|  |  |
| --- | --- |
|  | **Future Experiments**  If we were to do this experiment again we would do certain things to improve it, and perhaps investigate different things, yet keeping our basic experiment the same. We did have certain things that jeopardized the experiment, and many variables, which could account for our results.  We had problems at the beginning of the experiment, before we even started it, as we had deaths and births among the mice. It was our original intent to have 3 mice for each music group, but through numerous deaths (either by sickness, cats, or other mice) we ended up with 2 mice for each group. Even this was not fair as some of the mice in the control and rock group gave birth and this could have significantly affected the experiment. The mothers, who were used in the experiment, could have different hormones that could influence how susceptible they were to the music, and also their memory.  If we were to do this again we suggest that you breed the mice and use them when they are approximately the same age. 4-6 weeks would be an ideal age, as they will be old enough to respond to the experiment, but not too old to have contracted any diseases.  Psychologist Steven Smith performed experiments in 1986 that tested whether people remember better if, during the test, they are surrounded by the sounds that match those they learned by. If we were to do this experiment again, perhaps we could test whether the mice remembered better if they listened to the same music as they ran the maze as they were subjected to during the day. Smith found that the people who did the best were those who listened to the same music in both learning and testing. They did not remember as well when they heard different music, and when they learned to music and tested in silence they did significantly worse. He also tested white noise (a sound similar to continuous static). This would be an interesting aspect to see whether this has an effect on memory.  Because mice are nocternal animals, they are more active at night. If this experiment were to be repeated we suggest that music is played at night. The results for both experiments could then be compared and further conclusions, that have a larger scientific basis, can be drawn.  If the mice could be tested and run through the maze with one type of music and then exposed to another type of music this could find whether hte original music has a lasting or permanent effect on the learning capabilities of the mice.  Also, due to the small sample size that we used, we suggest that a larger sample size is used to get more accurate results. This also helps in evaluating the data, as larger sample sizes allow for natural error, not error that is dependant upon human error. From our experiment we were plagued by both nature and our own error. This influenced our results, but the strong data supprting the idea that hard rock music is bad suggests that our experiment is valid. |

*This Web Site is Best viewed with 256 or more colors.*

*For More Information about Creekwatch, please contact Eric Thiel at* [*ethiel@pleasanton.k12.ca.us*](mailto:ethiel@pleasanton.k12.ca.us)