

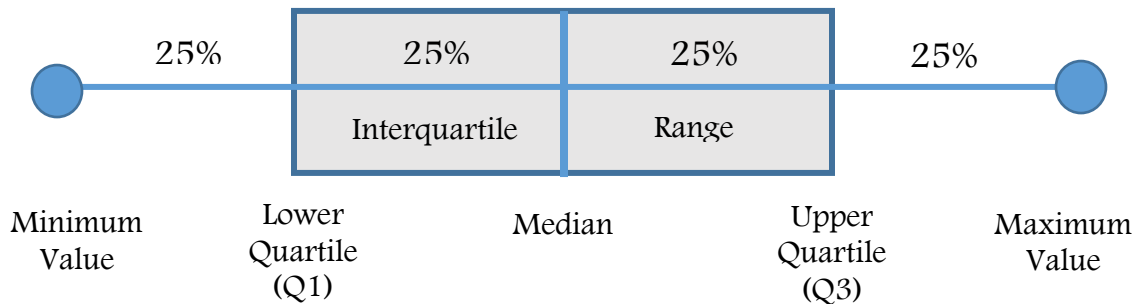
Name: _____

Box and Whisker Plot

A box and whisker plot displays data in four sections or quartiles along the number line. This provides a visual picture of the central tendency and the distribution of the data around it.

Each box and whisker plot will have the following:

minimum value, lower quartile (Q1), median, upper quartile (Q3) and maximum value



The difference of the upper quartile and the lower quartile is known as the interquartile range (IQR).

Create a Box and Whisker Plot

Step 1: Write the data in order from least to greatest. Create a number line starting with your lowest value and ending with your largest value.

Step 2: Place a dot on your number line for your minimum and maximum values.

Minimum value (lower extreme): The lowest value in the data set.

Maximum value (upper extreme): The greatest value in the data set.

Step 3: Determine the median. Place a vertical mark on your number line to represent the median.

Step 4: Calculate the lower quartile (Q1). Place a vertical mark on your number line for Q1.

Lower Quartile (Q1): The median of the lower half of the ordered data set.

Step 5: Calculate the upper quartile (Q3). Place a vertical mark on your number line for Q3.

Upper Quartile (Q3): The median of the upper half of an ordered data set.

Step 6: Draw a rectangle around Q1 and Q3. Draw a whisker from the lower quartile (Q1) to the minimum value and a whisker from the upper quartile to the maximum value.

The Five-Number Summary includes the minimum, maximum, median, lower quartile and upper quartile. Each quartile represents 25% of the data.