

Waves

1. Sound

CONCEPT 2

TEST YOURSELF

HEARING SOUNDS AND AUDITORY RANGES

KNOW

- Q1 What is the **frequency** of sound?
- Q2 A dog whistle produces a sound of 25 000 Hz when it is blown. Why will a dog hear the whistle when her owner blows it but the owner will not?

APPLY

- Q3 Where in the ear are
- electrical signals transmitted to the brain?
 - sound vibrations amplified?
 - vibrations first detected?
- Q4 Some animals like the Fennec Fox in the image have large ear lobes in the shape of a funnel.
Explain why having large ear lobes is useful for the animal.



EXTEND

- Q5 Who is more likely to be at risk of having problems with poor hearing?
- Q6 We often refer to high frequencies in kHz rather than Hz.
How many hertz are in 20 kHz?
- Q7 Why should you not be impressed with the headphones in this advert.?

