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| **Data**  We collected our data by running each individual mouse through the maze for thirty trials. During the first five trials we established a base with which to compare future trials, and no mouse was exposed to sound. During the next fifteen trials, the sound clips were played to the variable group; and the last ten entries was a new maze configuration with the sounds played again to the variable group. It is important to note that trial 21 marks the beginning trial of a new maze. From our data it appears as if the second configuration was easier for the mice to weave their way through because all their times are quicker than when they went through the other maze. The dropping times at this point do not signify that the mouse is remembering anything. In addition, the times of the mice occur on a wide scope, and there is no pattern between the mice from the original group or from the new group obtained after half of the original mice died. Mouse 1 through Mouse 5 are the variable group. Mouse 6 through Mouse 9 are the control group. The time is in minutes.  **Trial Data Table**   |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Trials | Mouse 1 | Mouse 2 | Mouse 3 | Mouse 4 | Mouse 5 | Mouse 6 | Mouse 7 | Mouse 8 | Mouse 9 | | 1 | 0:03 | 0:00 | :43.34 | 0:00 | 0:00 | 0:03 | 0:00 | 0:00 | 0:03 | | 2 | 0:03 | 03:18.72 | 0:00 | 0:00 | 0:00 | 0:05 | 0:00 | 0:00 | 0:05 | | 3 | 02:30.02 | 5:00.00 | 0:00 | 0:05 | 0:00 | 3:29.75 | 1:47.38 | 0:00 | 3:45.84 | | 4 | 04:56.00 | 0:00 | 2:26.57 | 0:00 | 0:00 | 4:15.88 | 1:26.41 | 1:30.01 | 2:23.63 | | 5 | 0:02 | 0:00 | 0:00 | 2:15.41 | 0:00 | 1:34.88 | 3:25.44 | 0:00 | 3:41.75 | | 6 | 0:02 | 0:00 | 1:43.16 | 3:06.58 | 0:00 | 4:37.79 | 0:00 | 0:00 | 3:33.87 | | 7 | 0:03 | 04:29.25 | 2:24.14 | 1:56.58 | 0:00 | 4:30.65 | 1:37.41 | 0:00 | 3:25.43 | | 8 | 0:04 | 0:05 | 2:51.58 | 2:59.07 | 0:00 | 4:25.69 | 1:19.33 | 0:00 | 0:03 | | 9 | 0:04 | 0:04 | 2:50.61 | 3:00.00 | 0:00 | 4:10.14 | 1:15.47 | 0:00 | 3:15.26 | | 10 | 0:04 | 5:20.64 | 2:55.31 | 3:10.14 | 0:00 | 0:04 | 0:00 | 0:00 | 0:03 | | 11 | 0:04 | 0:05 | 0:02 | 0:02 | 0:00 | 4:03.21 | 0:00 | 0:00 | 3:04.75 | | 12 | 0:04 | 5:10.06 | 5:01.15 | 3:00.61 | 1:30.85 | 4:07.61 | 0:00 | 0:00 | 2:03.16 | | 13 | 0:04 | 1:55.04 | 5:56.41 | 0:00 | 0:01 | 4:01.59 | 0:00 | 0:00 | 2:41.16 | | 14 | 0:03 | 1:56.03 | 5:49.00 | 3:39.28 | 0:00 | 4:20.42 | 0:00 | 0:00 | 2:16.47 | | 15 | 0:04 | 1:54.16 | 6:01.46 | 2:15.47 | 0:00 | 4:10.09 | 0:00 | 0:00 | 3:42.75 | | 16 | 0:03 | 3:42.75 | 6:00.55 | 2:56.00 | 1:16.74 | 4:08.57 | 0:01 | 0:00 | 2:17.36 | | 17 | 0:04 | 4:46.14 | 6:15.72 | 3:14.72 | 1:20.16 | 4:01.57 | 0:00 | 0:00 | 2:05.58 | | 18 | 0:05 | 3:39.17 | 6:30.14 | 3:16.17 | 0:00 | 0:04 | 2:21.43 | 0:00 | 0:02 | | 19 | 0:04 | 0:05 | 0:06 | 3:02.43 | 1:05.42 | 3:52.41 | 1:15.43 | 0:00 | 2:01.42 | | 20 | 0:05 | 5:16.73 | 1:32.14 | 0:03 | 0:00 | 2:20.61 | 0:00 | 0:00 | 4:00.01 | | 21 | 0:04 | 1:29.14 | 1:40.61 | 3:00.61 | 0:00 | 4:01.32 | 0:00 | 1:13.46 | 3:59.76 | | 22 | 0:04 | 1:57.14 | 1:47.14 | 3:21.16 | 0:00 | 4:15.41 | 0:00 | 0:00 | 4:15.02 | | 23 | 0:05 | 0:01 | 1:13.14 | 2:47.61 | 0:00 | 4:30.12 | 1:20.10 | 0:00 | 3:25.43 | | 24 | 0:04 | 0:00 | 1:59.73 | 2:34.52 | 0:00 | 3:59.16 | 1:19.17 | 0:00 | 3:20.73 | | 25 | 0:05 | 2:10.16 | 1:57.61 | 3:15.61 | 1.00.67 | 3:58.17 | 1.00.12 | 0:00 | 3:17.61 | | 26 | 0:05 | 3:10.14 | 2:01.15 | 3:51.72 | 0:01 | 0:04 | 1:15.31 | 0:00 | 0:03 | | 27 | 0:05 | 2:45.75 | 0:03 | 3:14.61 | 1:00.00 | 2:00.10 | 0:00 | 0:00 | 3:22.73 | | 28 | 0:05 | 3:14.61 | 4:14.01 | 0:03 | 1:15.01 | 4:00.10 | 0:00 | 0:00 | 3:22.05 | | 29 | 0:04 | 0:04 | 3:05.16 | 2:45.16 | 1:20.14 | 3:51.61 | 0:00 | 0:00 | 2:57.16 | | 30 | 0:05 | 5:00.17 | 2:47.16 | 0:02 | 1:56.13 | 0:03 | 0:00 | 0:00 | 0:03 | |  |  |  |  |  |  |  |  |  |  | | Average | 0:04 | 0:02 | 0:02 | 0:02 | 0:00 | 0:04 | 0:00 | 0:00 | 0:03 |   **The following is the mathematical work for the statistical testing:**  Analysis of Variance  Source DF SS MS F P  Factor 8 462.44 57.80 49.16 0.000  Error 261 306.87 1.18  Total 269 769.31  Individual 95% CIs For Mean  Based on Pooled StDev  Level N Mean StDev ---------+---------+---------+-------  C1 30 4.355 0.881 (--\*--)  C2 30 3.207 1.760 (-\*--)  C3 30 3.104 1.979 (--\*-)  C4 30 2.731 1.054 (-\*--)  C5 30 0.815 0.434 (-\*--)  C6 30 3.911 0.734 (--\*--)  C7 30 1.105 0.623 (-\*--)  C8 30 0.543 0.290 (--\*-)  C9 30 3.186 0.696 (-\*--)  ---------+---------+---------+-------  Pooled StDev = 1.084 1.5 3.0 4.5  **Important Symbols Key:**  C#=Mouse# under Level  N: number of trials  Mean: the average times of the mice  STDev: standard deviation  P: p-value  **GRAPHS**  [**(NEXT)**](http://docs.google.com/data2.html)  [[Home](http://docs.google.com/home.html)][[Introduction](http://docs.google.com/introduction.html)][[Hypothesis](http://docs.google.com/hypothesis.html)][[Procedure](http://docs.google.com/procedure.html)][[Data](http://docs.google.com/data.html)][[Conclusions](http://docs.google.com/conclusions.html)][[Bilio/Links](http://docs.google.com/biblio.html)]  [[2001 Projects](http://docs.google.com/index.html)][[2000 Projects](http://docs.google.com/AP2000/index.html)][[1999 Projects](http://docs.google.com/AP99/index.html)][[1998 Projects](http://docs.google.com/AP98/index.html)] |