Activity Page: Seven Friends

Seven friends each have a package of colored chocolate candies. Some of the packages are the fun size and some of the packages are the regular size. The chart below shows how many individual colored chocolate candies each person has in his or her package.

Friend's Name	Number of Colored Chocolate Candies
Miriam	24
Martha	18
Mark	38
Maria	24
Melissa	32
Michael	36
Melinda	24

1. What was the most common number of candies in a bag?

2. If the bags of candy were arranged in order from the least number of candies in a bag to the greatest number of candies in a bag, which bag would be located in the exact center? How many candies would be in this bag?

3. Who has the greatest number of candies? How many does he/she have?

4. Who has the least number of candies? How many does he/she have?

5. How many more candies does the person with the most have than the person with the least?

6. If the candies were redistributed so each person has the same amount, how many would each person have?

7. Open the **Seven Friends spreadsheet** and complete the activities on **sheet 1**.

Activity Page: How Far Can We Stretch?

1. Record the names of all of the students in your group in the chart below. Then measure across each person's back the length of how far each person can stretch. Measure from fingertip to fingertip the length in inches of each member of your group (round to the nearest inch) and record each length in the table.

Student Name	Height in Inches

2. When your group has measured and recorded the length of each person's stretch in the group, transfer the information to the chart on the overhead.

3. Record the class data on the last page of this activity.

4. Create a stem and leaf plot to display the lengths of how far the students in your class can stretch.

5. Create a line plot to display the lengths of how far the students in your class can stretch.

6. What are the similarities and differences in the two plots? Can you tell more about the data in one of the plots than the other? If so, which plot displays the data better? If you had to pick only one plot to display the data which one would you choose and why?

7. What is the mean of the data? Justify your answer.

8. What is the mode of the data? Justify your answer.

9. What is the median of the data? Justify your answer.

10. What is the range of the data? Justify your answer.

11. Use the Stem and Leaf Plotter to verify your stem and leaf plot.
        http://www.shodor.org/interactivate/activities/stemleaf/index.html

12. Use the Line Plotter to verify your line plot.
        http://www.shodor.org/interactivate/activities/plop/index.html

13. Use formulas in a spreadsheet to verify your answers for mean, median, mode, and range.

14. Which method (paper and pencil or website) was easier to use to construct the Stem and Leaf Plot and Line Plot?

15. How is calculating the mean, median, mode, and range from the spreadsheet different from calculating the statistics by hand? How is it the same?

16. Which method (paper and pencil or spreadsheet) was easier to use to calculate the mean, median, mode, and range? Why?

Activity Page: What is Missing?

There are nine sixth grade classes at Texas Middle School. Mary knows the number of students in six of the classes. The data she knows appears in the table below.

Class A	22 students	Class F	24 students
Class B	25 students	Class G	?
Class C	23 students	Class H	?
Class D	22 students	Class I	?
Class E	24 students		

She knows that the largest class has twenty-five students. She also knows the information listed below.

The mean is 23 students.
The mode is 24 students.
The median is 23 students.
The range is 5 students.

How many students are in each of the three missing classes?

Use the websites and a spreadsheet to help find the number of students in the three missing classes.

http://www.shodor.org/interactivate/activities/stemleaf/index.html

http://www.shodor.org/interactivate/activities/plop/index.html

1   Which of the following is the data set represented in the stem and leaf plot shown below?

5	6 8 9
6	1 3 4 5
7	0

A   0, 1, 3, 4, 5, 6, 7, 8, 9

B   50, 60, 70

C   5689, 61345, 70

D   56, 58, 59, 61, 63, 64, 65, 70

2   The range in weight of several boxes in a warehouse is 25 pounds. If the greatest weight of a box is 78 pounds, how much does the lightest box weigh?

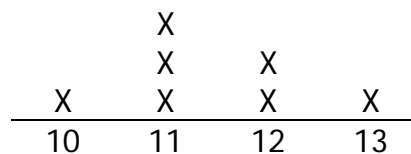A   25 pounds

B   53 pounds

C   103 pounds

D   128 pounds

3   Andrew kept a record of his bowling scores. The scores are shown in the table below.

Game	Score
1	150
2	140
3	170
4	200
5	140

What is the mean of his scores?

A   160

B   140

C   200

D   170

4   The line plot shows the ages of the grandchildren in a large family.

```
                X
                X       X
    X       X   X       X
  ─────────────────────────
   10      11  12      13
```

Which statement does the information in the line plot support?

A   There are just as many grandchildren that are 11 years old as grandchildren that are 12 years old.

B   There are six grandchildren that are 11 years old or older.

C   There are more grandchildren that are 11 years old than grandchildren that are 12 years old or 13 years old.

D   There are two grandchildren that are 12 years old or older.