LANGUAGE OF STATISTICS

TEXT: 1.1, 1.2, 1.3

LAST NAME	FIRST NAME	DATE

1 (5 points)**.** The Milky Way galaxy consists of more than 100 billion star systems, some of which are known to house planets. Our Solar system, for example, contains 8, perhaps 9 planets. An astronomer takes a sample of 4000 nearby star systems and conducts a study to find the average number of planets among the star systems of the Milky Way galaxy.

Describe each of the following:

(1) **individual** (a member of the population to be measured or examined)

(2) **population(s)** (collection(s) of individuals of interest)

(3) **parameter/statistic** (numerical summary derived from the population/sample)

(4) **variable(s)** (what is being measured?)

(5) **data** (give 2 or 3 examples of an individual measurement)

2 (8 points)**.** For each variable, determine whether it's *qualitative* or *quantitative*.
For each qualitative variable determine whether it's *nominal* or *ordinal*. For each quantitative variable determine whether it's *discrete* or *continuous*, and whether it's *interval* or *ratio*.

(a) Color of a pen

(b) The number of planets in a star system

(c) Type of an Olympic medal (like bronze, silver, or gold)

(d) Day of the month

(e) Gender of a newborn child

(f) Speed of a car in mph

(g) Amount of money in a jar full of pennies

(h) T-shirt size (like S, M, L, XL, or XXL)