



# Everything I Ever Needed to Learn about AP Statistics I Learned From a Bag of m&m's

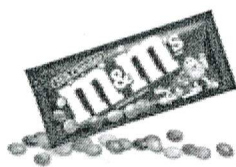
## I. Collecting Data

Welcome to APStats! Throughout this course of history, mathematics has been called upon to answer some of the world's most pressing questions, including, but not limited to: "What colors can I expect to find in a bag of milk chocolate m&m's?" Your task is to collect data on the m&m color distribution through a carefully designed and controlled experiment in which you will:

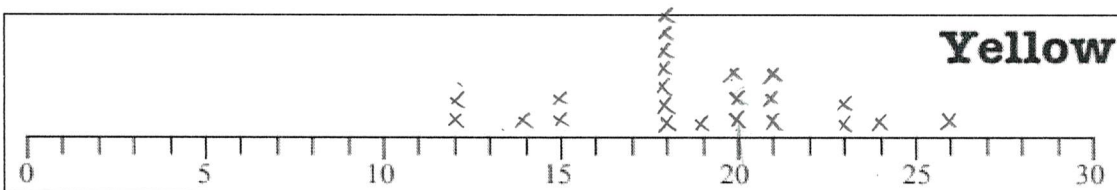
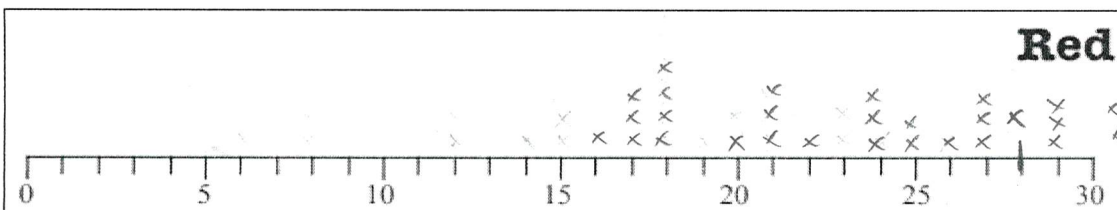
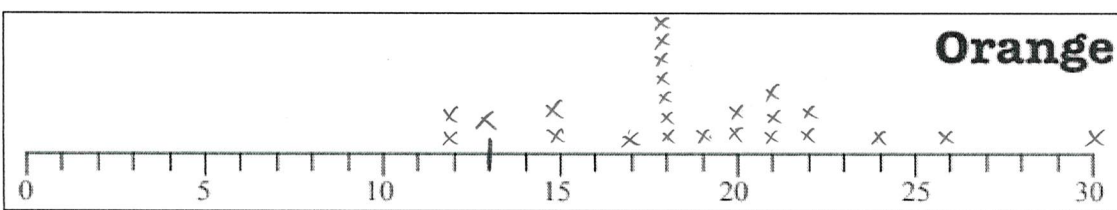
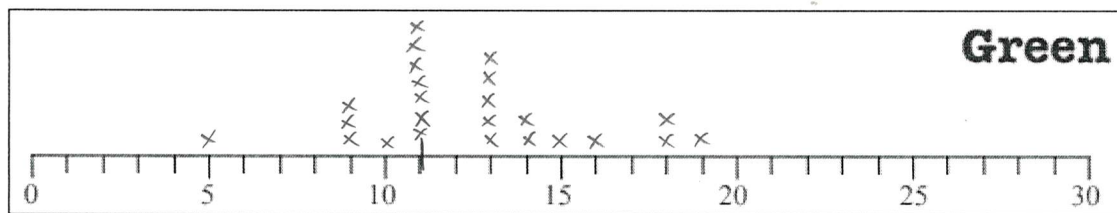
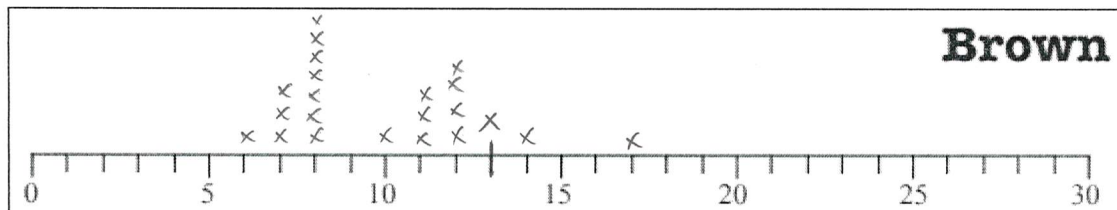
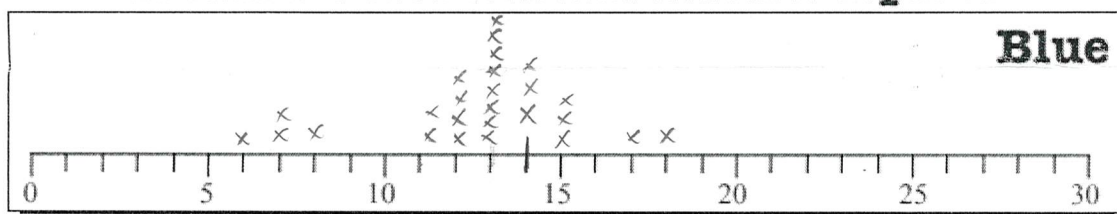
- Pour out your cup of M&M's,
- count the number of m&m's falling into each color category,
- record the numeric results,
- record your color distribution on the class dotplots (on the board), and
- properly dispose of the m&m's by seeing whether or not they really do melt in your mouth, not in your hand.

Be sure to record your data accurately as we will be referring to it throughout the course

Blue	Brown	Green	Orange	Red	Yellow
14	13	11	13	28	20



## m&m's Color Distribution Dotplots



## II. ORGANIZE THE DATA:

a. Can you summarize the class data using a basic numeric measure? If so, what is it for each color?

b. Can you think of another way?

## III. ANALYZE THE DATA

• Describe some general features of the classes data.

• What would you consider a "normal" or "typical" percentage of each color of M&M's? Why?

• Does our data reveal the true percentage of each color of M&M's? If so, what is the true percentage? If not, what DOES it reveal about the true percentage?

## IV: Conclusion:

What did you conclude?

How confident are you in your conclusion? Why

What could be done to increase your confidence in the conclusion you came to?