

BIOL 300 Assignment 1, Spring 2012

Chapter 1

10. **(a)** Discrete **(b)** Continuous **(c)** Continuous **(d)** Discrete—although could be continuous if fractional bread crumbs are considered **(e)** Continuous
12. **(a)** numerical, discrete
(b) numerical , continuous
(c) categorical, ordinal
(d) numerical, continuous
(e) categorical, ordinal
(f) numerical, continuous
(g) categorical, nominal
(h) numerical, discrete
(i) categorical, nominal
(j). numerical, continuous
14. **(a)** No. The 500 households selected to receive the survey might be a random sample, but the low completion rate ($< 20\%$) makes the sample a volunteer sample.
(b) Volunteer bias Those who volunteer to respond to a survey on recycling might have different opinions of the program than those who did not respond.
17. The 60 samples are not a random sample. The 6 dives measured on each bird are not independent. The six dive results measured from each bird are likely to be more similar than dive results obtained from six different birds sampled randomly from the population.