Name _____ Class _____ Date _____

# Directed Reading B

## Section: Organizing Your Data (pp. 50–55)
**CREATING A DATA TABLE**

___A.___ **1.** Which of the following can be the first step to take in organizing data?
- **a.** Choose a topic.
- **b.** Gather information.
- **c.** Create a data table.
- **d.** Analyze data.

___A.___ **2.** Which of the following should you do before an experiment starts?
- **a.** Determine what information is going to be gathered.
- **b.** Draw conclusions about the information before it is gathered.
- **c.** Miss information that might be important.
- **d.** Analyze the information after it is gathered.

**3.** A factor that is deliberately changed in an experiment is called a(n) ___independent variable___ .

**4.** Where do you find the independent variable in a data table? ___in the first column___

**5.** The factor that changes as a result of manipulation and is measured is called a(n) ___dependent variable___ .

**6.** Where do you find the dependent variable in a data table? ___in the second column___

## Variable and Controlled Parameters

**7.** What is the difference between controlled parameters and variable parameters?

___Controlled parameters are factors that stay constant throughout the experiment.___
___Variable parameters are factors that change or vary, throughout the experiment.___

## CREATING A GRAPH

**8.** Graphs make it easy to do what two things?

___Identify trends and make predictions___

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

c. axis ____ **9.** is one of two or more reference lines that mark the borders of a graph

d. independent variable ____ **10.** usually represented by the $x$-axis in a data table

b. dependent variable ____ **11.** usually represented by the $y$-axis in a data table

a. range ____ **12.** found by subtracting the smallest value of a variable from the largest value of the same variable

e. scale ____ **13.** is the size used for each box or grid mark on a graph

g. data point ____ **14.** plotted by putting a dot on the graph for a pair of data in the table

f. line of best fit ____ **15.** shows how data differ from the pattern; a smooth line drawn to include some but not all of the data points

**a.** range

**b.** dependent variable

**c.** axis

**d.** independent variable

**e.** scale

**f.** line of best fit

**g.** data point

**16.** The last step when creating a graph is giving the graph a(n) _____ title _____ .

**17.** What two things do scientists often include in the titles of their graphs?

a legend showing the independent variable description and dependent variable description. _____