

**Survey and Statistics**  
**Lesson 8**  
**Mean, Median, Mode and Range**

**Objectives:**

1. Students will calculate the mean, median, mode and range of the data.
2. Students will find the outliers.

**Materials Needed:**

Statistical Survey Worksheet

**Opening Activity:**

1. Write the following terms on the board: Mean, Median, Mode, Outliers and range.
2. Ask the students if they can give a definition of the words. Have them look up the words in their math books to write down the definition.
3. Have some students share their definitions with the class. Write the definitions on the chalkboard.

**Activity:**

- 1) Review outliers. Remind the students that it is a piece of data that is far above of below the other data.
- 2) Each student should write a set of directions for finding the mean, median, mode, and range. Some examples might be:
  - (a) Mean: Take all of the numbers and add them together. Then count how many numbers you added and divided your sum by that number.
  - (b) Median: Place all of the numbers in order in increasing value. The middle number is the median. If there are two middle numbers, then the median is the average of the two middle numbers.
  - (c) Mode: The mode is the number that is written the most often.
  - (d) Range: The range is the highest number minus the lowest number in a set of data.
- 3) Have each group find the mean, median, mode and range using the survey questions. The Statistical Survey Worksheet has a space for this data.
- 4) The students will want to create a poster page for the almanac that displays this information. An example is shown on the next page. The students should be sure to include the question in their poster.

**Closure**

Students should share their posters with the class. Some posters should be chosen for the almanac.

# How Many Times a Week

## Do You Eat Breakfast?

### **Statistical Analysis of Results**

Mean: 4.90 days

Median: 5 days

Mode: 7 days

Range: 7 days