

What is Sound? | The Dr. Binocs Show | Learn Videos For Kids



**WHAT IS SOUND?**

**SOUND** is a wave or vibration that travels through 3 states of matter: solid, liquid and gas and, of course, it is something that can be heard. But have you ever wondered how does sound travel? It is simple, it all starts with a mechanical movement: like pouring hot chocolate in a mug, clapping you hands or hitting a gong. So, when you hit a gong, there is a movement which causes some vibrations in the molecules, which, in turn, causes the other molecules around them to vibrate. These vibrations from one molecule to the other help sound to travel.

**VACUUM.** You couldn't hear me, right?  
Well, because I was in vacuum. In space, where there is just vacuum and no matter, sound will not travel because there will be no molecules to vibrate.

**FREQUENCY** is an important measure of sound.  
When there are more number of sound waves passing through a fixed place at a given time, it means that the frequency is high. When the number of waves become less, we hear low frequency sound waves. The HUMAN EAR is capable of detecting frequencies between 20HZ to 20000HZ. Any frequency above or below that is inaudible to the human ear.

Higher frequency sound waves will give us a higher **PITCH**.  
Take a guitar and play the heaviest string. Hearing the buzz? Now play the thinnest string. Is there a difference in sound? Well, that is the difference in pitch.  
The loudness of sound is measured in **VOLUME** and to quantify volume, we use DECIBELS (DB). here is an example of volume. Can you hear me now?

**TRIVIA TIME**

Sound waves can bend around corners and obstacles.  
Any sound with a frequency below 20HZ is called INFRASOUND  
Any sound with a frequency above 20000HZ is known as ULTRASOUND

**1.- Complete with the appropriate information.**

1. Sound is a \_\_\_\_\_ that starts with a \_\_\_\_\_.
2. Sound travels through \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
3. Sound needs a medium through which to travel, that is why we cannot hear sound in \_\_\_\_\_.
4. Human beings can hear sounds with a frequency range of \_\_\_\_\_ Hertz.

**2. – Find out some animals that can hear infrasounds – from 0 to 20 hertz**

\_\_\_\_\_

**3.- Find out some animals that can hear ultrasounds -from 20.000 to 150.000 hertz**

\_\_\_\_\_

**4.- Name the five senses**

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