

Name:

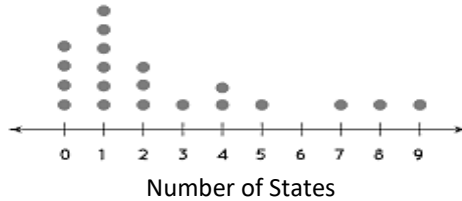
Date:

Period:

Data visualization is the process of putting data into a chart, graph, or other visual format that helps inform analysis and interpretation.

A **DOT PLOT** stacks dots along the horizontal X-axis to represent the frequencies of different values. More dots indicate greater frequency. Dot plots help you visualize the shape and spread of sample data and are especially useful for comparing frequency distributions.

Number of States Visited by High School Seniors



A **STEM AND LEAF** plot is a data display that helps you see how data is distributed. Consider the stem and leaf plot of the following baseball pitch speeds (mi/hr): 86, 83, 74, 95, 89, 97, 68, 88, 72, 97, 94, 85, 70, 89, 80, 93, 91, 84

Stem	Leaf
6	8
7	0 2 4
8	0 3 4 5 6 8 9 9
9	1 3 4 5 7 7

Key:
6 | 8 = 68

**Note: Make sure the leaves are always in order from smallest to largest.

DOUBLE STEM AND LEAF PLOTS: The data below shows the different number of laps swum during practice by swimmers on two different swim teams. Overall, which team swam more laps?

Dolphins: 19, 25, 31, 26, 17, 25, 26, 18, 23, 19, 25, 24

Sharks: 18, 25, 9, 15, 30, 24, 17, 18, 22, 16, 28, 19

Dolphins		Sharks
	0	9
9 9 8 7	1	5 6 7 8 8 9
6 6 5 5 5 4 3	2	2 4 5 8
1	3	0

Key:
1 | 3 | 0 = 31 and 30

The Dolphins had more swimmers swim a number of laps in the twenties.

A **BOX PLOT / BOX AND WHISKER PLOT** is a data display that divides data into several parts. You must identify the following to create your box and whisker plot. Be sure to include a number line and ALWAYS label the key components when creating your own.

Lower Extreme | **Lower Quartile** | **Median** | **Upper Quartile** | **Upper Extreme**

Create a box and whisker plot of the following data:

53 60 61 63 64 65 65 65 65 66 66 67 67 68 69 70 70 71 71 73

Lower Quartile = 64.5 Median = 66 Upper Quartile = 69.5

