# Rinne’s and Weber’s Test (Hearing Tests)

Scouts VICTORIA

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## Sections

Joey Scouts
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## Challenge Areas

COMMUNITY
CREATIVE
OUTDOOR
PERSONAL GROWTH

## Scout Method Elements

COMMUNITY INVOLVEMENT
**LEARNING BY DOING**
NATURE AND THE OUTDOORS
PROMISE AND LAW
**PERSONAL PROGRESSION**
PATROL SYSTEM
SYMBOLIC FRAMEWORK
**YOUTH LEADING, ADULTS SUPPORTING**

## SPICES Growth Areas

CHARACTER
EMOTIONAL
**INTELLECTUAL**
PHYSICAL
SOCIAL
SPIRITUAL

# The Adventure

Ever wondered how an audiologist tests your hearing? Investigate how we hear and the different ways our ears receive sounds using clinical hearing assessments.

# Plan

1. Investigate the structure of the ear. What is the purpose of each part of the ear?
2. Investigate sound waves and how they are detected by our ears. Can you think of any creative ways to visualise sound waves?
3. Learn about the two routes sounds can reach your inner ear: air conduction and bone conduction. Which do you think will be more sensitive? Why?
4. Investigate sensorineural and conductive hearing loss. What can cause these types of hearing loss?
5. Read the safety requirements and discuss with your leaders what supervision and safety measures might be needed. You will need a tuning fork.

# Do

1. To perform Rinne’s test, strike a tuning fork against your palm and quickly place the bottom of the tuning fork on the bone behind your ear. When you can no longer hear the sound, quickly place the prongs of the tuning fork next to the opening of your ear to see if you can still hear the sound.
2. To perform Weber’s test, strike a tuning fork against your palm and place the base of the tuning fork in the middle of your forehead. Note whether the sound is the same or different in each ear. Next try blocking one ear and performing the test again.
3. Make sure you record your observations along the way.

# Review

1. What type of sound conduction were you using at different time points during these tests? Did you find air or bone conduction to be more sensitive? Why do you think one was more sensitive than the other?
2. What parts of the ear made either air or bone conduction more sensitive? Can you think of a creative way to model the action of these parts of the ear?
3. What have you learnt about hearing loss while doing this Challenge Card? How might your unit learn more about deafness and the deaf community? What could you do to make Scouting at your group more accessible to deaf Scouts?
4. Using a diagram of the ear to help, what do you think could cause these different types of hearing loss?

# Safety

- Never put any objects into your ears, as you may cause damage. Remember the rule, never put anything smaller than your elbow in your ear!
- Sound warning: If you are participating in this Challenge Card and find the sounds too loud or causing any pain, do not continue testing on yourself. This challenge may not be suitable for noise sensitive individuals.
- It is important to note that while these tests are used by audiologists to test their patients’ hearing, what you will be doing is not a proper hearing evaluation. Do not interpret any of your findings as clinical results or measures of your hearing ability. If you have concerns about your hearing, you should speak to your doctor.

# Variations

- If you don’t have access to a tuning fork, experiment with using smartphone vibrations for Weber’s test.
- A larger program can be built using other ‘How Do We Hear’ or sound wave Challenge Cards.
- Depending on the larger program built around the different aspects of hearing and hearing impairments which may change the Challenge Area or Special Interest Area. For instance, if this Challenge Card is paired with a guest speaker related to hearing impairments, it may fall into a Community Challenge Area.