Group Name:

Group Members:

You have just completed your original experiment on M&Ms, when a scientist in your group comes in with historical documents from the Manufacturing Department, indicating that M&Ms used to be made with natural coloring, and switched to synthetic coloring in the late 1960s.

**Changing Hypothesis**

Based upon the results of your previous experiment, and the new information that just became available, state a new hypothesis, and a new Null Hypothesis for this experiment.

Hypothesis:

Null Hypothesis:

**Experimental Design**

Unfortunately, Hershey’s no longer makes M&Ms with natural coloring. However, you were able to procure some natural coloring candy-coated chocolates from a small manufacturer. Unlike your almost unlimited supply of M&Ms (you do work for Hershey’s), the supply of this candy is limited. Each group will only have access to 10-20 pieces of candy of multiple different colors.

Let’s first take stock of the candy you have available:-

How many are brown?

Are there enough Brown candy for you to test your hypothesis such that you are confident of the results?

*You realized that it would be impossible to conduct the experiment the way you had previously designed.*

This oftentimes happens with experiments; where the resources needed to conduct the perfect experiment is just not available. Given the resources you have, discuss in your group an alternative experimental approach you can conduct with the resources available, and the hypothesis you will be testing with this experiment.

Alternative Approach:

Hypothesis:

Null Hypothesis

Write your protocol below. Record your experimental results as well.

Result:

Conclusion: