Mean, Median, Mode Card Game

What You Need:

- a deck of cards
- scratch paper
- a pencil
- a calculator (optional)

Review the definitions of:

**Mean** is simply the average of all the items in a sample. To compute a mean add up all the values and divide by the total number of items in the data set.

**Median** is the middle number in a series of numbers, stated in order from least to greatest. If there is an even number of items in the data set, the median is the average of the two middle values. *Memory Trigger: Medians are in the middle of the road, therefore median is middle number.*

**Mode** is the most frequently occurring value in the data set.
*Memory Trigger: Mode is the Most*

Directions:

Using only the Ace through 10 cards, deal out 7 cards to each player. (Be sure there is only a maximum of 4 players!) Ask each player to arrange their cards in sequential order. Aces count as the number 1. Then, depending upon which game you want to play, follow the directions below:

1. **Finding the Mean Game.** Each player finds the total value of the digits on their cards, then divides the total by 7 (the total number of cards) to find the mean. For example, if the cards in your hand are Ace, 2, 4, 6, 8, 8, 9, then the sum of those digits is 38. Dividing the sum by 7 yields 5 (rounding to the nearest whole number). If this was your hand, you'd have scored 5 points in this round.

2. **Finding the Median Game.** Each player finds the median card in their hand and that number is their point value for that round. Thus, using the hand above, the median of the cards is 6, since it's the value of the middle card. (You can also deal out 6 cards in this round so students can practice finding the median of an even set of numbers.)

3. **Finding the Mode Game.** Each player finds the mode in their hand of cards, which represents their point value for that round. If there is no mode, then they don’t score any points in that round. However, if there are two modes (two numbers occur the same number of times), then the player snags the point values for both modes! In the example above, the mode would be 8, since it occurs most often.

The winner of each game is the first person who scores 21 points or whatever number you wish.

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http://www.education.com/activity/article/Mean_Mode_fifth/