

# Learning Targets

## One-variable Statistics

### Lesson 1: Getting to Know You

- I can tell statistical questions from non-statistical questions and can explain the difference.
- I can tell the difference between numerical and categorical data.

### Lesson 2: Data Representations

- I can find the five-number summary for data.
- I can use a dot plot, histogram, or box plot to represent data.

### Lesson 3: A Gallery of Data

- I can graphically represent the data I collected and critique the representations of others.

### Lesson 4: The Shape of Distributions

- I can describe the shape of a distribution using the terms "symmetric, skewed, uniform, bimodal, and bell-shaped."
- I can use a graphical representation of data to suggest a situation that produced the data pictured.

### Lesson 5: Calculating Measures of Center and Variability

- I can calculate mean absolute deviation, interquartile range, mean, and median for a set of data.

### Lesson 6: Mystery Computations

- I can determine basic relationships between cell values in a spreadsheet by changing the values and noticing what happens in another cell.

### Lesson 7: Spreadsheet Computations

- I can use a spreadsheet as a calculator to find solutions to word problems.

### Lesson 8: Spreadsheet Shortcuts

- I can use shortcuts to fill in cells on a spreadsheet.

### **Lesson 9: Technological Graphing**

- I can create graphic representations of data and calculate statistics using technology.

### **Lesson 10: The Effect of Extremes**

- I can describe how an extreme value will affect the mean and median.
- I can use the shape of a distribution to compare the mean and median.

### **Lesson 11: Comparing and Contrasting Data Distributions**

- I can arrange data sets in order of variability given graphic representations.

### **Lesson 12: Standard Deviation**

- I can describe standard deviation as a measure of variability.
- I can use technology to compute standard deviation.

### **Lesson 13: More Standard Deviation**

- I can use standard deviation to say something about a situation.

### **Lesson 14: Outliers**

- I can find values that are outliers, investigate their source, and figure out what to do with them.
- I can tell how an outlier will impact mean, median, IQR, or standard deviation.

### **Lesson 15: Comparing Data Sets**

- I can compare and contrast situations using measures of center and measures of variability.

### **Lesson 16: Analyzing Data**

- I can collect data from an experiment and compare the results using measures of center and measures of variability.