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## Use an XY Coordinate Pegboard to plot the data.

Use the plot to answer Questions 1-4.

| Score <br> $(\mathbf{x})$ | Number of <br> Students (y) |
| :---: | :---: |
| 5 | 1 |
| 6 | 1 |
| 7 | 2 |
| 8 | 4 |
| 9 | 5 |
| 10 | 4 |



1. How many observations are there? $\qquad$
2. What is the median score? $\qquad$
3. What is the range of the scores? $\qquad$
4. Describe the shape of the distribution. $\qquad$

Plot the data on the XY Coordinate Pegboard. Use the plot to answer Questions 5-8.

| Score <br> $(\mathbf{x})$ | Number of <br> Students $(\mathbf{y})$ |
| :---: | :---: |
| 4 | 1 |
| 5 | 1 |
| 6 | 2 |
| 7 | 4 |
| 8 | 3 |
| 9 | 1 |
| 10 | 1 |


5. How many observations are there? $\qquad$
6. What is the median score? $\qquad$
7. What is the range of the scores? $\qquad$
8. Describe the shape of the distribution.

Name $\qquad$

Challenge! Refer to the two distributions you used to answer Questions 1-8. Find the mean score in each case. Round your answers to the nearest hundredth. Show your work. Why is the mean closer to the median in the second distribution?
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Use Centimeter Cubes to model the set of data shown. Write the numbers in the set. Determine the mode, median, and range. Rearrange your cubes to find the mean.


Data: $\qquad$

Mode: $\qquad$
Median: $\qquad$
Range: $\qquad$
Mean: $\qquad$
Dara

Using Centimeter Cubes, model the set of data. Sketch the set of data. Determine the mode, median, and range. Rearrange the cubes to find the mean. Sketch the set of data.
2. $9,8,3,2,3$

Mode: $\qquad$ Median: $\qquad$
Range: $\qquad$ Mean: $\qquad$

Find the measure of central tendency named for each set of data.
3. 4, 7, 3; range
$\qquad$
6. $3,2,7,9,6,3$; mode
7. $14,3,8,4,1$; mean
8. $16,12,13,5$; median

Name

Challenge! Which measure of central tendency can you find by simply looking at the set of data? Explain.
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Use Centimeter Cubes to make a histogram. Use Fraction Circles to make a circle graph of the same data. Complete the table.
1.


Number of Hours Slept Each Night by People Surveyed


How many people were surveyed?
$\qquad$

| Number of <br> Hours | Fraction of <br> People |
| :---: | :---: |
| $0-3$ |  |
| $4-7$ |  |
| $8-11$ |  |

Using Centimeter Cubes and Fraction Circles, make a histogram and circle graph for the data in the table. Sketch the graphs. Complete the table.
2.

| Number <br> of <br> Pets | Number <br> of <br> People | Fraction <br> of <br> People |
| :---: | :---: | :---: |
| $0-1$ | 10 |  |
| $2-3$ | 9 |  |
| $4-5$ | 3 |  |
| 6 or more | 2 |  |



Name

Challenge! Explain how the tallest bar in a histogram is related to the sections of the corresponding circle graph.
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