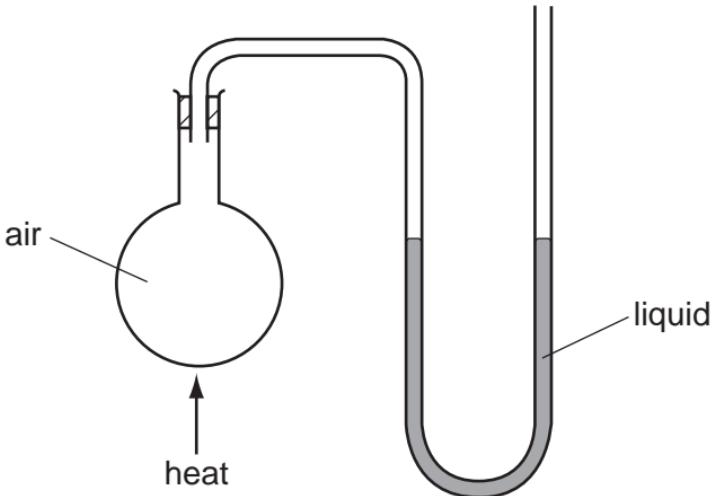


- 18 The diagram shows a flask connected to a U-tube containing liquid. The flask contains air at atmospheric pressure.



The flask is now gently heated and the liquid level in the right-hand side of the U-tube rises through a distance  $h$ . The density of the liquid is  $\rho$ .

What is the increase in pressure of the heated air in the flask?

A  $h\rho$

B  $\frac{1}{2} h\rho g$

C  $h\rho g$

D  $2h\rho g$

- 19 Four materials are formed into rods of the same dimensions.