

Reading Comprehension

Read the comprehension below which links to one of your previous science topics- sound. Use the techniques and methods we have used in school to help you to answer the questions below.

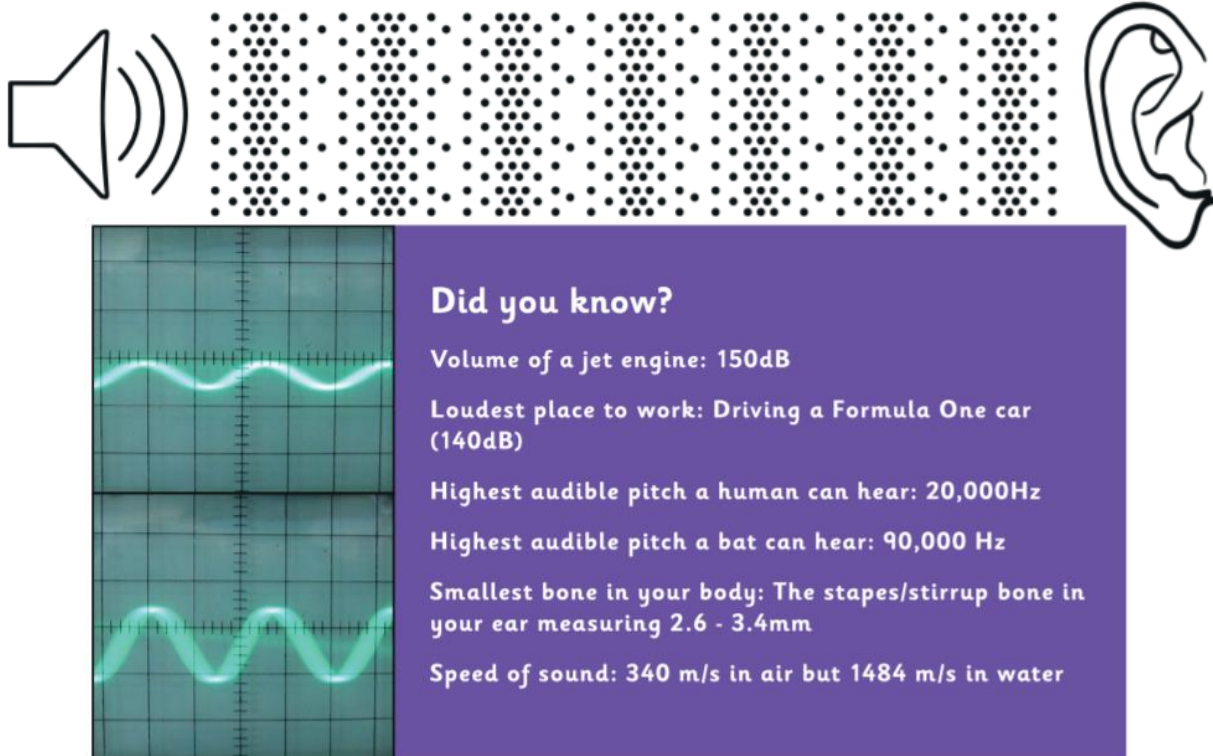
Sound Waves

Sound is all around us from the tweeting of a bird in a tree to your Mum shouting upstairs, "Hurry up – we're late!" and the latest song from your favourite band.

Different though all these things are, they have one thing in common... They all travel to your ear as sound waves.

Catching the Wave:

Sound waves are vibrations that move the air, in a similar way to how the wind might move the sea to make waves we can see. The waves travel towards your ear as the air particles move the next door particles until they arrive at your ear. How do the sound waves know how to get to your ear? Well, the answer is, they don't. The sound waves travel in lots of different directions from the source of the sound and your ear catches the bit that comes in your direction. Once your ear has 'caught' the sound, it carries on vibrating the tiny bones inside your ear that then turn the vibrations into electric pulses that are sent to the brain for them to be processed.



Pitch:

How fast the source of the sound vibrates is called the frequency of the sound and this is measured in hertz (Hz). The faster the vibration, the higher the frequency and the higher the pitch of the note. A low note will have a slow vibration and a lower frequency. You can make a string on an instrument have a higher frequency by shortening the string or making it tighter.

Volume:

Volume is how loud a sound is, no matter how high or low the pitch of the note. It is measured in decibels (dB). Think of volume being how hard the particles in the air are hitting each other, a bit like how hard you hit a rounders ball. Hit the particles hard and they will be louder and also the sound will travel further just like your rounders ball. So to make a guitar string louder, but the same pitch, you simply pluck it with more force.

Read the questions below carefully and use the text to help you to answer each of these questions. The domain is in brackets next to the question to help you identify the best strategy to use to answer the question. *Remember to look for the key words in the question and always go back to the text for your evidence! If you are unsure, read around the sentence and remember to always check all possible answers if it is multiple choice.*

1. What vibrates in your ear to send the sound signal into your body? **[2b]**
2. What unit is pitch measured in? **[2b]**
3. What unit is volume measured in? **[2b]**
4. What is another name for the stirrup bone found inside of your ear? **[2b]**
5. What is the speed of sound in the air? **[2b]**
6. How would you play a guitar more quietly? **[2b]**
7. Why has the author used an exclamation mark in the first sentence? **[2d/f]**
8. Thinking about how sound travels through the air, can you think why there is no sound in space? **[2d]**
9. Thinking about noise levels, what safety kit does a Formula One (race car) driver need? **[2d]**
10. What happens after the sound waves travel in different directions from the source? **[2b]**
11. Can you order the following events? **[2b]**
 - a) Processing sound waves
 - b) Source of the sound
 - c) Travelling sound waves
 - d) Ear catches the sound
12. “...they all have one thing in common...” Which is the closest meaning of the word common in this sentence? **[2a]**
 - a) Scruffy
 - b) Shared
 - c) Familiar
 - d) Usual
13. Can you summarise what the whole text is about in one sentence? **[2c]**
14. What is the main idea of *catching the wave*? **[2c]**
15. What is the meaning of the word ‘source’? **[2a]**
 - a) A liquid served with food
 - b) Birthplace
 - c) Start
 - d) Eye

Content domain reference	
2a	give / explain the meaning of words in context
2b	retrieve and record information / identify key details from fiction and non-fiction
2c	summarise main ideas from more than one paragraph
2d	make inferences from the text / explain and justify inferences with evidence from the text
2e	predict what might happen from details stated and implied
2f	identify / explain how information / narrative content is related and contributes to meaning as a whole
2g	identify / explain how meaning is enhanced through choice of words and phrases
2h	make comparisons within the text

Don't forget that you can also use the following website and login details to read different books. You could also talk to somebody at home about what you have read or write about them as a book review.



Class Sign In Instructions

Laptop or Chromebook

Have your students open their web browser and

1. Go to **www.getepic.com/students**
2. Sign in with your class code **zbu3135**
3. Select their name and they're in!

iOS/Android

Have your students open the Epic! app and

1. Click on **"Have an account? Sign In"** then click on **"Students & Educators"**
2. Sign in with your class code **zbu3135**
3. Select their name and they're in!

If you would like to hear David Walliams reading his stories (FOR FREE), you can also listen to one each day by clicking on the link or copying the link below into your browser.

<https://www.worldofdavidwalliams.com/elevenses/>

Oxford Owl is also a good website to use which allows you to read free e-books online once you have signed up. Again, this is free and something you might be interested in. You can use the link below:

<https://www.oxfordowl.co.uk/for-home/find-a-book/library-page/#>

Don't forget that any work you do can be photographed and attached as a file in an email and sent to my email address below:

CPSC11@corporationroad.darlington.sch.uk

Thank you to everyone who has emailed me so far. Keep working hard and showing me what you can do!

Miss Werrett 😊