

Steps for Skimming and Scanning

Follow the steps below to **skim** or **scan** a text.

Skimming:

- Read the title.
- Read the introduction.
- Read the first line of each paragraph.
- Look for important information such as names, dates and unusual words.
- Read headings and subheadings.
- Read the conclusion or summary.
- Do not read **every** word.



Scanning:

- Keep the word or piece of information you are looking for in mind at all times during your search.
- Let your eyes run quickly over the text.
- Use your finger to run along the lines of a text to keep your place.
- Skip over text that does not contain the information you are looking for.
- Once you have scanned from top to bottom, scan from the bottom to the top of the text to look for information you may have missed.

Sound Waves

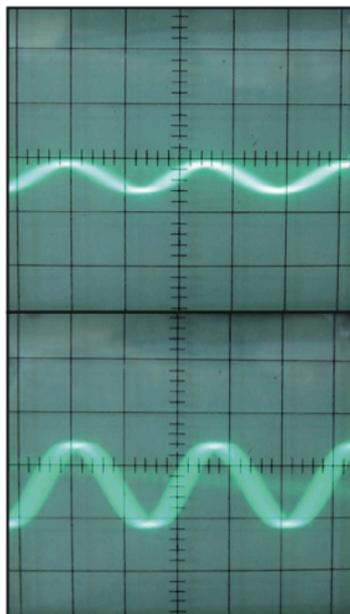
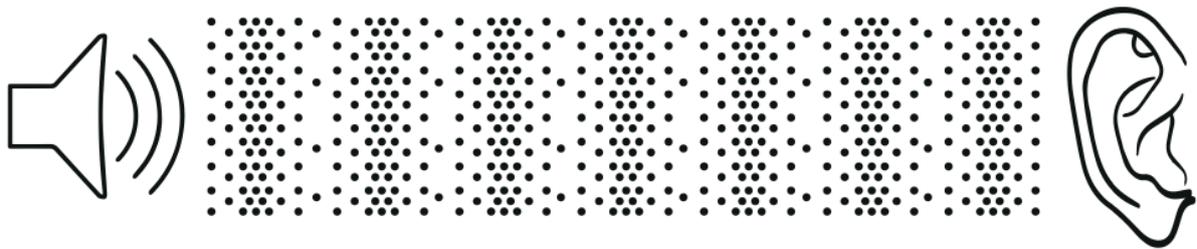
Sound is all around us. We can hear a bird in a tree, your Mum shouting upstairs, “Hurry up – we’re late!” and we can listen to our favourite songs and music.

These are all different types of sounds but they have one thing in common... They all travel to your ear as sound waves.

Catching the Wave:

Sound waves are vibrations (little wobbles) that move the air, in the same way that the wind moves the water in the sea to make waves. 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 where the sound is made 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 which turn the vibrations into electric pulses that are sent to the brain.



Did you know?

Volume of a jet engine: 150dB

Loudest place to work: Driving a Formula One car (140dB)

Highest audible pitch a human can hear: 20,000Hz

Highest audible pitch a bat can hear: 90,000 Hz

Smallest bone in your body: The stapes/stirrup bone in your ear measuring 2.6 - 3.4mm

Speed of sound: 340 m/s in air but 1484 m/s in water

Pitch:

The pitch of a sound is how high or low it sounds. This depends on how quickly the source of the sound vibrates. This 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). The volume is 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 the sound will travel further just like your rounders ball. So to make a guitar string louder, but the same pitch, you pluck it with more force.

Task 1

Read the text above carefully. Once you have read the text and the tips for 'scanning' and 'skimming' answer the questions below.

1. What vibrates inside your ear to send the sound signal to your body?
2. What unit is pitch measured in?
3. What unit is volume measured in?
4. What is another name for the stirrup bone inside your ear?
5. What is the speed of sound on water?
6. What is the speed of sound in air?
7. Can bats hear higher pitched noises than humans?
8. How would you play a guitar string louder?
9. Why has the author used an exclamation mark in the first sentence?
10. Why has the author put (little wobbles) in brackets next to the word 'vibrations' in the first sentence?
11. In the fact file what did the word 'audible' mean?
12. Thinking about how sound travels through air, can you think why there is no sound in space?
13. Thinking about noise levels, what safety kit does a Formula One driver need?
14. Why has the author used inverted commas around the word 'caught' in the Catching the wave paragraph?
15. Why do you think sound travels faster in water?

You **MUST** attempt 10 questions

You **SHOULD** attempt 12 questions

You **COULD** attempt ALL questions

Solutions to come tomorrow.

Task 2

Watch the video below and give a review.

Reviews should have the following:

- Short sentence summarising the content of the video.
- Comments about your enjoyment of the book - why you thought it was good.
- If necessary something you didn't like about the book and how it could improve.

BBC – What is sound?

<https://www.youtube.com/watch?v=aWieHpsZ7ik>



Mr Ronchetti's 'Puzzle of the day':

Yesterday's solution: Egg

How many Right angles are there in the name:

MR RONCHETTI