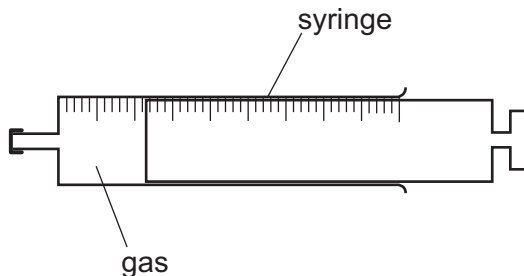


16 A gas is contained inside a syringe, as shown.



The initial volume of the gas is 2.00 cm^3 .

Atmospheric pressure is 101 kPa .

What is the work done by the gas on the atmosphere when the gas is heated and expands to a volume of 6.00 cm^3 ?

A $404 \mu\text{J}$

B 404 mJ

C 404 J

D 404 kJ