

Statistician

Grade Level: 8th grade

Time allotted to unit: 45-50 minutes

Lesson Plan

This is an introductory lesson about the median, mean, mode, range, bar graph, and pie chart.

Goals and Objectives

- Introduce statistical terms of median, mean, mode, and range.
- Introduce bar graph and pie chart as a form of visual summary.
- Realize that many researchers use statistics.
- Calculate median, mode, mean, and range given the data.
- Construct bar graph and pie chart.

Materials for each group

- Calculator
- Dice
- Statistician worksheet
- Completed Knowing Our Solar System worksheet

NJCCCS: 5.3.8.D.2 in Science,
4.1.8.B.1, 4.4.8.A.1, 4.5.8.B.1, 4.5.8.B.3, 4.5.8.E.1 in Mathematics

Activities and Procedures:

1. Talk about my major: Statistics.
2. Explain to the students that many researchers use statistics in their work, research.
3. Give students examples of median, mode, mean, and range.
4. Hand out Statistician worksheet and completed Knowing Our Solar System worksheet.
5. Divide students into groups.

6. Give students some time to complete Statistician worksheet.
7. Go over the questions and discuss the answers with the students.

Accommodations:

For SLD explain each activity step by step. Arrange heterogeneous group assignments. For ELL give some vocabulary the day before so they can prepare with another student or look up in dictionary, or specifically translate some words for them.

Assessment:

Walk around the room; classroom discussion; collect the worksheets.

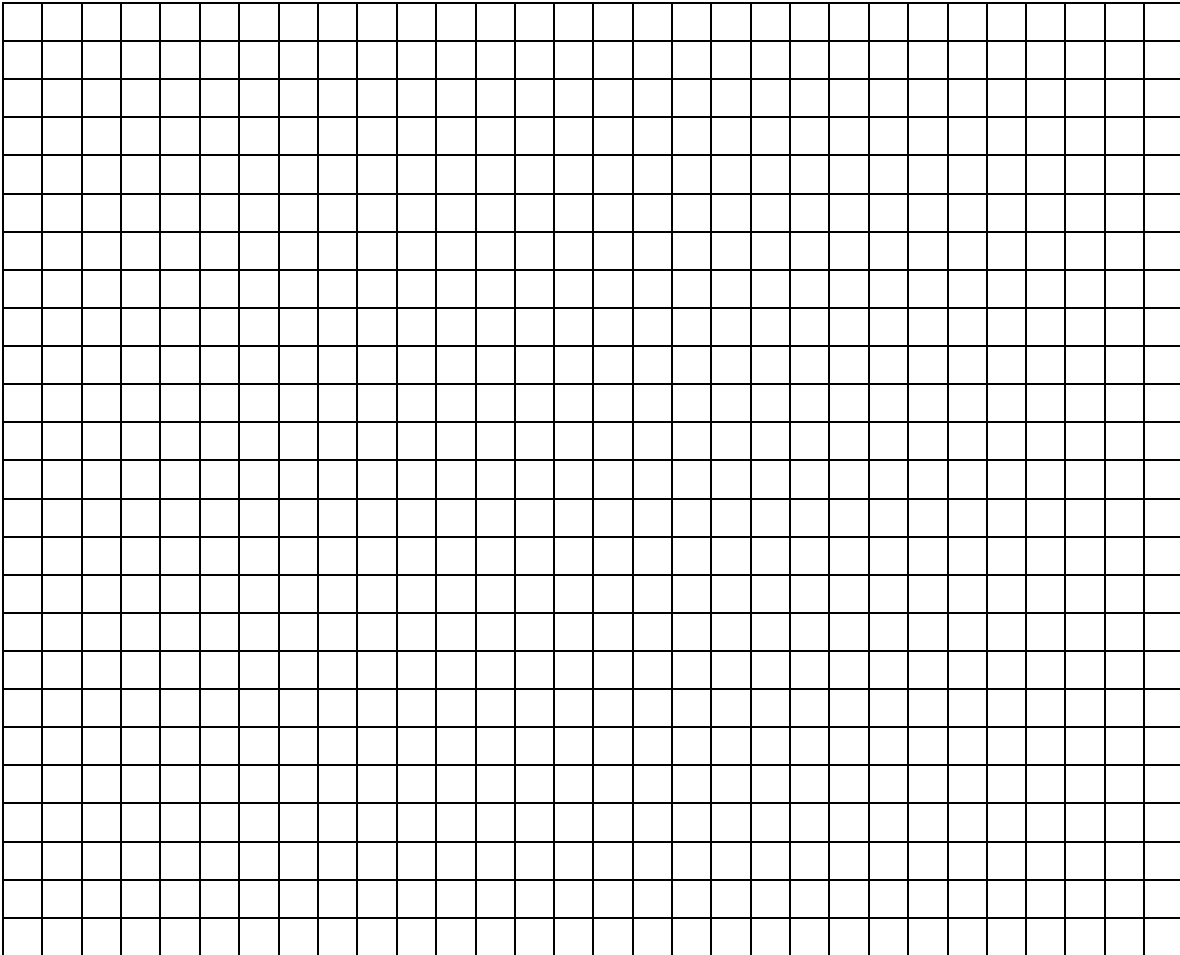
Homework:

Assigned below.

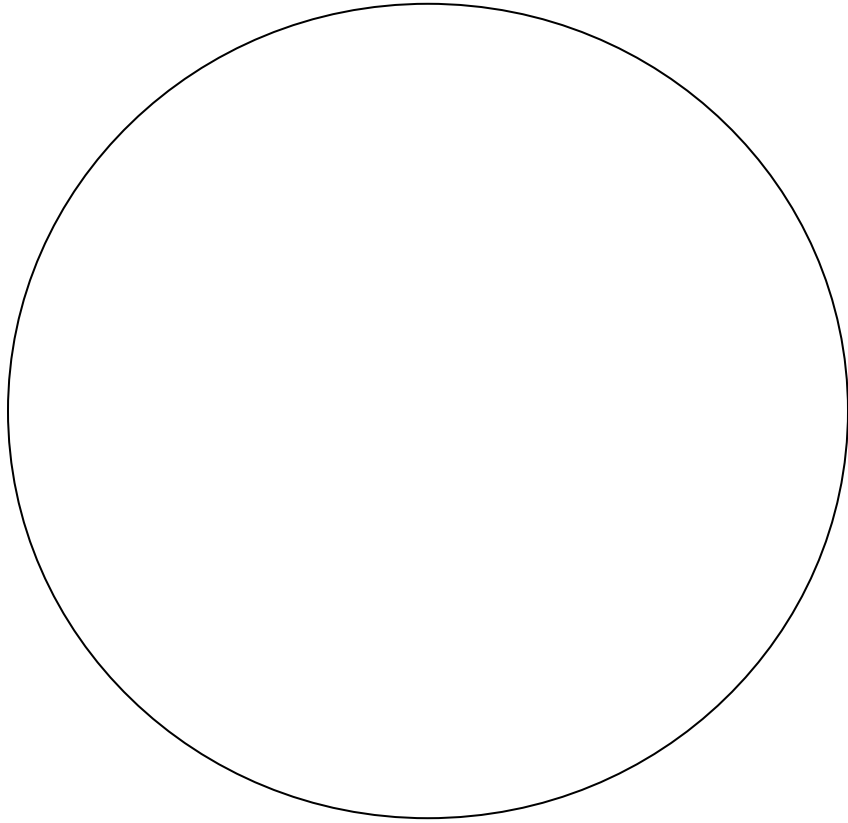
13. For the volume of objects in our Solar System calculate the median?

14. For the volume of objects in our Solar System calculate the mean?

15. For the volume of objects in our Solar System construct a bar graph?



16. For the volume of objects in our Solar System construct a pie chart?



17. For the colors of objects in our Solar System find the mode?

18. Make a list of the numbers whose mode is 7 and the range is 50.

Homework:

Write a short statistical report summarizing the results you have calculated today.