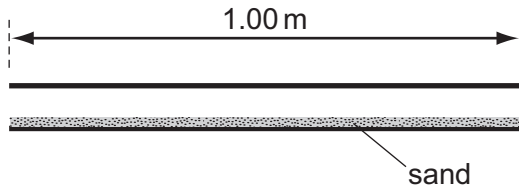


- 26** The diagram shows an air-filled pipe open at both ends. The length of the pipe is 1.00 m and the lower surface of the inside of the pipe is covered with a layer of fine sand.



When a source of sound of a single frequency is put near one end of the pipe, the air in the pipe is found to resonate and a pattern in the sand shows that a standing wave containing three nodes is formed within the pipe.

The speed of sound in air is  $330 \text{ m s}^{-1}$ .

What is the frequency of the sound?

- A** 330 Hz      **B** 495 Hz      **C** 990 Hz      **D** 1320 Hz

- 27** A stationary sound wave is formed in a measuring cylinder by blowing across the top, as shown