

Deaf Students CAN be Successful in the Band Classroom and the Marching Field!



Adam Chitta
Grace Zientek

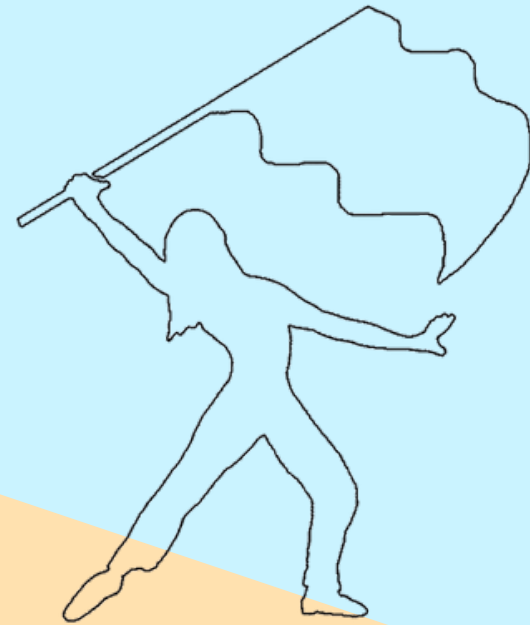
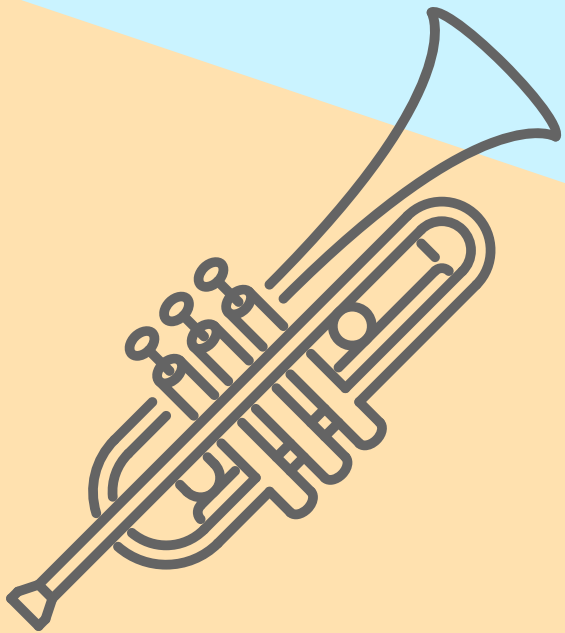


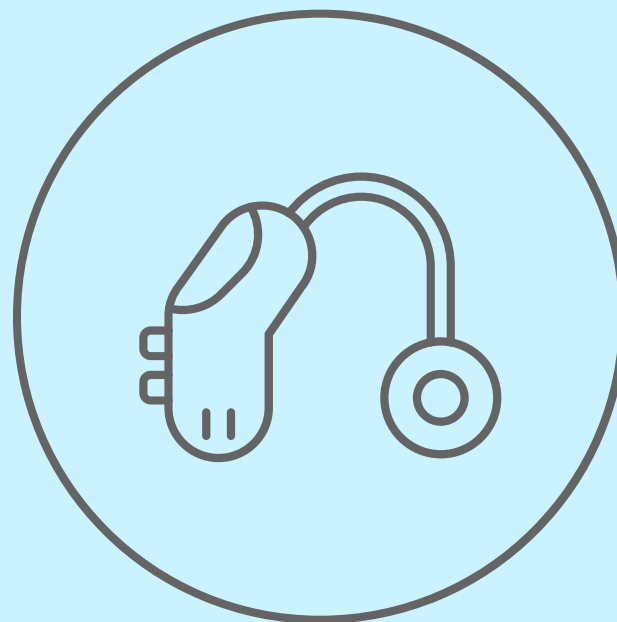
Friday, July 26, 2024

5:00-6:00 PM

CC 206

About Us





Adam Chitta (key-ta)

Hearing loss diagnosis

Moderate to severe hearing loss at age 7

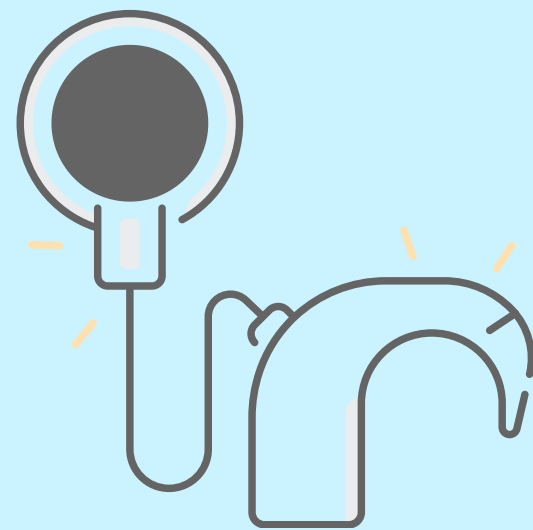




Adam Chitta

Teaching & Performing Experience

- 13 years in public education
- 5 year DCI performer
- 5 years teaching DCI
- 7 years teaching indoor color guard and indoor percussion

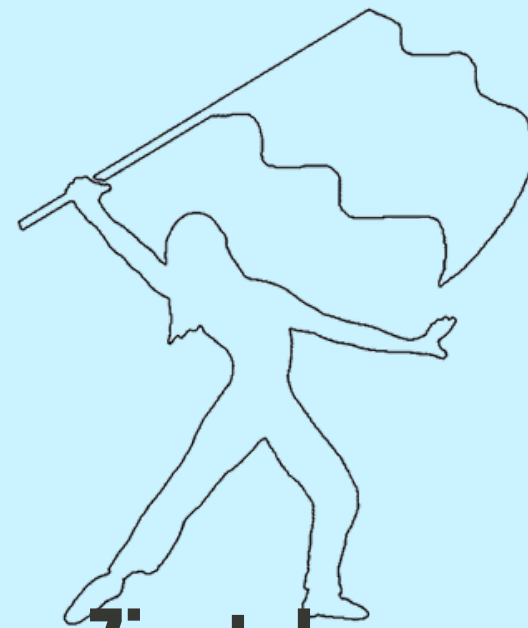


Grace Zientek (zen-tek)

Hearing loss diagnosis

Complete/profound hearing loss in left ear at birth.
Profound hearing loss in right ear by age 11





Grace Zientek

Marching Arts Performing & Teaching Experience

- 12 years teching / choreographing
- 9 years directing
- 5 years teaching DCI
- 12 years teaching indoor color guard and indoor percussion

DEAF EXAMPLE


- On the next slide, you will see a picture that resembles a puzzle.
- When you have it solved, place a thumbs up in front of you.



**THIS IS WHAT DEAF
OR HARD OF HEARING
PEOPLE FEEL WHEN
HEARING PEOPLE
SPEAK TO THEM.**

IT IS HARD WORK .



A scenic landscape at sunset or sunrise. The sun is low on the horizon, casting a warm, golden glow over the scene. In the foreground, there's a dirt road with patches of snow or ice. To the right, a hillside covered in bare trees rises. The middle ground is filled with tall, dry grass. A large, dark, semi-transparent text box is centered over the image, containing the quote in white serif font.

I'm not a deaf musician.
I'm a musician who
happens to be deaf.

Evelyn Glennie



[TheChittaSound blog entry](#)

CLINIC OBJECTIVES

- Types of hearing loss and hearing assisting devices
- Adaptive strategies for the middle/high school band classroom
- Adaptive strategies for the marching band field

What does it mean to be deaf?

“

FOR STUDENTS WHO ARE DEAF, THE PRIMARY MEANS OF COMMUNICATION IS THROUGH THE VISUAL CHANNEL. THEIR RESIDUAL HEARING OR REMAINING HEARING IS NOT SUFFICIENT TO PROCESS SPEECH. THESE STUDENTS HAVE A HEARING LOSS THAT IS 90DB OR GREATER.

(DARROW, 2006)

”

TYPES OF HEARING LOSS

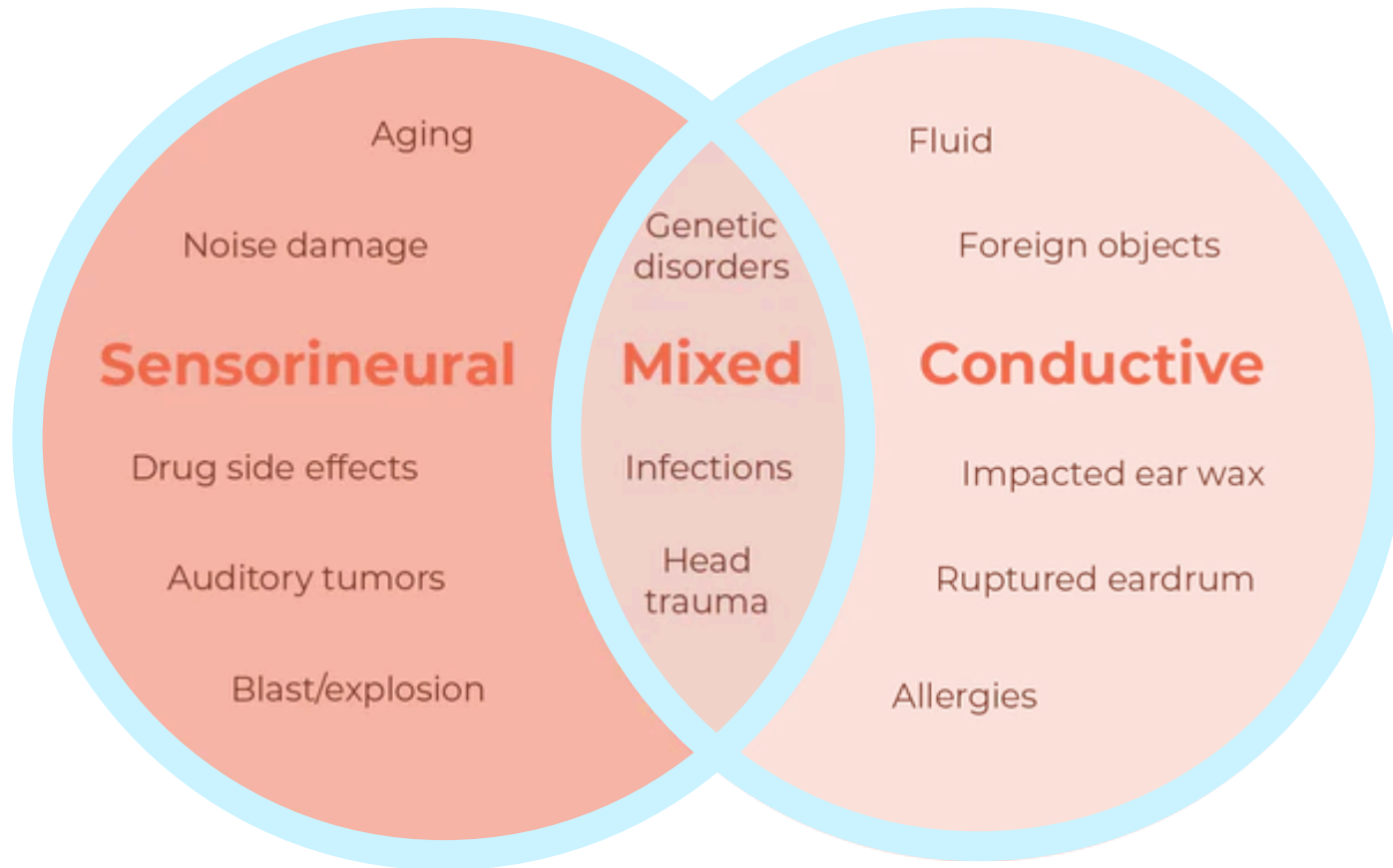
CONGENITAL



ACQUIRED

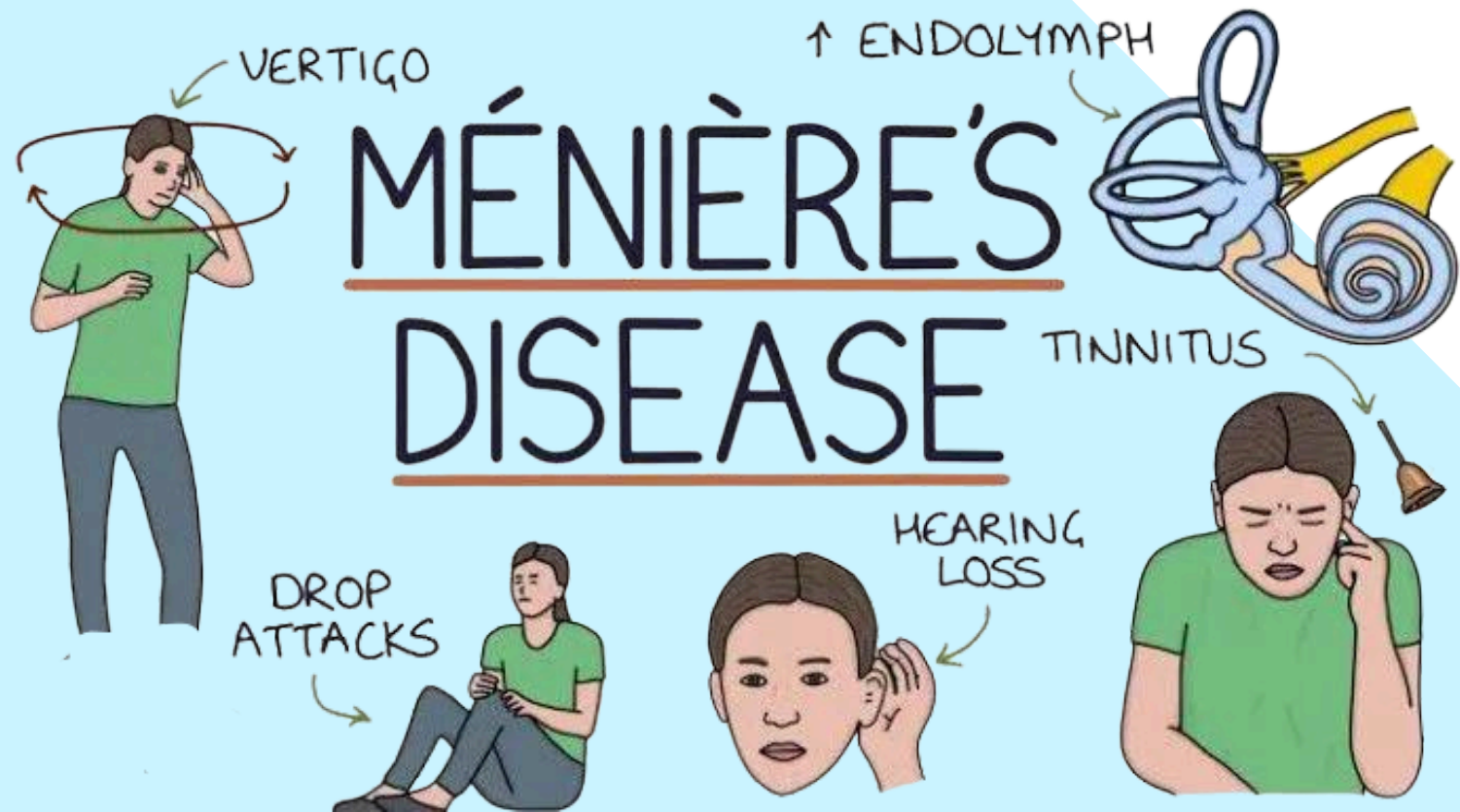


TYPES OF HEARING LOSS



Symptoms

- Tinnitus
- Fatigue
- Nausea
- Vertigo
- Loss of balance
- Migraines
- Hearing loss
- Ear Congestion
- Rapid involuntary eye movement
- Double vision



**Unilateral
Hearing
Loss**



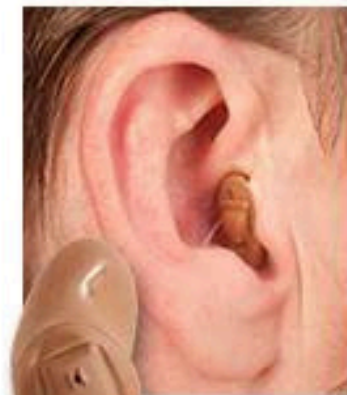
ONE EAR OR TWO?



**Bilateral
Hearing
Loss**

HEARING ASSISTIVE DEVICES





A



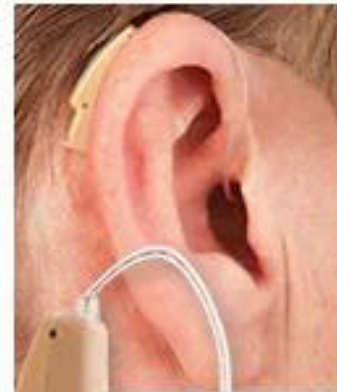
B



C



D



E



F

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- [Click here for more Information](#)
- [Article: "Hearing Aids: How to choose the right one."](#)



Cochlear™ Nucleus® 7
Sound Processor



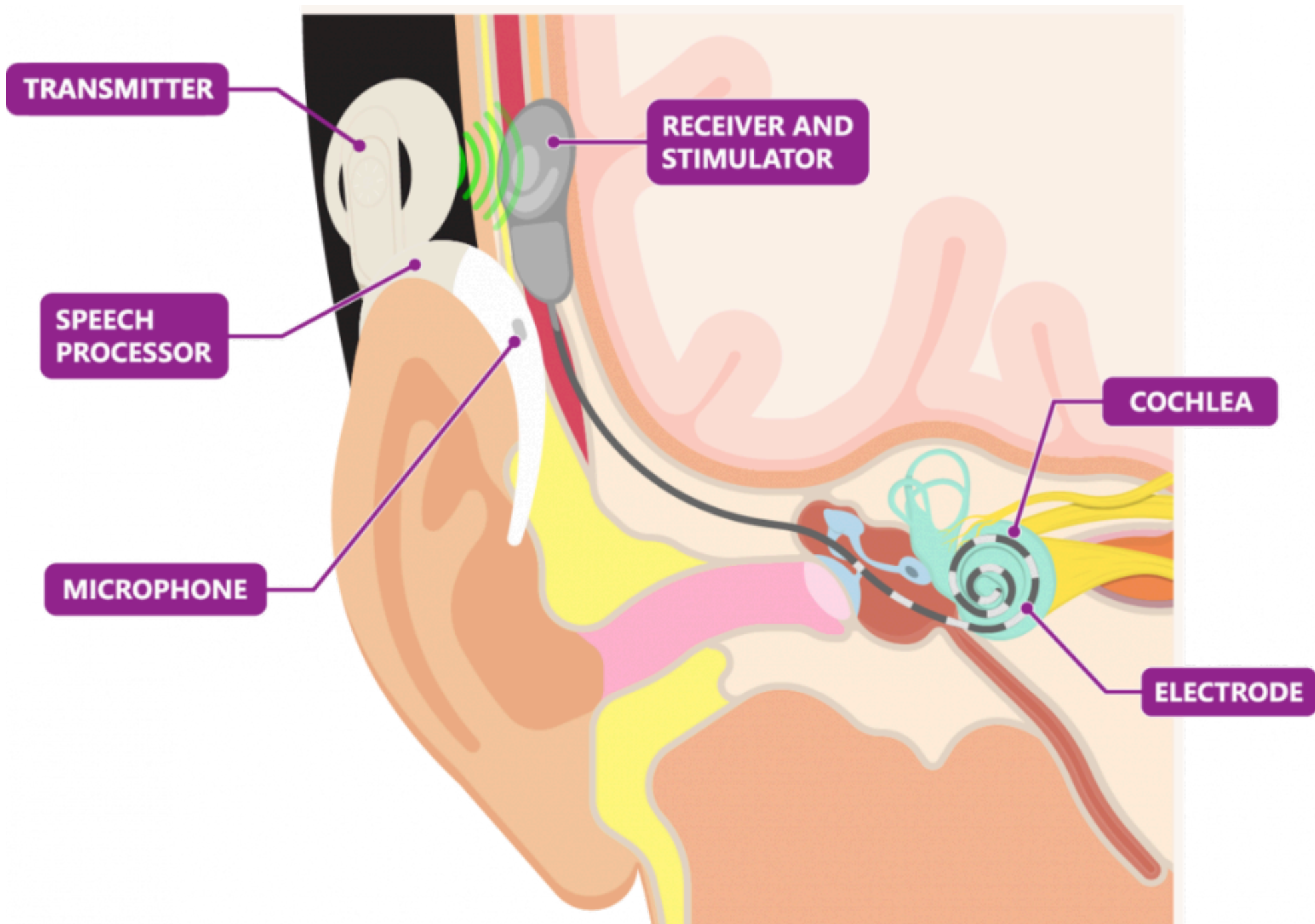
Cochlear™ Profile® Plus
with Slim Modiolar



Cochlear™ Kanso®
Sound Processor

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Cochlear is a leader in hearing device implants that help to restore hearing and connect people to a world of sound. Start your hearing journey today!



ADAPTIVE STRATEGIES FOR THE MIDDLE/HIGH SCHOOL BAND CLASSROOM

FULL ENSEMBLE / REHEARSAL STRATEGIES

Chair/Stand Setup

- It is OKAY to change from the norm!
- Experiment and trial/error the ways to achieve your wanted band sound while still meeting the needs of the DHH child
- Place DHH students in between strong players to help with tone, tuning, timing
- Avoid placing on the outside as their “weaker” ear may not be able to hear the inside of the setup
- Students on either side can help point to music or quietly answer questions
- Placing a DHH student near the lower pitched instruments and the percussion. This can enhance the FEEL of the beat and of the nearby instruments

FULL ENSEMBLE / REHEARSAL STRATEGIES

Voice Amplification

- Use of microphones and amplification devices can help ALL students hear better in the large band and orchestra classrooms
- Likely to be listed on the 504 or SPED paperwork for students with hearing loss, regardless of degree
- Allows teacher to deliver clear instructions in calm voice to reach a small or large class
- Protects vocal cords of those who teach continuously back to back large classes
- More students hearing the instructions = More productive rehearsals = More success to be had by EVERYONE!
- FACE the students when speaking to them
- Avoid speaking while facing the board at all costs
- SOME DHH students also read your lips along with what they hear.

FULL ENSEMBLE / REHEARSAL STRATEGIES

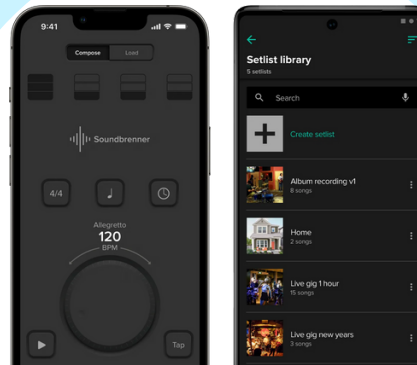
Metronome Setup



Visual Learning

Sound Speaker
Placement

Audio Learning

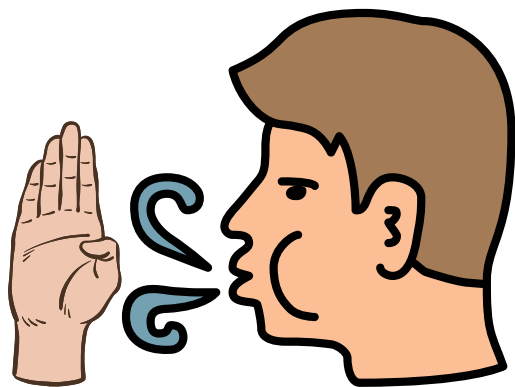


Tactile learning

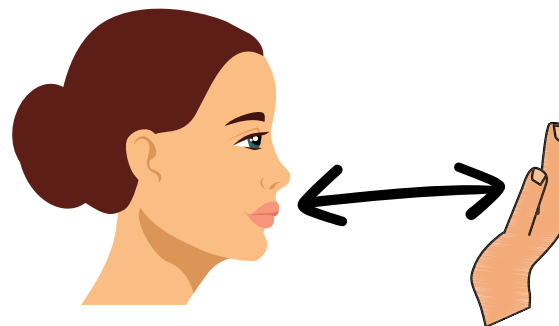
McAdams Metronome

Soundbrenner Metronome

FULL ENSEMBLE / REHEARSAL STRATEGIES



“Shark fin” (ASL B) (Tactile Learning)



Hand movement to (inhale) and away (exhale) from mouth (Kinesthetic learning)



**Hand placement on body
(Kinesthetic learning)**

**One hand on stomach,
one hand on back**

Breathing Exercises

FULL ENSEMBLE / REHEARSAL STRATEGIES

Tuning



KORG tuner with clip
Visual Learning



TonalEnergy Tuner app
Audio and Visual
Learning



FULL ENSEMBLE / REHEARSAL STRATEGIES

Scales

Solfege

Audio and Visual
Learning

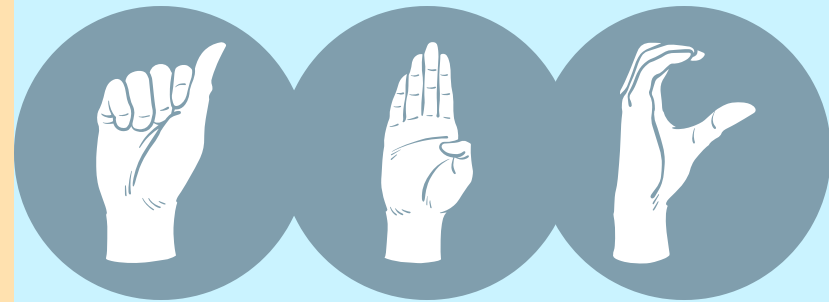


Rehearsal Numbers



Colors

Visual Learning

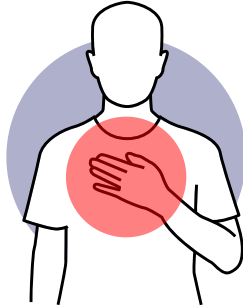


Letters

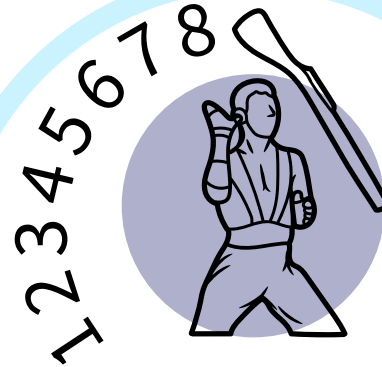
Visual and Kinesthetic Learning

FULL ENSEMBLE / REHEARSAL STRATEGIES

Rhythms



Tapping on chest
Kinesthetic learning



Counting the rhythm
Audio Learning

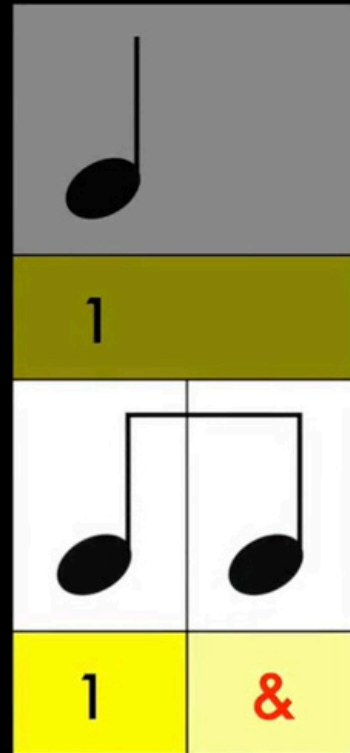


Clapping the rhythm
Kinesthetic Learning

FULL ENSEMBLE / REHEARSAL STRATEGIES

Rhythms

ReadyMade
Music Theory



FULL ENSEMBLE / REHEARSAL STRATEGIES

Dynamics

- Decibel meter reader
(Visual learning)
- Number system
















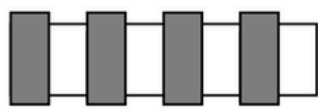
NIOSH App

Note Length/Separation

- Utilize visuals for students to see note length relationship from note to note (Visual learning) BC Band Solutions
- Air onto the palm (Tactile learning)
- TonalEnergy Tuner app (Visual learning)
- Feeling the resonance/vibrations of the instrument (Tactile learning)

FULL ENSEMBLE / REHEARSAL STRATEGIES

BC Band Solutions

<u>Style/Length</u>	<u>Symbol</u>	<u>Visualization</u>
Connected		
<i>def.</i> – The notes touch and there is no decay.		
Long Lifted		
<i>def.</i> – The notes touch and there is a slight decay.		
Lifted		
<i>def.</i> – There is a small space and a slight decay.		
Detached		
<i>def.</i> – The length is half of the note it is attached to and there is no decay.		
Accented		
<i>def.</i> – The front of the note is slightly louder, the notes touch and there is a slight decay.		
Lifted Accent		
<i>def.</i> – The front of the note is slightly louder, there is a small space and a slight decay.		
Roof-Top Accent		
<i>def.</i> – The front of the note is slightly louder, the length is half of the note it is attached to and there is no decay.		

© BC Band Solutions

TonalEnergy Tuner



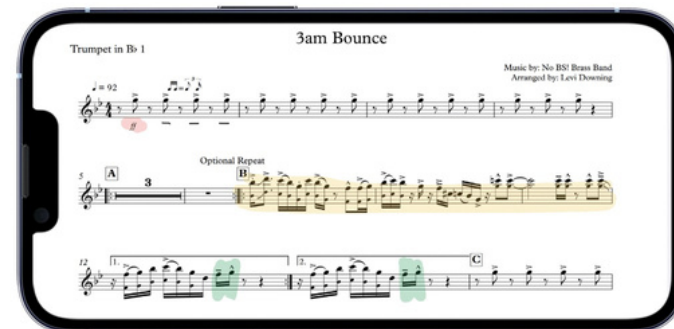
ADAPTIVE STRATEGIES FOR THE MARCHING FIELD

FULL ENSEMBLE / REHEARSAL STRATEGIES

Field placement & drill assignments

- DHH students should be included in the setup just like their hearing peers

Communication



- BEAM app within Ultimate Drill Book
- Annotation & Live Mode



FULL ENSEMBLE / REHEARSAL STRATEGIES

Non-verbal communication cues on-the-move

- Examples from Frank Troyka's Guidelines for Marching Technicians
 - Located in clinic handout
- **Problem → Gesture**
 - Incorrect interval → Point to the larger interval to be adjusted
 - Out of step → Point to the person's feet and make a circular motion with your hand
 - Upper body not lifted → Place your hands below your rib cage and gesture a lifting motion
 - Chin too low → Touch your own chin and lift it slightly

Voice Amplification

- Stick what you normally use with metronome audio system (MegaVox, Long Ranger, stationed at back sideline, traveling with drumline, etc.)
- Similar to the middle/high school band classroom, voice amplification devices can help ALL students hear better on the field
- More students hearing the instructions = More productive rehearsals while staying in the 8-hour minimum window = More success to be had by EVERYONE! **Every second counts!**
- Develop a system that assists in the count-offs of each rehearsal segment

Metronome Setup

- Just how LOUD are the environments for our student musicians?
- Any hearing protection is better than no protection at all
- Hearing loss is IRREVERSIBLE!
- JWPepper video

Hearing Protection

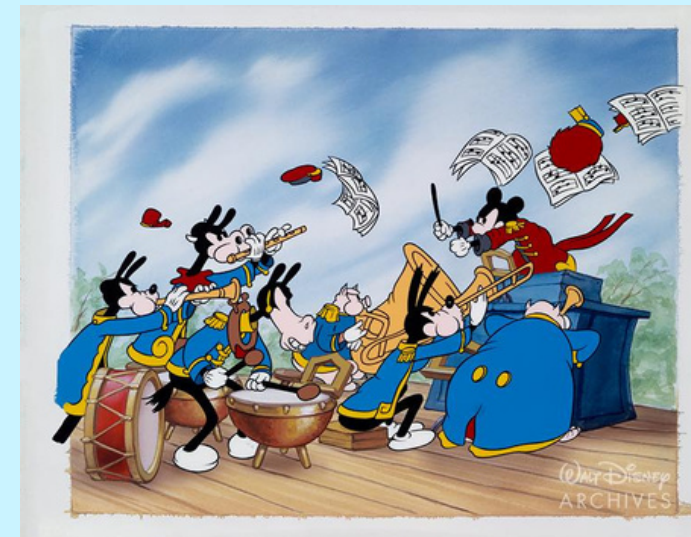
Decibel Overview

Decibel Level	Sound Source	Musical Levels
0 dB	Just audible sounds	
20 dB	Soft rustle of leaves	
30 dB	Quiet whispers	Background music
40 dB	Soft speech	Piano - <i>p</i>
50 dB	Normal conversation	Mezzo Piano - <i>mp</i>
60 dB	Loud conversation	Mezzo Forte - <i>mf</i>
80 dB	Shouting	Forte - <i>f</i>
90 dB	Heavy traffic	Fortissimo - <i>ff</i>
100 dB	Riveter 35 ft away	Marching band
120 dB	Jet engine	

Hearing Protection

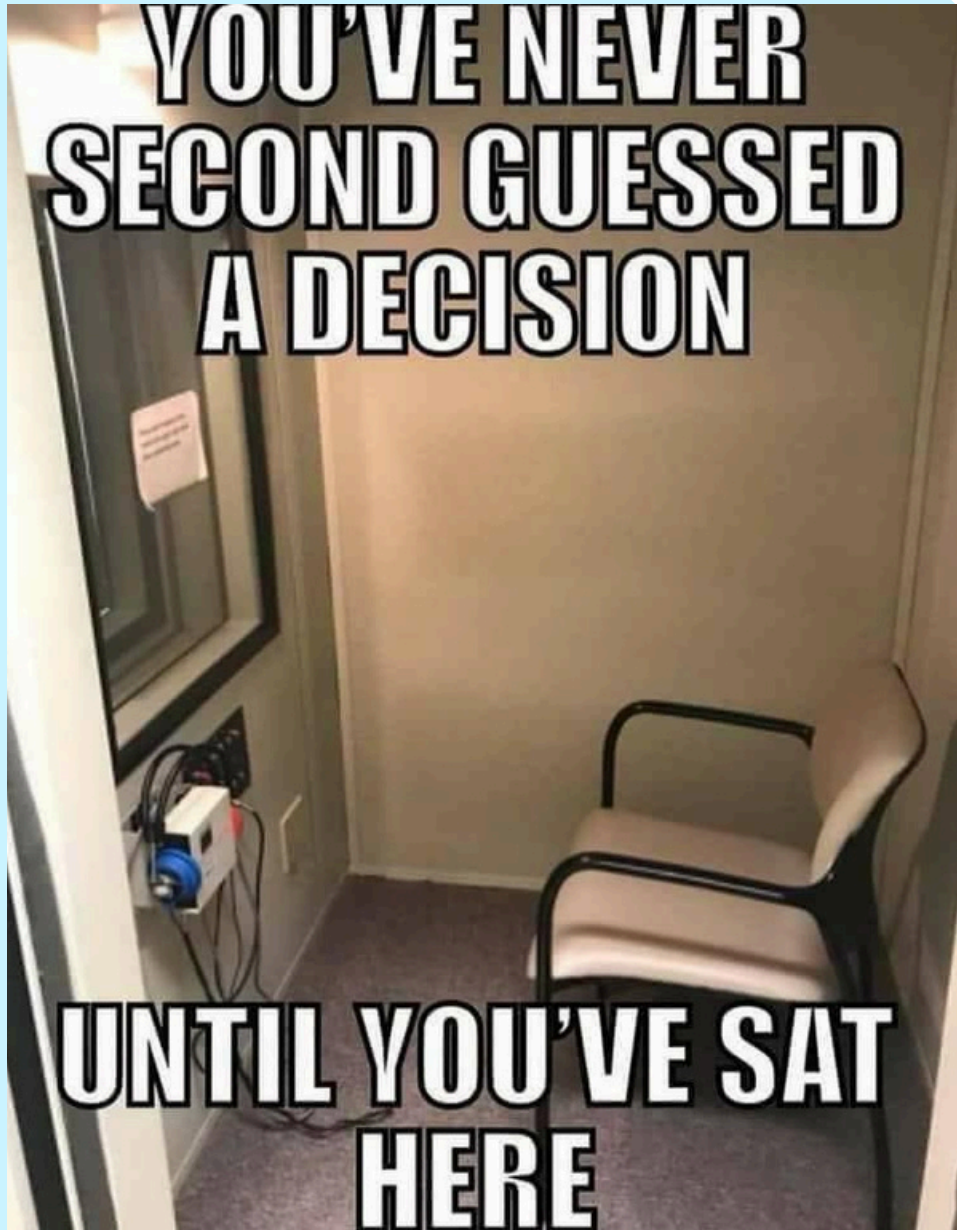
Disneyland Decibel Overview

Decibel Level	Disneyland Attraction	Musical Levels
81 dB	It's a Small World Clock Tower	Forte - <i>f</i>
82 dB	Matterhorn (west)	Forte - <i>f</i>
83 dB	Radiator Springs Racers Track Car Pass-by	Forte - <i>f</i>
85 dB	Mark Twain Steamboat	Forte - <i>f</i>
86 dB	Big Thunder Mountain Railroad (west)	Forte - <i>f</i>
87 dB	Soarin' Over California Queue	Forte - <i>f</i>
91 dB	Disneyland Railroad Train Horn	Fortissimo - <i>ff</i>
92 dB	Grizzly River Run Drop Point	Fortissimo - <i>ff</i>
97 dB	Monorail Horn Near Matterhorn	Fortissimo - <i>ff</i>
?? dB	Screaming toddler being pushed around a jammed Fantasyland well past naptime	

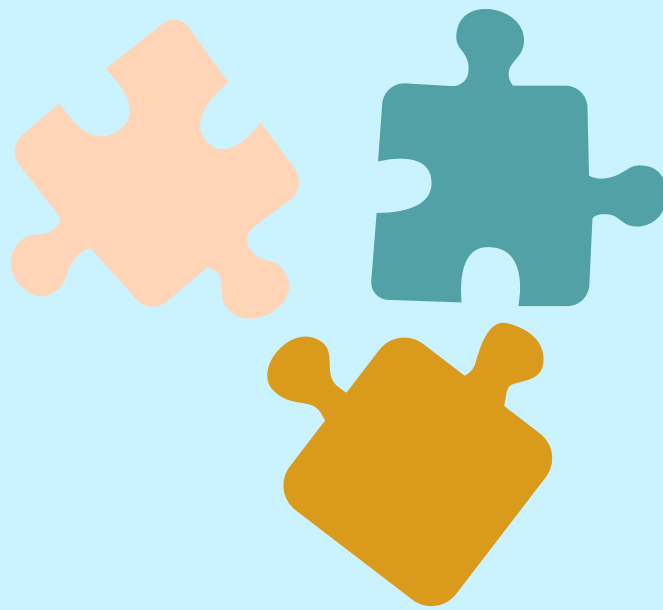
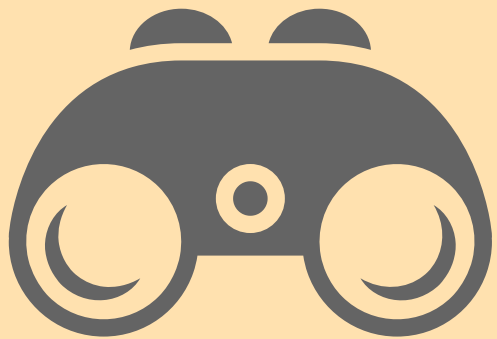


**YOU'VE NEVER
SECOND GUESSED
A DECISION**

**UNTIL YOU'VE SAT
HERE**



BE ON THE LOOK OUT



- Hearing fatigue
- Did the students hear your instructions?
- Did all students hear the question?
- Be PATIENT with the DHH students. We only have a piece of the puzzle and need to fill in the gaps on our own.

MISCONCEPTIONS

```
graph TD; M((MISCONCEPTIONS)) --> A[All Deaf/HoH students can lip read]; M --> B[DHH students cannot be musical]; M --> C[DHH students cannot be as successful as their hearing peers]; M --> D[Speaking LOUDER is the answer]; M --> E[Deaf = Dumb]; M --> F[There's nothing that can be done to help];
```

All Deaf/HoH
students can lip
read

DHH students
cannot be
musical

DHH students
cannot be as
successful as
their hearing
peers

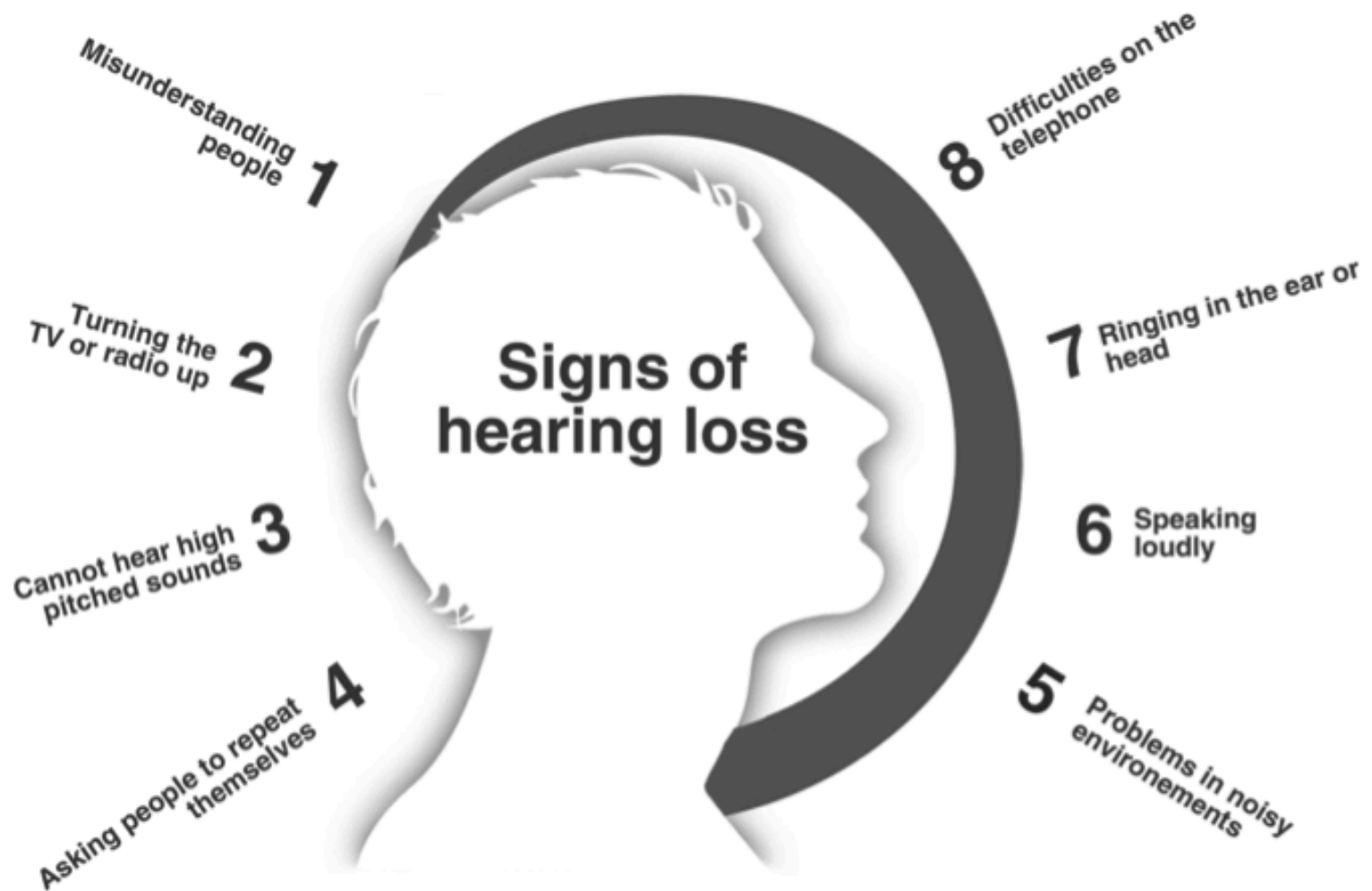
Speaking
LOUDER is the
answer

Deaf = Dumb

There's nothing
that can be
done to help

*My subtitles.
I can't hear without my
subtitles...*





RESOURCES

- **The Chitta Sound, LLC**
 - www.thechittasound.com
 - <https://thechittasound.com/2024-texas-bandmasters>
 - [Podcast episodes](#)
 - [DHH Performers](#)
- **Texas Health & Human Services - Deaf Tuition Waiver**
 - <https://www.hhs.texas.gov/services/disability/deaf-hard-hearing/tuition-waiver>
- **JWPepper video - Hearing Health**
 - <https://www.youtube.com/watch?v=O7Cyjs4tEZY>
- **Hear & Beyond**
 - **How-to guide on living successfully with hearing loss**
 - <https://livingwithhearingloss.com/hearandbeyond/>
- **ReadyMade Music, LLC**
 - <https://www.readymademusic.net/>
- **Ultimate Drill Book / BEAM app**
 - <https://www.ultimatedrillbook.com/>
 - <https://www.ultimatedrillbook.com/beam/>

Thank You!

CONTACT US

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