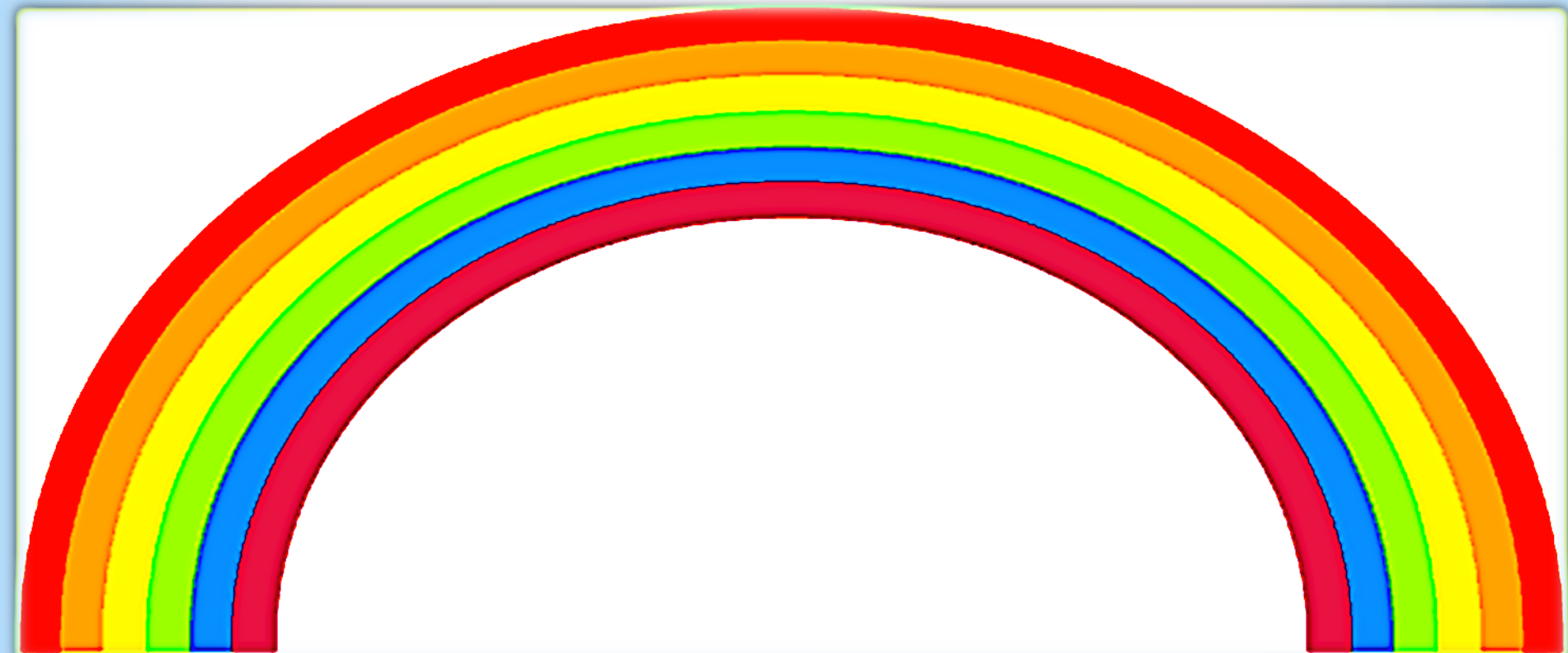# TASTE THE RAINBOW

Minute To Win It Challenge

*Introduction & Thoughts Behind The Experiment

- We wanted to chose an experiment that was easy to complete, organized, and some what entertaining.

- Our original hypothesis, was that people who ate more Candy on a Regular Basis and had a stronger preference for Sweets rather than Chocolate would have more success and be able to correctly identify more skittles in one minute than those who do not.

The Task

* 40 Subjects
* Objective:
* How many Skittles can the Subject identify in one minute based solely on their Taste Buds
* Categorical Factors:
  * Gender
    * Male or Female
  * Candy Consumption
    * Frequent, Sometimes, Never
  * Candy Preference
    * Chocolate or Sweet
  * Hair Color

*Overall Quantitative Data
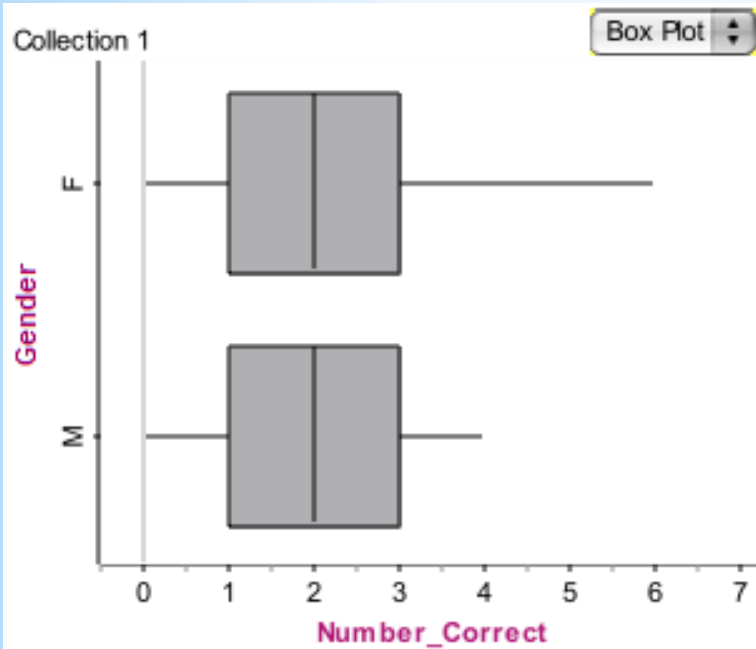

BOXPLOT
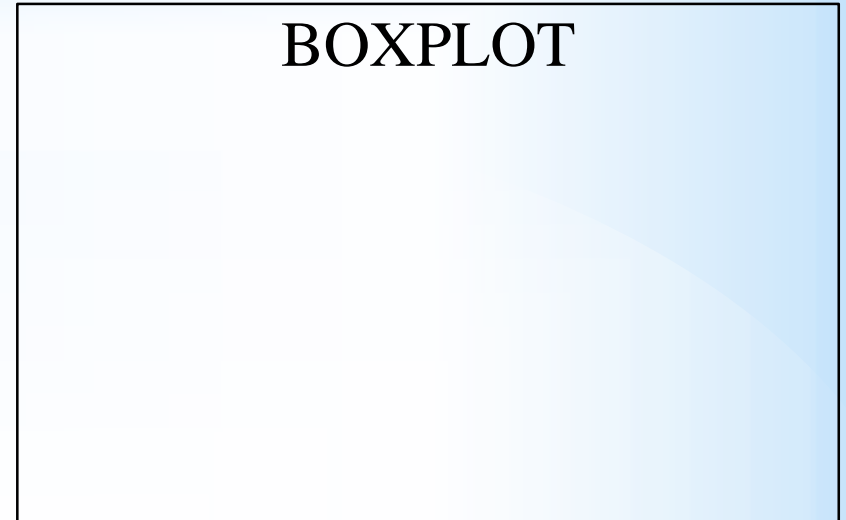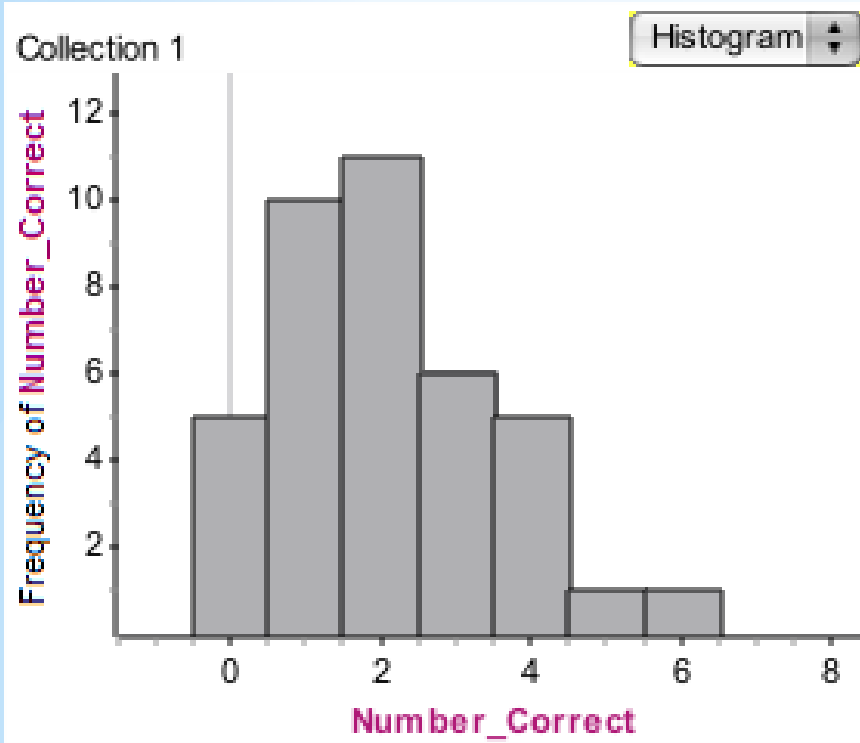
DESCRIBE: Shape, Center, and Spread

4

SUMMARY STATS:

- Check for Normality
  - Shape
  - 1st SD (lb,ub)
    - # observation
    - % of observations
  - 2nd SD (lb,ub)
    - # observation
    - % of observations
  - Same for 3rd SD

OUTLIER TEST:

*Quantitative Data by Gender

Female Summary Stats:

Male Summary Stats:

*OUTLIER TEST ON EACH GENDER

DESCRIBE AND COMPARE THE TWO DISTRIBUTIONS
SHAPE, CENTER, SPREAD

*Quantitative Data by Categorical Variable (with only 2 values)

Parallel Boxplots

Summary stats for Value 1

Summary stats for value 2
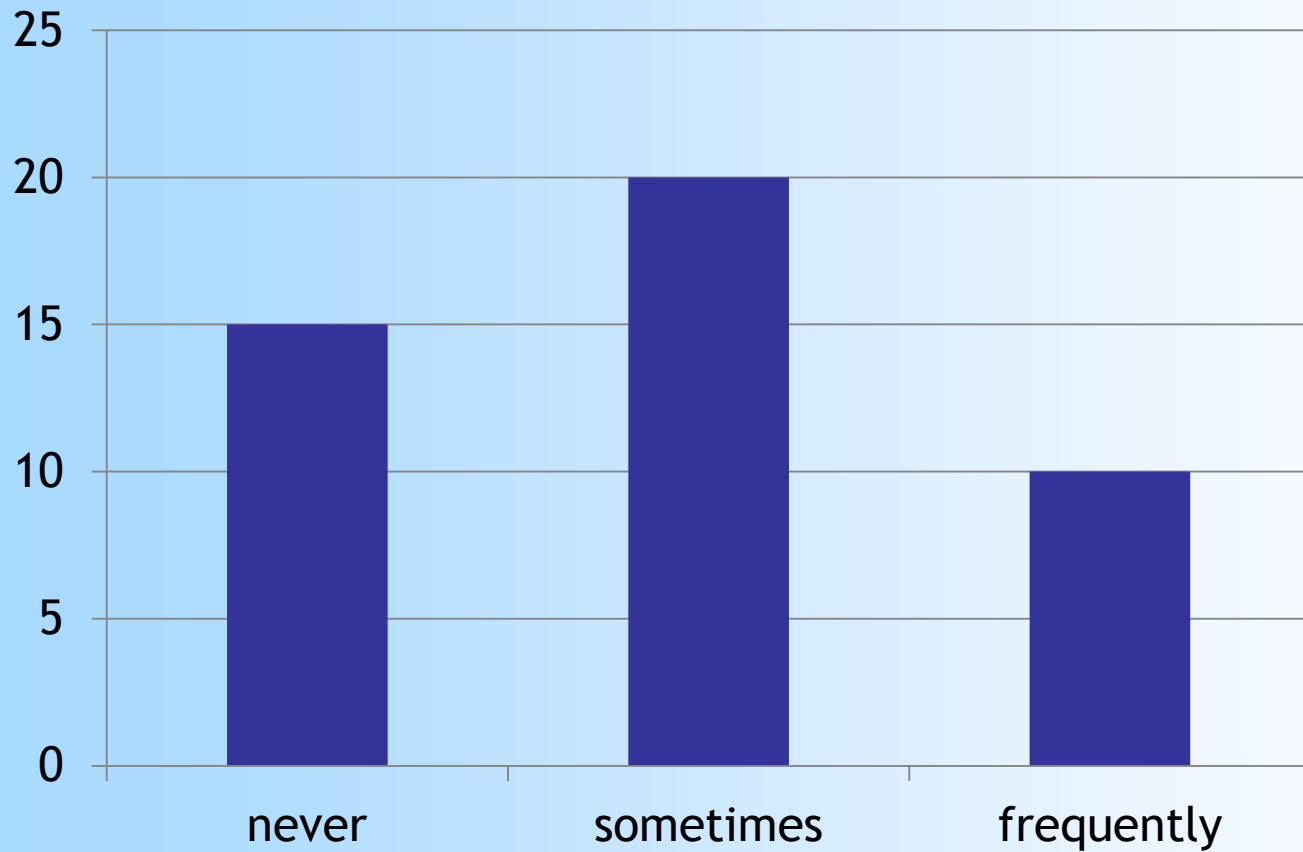
*OUTLIER TEST ON EACH VALUE

DESCRIPTION/COMPARISON OF EACH VALUE

*Quantitative Data by Candy Consumption
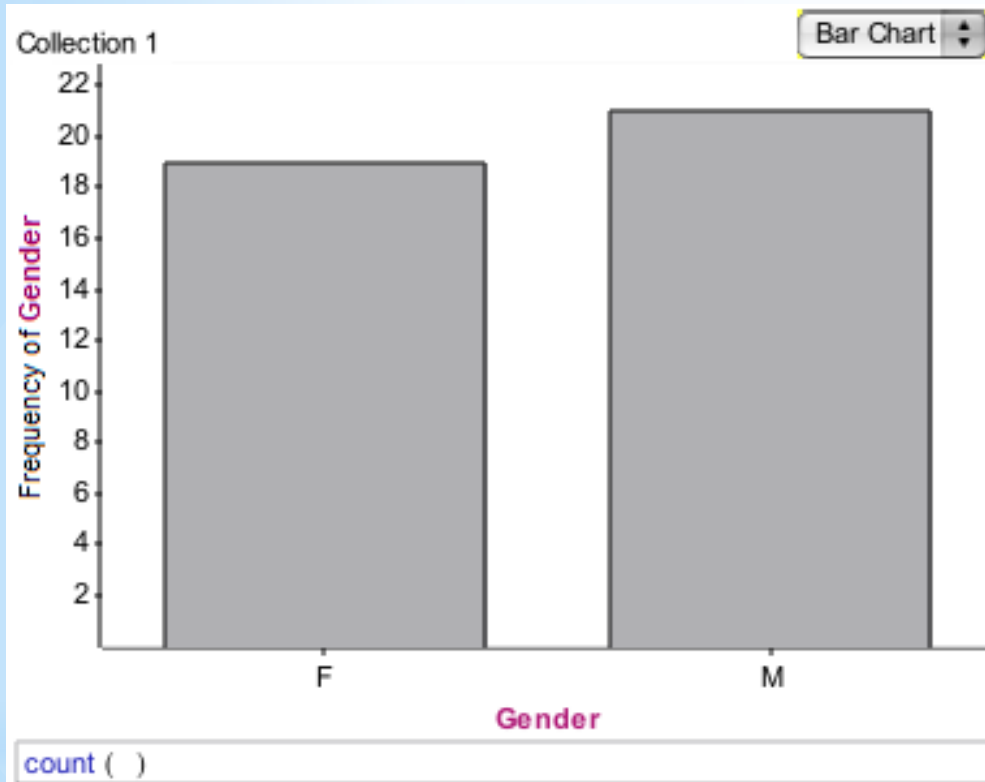
Sometimes, Never, Frequently

never	sometimes	frequently
15	20	10

never	sometimes	frequently
33.3%	44.4%	22.2%

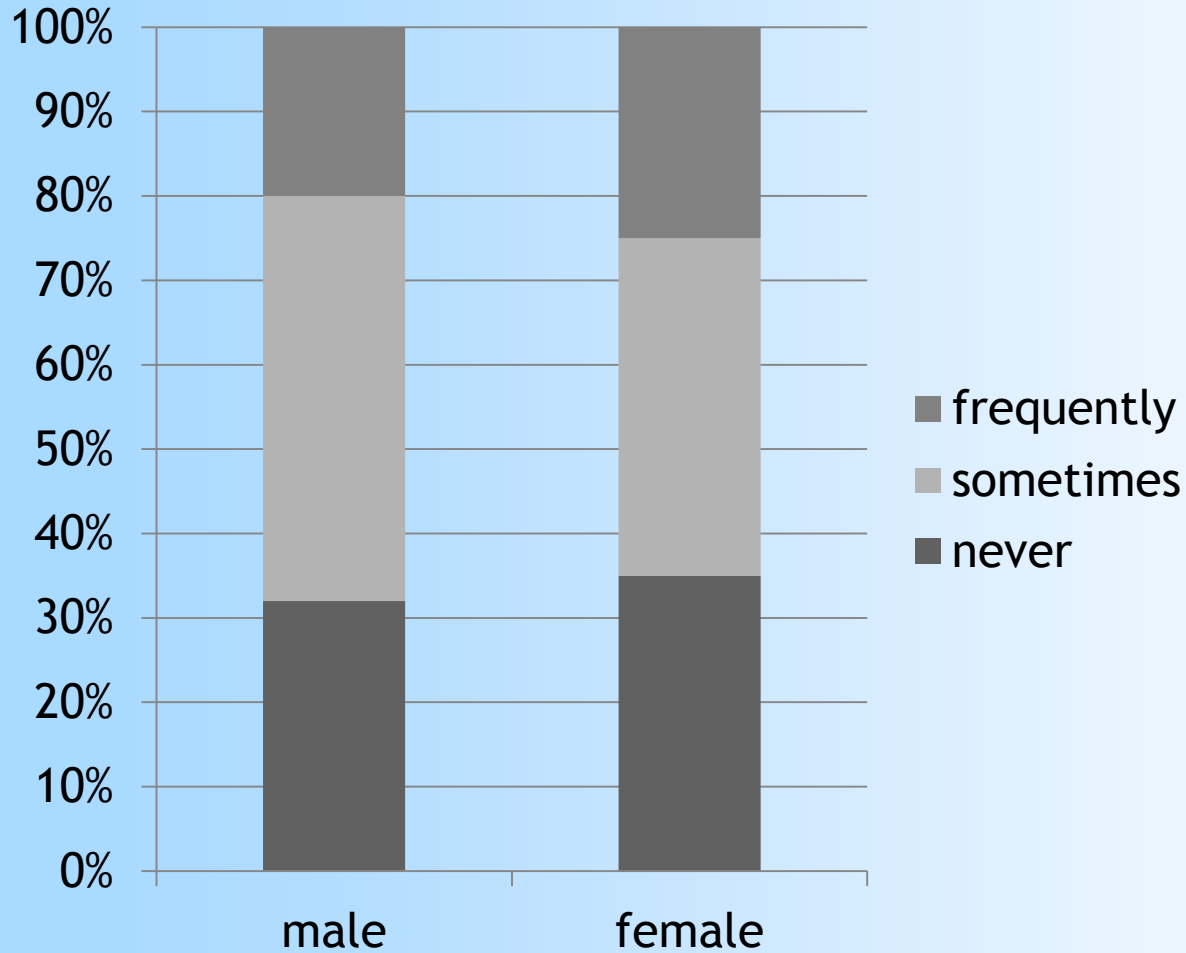General conclusion about distribution of the variable

*Distribution for Gender

Male: 21
Female: 19

Male: 52.5 %
Female: 47.5%

*Simple Two-Way Table of Categorical Data

	never	sometimes	frequently	total
male	8	12	5	25
female	7	8	5	20
total	15	20	10	45

*SEGMENTED BAR GRAPH

List the % in each category:

Of the males…
F = ____%
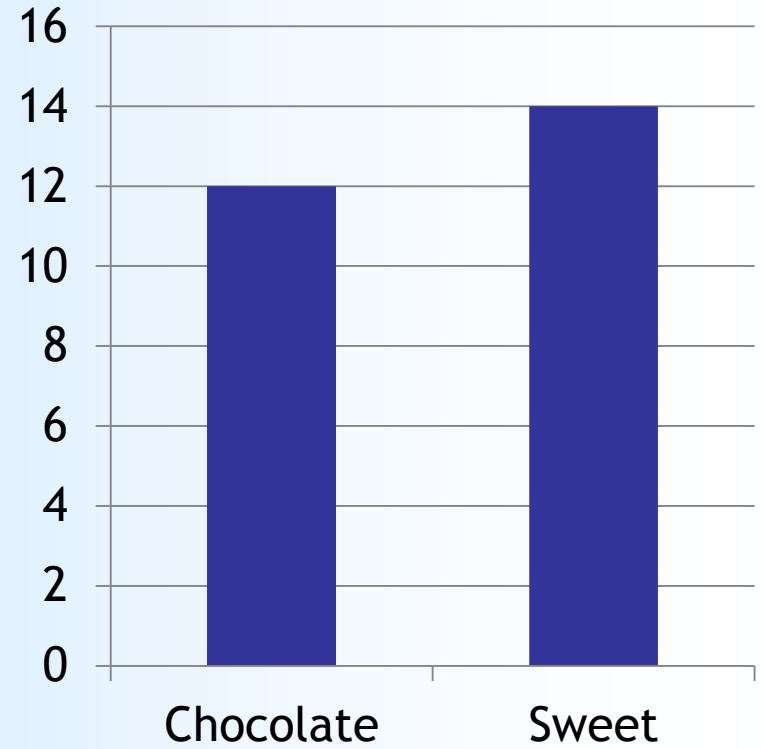S = ____%
N = ____%

Of the females…
F = ____%
S = ____%
N = ____%

Chocolate	Sweet
20	30

Chocolate	Sweet
40%	60%

*Candy preference (chocolate or sweet)

	Chocolate	Sweet
male	12	14
female	8	16

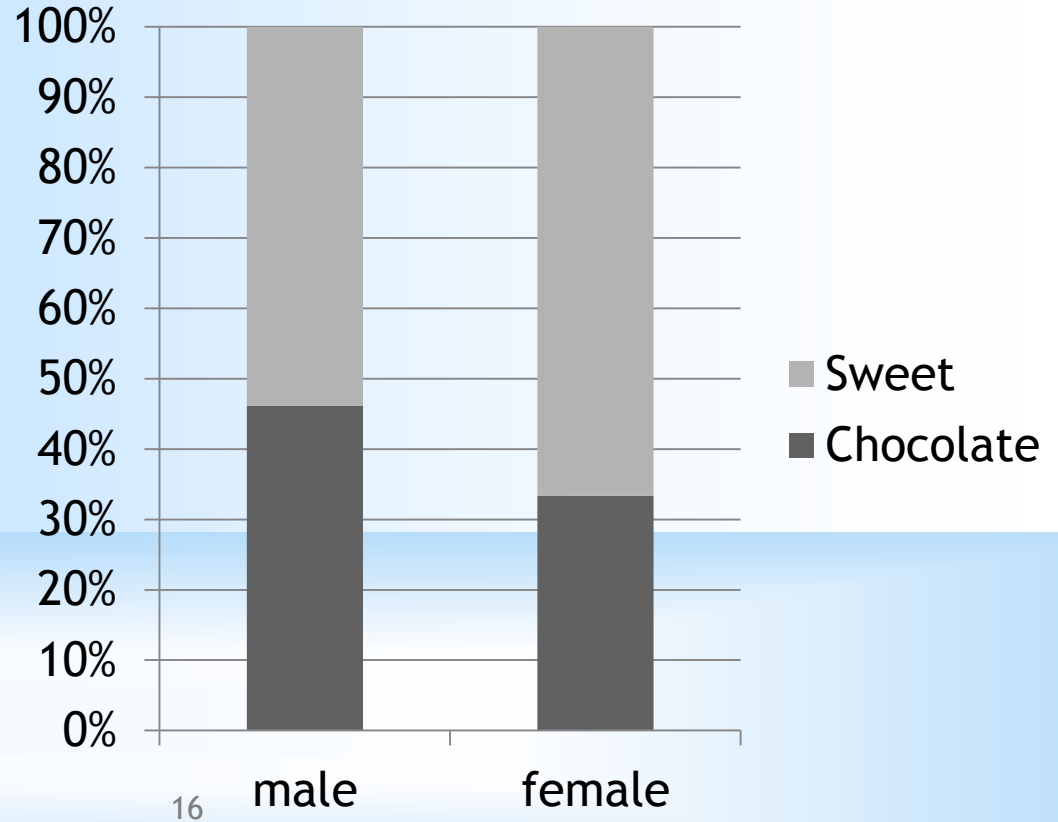Percents of each value:

Of the males:
C = _____%
S = _____%

Of the females:
C = _____%
S = _____%

*Sources of Error and Bias

What went wrong in your experiment?
What could have been done differently?
What could have adversely affected your experiment?

*Conclusion

*Make a DETAILED conclusion about what you found from each of your analyses.