6 A student finds the density of a liquid by measuring its mass and its volume. The following is a summary of his measurements.

mass of empty beaker = $(20 \pm 1)\,g$

mass of beaker + liquid = $(70 \pm 1)\,g$

volume of liquid = $(10.0 \pm 0.6)\,cm^3$

He correctly calculates the density of the liquid as $5.0\,g\,cm^{-3}$.

What is the uncertainty in this value?

A $0.3\,g\,cm^{-3}$ **B** $0.5\,g\,cm^{-3}$ **C** $0.6\,g\,cm^{-3}$ **D** $2.6\,g\,cm^{-3}$