

Name: \_\_\_\_\_ Per \_\_\_\_\_

## BOX AND WHISKER PLOTS

A box and whisker plot organizes data values into five parts : minimum value, lower quartile, median, upper quartile, and maximum value in a data set.

### Math Test Scores from Ms. Henry's Class

98, 100, 84, 92, 80, 100, 72, 78, 86, 96, 80, 82, 100



### To create a box and whisker plot:

1. Order your data values in order from least to greatest.
2. Identify the Minimum value and Maximum value in your data set (they become your whisker points).
3. Determine the Median of your data set. The median divides the data set into two halves.
4. To divide the data set into the first quartile (Q1), find the median of the front half of the data set (first value in data set up to (not including) the median value).
5. To divide the data set into the third quartile (Q3), find the median of the back half of the data set (first value after the median up to the highest value in the data set).
6. Draw a box from the first quartile to the third quartile.
7. Draw a 'whisker' from your minimum value to Q1.



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Let's create a box and whisker plot of Mrs. Henry's math test scores:

5-Key Values

Minimum Value:

Maximum Value:

Median:

Q1:

Q4:

\_\_\_\_\_



Step:

1. Order values from least to greatest:

\_\_\_\_\_

2. Identify the Minimum Value: \_\_\_\_\_

Maximum Value: \_\_\_\_\_

3. Identify the Median value in the data set: \_\_\_\_\_

4. Identify the median value in the first quartile (Q1): \_\_\_\_\_

5. Identify the median value in the third quartile (Q3): \_\_\_\_\_

6. Draw a box from Q1 to Q3.

7. You did it!! You've created a box and whisker plot for Mrs. Henry.

What does the size of the box tell us about the test scores?

What about the whiskers?