**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_ Parent Autograph: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Unit 1: One-Variable Data**

**Study Guide**

**Please answer each question to the best of your ability.**

1. What are four things you should address when describing the distribution (or graph) of a set a data?
2. What is the difference between a measure of center and a measure of spread?
3. Given a set of data, how do you calculate the following measures?

mean

median

range

interquartile range (IQR)

standard deviation

1. The following is a set of quiz grades for the first quiz in Mr. Smith’s class:

72, 90, 53, 75, 62, 100, 30, 69, 82, 100, 75, 58, 40, 85, 100, 55, 66, 70, 81, 60, 65

Create a dot plot for this set of data.

1. Find the mean and the median of the grades. Which measure best represents the data? Why? Describe the distribution of grades in context.
2. The following is the set of quiz grades for the second quiz in Mr. Smith’s class:

68, 85, 84, 95, 32, 80, 75, 90, 98, 85, 78, 86, 70, 39, 93, 78, 82, 79, 78, 85

Create a histogram for this set of data. Make a sketch below.

1. Find the median and interquartile range for this set of data. How do the two sets of quiz grades compare?
2. Label each part of the box plot below:
3. What is an outlier?
4. The histogram below shows the graphs of telephone bills of customers in a certain city. How many customers had bills of at least $40?

