Franklin County Court of Common Pleas

Division of Domestic Relations and Juvenile Branch

Performance Evaluation Department
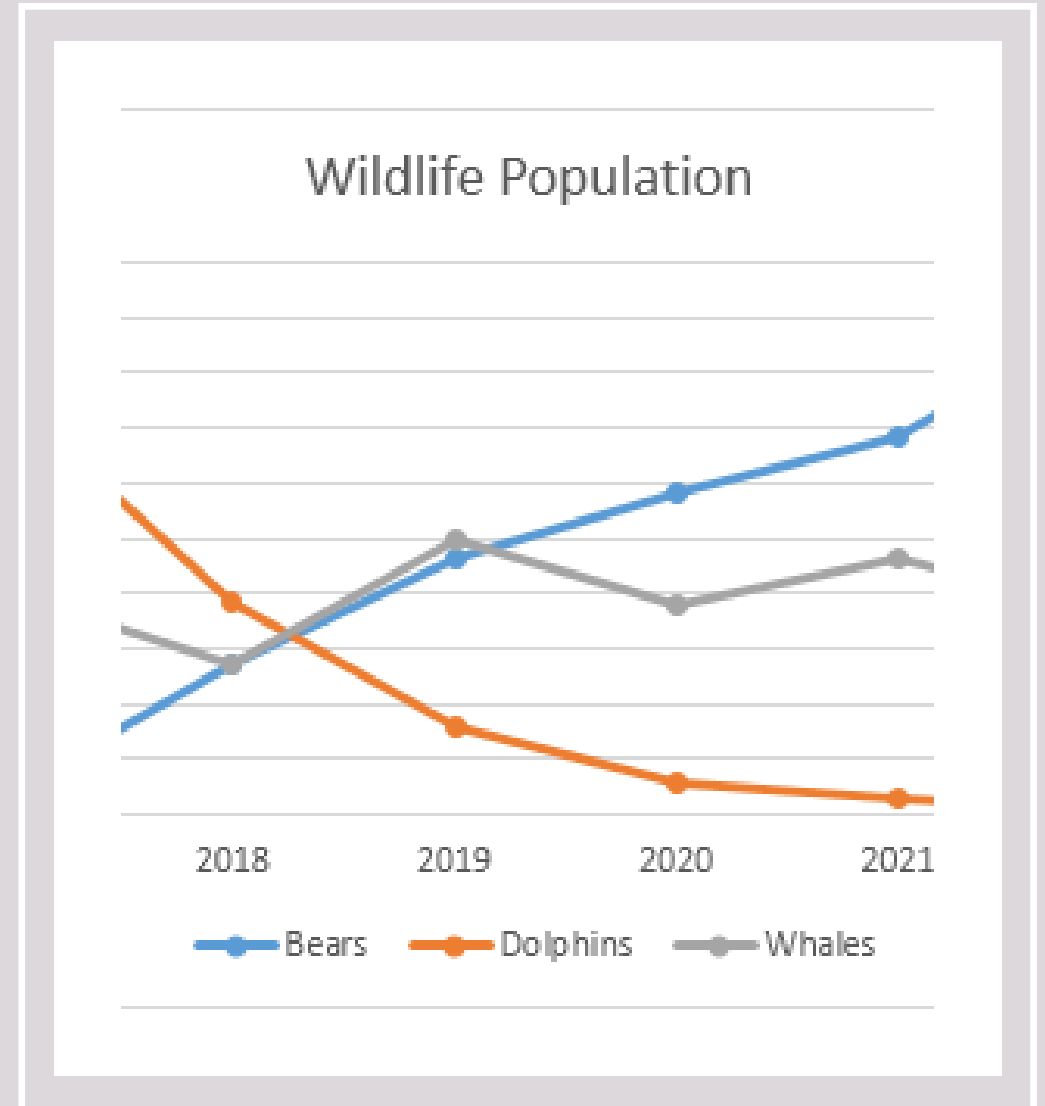
DATA BASICS PART FOUR: GRAPHS

THERE ARE FOUR MAIN TYPES OF GRAPHS THAT WE USE IN THE PERFORMANCE EVALUATION DEPARTMENT

- Line Graphs

- Pie Charts

- Bar Graphs

- Stacked Bar Graphs

- Understanding how to read and interpret the data presented in each type of graph is essential to understanding the overall findings.

LINE GRAPHS

- They are exactly what they sound like – data points connected by a line. Sometimes the line has markers at measurement intervals.

- Line graphs are effective at gauging trends across time and comparing trajectories of different groups.

Wildlife Population

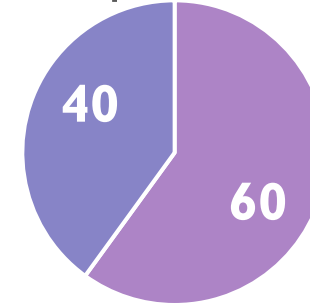2018   2019   2020   2021

Bears   Dolphins   Whales

PIE CHARTS

- A circle with slices that represent proportions for one specific group at a set point in time

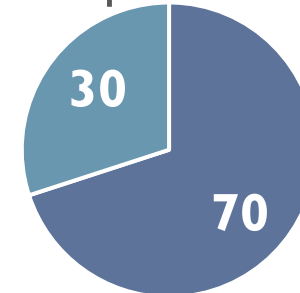- The circle should represent the proportions of only one issue for only one group.

Our Group Has **100** Kids

40

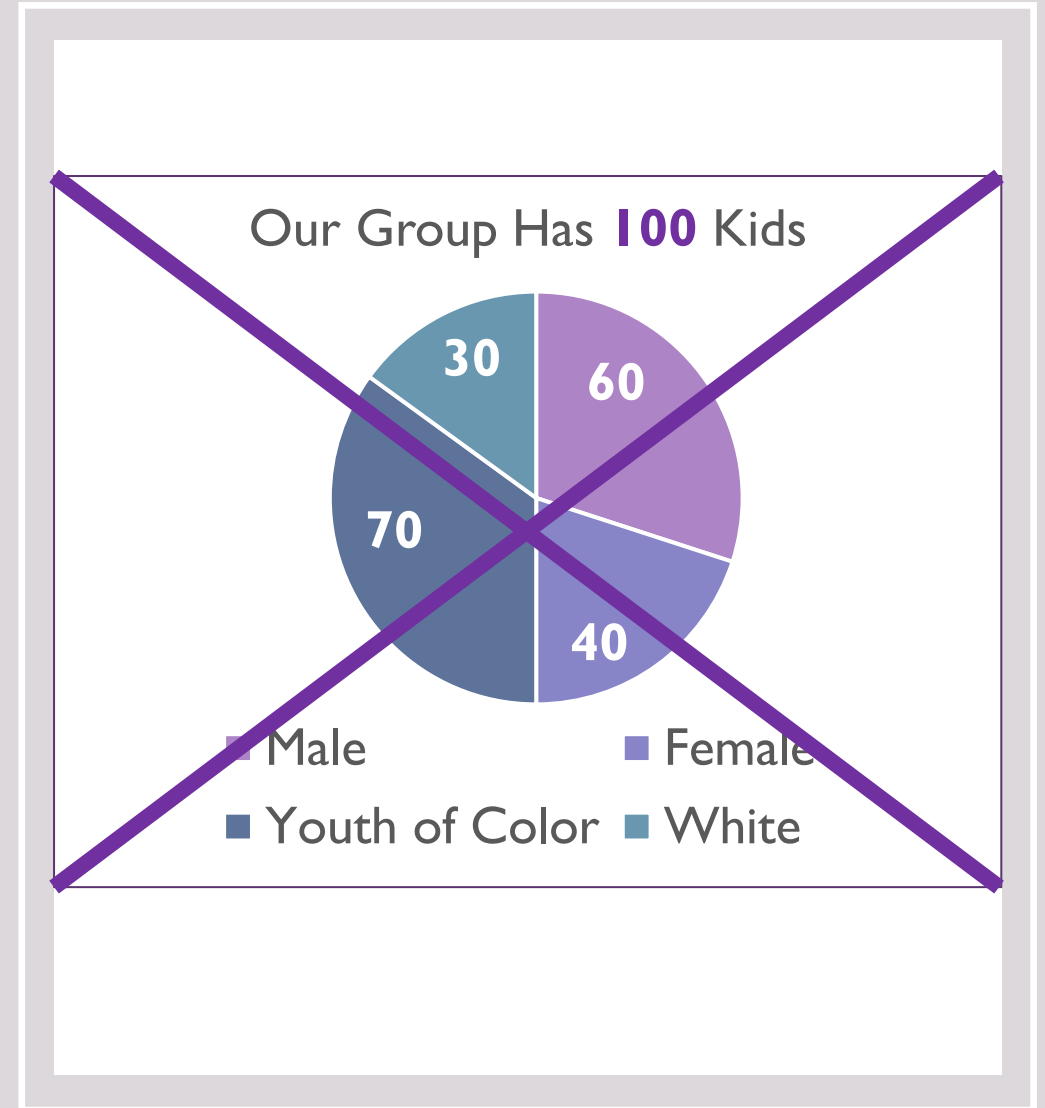60

■ Male ■ Female

Our Group Has **100** Kids

30

70

■ Youth of Color ■ White

PIE CHARTS

- In this pie chart, there are only 100 kids in our group, but if you add all the pieces of the pie, the sum is 200. That's a problem!

Our Group Has **100** Kids

30
60
70
40

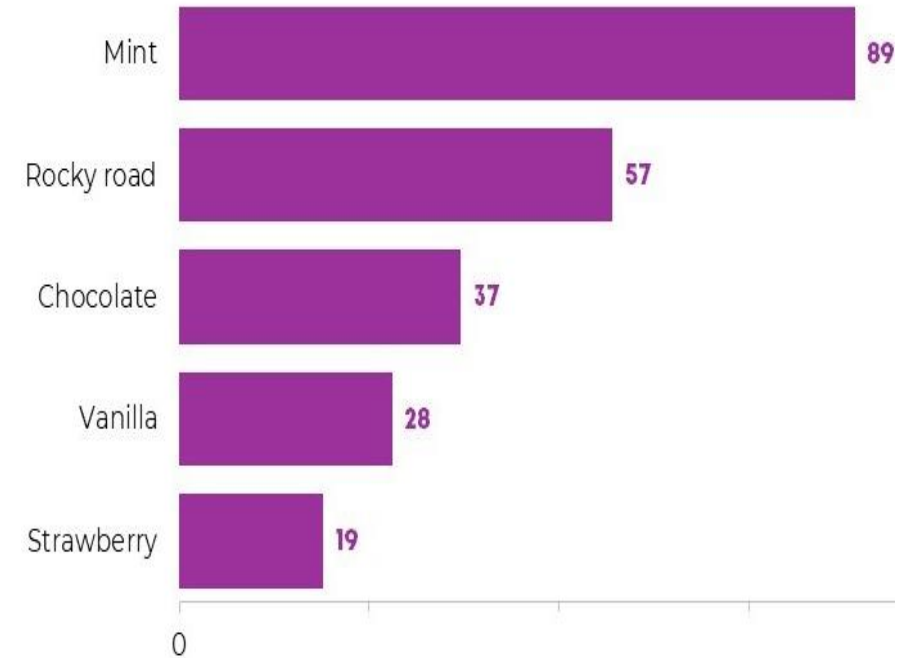■ Male   ■ Female
■ Youth of Color ■ White

BAR CHARTS

Displays the quantitative information by the qualitative groups for easy comparisons of counts, averages, or percentages

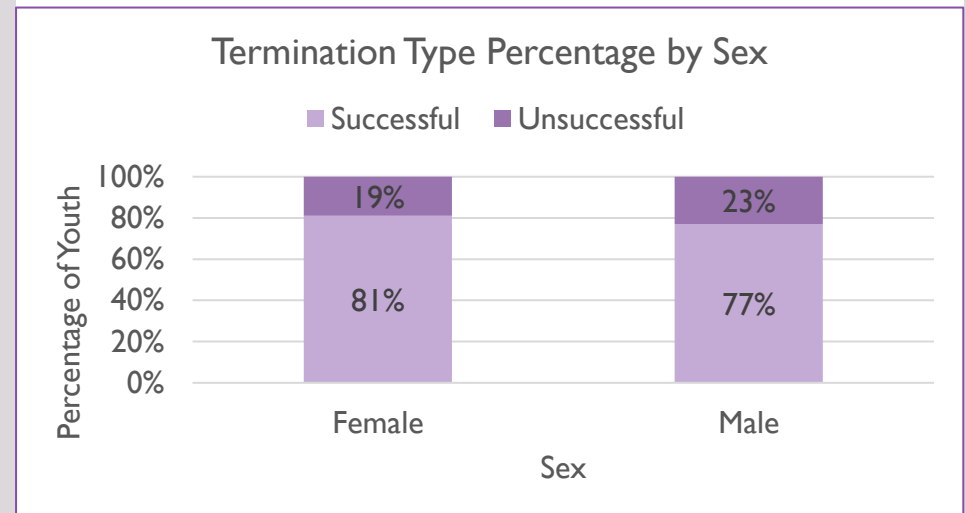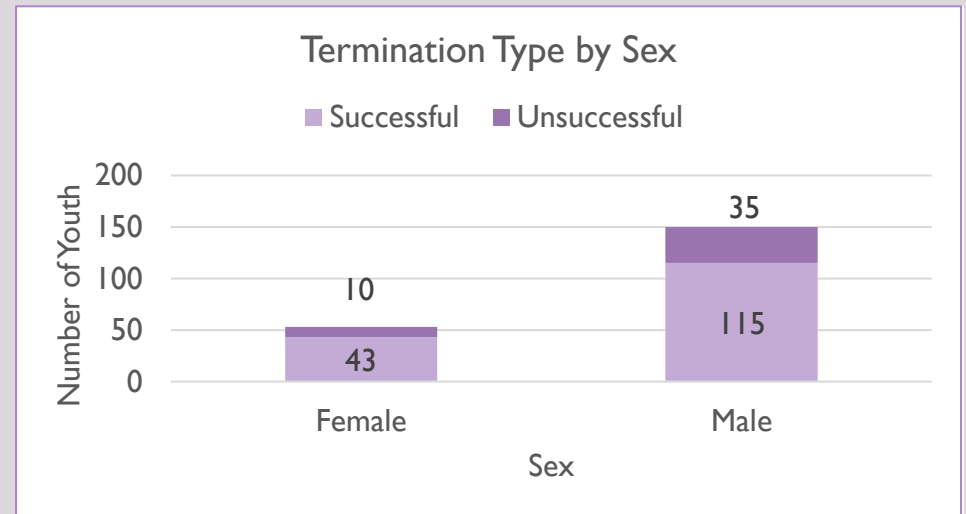Data can be displayed vertically or horizontally.

STACKED BAR CHARTS

- Highlights differences within groups (females who are successful compared to females who are unsuccessful) and between groups (males compared to females) simultaneously

- Similar to comparing pie charts side by side.

- A Stacked Bar Chart can compare COUNTS.
  - The top chart shows a count comparison which highlights the differences in the numbers of males and females, but it is difficult to make comparisons about success because the total number of males and females is quite different.

- A Stacked Bar Chart can compare PERCENTAGES.
  - When we look at the bottom chart, we can see that a larger proportion of males are unsuccessful compared to females, but we don't know how many males and how many females were included in the analysis.

None of the following examples use real life data.

Termination Type by Sex
Successful ■ Unsuccessful
Number of Youth
Female: 43, 10
Male: 115, 35
Sex

Termination Type Percentage by Sex
Successful ■ Unsuccessful
Percentage of Youth
Female: 81%, 19%
Male: 77%, 23%
Sex

IN SUMMARY:

- Graphs are valuable because they visually represent data, making complex information easier to understand and analyze.

- They help identify patterns, trends, and relationships that might be missed in raw data.

- Whether comparing quantities, showing changes over time, or illustrating connections between variables, graphs make data more accessible and support better decision making.