

We can define a sound wave as a disturbance which travels through some medium. **Sound** is the term to describe what is heard when sound waves pass through a medium to the ear. All sounds are made by vibrations of molecules through which the sound travels. For instance, when a drum or a cymbal is struck, the object vibrates. These vibrations make air molecules move. Sound waves move away from their source (where they came from), traveling on the air molecules. When the vibrating air molecules reach our ears, the eardrum vibrates, too. The bones of the ear vibrate in the same way that of the object that started the sound wave.

These vibrations let you hear different sounds. Even music is vibrations. Irregular vibrations are noise. People can make very complex sounds. We use them for speech.

Sound waves are longitudinal waves with two parts: compression and rarefaction. Compression is the part of the sound waves where the molecules of air are pushed (compressed) together. Rarefaction is the part of the waves where the molecules are far away from each other. Sound waves are a sequence of compression and rarefaction.

Luke 19:40 And he answered and said to them, I tell you that, if these should hold their peace, the **stones** would immediately **cry out**.

Psalms 96:11 Let the heavens rejoice, and let the earth be glad; let the sea roar, and the fulness thereof.

1. **Isaiah 55:12** ¹²You will go out in joy and be led forth in peace; the mountains and hills will burst into song before you, and all the **trees of the field will clap their hands**.
2. Wind referenced over 55 times.
 3. **Ezekiel 37:9**
 6. Then He said to me, "Prophesy to the breath, prophesy, son of man, and say to the breath, 'Thus says the Lord GOD, "Come from the four winds, O breath, and breathe on these slain, that they come to life.'""
 7. **The Holy Spirit Described As The Wind**
 8. **Acts 2:2**
 11. And suddenly there came from heaven a noise like a violent rushing wind, and it filled the whole house where they were sitting.
 12. **Psalms 148:7-8**
 13. Praise the LORD from the earth, Sea monsters and all deeps; Fire and hail, snow and clouds; Stormy wind, fulfilling His word;

Water

Ezekiel 1:24

I also heard the sound of their wings like the sound of abundant waters as they went, like the voice of the Almighty, a sound of tumult like the sound of an army camp; whenever they stood still, they dropped their wings.

Revelation 1:15

His feet were like burnished bronze, when it has been made to glow in a furnace, and His voice was like the sound of many waters.

Revelation 19:6

Then I heard something like the voice of a great multitude and like the sound of many waters and like the sound of mighty peals of thunder, saying, "Hallelujah! For the Lord our God, the Almighty, reigns."

A frequency is just an everyday happening

Every time you speak your voice box vibrates and creates a *frequency*. When you form words your tongue vibrates and that's a *frequency* too.

We identify frequencies using a unit of measurement called the Hertz

Hertz measures sound as 1 vibrational cycle per second.

think I just discovered the key of David

So I quickly grabbed my guitar and tuned it up to 444 hertz.

Remember: hertz measures sound as 1 vibrational cycle per second – these are frequencies...

All this means is that each sound vibrates 444 times per second.

<https://www.thoughtco.com/battle-of-gericho-700195>

A Strange Miracle Josh 6:1-27

God had a strange plan for the battle of Jericho. He told Joshua to have the armed men march around the city once each day, for six days. The priests were to carry the ark, blowing trumpets, but the soldiers were to keep silent.

On the seventh day, the assembly marched around the walls of Jericho seven times. Joshua told them that by God's order, every living thing in the city must be destroyed, except Rahab and her family. All articles of silver, gold, bronze, and iron were to go into the Lord's treasury.

At Joshua's command, the men gave a great shout, and Jericho's walls fell down flat! The Israelite army rushed in and conquered the city. Only Rahab and her family were spared.

¹⁵On the seventh day, they got up at daybreak and marched around the city seven times in the same manner, except that on that day they circled the city seven times. ¹⁶The seventh time around, when the priests sounded the trumpet blast, Joshua commanded the army, "Shout! For the LORD has given you the city!" ¹⁷The city and all that is in it are to be devoted^{to} the LORD

Isaiah 30:32 NIV Every stroke the LORD lays on them with his punishing club will be to the music of timbrels and harps, as he fights them **in battle** with the blows of his arm.

Mattah, Rod or Staff

The Mattah can be struck on a piece of wood to create a vibration of warfare sounds in the atmosphere.

8 scriptures that include tambourine. Ps 150:4; Gen 31:27; 1 Sam 10:5; 1 Chron 13:8; Is 5:12

Exodus 15:20

Miriam the prophetess, Aaron's sister, took the timbrel in her hand, and all the women went out after her with timbrels and with dancing.

2 Samuel 6:5

Meanwhile, David and all the house of Israel were celebrating before the LORD with all kinds of instruments made of fir wood, and with lyres, harps, tambourines, castanets and cymbals.

Tambourine

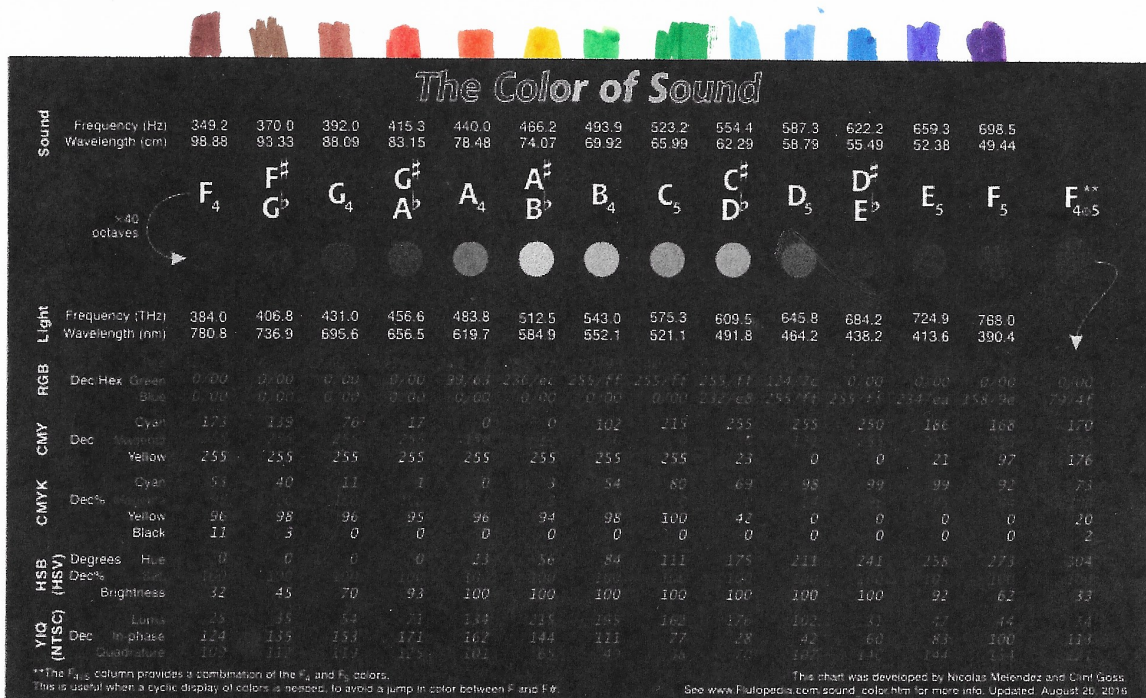
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Sound is a type of energy made by vibrations. When any object vibrates, it causes movement in the air particles. These particles bump into the particles close to them, which makes them vibrate too causing them to bump into more air particles. This movement, called sound waves, keeps going until they run out of energy. If your ear is within range of the vibrations, you hear the sound.

Picture a stone thrown into a still body of water. The rings of waves expand indefinitely. The same is true with sound. Irregular repeating sound waves create noise, while regular repeating waves produce musical notes.

When the vibrations are fast, you hear a high note. When the vibrations are slow, it creates a low note. The sound waves in the diagram show the different frequencies for high and low notes.

http://www.sciencekidsathome.com/science_topics/what_is_sound.html



http://www.flutopedia.com/sound_color.htm