

BOX-AND-WHISKER PLOTS

Test scores for three classrooms are recorded on strips below. Cut out the strips.

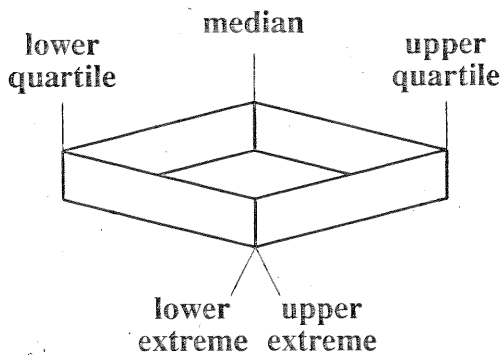
CLASSROOM 1																							
68	72	72	73	74	74	76	78	80	80	81	82	82	84	86	86	87	88	88	89	90	92	96	96

CLASSROOM 2																								
58	59	63	64	64	64	66	68	69	72	73	74	80	82	94	94	95	95	95	95	96	97	98	100	100

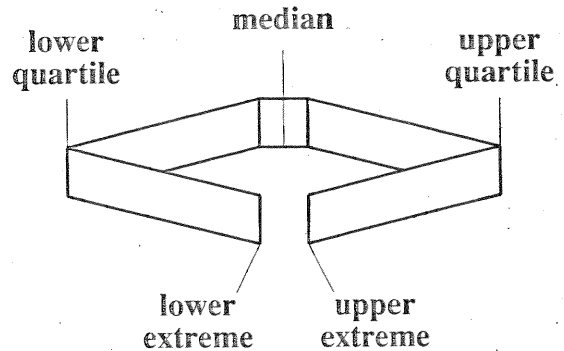
CLASSROOM 3																										
55	58	60	60	62	64	66	70	70	70	73	74	74	76	78	78	79	82	82	85	87	87	87	92	94	94	96

Fold each strip in half to locate the median. Then make two more folds as shown to locate the lower and upper quartiles. If the number of data values is odd, make these folds so the median value remains visible.

Even Number of Data Values



Odd Number of Data Values



Assignment # _____

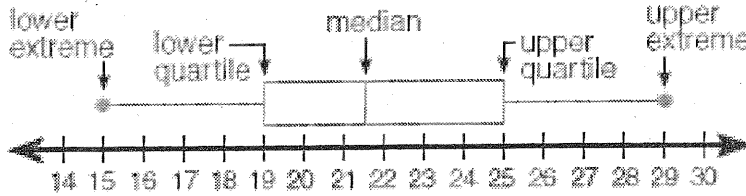
Name _____

WS Box & Whisker Plot

Period _____

Date _____

A box-and-whisker plot is a way to show data arranged in order from least to greatest along a number line. The box-and-whisker plot divides a set of values into four parts called quartiles.



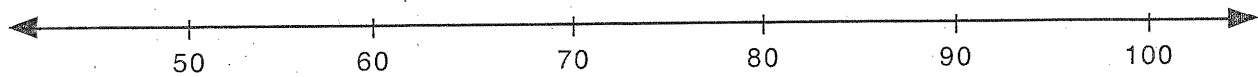
The middle value is the *median*. The box goes from the lower (or 1st) quartile to the upper (or 3rd) quartile. The *whiskers* connect the lowest value (lower extreme) and highest value (upper extreme) to the box.

The graph above shows the number of students in each class at an E. Zee Elementary School.

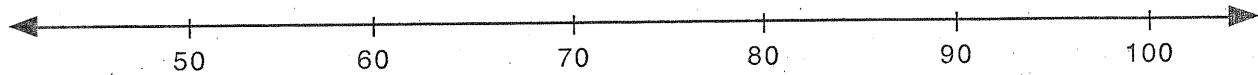
1. What is the smallest number of students in any classroom? _____
2. What is the largest number of students in any classroom? _____
3. What is the median number of students in the classrooms? _____
4. Twenty-five percent of the numbers are between 15 and _____. (the whisker)
5. Twenty-five percent of the numbers are between 19 and _____. (part of box)
6. Twenty-five percent of the numbers are between 21.5 and _____. (part of box)
7. Twenty-five percent of the numbers are between 25 and _____. (the whisker)
8. From the picture, can you tell how many classroom are represented in this plot? _____

Use the second page of this worksheet for the next portion. Follow the directions given to complete a box-and-whisker plot for each of the three classrooms. Use a ruler.

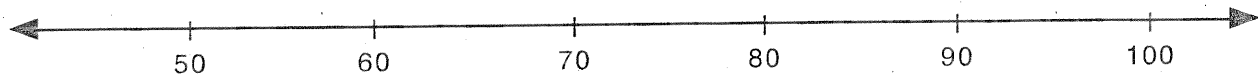
Class 1



Class 2



Class 3



Ages: Write the following ages in numerical order: 25, 27, 13, 18, 21, 59, 38, 42, 50, 24

Median _____

Lower Quartile _____

Upper Quartile _____

Lower Extreme _____

Upper Extreme _____

Now draw the box-and-whisker plot

