

**28** A musical organ produces notes by blowing air into a set of pipes that are open at one end and closed at the other.

What is the lowest frequency of sound produced by a pipe of length 10 m?  
(The speed of sound in the pipe is  $320 \text{ ms}^{-1}$ .)

**A** 4 Hz

**B** 8 Hz

**C** 16 Hz

**D** 32 Hz

**29** Monochromatic light is directed at a diffraction grating as shown.