

Chapter P: What Is Statistics?



Key Vocabulary:

- individuals
- variables
- categorical variable
- quantitative variable
- population
- sample
- surveys
- experiments
- observational studies
- distribution
- dotplot
- bargraph
- exploratory data analysis

(Record key ideas and your own notes while reading from the relevant sections of the textbook)

Introduction (pp.5-6)

- *Statistics* is...
- *Data* are...
- *Probability* is...

Data Production: Where Do You Get Good Data? (pp.6-11)

- Available data are...
- *Surveys* are..
- The difference between *sample* and *population*:
- The difference between a *survey* and a *census*:
- In an *observational study*, we ..
- In an *experiment*, we...
- If we want to understand '*cause and effect*' we use a

Data Analysis: Making Sense Of Data (pp.12-21)

- *Individuals* are...
- A *variable* is...
- When given a data set, the *key questions* to ask are:
 - Who...
 - What...
 - Why...
 - When, where, how, and by whom...
- The difference between a *categorical variable* and a *quantitative variable*.
(Give an example of each.)
- Define *distribution*.
- What is a *side-by-side bar graph* best used for?
- What type of data is a *dotplot* used for?
- When would it be better to use a *bar graph* instead of a *dotplot*?

Probability: What Are the Chances? (pp.21-23)

1. What is the big idea of *probability*?