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*Color To Dye For*

The purpose of this project is to use retention factors of chromatography to determine which colors of hair dye are the worst for hair. The larger the retention factor the worse the dye is for hair. I hypothesized that the color containing the highest retention factor would be brown and the color containing the lowest would be blonde. After following the proper paper chromatography procedures, I analyzed the results. I took the retention factors of each color for every trial. I then took the average of each color for all the trials. I came to the conclusion that my hypothesis was partially correct because the brown hair dye did contain the highest retention factor. However, the dye with the lowest retention factor was auburn and in the middle was blonde. Therefore, according to this experiment, the color has nothing to do with the amount of damage the dye will do to your hair.