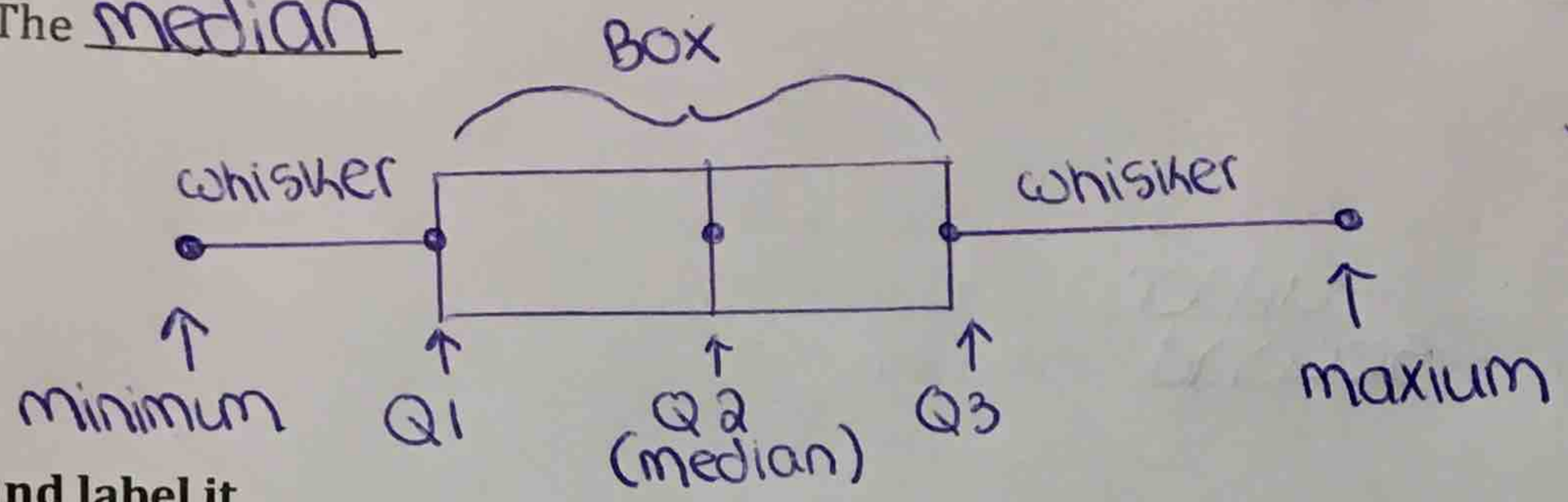
Box-And-Whisker Plot Notes

A box-and-whisker plot is a graph that displays the:

- Highest and lowest quarters of data as whiskers
- the middle two quarters of the data as a box
- The median

} 5 parts which is why it's called 5 # Summary

Ex)



Try and label it.

A. Second Quartile/Median B. Whisker (2) C. Upper Extreme/Maximum
D. Box E. Lower Extreme/Minimum F. First/Lower Quartile
G. Third/Upper Quartile

Steps to finding the **Five Number Summary**:

1. You will first get a set of data.

   Ex) 26, 17, 21, 23, 19, 28, 17, 20, 29

2. Order the data from least to greatest

   17, 17, 19, 20, 21, 23, 26, 28, 29

3. Find the minimum or lower extreme.
   This is the smallest number in the set of data.

   Ex) 17

   "min"

4. Find the maximum or upper extreme.
   This is the largest number in the set of data.

   Ex) 29

   "max"

5. Find the second quartile or median.
   This is the middle number in the set of data.

   Ex) 21

   "Q_2"

6. Find the first or lower Quartile.
This is the median of the first half of data.

Ex) 17, 17, 19, 20, 21, 23, 26, 28, 29

18

7. Find the third or upper Quartile.
This is the median of the second half of data.

Ex) 27

Interquartile Range: the difference between the upper and lower quartiles.

FORMULA: Q3 − Q1

Ex) 27 - 18 = 9