

AP Stats – Chap 1

Stats Starts Here! - Data

1. One of the reasons that the Monitoring the Future (MTF) project was started was “to study changes in the beliefs, attitudes, and behavior of young people in the US.”

Data are collected from 8th, 10th, and 12th graders each year. To get a representative nationwide sample, surveys are given to a randomly selected group of students. In Spring 2004, students were asked about alcohol, illegal drug, and cigarette use. Describe the Ws if the information is given.



2. Consider the following part of a data set. List the variables in the data set and indicate whether it is categorical or quantitative. If it is quantitative, state the units.

Age (years)	Sex	Only child?	Height (inches)	Weight (pounds)	Credit Hours	GPA	Major
21	Female	Yes	67.00	140.0	16	3.60	animal science
20	Female	No	62.00	130.0	18	3.86	biology
28	Female	No	64.00	188.0	21	3.25	psychology
21	Male	No	65.00	140.0	15	2.95	psychology
24	Female	No	67.00	130.0	20	3.00	anthropology
22	Male	Yes	68.00	135.0	15	2.94	journalism

3. In November 2003 *Discover* published an article on the colonies of ants. They reported some basic information about many species of ants and the results of some discoveries found by Professor Tischel of the University of Florida. Information included the scientific name of the ant species, the geographic location, the depth of the ant nest (in feet), the number of chambers in the nest, and the number of ants in the colony. The article documented how new ant colonies begin, the ant nest design, and how nests differ in shape, number, size of chambers, and how they are connected, depending on the species. It reported that nest designs include vertical, horizontal, or inclined tunnels and transport of food and ants. Describe the Ws if the information is given. List the variables. Indicate whether each variable is categorical or quantitative. If the variable is quantitative, tell the units.

