Instructor Sheet: M & M Activity

Materials Needed: One small bag of regular chocolate M & M’s for each student

M & M worksheet for each student

The Goal: The goal of this activity is for students to understand the idea of variability and also display their results using different graphical techniques (bar graph, circle graph or another type of graph the students are familiar with). Variability can be seen by the different percentages of colors each student had in their bag. Variability can also be seen with the total number of M & M’s in each bag. The company states that they fill bags based on weight. You can discuss with your students why they believe that there are different numbers of M & M’s in each of their bags as well. You can also discuss how their experimental data can be different than the “theoretical data” from the M & M company.

The M & M company stopped reporting their color distribution in 2008, but their overall goal is to achieve

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Blue | Orange | Green | Yellow | Red | Brown |
| 24% | 20% | 16% | 14% | 13% | 13% |

1. Have the students open their bag of M & M’s and count each of the colors and calculate the percentage of each color.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Blue | Orange | Green | Yellow | Red | Brown | Total |
| Number |  |  |  |  |  |  |  |
| Percentage |  |  |  |  |  |  |  |

1. Have your students discuss their results with one another to see if their classmates had similar findings.
2. Discuss the idea of variability with your students.
3. Have students create a bar graph or circle graph for each color and discuss.