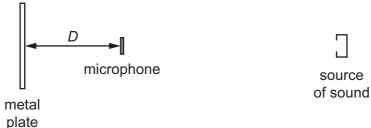
Which region of the electromagnetic spectrum has waves of wavelength 1000 times smaller than the wavelength of visible light?
A infra-red
B microwaves
C ultraviolet
D X-rays
The diagram shows apparatus for the measurement of the frequency of a sound wave.



Sound of the unknown frequency is reflected back from a metal plate. A microphone placed at a distance D from the metal plate detects the sound intensity. A minimum intensity is detected with $D = 12.0 \,\mathrm{cm}$. The plate is moved further away from the microphone until the next minimum is detected with $D = 15.0 \,\mathrm{cm}$.

The speed of sound in air is 336 m s⁻¹.

What is the frequency of the sound?

- what is the frequency of the sound:
 - **B** 112 Hz
- C 5600 Hz
- **D** 11200 Hz
- 27 An astronomer observes the light from a star that is moving away from the Earth.

For the observed light, what has been increased due to the star's motion?

- A amplitude
- **B** frequency
- C speed

A 56 Hz

D wavelength