## M \& M Lab Report

1. Please put numbers(1-6) beside the step and prove you know correct order generally used for the Scientific Method.
$\qquad$ Hypothesis $\qquad$ Conclusion $\qquad$ Research

Analysis $\qquad$ Purpose
$\qquad$ Experiment
2. No matter which Scientific Method you use, the first step will always be having a $\qquad$ or a problem.
3. Use the situation below to test your knowledge on the Scientific Method. Read the sentence below and match the steps that best fit each part of problem.

In 1872, a wealthy railroad tycoon named Leland Stanford (Stanford University is named after him) made a bet with a friend about a galloping horse.
A) Ask a question
B) List materials needed
C) Analyze the results
D) Perform the experiment
E) Decide the steps in the procedure
F) Draw a conclusion

G )Form a hypothesis
__ Mr. Stanford guessed that the hooves of a galloping horse don't touch the ground at some point in time during the gallop.

A racehorse, a jockey and a camera.
__ Some of the pictures showed the horse's hooves were all in the air at the same time. Mr. Stanford won his bet.
$\qquad$ Leland Stanford made a bet that the hooves of a galloping don't touch the ground at some point in time.
$\qquad$ Mr. Stanford asked a photographer to take pictures of a horse galloping at the racetrack.

The jockey rode the galloping horse around the racetrack.
$\qquad$ Mr. Stanford looked at the pictures the photographer brought him.

The word science is taken from a Latin word meaning $\qquad$ .

Name 2 branches of Science.

List a two ways to gain knowledge.

What was the Purpose of the M \& M experiment?

After completing the M \& M experiment and analyzing the data we came to a Conclusion. What was it?

Please use the data below to find the average amount of $M$ \& $M^{\prime}$ s for all 5 bags. Round answer to nearest tenth decimal.

| M\&M Color | Period 1 - <br> Bag 1 | Period 2 - <br> Bag 2 | Period 3 - <br> Bag 3 | Period 6/7 - <br> Bag 4 | Period 9 - <br> Bag 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Blue | 64 | 94 | 106 | 102 | 103 |
| Red | 50 | 40 | 47 | 54 | 35 |
| Yellow | 56 | 62 | 44 | 48 | 41 |
| Orange | 83 | 65 | 91 | 97 | 96 |
| Brown | 49 | 45 | 57 | 54 | 70 |
| Green | 98 | 88 | 72 | 53 | 62 |
| Total |  |  |  |  |  |
| Average |  |  |  |  |  |

Next, make a graph using the data above. Please make sure to mark your increments, include labels for both axis, title for graph and use different colors for different data groups.


Name:

