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)

- *Individual*s 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*?