

Directed Reading B *continued*

DESCRIBING THE ENTIRE SET OF DATA

Match the correct definition with the correct term. Write the letter in the space provided.

b. mean
aka average

6. the number obtained by adding up the data for a given characteristic and dividing this sum by the number of individuals

- a. mode
- b. mean
- c. median

c. median

7. the value of the middle item when data are arranged in order by size

a. mode

8. the most frequently occurring value in a data set

9. When is using the median especially useful?

When there is a renegade, way off the mark, data point that is skewing the mean, then it is useful to use the median to get a more reasonable understanding of the data's true range.

SLOPE OF A LINE

10. A measure of the slant of a line is called the slope.

11. What does the rise represent?

the vertical change in the y-value

12. What does the run represent?

the horizontal change in the x-value

13. How is the slope of a straight line calculated?

slope = the rise / (divided by) the run

14. The value of the slope between any two points on that line will be a(n)

constant k number.

15. In the equation $y = kx$, which letter represents the slope of the line, also known as the constant term?

k (in math it is also called m, for example $y = mx + b$)

Match the correct description with the correct term. Write the letter in the space provided.

b. linear graph

16. displays a straight line

a. nonlinear graph

a. nonlinear graph

17. displays a curved line

b. linear graph

Skills Worksheet

Vocabulary and Section Summary B

Tools and Models in Science

VOCABULARY

After you finish reading the section, try this puzzle! Use the clues provided to solve the crossword puzzle.

ACROSS

1. a measure of the size of an object in three-dimensional space
4. the ratio of a substance's mass to the substance's volume
6. a descriptive statement or equation that reliably predicts events under certain conditions
7. a measure of how hot or cold something is

DOWN

2. a pattern, plan, representation, or description designed to show the structure or workings of an object, system, or concept
3. a measure of the amount of matter in an object
5. a system of ideas that explains many related observations and is supported by a large body of scientific evidence

