



**CALIFORNIA SCIENCE & ENGINEERING FAIR  
2018 PROJECT SUMMARY**

<b>Name(s)</b> <b>Leah J. Booth</b>	<b>Project Number</b> <b>J0705</b>
<b>Project Title</b> <b>The Effects of Background Noise on Auditory Perception</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The objective of this study was to determine if background noise affects hearing.</p> <p><b>Methods/Materials</b> 75 students, scripts, downloads of background noise (static, music with words, music without words, coffee shop noise), speaker. Read script to students with different background noises playing. Students wrote down facts that they could recall afterwards. Then had students read a different script to themselves with the same background noise. Then they wrote the facts they could recall.</p> <p><b>Results</b> The results showed that having background noise of music with words impacted their ability to listen, understand and remember information. They could not recall as many facts from the articles when the music with words was played in the background. My experiment also showed that overall, when static was played in the background while being read to, students were able to recall the most facts.</p> <p><b>Conclusions/Discussion</b> The information gained from this project could be useful for teachers who are concerned about background noise and its implications on hearing and recalling information. A teacher could use this data to create an optimal environment for students for learning.</p>	
<b>Summary Statement</b> I discovered people have a difficult time listening and recalling facts from an article when various noises were playing in the background, particularly when they were listening to music with words.	
<b>Help Received</b> My science teacher, Mr. Scott, helped me analyze my results.	