

# 13 CHAPTER SUMMARY

## BIG IDEAS

For Your Notebook

### Big Idea 1

TEKS 8.11.B

### Finding Probabilities of Simple and Compound Events

To find $P(A)$ when...	
all outcomes are equally likely, use $P(A) = \frac{\text{Number of favorable outcomes}}{\text{Number of possible outcomes}}$	you perform an experiment, use $P(A) = \frac{\text{Number of successes}}{\text{Number of trials}}$
To find $P(A \text{ or } B)$ when...	...use this formula
events $A$ and $B$ have no common outcomes	$P(A \text{ or } B) = P(A) + P(B)$
events $A$ and $B$ have at least one common outcome	$P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$
To find $P(A \text{ and } B)$ when...	...use this formula
events $A$ and $B$ are independent	$P(A \text{ and } B) = P(A) \cdot P(B)$
events $A$ and $B$ are dependent	$P(A \text{ and } B) = P(A) \cdot P(B \text{ given } A)$

### Big Idea 2

TEKS 8.12.A

### Analyzing Sets of Data

You can find values that represent a typical data value using the following measures of central tendency:

mean, median, and mode

You can find values that describe the spread of data using the following measures of dispersion:

range, mean absolute deviation, and interquartile range

### Big Idea 3

TEKS 8.12.C

### Making and Interpreting Data Displays

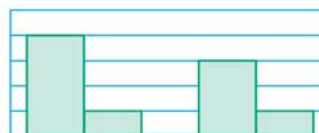
Use an appropriate display to show the distribution of a set of numerical data.

A **stem-and-leaf plot** organizes data based on their digits.

Stem	Leaves
1	0 1 1 2 3
2	0 0 0 2

Key: 1 | 0 = 10

A **histogram** shows the frequency of data on intervals of equal size, with no gaps or overlaps.



A **box-and-whisker plot** organizes data into four groups of approximately equal size.

