

Understanding Sound and Hearing Worksheet

Data Tables

Action Performed	Visual Observations	Audio Observations
Water		
Salt		

Test Performed	Conditions	Location where sound perceived loudest (circle answer)
Weber	None	Left Ear Right Ear Equal
	Left ear plugged	Left Ear Right Ear Equal
	Right ear plugged	Left Ear Right Ear Equal

Test Performed	Was sound heard longer through bone or air?
Rinne	

Post-Lab Questions

- How do sound waves contribute to the changes observed in both water and salt when exposed to a tuning fork?
- In steps 12 and 13, plugging each ear was done to simulate conductive hearing loss. Did the test results turn out as anticipated?
- Based on your results of the Rinne test, did sound last longer when conducted through bone or air?
 - Was this consistent with anticipated results?
- How does sound differ from sound waves?
- A vacuum is a space that is empty of matter. Is it possible to have sound in a vacuum?
- Describe the specific modifications you can make to protect yourself from hearing loss.