1) the elements
2) 118
3) Answers may vary: What fraction of elements make up $1 \%$ or more of the Earth's crust?
4) Answers may vary: $0.00008988,0.0001785,0.534,1.85 \mathrm{~g} / \mathrm{cm}^{\wedge} 3$
5) Answers may vary: Symbol, Atomic weight, Period, Abundance in Earth's crust
6) Density is quant. Answers may vary: Symbol is qual, Atomic weight is quant, Period is quant, Abundance is quant
7) Density is continuous. Answers may vary: Atomic weight is continuous, Period is discrete, Abundance is continuous
8a) Discrete Quantitative
8b) It is not a characteristic of each individual element. It is a property of the entire data set. There is only one number for the whole data set.
8c) Parameter
8) The states
9) 50 !
10) What is the average land area of the 50 states?
11) Answers may vary: $4597,245384,1026,2961$
12) Answers may vary: Postal abbreviation, population, largest city, land area in square miles
13) I'd probably go with quantitative. Dates are kind of like numbers. They have an order. You can average dates, and subtract them (how much time passed between two dates), but not add them (What is Dec 14, 1819 plus Jan 3, 1959... No.) This is a strange one.
14) Discrete. Can't have 3.6 people.
15) Continuous. Area does not have to be a whole number of square miles.

17a) It is not a characteristic of each individual state. It is a property of the entire data set. There is only one number for the whole data set.
17b) parameter
18) Which team was the winning team, home or road
19) Qual
20) 45
21) 25
22) $55.6 \%, 0.556$
23) cluster

24a) It is not a characteristic of each individual game. It is a property of the entire sample. There is only one number for the whole data set.
24b) statistic
25) stratified
26) systematic
27) Make a list of all the games. Randomly choose 60 of them. Look up each game and record if it was won by the home or road team.
28) No
29) 1286
30) $52.9 \%, 0.529$
31) $0.026,2.6$ \%
32) $0.149,14.9 \%$
33) Yes, way smaller. There is nothing unusual about our sample

