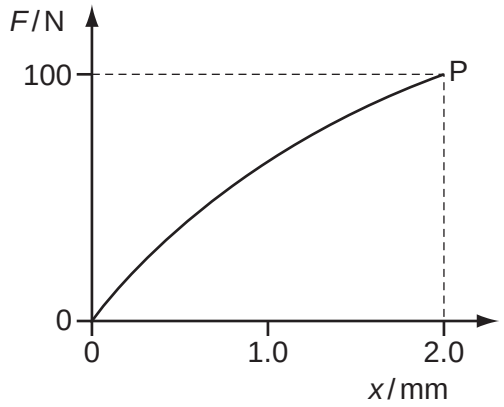
20 The graph shows the non-linear force-extension curve for a wire made from a ne material.



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

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

21 A steel string on an electric guitar has the following properties.

diameter = 5.0×10^{-4} m

Young modulus = 2.0×10^{11} Pa

tension = 20 N

The string snaps, and contracts elastically.

By what percentage does a length l of a piece of the string contract?

A 5.1×10^{-4} % **B** 5.1×10^{-2} % **C** 1.3×10^{-4} % **D** 1.3×10^{-2} %

Space for working