

Now

In Chapter 11, you will apply the big ideas listed below and reviewed in the Chapter Summary on page 783. You will also use the key vocabulary listed below.

Big Ideas

- 1 Finding measures of central tendency and dispersion
- 2 Using normal distributions
- 3 Working with samples

KEY VOCABULARY

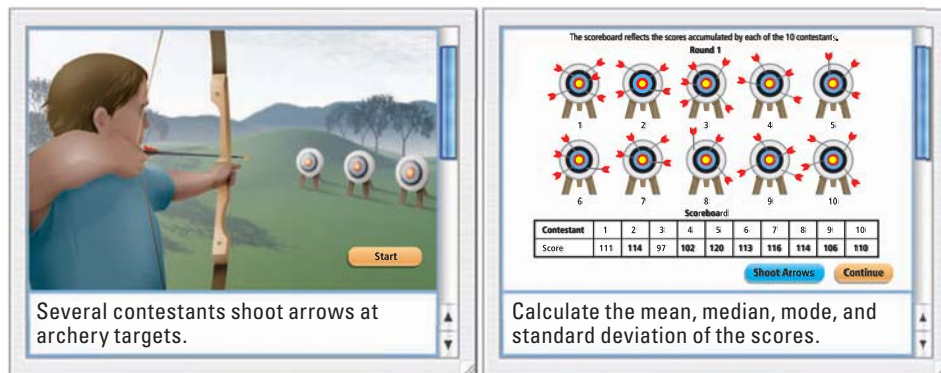
- statistics, p. 744
- mean, p. 744
- median, p. 744
- mode, p. 744
- range, p. 745
- standard deviation, p. 745
- normal distribution, p. 757
- normal curve, p. 757
- standard normal distribution, p. 758
- z-score, p. 758
- sample, p. 766
- unbiased sample, p. 767
- biased sample, p. 767
- margin of error, p. 768

Why?

You can use statistics to compare two or more sets of data. For example, you can compare data for two athletes to see who performs better.

Animated Algebra

The animation illustrated below for Exercise 28 on page 748 helps you answer this question: Which contestant has the best average score after four rounds of an archery competition?



Several contestants shoot arrows at archery targets.

The scoreboard reflects the scores accumulated by each of the 10 contestants.

Round 1

Contestant	1	2	3	4	5	6	7	8	9	10
Score	111	114	97	102	120	113	116	114	106	110

Calculate the mean, median, mode, and standard deviation of the scores.

Animated Algebra at classzone.com

Other animations for Chapter 11: pages 744, 754, 757, and 776