Determine which graphical display would be best for each set of data, explain your reasoning. Packet L

1) The following data are the heights of 133 plants in cm :

| Height | 160 | 161 | 162 | 163 | 164 | 165 | 166 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 10 | 15 | 29 | 28 | 24 | 21 | 6 |

2) The following data are the average number of children per woman in 5 countries in Africa.

| Country | Botswana | Namibia | Zimbabwe | Zambia | Mozambique |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \# of Children | 5.2 | 6.0 | 5.5 | 6.5 | 6.5 |
| Percentage by <br> Country | $17.5 \%$ | $20.2 \%$ | $18.5 \%$ | $21.9 \%$ | $21.9 \%$ |

3) A sample of eggs from one day's production has mass in grams:
$40,50,72,51,60,55,67,46,57,53,55,42,51,59,49,52,46,64,43,66,54,64,48,58,52$
4) The way the vote is split among three candidates in a school election.
5) The points scored by a football team during each game in a 16 game season organized so the coach can clearly calculate stats such as mean number of points scored.
6) The distribution of heights of the graduating class of 2016 to be organized so students can be grouped by close heights for graduation.
7) The percentage of students in each club at MA.
8) The part of a whole group that said yes, no, or no opinion in a survey.
9) The data below depicts the ages of students who participated in the National Spelling Bee. How would you organize the data so you could quickly identify the range as well as the middle $50 \%$ of the data?
$14,12,13,14,11,13,12,11,12,13,14,10,14,13$
10) Data depicting two periods of student scores on a history exam. The teach would like to quickly organize the data to determine the mean, median, mode and range by period.
11) Data comparing the mileage Batman gets in the city vs. on the highway for his last 50 trips. Mrs. Knowlton would like to quickly be able to identify how many miles he gets $75 \%$ of the time.
12) A call center wants to improve the response time on incoming calls. Data on the length callers wait before they are spoken to is collected for a week. During this time the call center collects 1,000 data points.
13) Use this type of display when you are working with larger data sets and you wish to group the data and show the frequency of each grouping.
14) Use this type of display when you are trying to show what part of the whole something represents.
15) Use this type of display when you are summarizing your data and including the median as part of the summary.
16) Use this type of display when you have smaller sets of data and want to organize the data but still display each one of your data points.
