

## Chapter 3 Map Activity B

### Reading a Topographic Map

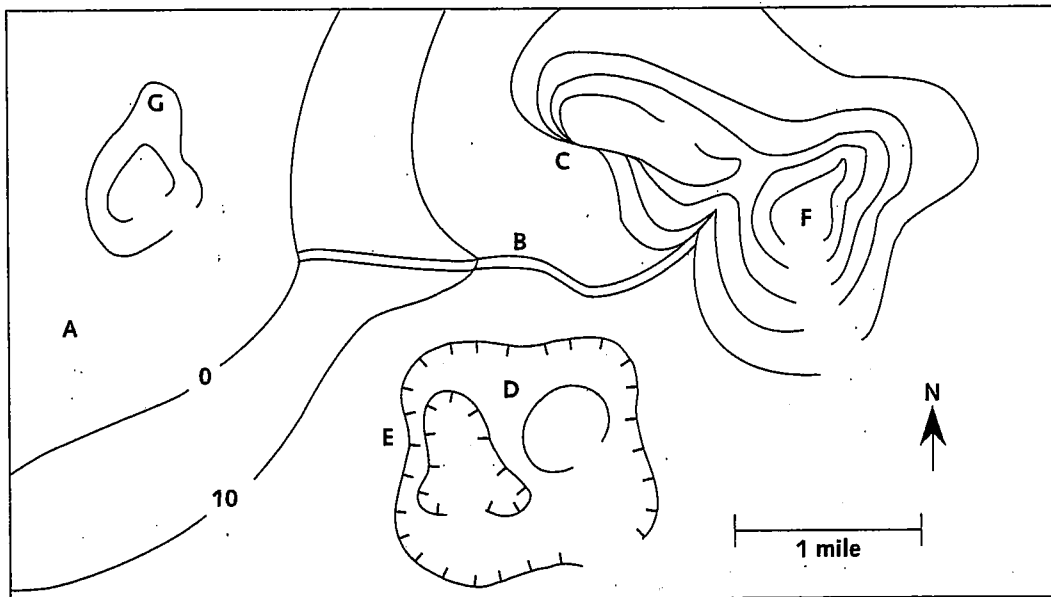
Topographic maps show the shape of Earth's surface by means of contour lines. Contour lines are lines that connect points that are at the same elevation above sea level. Topographic maps include a variety of information that can help you determine an area's layout without seeing the area yourself. This activity demonstrates the interpretation of contour lines and of a portion of a topographic map.

#### Procedure

- 1 The figure below is a topographic map of an area along a seacoast. The map includes each of the following topographic features:

_____ Cliff	_____ Ocean
_____ Rock quarry (man-made)	_____ Island
_____ River	_____ Steep quarry wall
_____ Mountain peak	

Complete the numbering of contour lines in the figure below by using a contour interval of ten feet. Label each contour at the break in the line, as shown for the zero- and ten-foot contours. Then identify each topographic feature on the map and write its corresponding letter in the space provided above.



#### MAP SKILLS AND OBJECTIVES

- Utilize map symbols.
- Interpret a topographic map.

#### MATERIALS

- Appendix A: Topographic Map Symbols, page 697 of your text
- Appendix B: Topographic Map of Harrisburg, Pennsylvania, page 718 of your text
- string
- magnifying glass or hand lens

- 2 Find the creek southwest of Marysville on the Harrisburg map in your text. In what direction does the creek flow? How can you tell?

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- 3 Find the Susquehanna River, which flows through the Appalachian Mountains. Near Harrisburg, the Appalachians consist of ridges and valleys. How can you distinguish ridges and valleys on the map?

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- 4 Locate the points on east bank of the Susquehanna River where the river enters and exits the map. Connect the two points using a piece of string and then measure this distance along the map's scale. What is the straight-line distance (in miles) between the two points on the river?

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- 5 Use the string to trace the actual path of the east bank of the Susquehanna River across the map. Measure this length along the map's scale. What is the length of the river (in miles), measured along the east bank, between the two points in Step 4?

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### **Analysis and Conclusions**

- 1 Describe the shape and the orientation of the ridges and the valleys.

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- 2 Based on this map activity, how would you define the term ridge?

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- 3 You are driving north on Highway 225 from Clark Creek to the Appalachian Trail. What is the straight-line distance (in miles) of your trip? What distance will your car's odometer measure for your trip?

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- 4 The mapped landscape is the result of millions of years of erosion by wind and rain. Which map features consist of rocks that were most resistant to this erosion? Which features were least resistant?

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