Descriptive Statistics

Numbers that describe the main characteristics of the data.

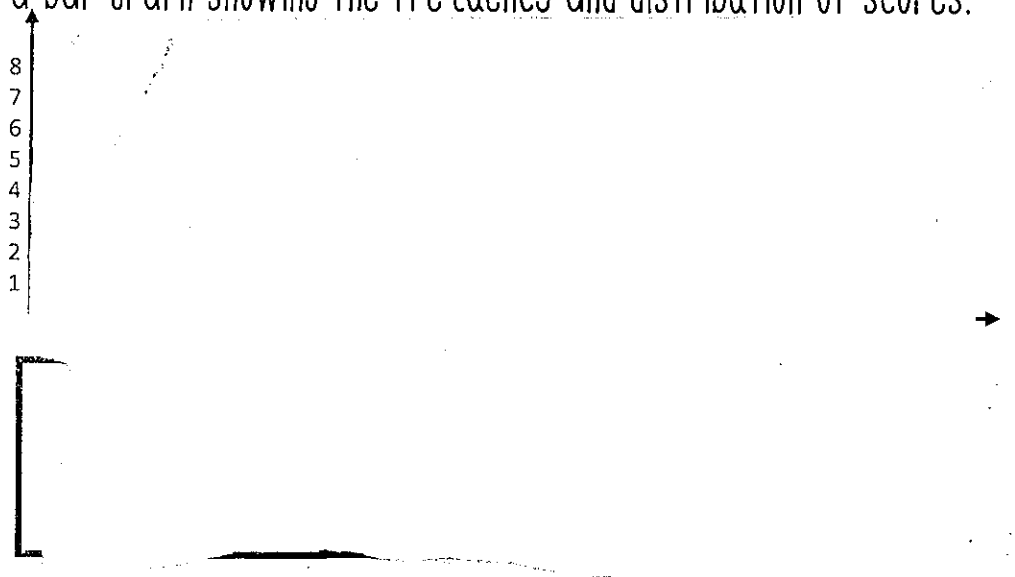
Measures of central tendency

AVERAGE

Mean	Median	Mode
Add up all the scores and divide by the total number of scores. $M = \Sigma X \div N$	The middle score—the one that separates the top half distribution from the bottom half	The most frequently occurring score or data point

Using this data set, organize and then identify each measure of central tendency. Then, create a bar graph showing the frequency and distribution of scores.

1 1 1 1 2 2 2 3 3 3
3 3 4 4 4 4 4 4 5 5
5 5 5 6 6 6 6 6 6 6
7 7 7 7 7 7 8 8 8 8
8 8 8 8 9 9 9 10 10
11 12



SPREAD — Measures of Variability

- ✓ The larger the standard deviation, the more "spread out" the scores are
- ✓ This tells us where the center of the distribution is and how closely the scores cluster around it
- ✓ 1 standard deviation on either side of the mean covers approximately 68% of scores in a normal distribution

Range
The difference between the highest and the lowest values in a frequency distribution

Standard Deviation
The difference between each score and the mean