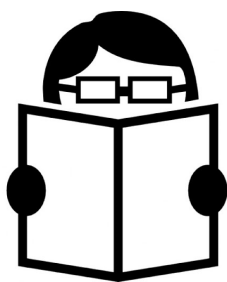


Science

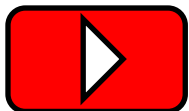
Year 5

Sound Part 2:

Sound is produced by Vibrations



Instructions: These notes contain links to videos, tasks, experiments and interactive questions. When pressing these buttons a new browser window is launched with new contents. When ready close the web browser and continue where you left.



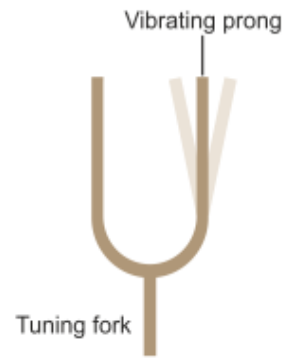
Vibrations produce sound: Sounds are produced by vibrating objects. Vibration in a general sense is anything that move back and forth, side to side, in and out or up and down. When the objects vibrate they push the air around them and produce sound.



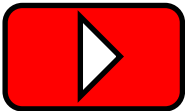
When we hit the drum, membrane of drum vibrates producing sound.



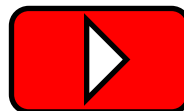
When we play a guitar, the string on it makes to and fro motion and produces sound.



Sound produced by vibrating prong of tuning fork.

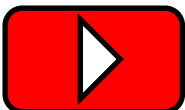


Click this button to watch a video about vibrations.

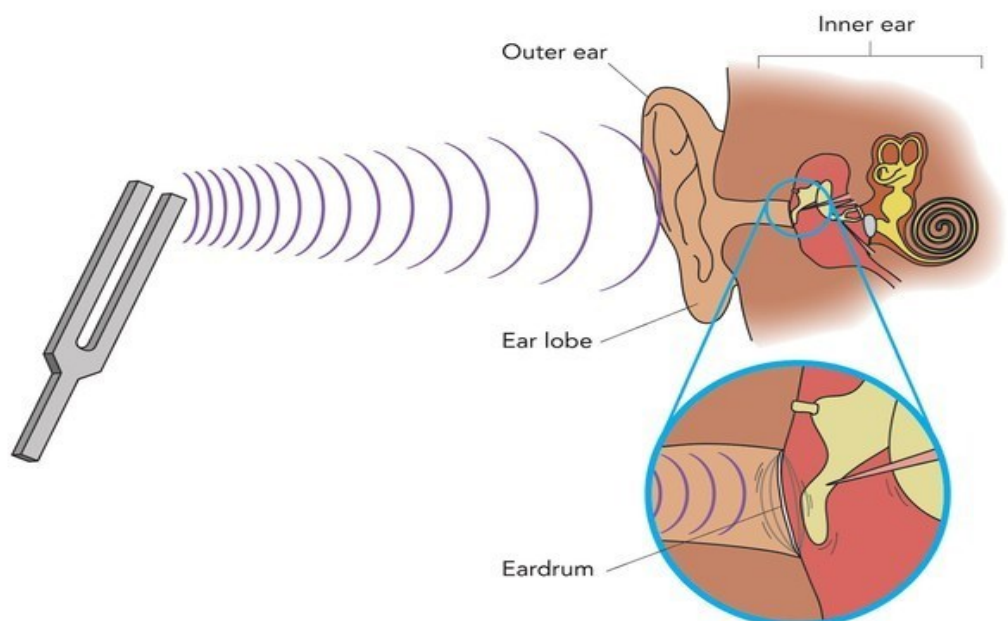


Click this button to watch a video about sound and vibrations.

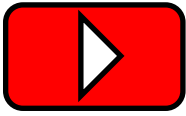
When these vibrations move through the air, they hit our ear drum and we are able to hear the sound.



Click this button to watch a video about the ear.

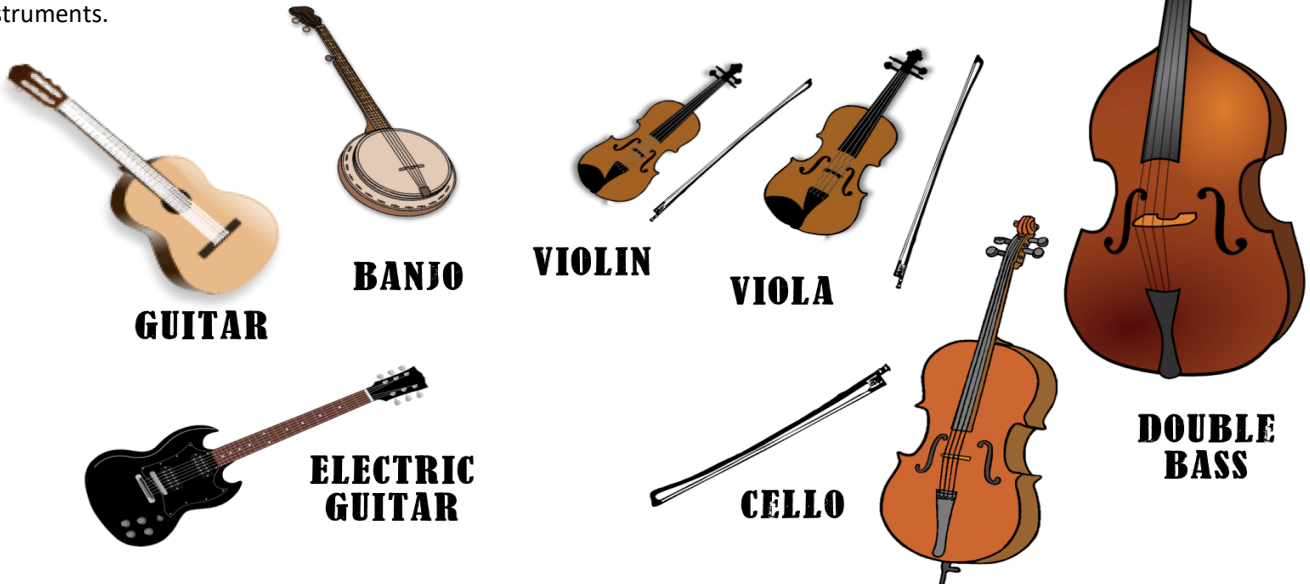


Different musical instruments have some vibrating parts: String instruments make sound from **vibrating strings**.

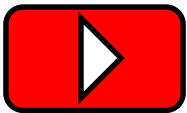


Click this button to watch a video about string instruments.

String Instruments



Wind and brass instruments produce sound from **blown vibrating air**.



Click this button to watch a video about wind instruments.

Wind and Brass Instruments



Percussion instruments produce sound by **striking** the instrument. The **vibrating metal, wood and other materials** of the instrument makes the sound.

Percussion Instruments

Xylophone



Claves



Triangle



Snare Drum



Cymbals



Tambourine



Maracas



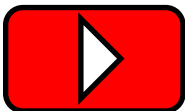
Bass Drum



Piano



Timpani



Click this button to watch a video about percussion instruments.

Questions

Click on the vibrating parts of the instruments.

Experiments
to try

Experiments
to try

Experiments
to try

Experiments
to try

Experiments
to try

Experiments
to try

Experiments
to try

Experiments
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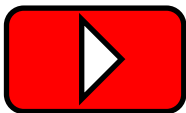
Click on these buttons to try some experiments and make different instruments.

High Vibrations and low vibrations sounds: light objects can vibrate a lot as they are light and move quickly. These produce high vibration sounds (high pitched sounds), tones such as squeaky, screechy, squeaking and squealing. Some examples are mouse squeaking, women voice, whistle and a rusty hinge.

Heavy objects due to their weight vibrate less as they are heavy. These produce low vibration sounds (low pitched sounds) and are soft and deep. Some example are men voices, bears growls, drum and hearth beats.



Low Pitched Sounds



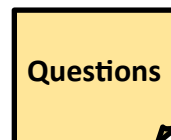
Click this button to watch video about pitch and loudness.



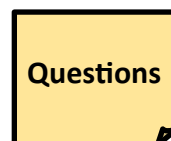
Write about the main points of this lesson.



High Pitched Sounds



Is it a low or a high pitched sound?



Answer question about sound pitch.