Worksheet 1: Chapter 2

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For questions 1-5, indicate the level of measurement being used in the given scenario: Nominal, ordinal, interval, or ratio.

1. A local animal shelter keeps track of the breeds of dogs that come in.

2. A local animal shelter keeps track of the weight of dogs that come in.

3. The number of miles joggers run per week.

4. The starting salaries of graduates of MBA programs.

5. Before leaving a restaurant, customers are provided a feedback form. For each question, determine the level of measurement:

   a. What is the approximate distance between this restaurant (in miles) & your residence?

   b. Have you ever eaten at this restaurant before?

   c. On how many occasions have you eaten at this restaurant before?

   d. Which of the following attributes of this restaurant do you find most attractive: service, prices, quality of the food, or the menu?

   e. What is your overall rating of this restaurant: excellent, good, fair or poor?

6. Fifteen students answered the question of how many siblings they have. The answers were:

$$1, 1, 2, 0, 3, 2, 1, 4, 2, 3, 1, 0, 0, 1, 2.$$

Construct a simple frequency distribution which includes frequencies, relative frequencies, percent frequencies and cumulative relative frequencies.

7. A paper by Appleton, French, and Vanderpump (1996, American Statistician) goes over a survey of 1314 English woman in 1972-74 were their smoking habits along with other information were recorded and then there was a follow up 20 years later to see how many survived. They summarized the result in a cross-classification table.

   a. During the publication process, a part of table got lost. Fill the table with the given information.

Smoker	Dead	Alive	Total
Yes	139		582
No			732
Total	369		

   b. What percentage of smokers survived? What is your conclusion?

   c. Now look at the following table which shows the results of the study broken down by age group, does your conclusion change?

Age group	$18 - 24$		$25 - 34$		$35 - 44$		$45 - 54$		$55 - 54$	
Smoker	Y	N	Y	N	Y	N	Y	N	Y	N
Dead	2	1	3	5	11	7	27	12	51	40
Alive	53	61	121	152	95	114	103	66	64	81