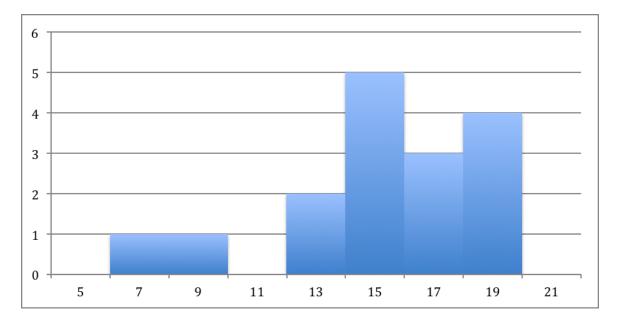
Once data about a variable of interest have been obtained, it's important to clearly describe the dataset. We often look for ways of expressing the data graphically. The graph of choice usually depends on the nature of the data itself or the type of question to be answered.

## Questions

- 1. In order to determine which kind of data display (e.g., histogram vs. bar graph) is appropriate for a given variable, what should we consider?
  - a. whether the relevant variable is quantitative or categorical
  - b. whether the study is observational or experimental
  - c. the range of the data
- 2. A class survey asked students to indicate if they are MAC or PC users. What type of graph(s) (pie chart, bar chart, histogram) is most appropriate to display their results.
- 3. Scores for a quiz were calculated as the number of correct responses. Below is a graphical display of the quiz scores. How many students have score above 15? (Note: all scores are integers and bars begin at left endpoints.)

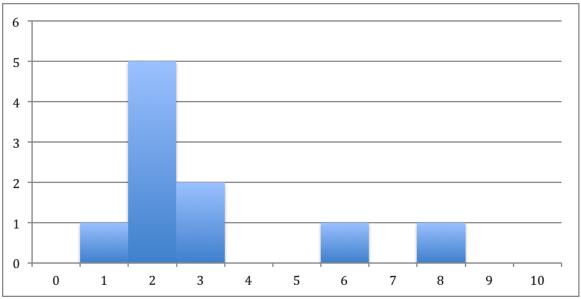


Answer: \_\_\_\_\_

## Handout #11 — Different Kinds of Data Representations

For questions #4 - 6:

Here is a histogram for a set of test scores from a 10-item makeup quiz given to a group of students.



- 4. What do the number on the vertical axis represent?
- 5. How many students received scores higher than 4?
- 6. How many people took the quiz and have scores represented in the graph?
- 7. Select the best description (normal, skewed to the left, skewed to the right, uniform, bimodal) for each distribution below.

