

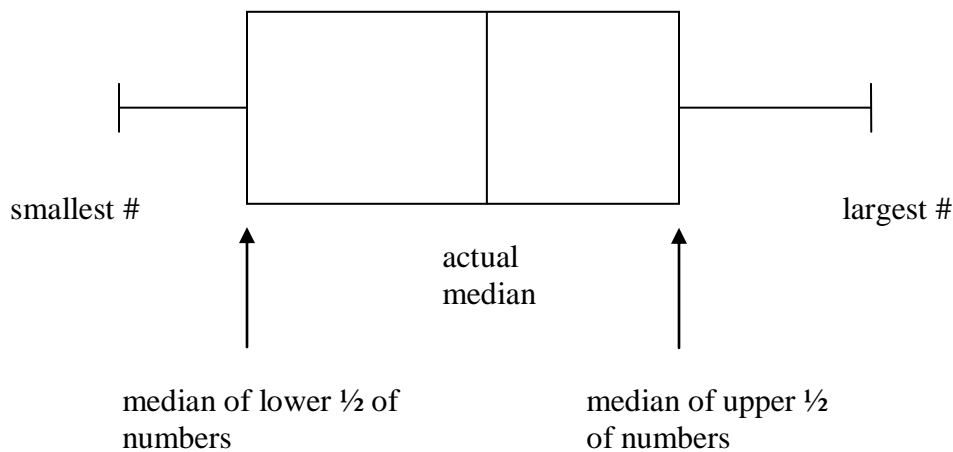
Box and Whisker Plot: A box and whisker plot is a way to display data. To create a box and whisker plot, you need to be able to find the median. As you learned in an earlier unit, the median is the number in the middle of a set of data (after putting the numbers in order from least to greatest).

TASK #1: Find the median of the following sets of data. (remember, if there are 2 #'s in the middle, find the average of those two numbers)

4, 19, 23, 5, 33, 24, 17, 24, 46, 22, 40

24, 88, 90, 44, 28, 83, 46, 14, 66, 55

Example of a box and whisker plot:



Steps to creating a box and whisker plot:

- Arrange the numbers in order from least to greatest.
- Find the actual median of the whole set of data (# in middle).
- Split the data set into the upper half and the lower half.
- Find the median of the upper half.
- Find the median of the lower half.
- Draw a number line that has the numbers included in your set.
- Draw the box and whisker plot above the number line.

TASK #2: Create a box and whisker plot for the following set of data.

12, 18, 17, 22, 19, 17, 24, 20, 30, 22, 16, 14, 21, 18, 19

TASK #3: Develop a survey question to ask 50 classmates/teachers. The survey question must have a number as an answer. Once you have 50 responses, create a box and whisker plot to display the data you have collected. When your box and whisker plot is complete, write down 2 conclusions based on the data you have. For example, if your question was “How many pets does your family have?”, and the median was 8, one conclusion might be that it is common for families to own more than 1 pet.