**Common Core Math I**

**Homework: Measures of Center - Median**

**For questions 1-5, tell whether the answers to the questions are quantitative or categorical data. If the data is quantitative, indicate the unit of measurement.**

1. What is your height in centimeters?
2. What is your favorite band?
3. What would you like to do after you graduate from high school?
4. How much time do you spend doing homework each day?
5. On a scale of 1 to 5, with 5 being excellent and 1 being poor, how would you rate the food in the cafeteria?

**For questions 6-9, use the graphs below. The graphs show information about a class of students.**

6) Which graph might show the number of children in the student’s families? Explain.

7) Which graph might show the birth months of the students? Explain.

8) Which graph might show the number of toppings students like on their pizzas?

9) Give a possible title, a label for the vertical axis, and a label for the horizontal axis for each graph, based on your answers to questions 6-8.

10) Annette has a hamster that is three years old. She wonders if her hamster is old compared to other hamsters. On the internet, she finds out that the median age for a hamster is 2 ½ years.

a) What does the median tell Annette about the life span of a hamster?

b) How would knowing how the data vary from the least value to the greatest value help Annette predict the life span of her hamster?

**Ms. Jackson’s class also collected data on the number of pets each student has at their home. Use this data to answer the following questions.**

**Number of Pets**

|  |  |
| --- | --- |
| Number | Frequency |
| 0 | 2 |
| 1 | 2 |
| 2 | 5 |
| 3 | 4 |
| 4 | 1 |
| 5 | 2 |
| 6 | 3 |
| 7 | 0 |
| 8 | 1 |
| 9 | 1 |

11) Make a histogram of the data. Include the graph or a sketch of the graph from the calculator.

12) Find the median.

13) Describe the distribution (shape, center, spread, outliers).

14) Do you think the students live in a city, the suburbs, or the country? Explain.