

Career Connections

The Sound of Silo's

Interests & Skill Sets

- Enjoy creating, playing and listening to music.
- Detail oriented
- Good hand-eye coordination
- Manual dexterity
- Problem solver
- Math & Physics
- Communication
- Creative

Jobs

- Acoustician
- Sound Engineer
- Musician
- Recording Engineer
- Record Producer
- Audio technician
- Instrument Designer
- Digital Audio Engineer
- Radio Broadcast Engineer
- Medical Sonographer (Ultrasound technician)

Courses & Degree Programs

- **Acoustical Engineering**-A branch of engineering dealing with sound & vibration. It includes the application of acoustics, the science of sound and vibration, in technology.
- **Ultrasound Medical Imaging**-A medical imaging technique that uses high frequency sound waves and their echoes.
- **Acoustics**
- **Physics**
- **Audio Production**
- **Audio Mixing**
- **Sound System Engineering**
- **Electrical Engineering**
- **Architecture**

Writing Prompt

Create a sound map! Sit in one spot and close your eyes. Listen to all the sounds you hear and estimate the distance they are from you. Then, write a story about what you heard and how it traveled across the air into your ears!

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Videos & More:

- [The Magic Frequency - Nikola Tesla](#)
- [Shattering Cancer with Resonant Frequency](#)
- [Using Sound Waves to Destroy Cancer](#)
- [Why do we hear echoes?](#)
- [Why is ultrasound used in Sonar?](#)
- [Sound: Crash Course Physics #18](#)
- [What does a sound engineer do?](#)
- [The difference between a producer and an audio engineer](#)
- [Journey of Sound to the Brain](#)
- [How Ultrasound Works](#)
- [What is Sound? - SciKids-Elementary age](#)
- [Magic School Bus Haunted Mansion-How sound is made](#)

Activities & Lessons:

- <https://www.boogeylights.com/physics-of-light-and-sound-for-kids/>
- <https://www.sciencekids.co.nz/sciencefacts/sound.html>
- <https://www.physicsclassroom.com/class/sound>
- [15 Unique Homemade Instruments](#)
- [How strings make sound the Physics of a Guitar](#)
- [Super Cool Sound Experiments to Do at Home](#)

Further Resources:

- <https://savingplaces.org/stories/looks-great-sounds-amazing-buffalos-silo-city-2#.XrFvYKhKjIU>
- <https://www.fast-and-wide.com/faw-news/11789-silo-songs>
- <https://www.sciencedaily.com/releases/2019/10/191028092413.htm>

Advanced Reading:

Drugs can be safely delivered to cancerous lymph nodes via the lymphatic system and then released inside the nodes using sound waves. Tohoku University researchers tested the treatment on mice with metastatic breast cancer and published their findings in the journal *Scientific Reports*.

High-Intensity Focused Ultrasound (HIFU) treatment uses focused sound waves to destroy cancerous cells in the bone, brain, breast, liver, pancreas, rectum, kidneys, testes, and prostate. While approved by the U.S. Food and Drug Administration, HIFU is still in its early stages, and the full potential of ultrasound in the fight against cancer has not yet been fully explored. In addition to being non-invasive, HIFU also introduces no radiation, has few side effects, and does not require a hospital stay.