

# [Curve](https://assignbuster.com/curve/)

[](https://assignbuster.com/)[Education](https://assignbuster.com/essay-subjects/education/)

M & M’s Curve and Color Distribution Analysis M & M’s Curve and Color Distribution Analysis The analysis starts with purchase ofthe M & M package and categories the candies according to the color distribution. Subsequent counts to determine the number total number of candies with a particular color gave varying results (Ziemer, 2010). The 24 Packages of the candies had an average color distribution of Red (53), Orange (94) Yellow (51) Blue (88), Green (80), and brown (51). This was different as per the percentage distribution of colors posted in the company website. As such, it was critical to carry out an analysis.   
Results   
Red   
Orange   
Yellow   
Blue   
Green   
Brown   
Total M & M’s   
Percentage Expected (as per the company website)   
24%   
13%   
16%   
20%   
13%   
14%   
Mathematical mean counted   
52. 25   
93. 63   
51. 04   
88. 08   
79. 29   
53. 33   
Percentage observed   
10. 45%   
18. 73%   
10. 21%   
17. 62%   
15. 86%   
10. 67%   
Quantities Observed   
456   
409   
449   
411   
408   
416   
2549   
Standard Deviation   
1. 98   
2. 23   
2. 95   
2. 18   
2. 56   
2. 48   
2. 4   
Variance   
1. 48   
6. 97   
5. 87   
7. 02   
5. 98   
6. 76   
5. 68   
The quantities of every row as observed were computed and compared to the company website values. The most popular color was orange as indicated in the findings 93. 63 (18. 73%). Blue (17. 62%), green (15. 86%), brown (10. 67%), red (10. 45%), and yellow (10. 21%) followed this in this order. The variation was clear when compared to the company website of the percentage points expected for each color. However, green, blue, and brown were closer to the expected percentages. This is well indicated in the graph below showing distribution of the colors in average.   
Mean graph   
Standard deviation graph   
It is clear that the yellow is the score with absolute centre of the group (mean average score).   
Reference   
Ziemer, H. (2010) . Statistical Distribution. Viewed on 24th October 2012