

Name: _____

Date: _____



Probability

Which M&M color are you most likely to get? If you were to open a bag of Plain M&M's, what color would you most likely get? What color would you least likely get? Would your results be the same if you opened a bag of Peanut, Almond, Peanut Butter, Crispy, or Mini M&M's? Whenever you start to use the words "most likely" or "least likely", you are talking about probability.

Here are the steps you are going to take:

1. Reach into the bag without looking and pick out one M&M.
2. Use tally marks to record, on the chart, which color M&M was picked.
3. Put the M&M back in the bag.
4. Repeat steps 1-3 forty-nine more times.
(You will make 50 different picks total.)



Record the data below.

M&M Color	Tally of Times Picked	Total # of Times Picked
Red		
Yellow		
Blue		
Green		
Brown		
Orange		

M&M Probability - Calculations

- Count the total number of M&Ms in the bag. Record the number here: _____
- Use the "Results" table to the right to record the equation for each probability.



RESULTS		
Color	$\frac{\text{Total \# of Times Picked}}{\text{Total \# of M\&Ms}}$	Probability
Red		
Yellow		
Blue		
Green		
Brown		
Orange		

- Now separate the M&M's into piles based on color.
- Count how many M&Ms are in each pile.
- Organize your data in the "Actual Amount" table to the right.

ACTUAL AMOUNT		
Color	$\frac{\text{Actual \# Of Each Color}}{\text{Total \# of M\&Ms}}$	Probability
Red		
Yellow		
Blue		
Green		
Brown		
Orange		

Answer the following questions:

- Which color has the largest quantity?

- Which color has the smallest quantity?

- Is this what you expected to find? Why or why not?
YES NO

M&M Probability - Results

Remember, the more likely something is, the closer to 1 the probability will be.

Answer the following questions:

- What color is most likely? _____
- Which one is least likely? _____
- Are there any that are equally likely? (This means the probabilities are the same.)

YES NO

If yes, which ones? _____

