

- 18** A musical instrument is made using a long tube with a mouthpiece at one end. The other end is open and flared, as shown.



A musician maintains stationary sound waves with a node at the mouthpiece and an antinode at the other end. The fundamental frequency of sound that the instrument can produce is 80 Hz.

Which different frequencies of sound can be produced by the instrument?

- A** 160 Hz, 240 Hz, 320 Hz
- B** 160 Hz, 320 Hz, 640 Hz
- C** 240 Hz, 400 Hz, 720 Hz
- D** 240 Hz, 320 Hz, 480 Hz

- 18** A portable fan battery is charged by connecting it to a constant potential difference of 6.0 V. The