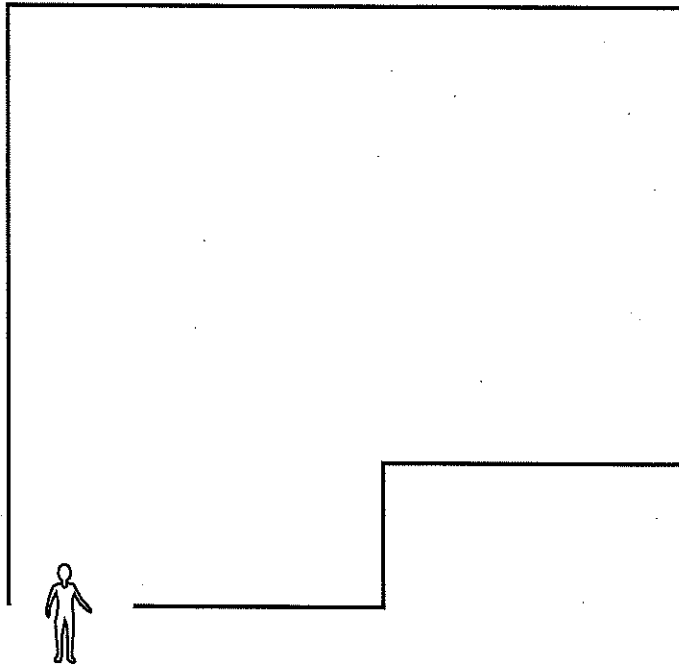


Goal • Use this worksheet to demonstrate how you could position a plane (flat) mirror to observe most places in a room.

What to Do

The diagram shows the floor plan of a store. You are a security guard, with radio and flashlight, who stands at the position shown, just inside the door. Are there any places you cannot see? Suppose you could install a large mirror (2 cm to this scale) by hanging it from the ceiling or placing it on a wall. Where

could you put it to make sure you could see everywhere? Add your mirror to the diagram. Then trace out light rays showing that light from your flashlight could illuminate every portion of every wall. If you are bouncing light off the mirror, make sure you draw the normal and measure your angles carefully.



Going Further

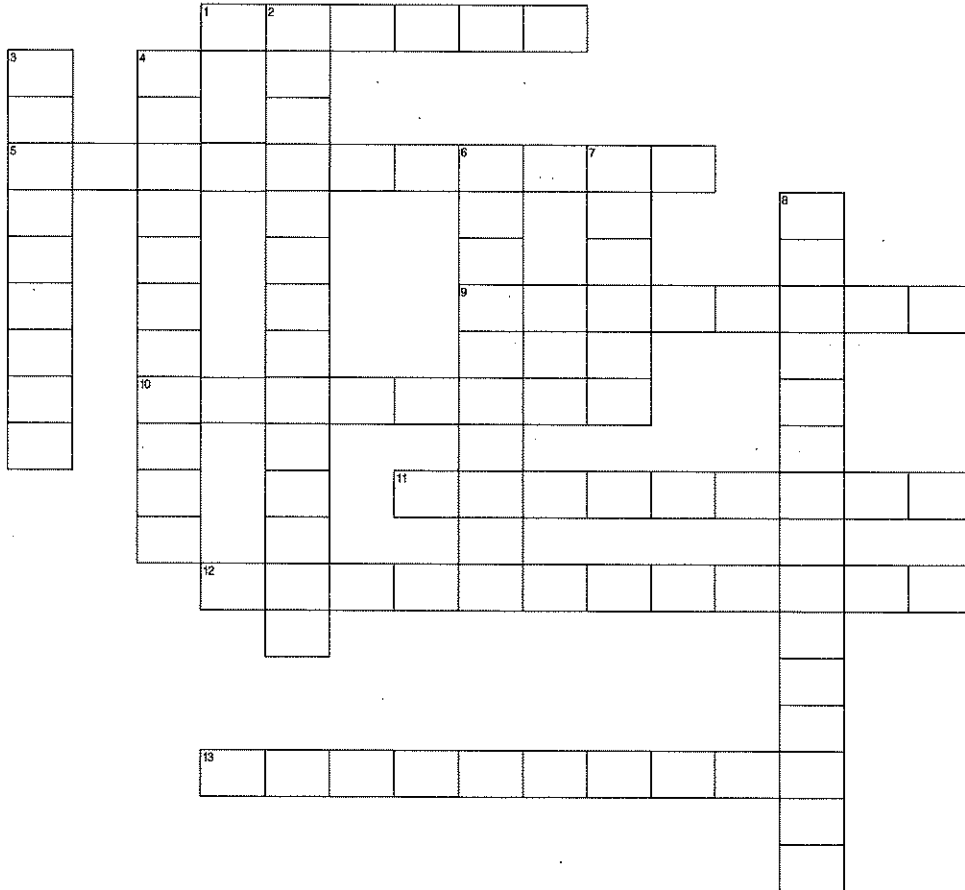
If you have a small mirror, you could build cardboard walls, place the mirror in position, and demonstrate how looking from the position of the person, there is no “blind spot” in the room.

CHAPTER 7
VOCABULARY CHECK
Crossword Puzzle
BLM 7-18

Goal • Review your understanding of terms introduced in this chapter by completing this crossword puzzle.

What to Do

- Fill in the blank spaces in the crossword puzzle with your answers to the clues below.


Across

- not allowing any light to pass through
- light can pass through clearly
- shining with its own light
- type of reaction that can produce light
- natural source of light in storms
- type of bulb that glows when hot
- bending of light travelling between two substances

Down

- glowing from stored light
- light's strength
- lets light partly pass through
- when light hits a mirror
- a line perpendicular to a surface
- glow produced by living creatures