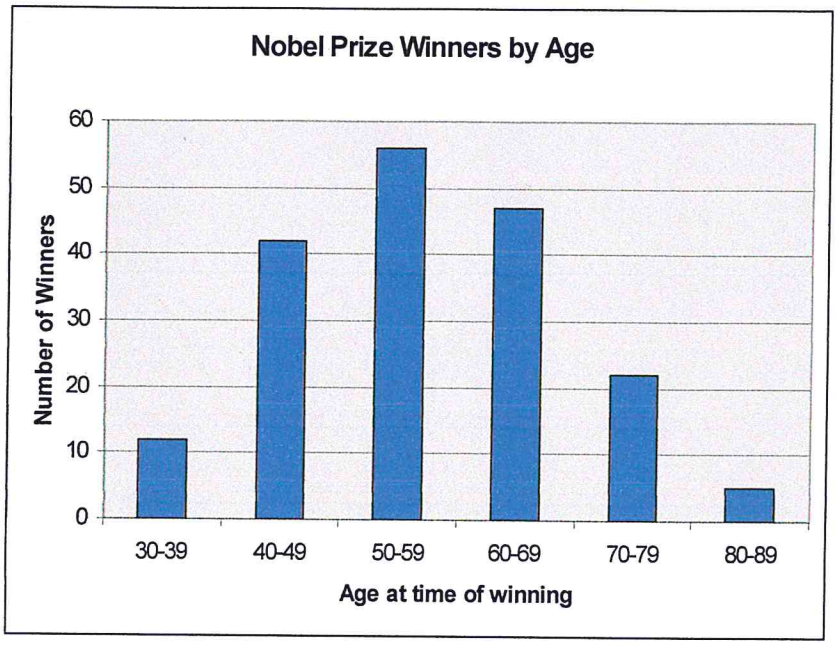
What's a Histogram?

A histogram is a bar graph that shows the frequency of data in intervals.

Important Elements of a Histogram

Label each element on the example histogram at right:

- Title
- Bars
- X-Axis Label
- Y-Axis Label
- Intervals



Analyze a Histogram

The histogram at right shows the frequency distribution of the ages of the winners of the Nobel Prize in Medicine.

1. According to the histogram, most winners are between what ages when they are awarded the Nobel Prize?
2. How many scientists between the ages of 80-89 have won the Nobel Prize for Medicine?

How Do You Make a Histogram?

1. **Collect the data.**
2. **Create a frequency table.** Choose the size of each group of values, called the interval. You decide what size of interval will best show the distribution of the data. Tally the number of values that are grouped in each interval. The number of tally marks is the frequency.
3. **Create the Histogram.** Create a graph with an x-axis and y-axis. List the interval ranges on the x-axis. The y-axis is the frequency of each interval. Each interval is represented by a bar. The height of the bar tells the frequency, how many, data points are in that interval. Label the x- and y-axes and give the histogram a title.

Name_____ Per_____

Homework: Complete the frequency table with the given information. Use that information to create a histogram on the given graph paper. Use the table and graph to answer the attached questions. GOOD LUCK!

76	**89**	**96**	**65**	**89**	**72**	**92**	**84**	**68**	**73**	**68**	**87**
91	**85**	**78**	**66**	**71**	**98**	**94**	**81**	**75**	**85**	**96**	**71**

1.) Organize the data given into the following **Frequency table**:

Scores	*Tally*	*Frequency*
92-100		
83-91		
74-82		
65-73		

Questions:

a.) Which interval had the least amount of scores?

b.) Did more people score above or below 82%?

c.) Which interval had the most scores, and what does this mean?

2.) Using the information from the frequency table, create a **histogram** for the data.

(MAKE SURE TO LABEL YOUR HORIZONTAL / VERTICAL AXIS, AND TITLE!)