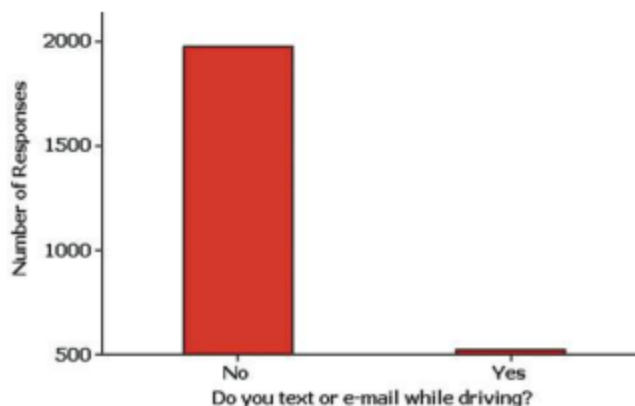**3. Organ Donors** *USA Today* provided information about a survey of 5100 adult Internet users. Of the respondents, 2346 said they are willing to donate organs after death. In this survey conducted for Donate Life America, 100 adults were surveyed in each state and the District of Columbia, and results were weighted to account for the different state population sizes.

a. What percentage of respondents said that they are willing to donate organs after death?

b. Based on the poll results, what is the probability of randomly selecting an adult who is willing to donate organs after death?

c. What term is used to describe the sampling method of randomly selecting 100 adults from each state and the District of Columbia?

4. Driving Survey In a survey of Americans age 16 years or older, respondents were asked if they texted or e-mailed while driving during the previous 30 days. The results are summarized in the accompanying graph (based on data from AAA Foundation for Traffic Safety). What is wrong with this graph?

5. Sampling Eye Color Based on a study by Dr. P. Sorita Soni at Indiana University, we know that eye colors in the United States are distributed as follows: 40% brown, 35% blue, 12% green, 7% gray, 6% hazel.

a. A statistics instructor collects eye color data from her students. What is the name for this type of sample?

b. Identify one factor that might make this particular sample biased and not representative of the general population of people in the United States.

c. If one person is randomly selected, what is the probability that this person will have brown or blue eyes?

d. If two people are randomly selected, what is the probability that at least one of them has brown eyes?

6. Scatterplot of Bear Chest Sizes and Weights Given below are the chest sizes (inches) and weights (pounds) of 10 bears taken from Data Set 7 in Appendix B. Construct a scatterplot. Based on the scatterplot, does there appear to be a correlation between the chest sizes of bears and their weights?

Chest Size (in.)	26	45	54	49	35	41	41	49	38	31
Weight (lb)	80	344	416	348	166	220	262	360	204	144