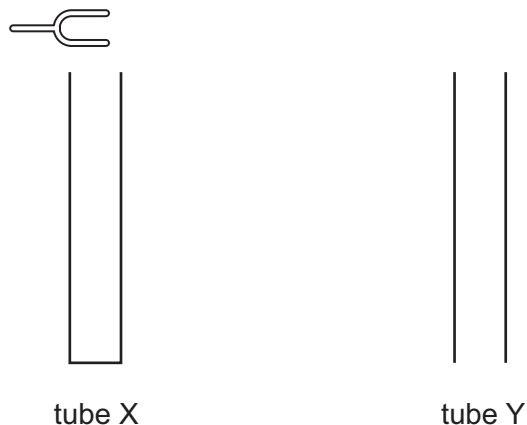


25 The diagram shows two tubes.



The tubes are identical except tube X is closed at its lower end while tube Y is open at its lower end. Both tubes have open upper ends.

A tuning fork placed above tube X causes resonance of the air at frequency f . No resonance is found at any **lower** frequency than f with tube X.

Which tuning fork will produce resonance when placed just above tube Y?

- A a fork of frequency $\frac{f}{2}$
- B a fork of frequency $\frac{2f}{3}$
- C a fork of frequency $\frac{3f}{2}$
- D a fork of frequency $2f$

Space for working