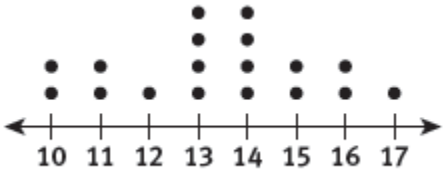
Name_____ Date_____
Teacher_____

6th Grade Math (Statistics) Enrichment #10 (Lesson 30-1)

Ready:

1. The dot plot below shows the ages of the students in the drama club.



(a) Determine the 5-number summary.

(b) Write a brief paragraph about the distribution of students in the drama club.

2. Create a box plot for the data above.

3. Using the five-number summary, which two numbers represent the starting point and ending point of the following portions of the distribution?

(a) Lowest 50% of the values in the distribution.

(b) Highest 25% of the values in the distribution.

(c) Middle 50% of the values in the distribution.

Set:

4. Evaluate each expression:

(a) $4 \cdot 25 \div (25 \div 5 \cdot 4)$ (b) $13 + 7 \cdot 3$

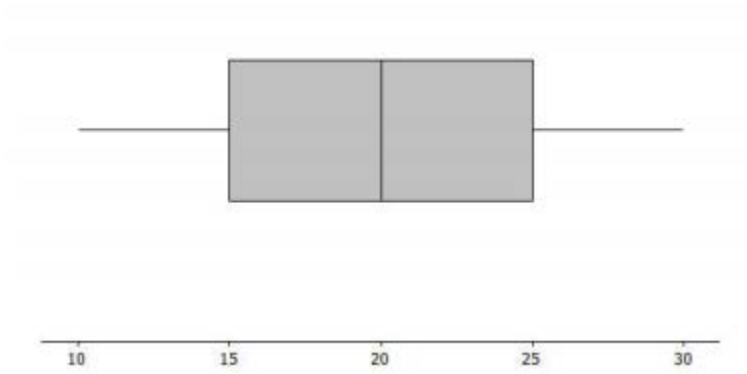
5. If an average American recycles 1.5 pounds of trash a day, how many pounds do they recycle in a year (365 days)? Write and solve an equation.

Go:

6. Susie explained how to make a box plot to her sister as follows:

"First you find the smallest and largest values and put a mark halfway between them, and then put a mark halfway between that mark and each end. So, if 10 is the smallest value and 30 is the largest value, you would put a mark at 20. Then another mark belongs half way between 20 and 10, which would be at 15. And then one more mark belongs half way between 20 and 30, which would be at 25. Now, you put a box around the three middle marks and draw lines from the box to the smallest and largest values."

Here is her box plot. What would you say to Susie?



7. In Mrs. Hunt's classroom, more people sit on the right side of the room than the left. The students on the right side of the classroom received the following scores on an exam worth 100 points:

85, 90, 100, 95, 0, 0, 90, 70, 100, 95, 80, 95

The students on the left received these test scores:

65, 80, 90, 65, 80, 60, 95, 85

(a) Make two box plots of the student's scores, one for each side of the room.

(b) Which students were more successful on the test? The left or the right? Explain your reasoning.