**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date: \_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_**

**The Scientific Method**

**M & M Lab**

Our class is conducting a study on the colors of M&M’s. Your job is to

determine, using the scientific method, what the most dominant color of M&M’s is. If you are allergic to peanuts or chocolate, do not touch the M & M’s. If your allergy is severe and you need to leave the room, please let me know.

1. State the Problem (What do you want to learn?) Use a complete sentence,

starting with a capital and ending with a question mark.

2. Gather Information/Research: Do a survey of the class to decide what color

they think is dominant. Record the results of your survey.

3. Hypothesis **(IF**…tells the readers what will be changed/tested--**THEN IT CAN BE PREDICTED THAT**… tells the reader what you think will happen because of the change--**BECAUSE**… tells the reader why you think this will occur (it should be based on something you have experienced, or perhaps something you infer): Based on your survey create a hypothesis about what color of M&M’s your team thinks will be most common. Use a complete sentence, starting with a capital and ending with a period. Follow the hypothesis format above.

4. Open the bag of M&M’s, but do not eat them. Count the number of candies in the bag and record the number \_\_\_\_\_\_\_. Count the number of each color and write the number in the chart below:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Color** | **Green** | **Brown** | **Yellow** | **Orange** | **Blue** | **Red**  |
| **Number**  |  |  |  |  |  |  |

5. Make a bar graph showing the number of candies of each color in your package.

6. Using your data, find the fraction each color M&M is of the total number of candies in your package. To find the fraction: \_\_\_\_**Number of color\_\_\_\_\_\_**

 **Total candies in package**

7. Conclusion: Was your hypothesis supported? Use complete sentences that start

with a capital letter and end with a period. Explain what your hypothesis was and the procedure you followed to determine if it was supported or not supported.

8. Clean up your lab station. Do whatever you wish with the M&M’s (i.e. eat them or throw them away).