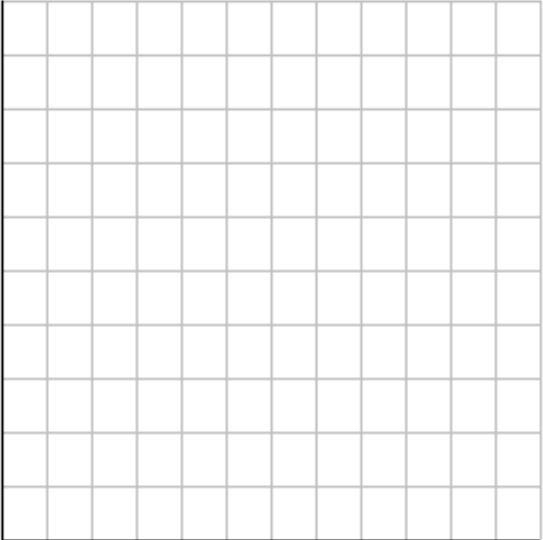
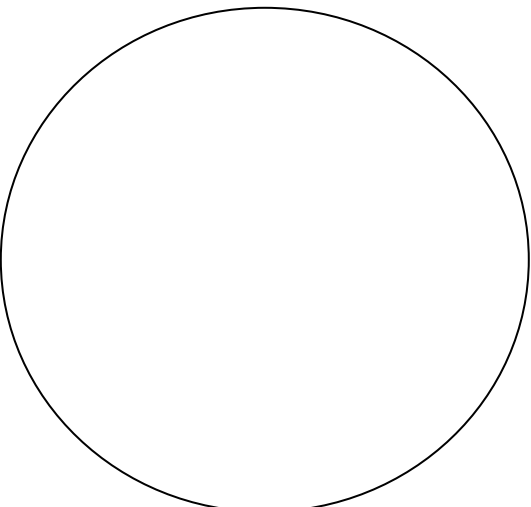


The M and M Activity – Procedure:


- 1.) Each student will need to get a cup full of M and M's candies.
- 2.) Carefully, pour out your candies onto a paper plate. Divide your candies into various colors: red, orange, yellow, green, blue, and brown. You may use the “small cups” to divide your candies. If a “candy” is broken and you cannot tell what color it was, then remove it from your sample. **DO NOT EAT ANY “CANDIES” UNTIL YOU ARE DONE WITH THE ACTIVITY!!**
- 3.) Make a categorical display for the distribution of colors in your sample:
Data Display # 1 – Pie Chart and Data Display # 2 – Bar Graph
Make sure the colors in BOTH displays are represented with the same colors in your sample.
- 4.) Complete the questions at the bottom.

Data Display # 1 – Categorical: Pie Chart							Data Display # 2 – Categorical: Bar Graph
Red	Oran	Yellow	Green	Blue	Brow	Totals	
						Total # =	
						Total % =	
						Total Deg =	
							

Questions: Answer each question appropriately.




- 1.) According to your sample, which color showed up the most? _____
- 2.) According to your sample, which color showed up the least? _____
- 3.) In a 13.3 ounce bag as the following (normal) distribution of colors –
Red = 13% , Orange = 20% , Yellow = 14% , Green = 16% , Blue = 24% , and Brown = 13%
Was your sample close to this distribution? Explain. _____
- 4.) Why do you think the Mars Inc. chose to make blue the most distributed color? Explain answer.

The National Basketball Association (NBA) Activity – Procedure:

- 1.) Before starting to collect and write down data, each student will randomly choose a piece of paper. Each paper has a name of a current NBA team.
- 2.) Once you've selected your NBA team, place sticker in the box to the right → 
- 3.) Go to the following website: www.rotoworld.com
 - a.) Click on the NBA tab towards the top of the webpage
 - b.) Click on Depth Charts tab towards the upper middle of the webpage
 - c.) Scroll on the screen to find the name of your chosen team and click on the team's name
 - d.) Click on Rosters to pull up your team's stats
 - e.) Complete the chart below once you are the Roster page

Player's Name	Height (Inches)	Weight (Pounds)	Age (Years)

- 4.) Make 3 quantitative displays (Box-Whisker Plots) of the spread of each player's height (inches), weight (pounds), and age. Make sure to check for any outliers!
- 5.) Complete the questions at the bottom.

Height Box-Whisker Plot	Weight Box-Whisker Plot	Age Box-Whisker Plot
5 Number Summary → min = _____ max = _____ Q1 = _____ Q3 = _____ med = _____ IQR = _____ Outliers? _____ 	5 Number Summary → min = _____ max = _____ Q1 = _____ Q3 = _____ med = _____ IQR = _____ Outliers? _____ 	5 Number Summary → min = _____ max = _____ Q1 = _____ Q3 = _____ med = _____ IQR = _____ Outliers? _____ 

Questions: Answer each question appropriately.

- 1.) Referring to your team's "spread", which plot would a sports analysis use to make your team sound better than all the rest of the NBA teams? _____
- 2.) How could an outlier effect a Box-Whisker Plot's information? _____
- 3.) Which spread (height, weight, or age) really determines how well an NBA team will do for a season?
