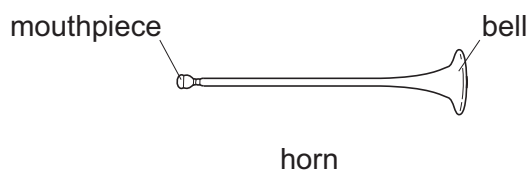


- 27 The basic principle of note production in a horn is to set up a stationary wave in an air column.



For the lowest note produced by a horn, a node is formed at the mouthpiece and the antinode is formed at the bell. The frequency of this note is 75 Hz.

What are the frequencies of the next two higher notes for this air column?

	first higher note / Hz	second higher note / Hz
A	113	150
B	150	225
C	150	300
D	225	375

- 28 Two parallel plates, a distance 25 mm apart, have a potential difference between them of 12 kV.

What is the force on an electron when it is in the uniform electric field between the plates?

- A** $4.8 \times 10^{-20} \text{ N}$
- B** $7.7 \times 10^{-20} \text{ N}$
- C** $4.8 \times 10^{-17} \text{ N}$
- D** $7.7 \times 10^{-14} \text{ N}$

Space for working