

Lesson 178

Data Analysis Project – Part 1

Sports fans love to track the statistics and averages of their favorite players. In the next two Lessons, you will get to try this for yourself!

Do you have a favorite baseball team? If so, you should have fun looking up the important player stats. If not, this will be a good opportunity for you to learn about America's favorite pastime.

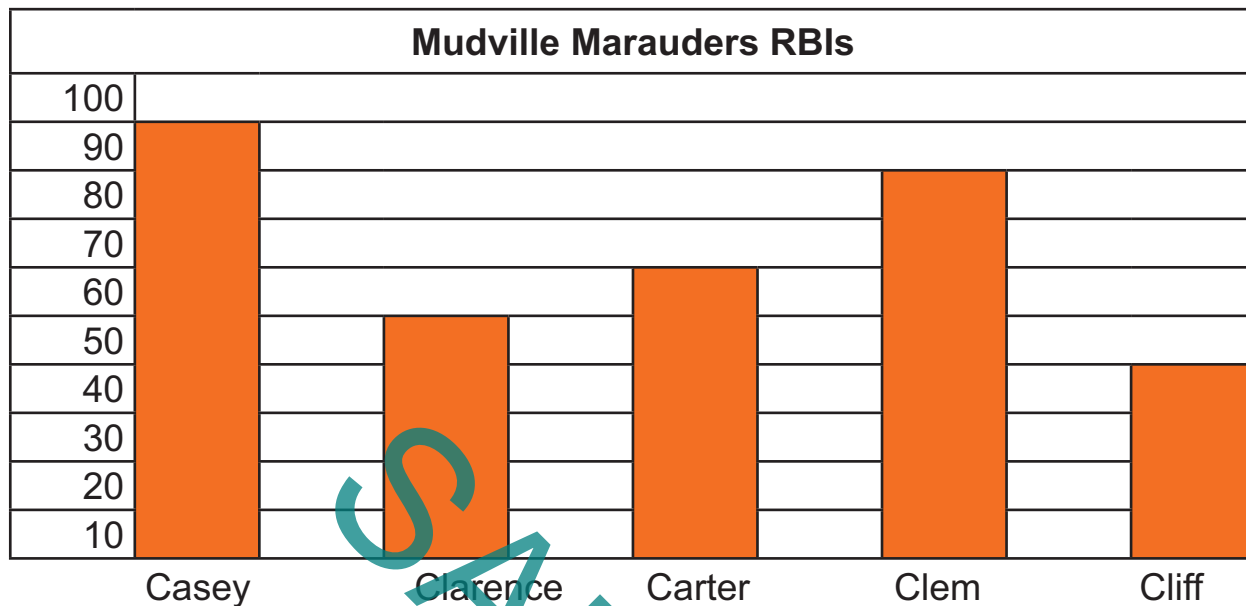
Directions: Follow the steps below to complete your assignment for this Lesson.

1. Go to the website for your favorite baseball team (or use a sports almanac), and find the player statistics (sometimes called stats).
2. Pick five players to compare—they can be the best players on the team, the heaviest hitters, the best pitchers, or just five that you like.
3. Find and write down the following statistics for each player:

Home Run (H)
At Bat (AB)
Runs Batted In (RBI)
Strike Out (SO)
Batting Averages (AVG)

4. You now have five sets of data, one set for each statistic. For each set, calculate the minimum, maximum, median, and range.
5. Determine the scale for each set of data. For example, Batting Averages are all numbers under 1, ranging from .001 to .999, but they usually range between .200 and .400. Your graph will probably stop at 500, and will go from 0 to .500 by thousandths (.01, .02, .03, etc).
6. When you know the scale for each of your five bar graphs, draw out a rough version—it doesn't have to be perfect. This is something to show your teacher so that you can make nice looking and accurate graphs in Lesson 179.

Your graphs are going to show the scores of each player in comparison to other players. Look at the sample graph for the Mudville Marauders below.



Minimum: 50
 Maximum: 90
 Range: 40
 Median: 55

Lesson Wrap-Up: Do you think it will be easier to analyze your data when you have it laid out in a bar graph?

Lesson 179

Data Analysis Project – Part 2

In this Lesson, you will work with the data you gathered in Lesson 178. You will be making bar graphs to represent each of your questions.



Look at the data you collected and the early drafts of your graphs, asking yourself the following questions:

- 1) Did I choose the right scale for each graph?
- 2) Did I correctly identify and label the minimum, maximum, and range?
- 3) Is my information clear and easy to understand?

If you can answer all three questions “yes”, then it’s time to make the final version of your graphs. Use the poster board, glue, markers, construction paper, and other art supplies to make good looking graphs to represent the data you’ve found.

You can also decorate your graphs with pictures of baseball players and games cut out from sports magazines or printed out from the internet

Have fun, and give the finished graphs to your teacher when you are done.

Lesson Wrap-Up: Step back and look at your graphs—are they easy to understand? What can you say about each player just by looking at these graphs?

Lesson 180

Data Analysis Assessment

In this Lesson, you are going to complete Worksheet 180 to see if you understand bar graphs, range and median.

Directions: On a separate sheet of paper, create a bar graph for this data, and then answer the questions below.

Favorite Type of Book	Number of Students
Comedy	12
Mystery	8
Romance	2
Biography	3
Informational	3

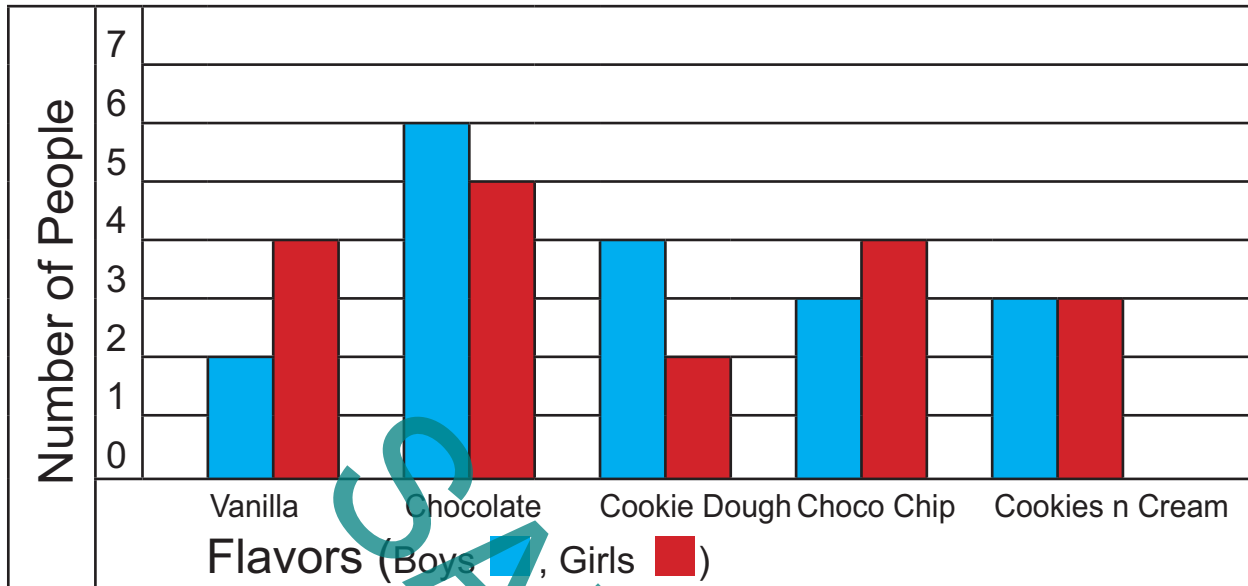
1. What would be a good title for this graph?

2. How many people picked mystery and comedy?

3. How many more people picked comedy than informational?

Directions: Use the bar graph below to answer the questions.

Favorite Ice Cream



4. Complete the chart below based on the data displayed in the graph.

Flavors	Boys	Girls
Vanilla		
Chocolate		
Cookie Dough		
Chocolate Chip		
Cookies and Cream		

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Flavors	Boys	Girls
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5. How many boys are represented in this graph?

6. How many girls are represented in this graph?

7. How many more girls like chocolate chip than boys?

8. How many people (boys and girls) picked chocolate?

9. How many boys picked chocolate and chocolate chip?

10. How many girls picked vanilla and cookies and cream?

11. What is the most popular flavor for boys?

12. What is the most popular flavor for girls?

13. What is the least popular flavor for boys?

14. What is the least popular flavor for girls?

15. Find the range and the median of the data set below.

45, 67, 32, 12, 45, 45, 67, 83, 45, 26, 37, 64, 31, 53, 53

SAMPLE