**Abstract:** The time it takes to respond to a stimulus, known as reaction time, is influenced by over 20 factors. One factor deemed most relevant to this experiment is gender, and it was hypothesized that the male partner will have a faster reaction time than the female partner. A ruler was dropped without warning. The distance the ruler fell before being caught was recorded and converted to reaction time using a formula, and means and standard deviations were calculated and plotted. A t-test was also applied to the data. The p-value was 0.0027 indicating that the mean reaction times differed significantly, as hypothesized. Although the data supported the hypothesis, there must have been factors at play in this experiment that were not given serious consideration during hypothesis formulation because their description lacked clarity. Future studies should focus on ways to either quantitatively or qualitatively assess the influence of factors known to affect reaction time, so they may be given more serious consideration during hypothesis formulation.