



Mind your M&M's®

### Level

Grades 2-6

### Materials

Bags of M&M'S® (regular sized and mini sized M&M'S) \*can use Skittles® if there are allergies

Paper

Colored pencils

Large sheets of (preferably) graph paper for graphing



### Goal

To introduce an activity which makes graphing more hands-on and visually fun.

### Activity

1. Have the students make a hypothesis on the total number of M&M's and how many of each color are in the bag (you can make this into a game and see who has the closest guess at the end).
2. Open the bag of M&Ms and give each student an equal handful.
3. Then have each student count and record the number of M&Ms of each color they have in their pile.
4. The students will then use colored pencils (in the M&M colors) to create a bar chart (color on x-axis, number of M&Ms on y-axis) to graph their findings.
  - a. Spend time with the students discussing what goes on each axis, how to make an axis, and how to make a scale for an axis.
5. Go around the room and tally up the total number of M&Ms for each color the students recorded.
6. The students can then create a second bar graph (same axes as in step 4) that illustrates the total number of M&Ms per color in the bag.
7. Have a discussion in which the students compare their individual results to the group results. They can discuss if their results were similar to the group results, or if they had more or less of certain colors compared to the total numbers.

### Extension:

1. You can do the same exercise above with regular size M&Ms and mini M&Ms and have the students compare the bar graphs from each bag. Do the bags have the same RELATIVE numbers of each color? (Obviously there will be a lot more mini M&Ms than regular size M&Ms, so get the students thinking about the bar graphs in terms of which bar *within* each graph is the largest and which one is the smallest. They can then determine if the same pattern occurs in both bag sizes or if there is a different pattern.
2. After creating the bar graphs, count the total number of M&Ms in the bag. You can then use this to practice fractions and pie charts. Have the students calculate the fraction that each color makes up of the total number of M&Ms, and then have them graph the fractions on a pie chart (where each section of the pie is colored in with the corresponding M&M color). This would also be a way to compare differences in the fraction of M&M colors between the regular and mini bags of M&Ms.