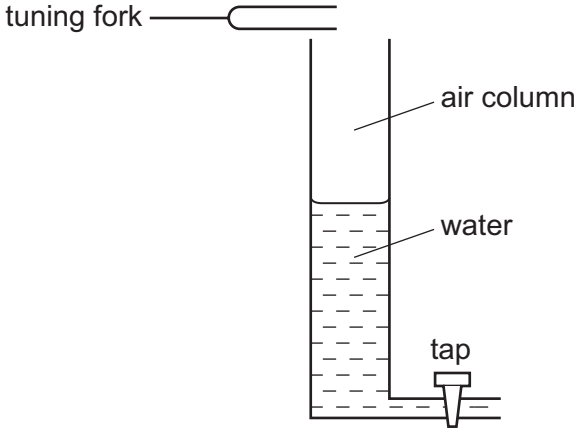
23 The table shows the wavelengths of five electromagnetic waves.

Which row correctly identifies the principal radiation for each of these wavelengths?

	10^{-14} m	10^{-10} m	10^{-6} m	10^{-2} m	10^{2} m
A	gamma ray	X-ray	infra-red	microwave	radio wave
B	radio wave	microwave	infra-red	X-ray	gamma ray
C	radio wave	microwave	ultraviolet	infra-red	X-ray
D	X-ray	infra-red	ultraviolet	microwave	radio wave

24 The diagram shows an experiment to produce a stationary wave in an air column. A tuning fork, placed above the column, vibrates and produces a sound wave. The length of the air column can be varied by altering the volume of the water in the tube.



The tube is filled and then water is allowed to run out of it. The first two stationary waves occur when the air column lengths are 0.14 m and 0.42 m.

What is the wavelength of the sound wave?

A 0.14 m **B** 0.28 m **C** 0.42 m **D** 0.56 m