



# CALIFORNIA STATE SCIENCE FAIR 2010 PROJECT SUMMARY

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<b>Project Title</b> <b>Music in Work</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> My objective was to see whether or not different genres of music had an effect on a person's work accuracy and work efficiency</p> <p><b>Methods/Materials</b> First, give the person a worksheet with no music whatsoever, and time them to see how long it takes them to finish it and how many answers they get right. On a table, place the headphones with the music device already loaded with all five songs in the order of rock, classical, pop, techno, and lastly rap. Once the person is ready, start the song and start the timer. When the person is done with the worksheet, they will raise their hand and that is when you stop the timer. Write down the time it took them to finish the problems and correct the worksheet to see how many they got correct and how many they missed. Give the person a break to relax before beginning on another genre. Repeat this process for the rest of the genres. I tested 10 people between the ages of 13 and 15 who had passed Algebra 1,2 with a B average. I used 6 different algebraic problem worksheets with 15 problems on each (one for each genre of music). I also used 5 different songs from 5 genres of music and also tested a no music test as my controlled variable.</p> <p><b>Results</b> While testing people, depending on the genre of music, people either disliked the music being played or enjoyed it so much that they began singing along with it. The beat of the songs had a huge affect on people. If the pace of the music was upbeat and fast people tended to get easily unfocused. When the pace was soft and peaceful people finished the problems quicker and more accurately. Classical music allowed people to work the fastest and the most accurate. Rap, pop, and techno slowed the majority of people down and their accuracy also went down.</p> <p><b>Conclusions/Discussion</b> To make this experiment better next time, I would change some of the things in my procedure. I found that listening to one or two songs over and over again became very dull and not interesting to those taking the tests. I would add more variety of songs from the genre, so that the songs were not repetitive. I would also separate the people farther away from each other when they take the test. I found out that some people in my experiment would grow impatient and would start talking nonstop and this messed up many of the other people taking the tests too. Distractions would need to be eliminated to run a smooth experiment. The only thing needed would be music.</p>	
<b>Summary Statement</b> Music does have an effect on a person's work accuracy and efficiency depending on the specific genre.	
<b>Help Received</b>	