

# Design Your Dream Bedroom



## Objectives

In this activity, students will

- use geometric concepts, properties, and relationships in problem-solving situations.
- communicate the reasoning used in solving these problems.

## Technology required

- *AppleWorks*, *Microsoft Works*, or another drawing program
- *Microsoft Word*, *AppleWorks*, or other word processing program

## Materials needed

- copies of *Bedroom Floorplan* (page 64) for the students
- copies of *Furniture Choices* (page 65) for the students

## Description

Tell the students the following scenario. Record the important facts on the board as you tell them.

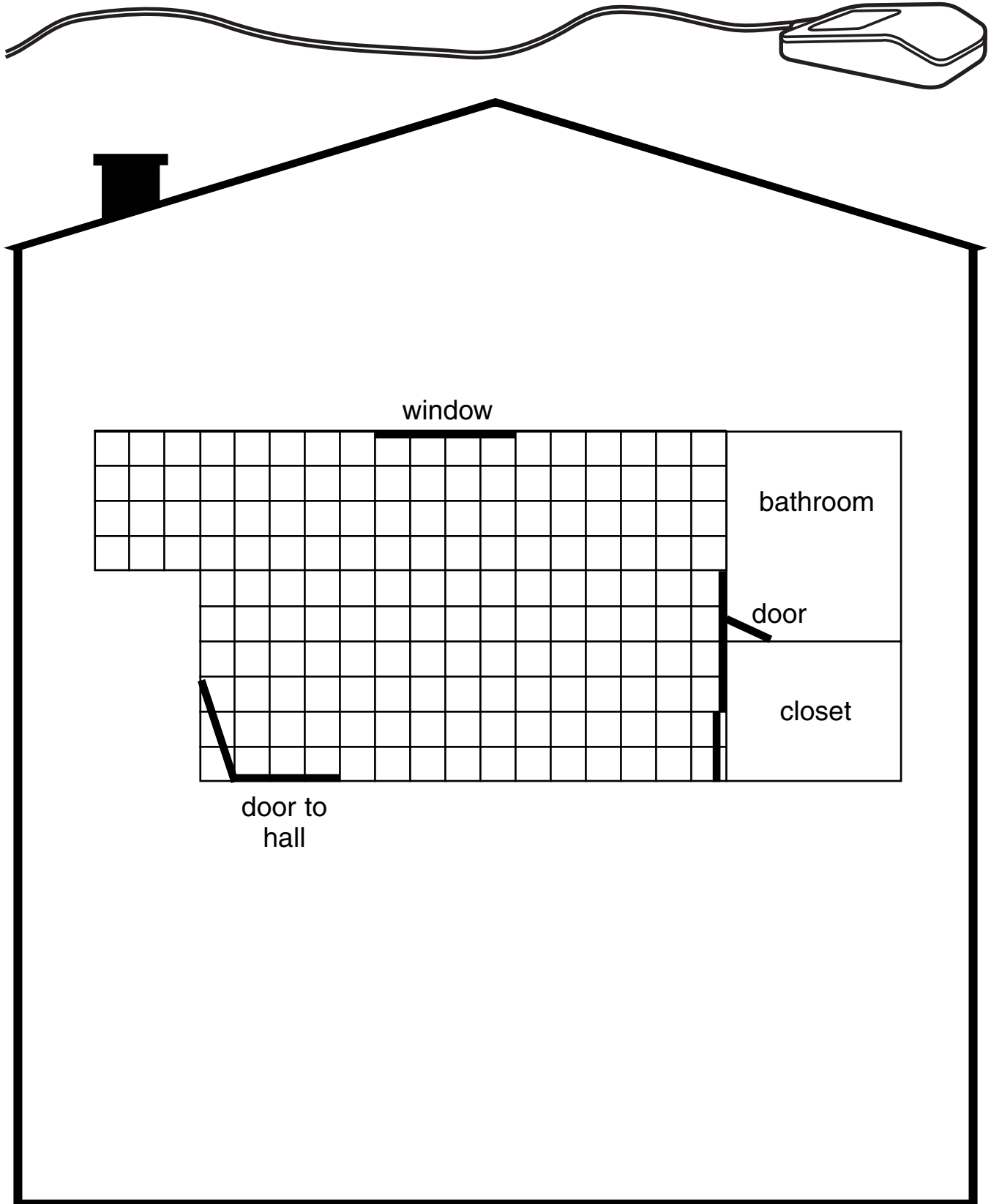
- You and your family are moving to a new house. Included is the floor plan for your bedroom (page 64). Your parents have agreed to allow you to choose and arrange your own bedroom furniture as long as you meet these criteria:
  1. You must include a sleeping area, a work area, a play area, and appropriate walk space.
  2. You must select from the parent-approved furniture provided (page 65).
- Using a drawing program, draw the floor plan of your own bedroom, including furniture placement (one  $\frac{1}{4}$ " square = 1 square foot).
- Then, using a word processing program, write a description of your new bedroom. In your description, include which furniture you chose and why; where you put the furniture and why; and evidence that you met the criteria set by your parents.

## Extension

The students could plan the layout of their entire homes, classrooms, school, etc.

Name \_\_\_\_\_

# Bedroom Floorplan



# Furniture Choices

The diagram shows a house-shaped area containing the following furniture items:

- Beds:**
  - single: 3x6 grid
  - bunk: 3x6 grid
  - double: 5x6 grid
  - daybed: 7x3 grid
- Desks:**
  - 3x3 grid
  - 4x2 grid
  - 3x2 grid
- Chairs:**
  - desk chair: 2x2 grid
  - rocking chair: 3x2 grid
  - easy chair: 3x3 grid
  - beanbag: 4x3 grid
- Dressers:**
  - dresser: 7x2 grid
  - dresser: 3x2 grid
  - wardrobe: 4x3 grid
  - toybox: 5x2 grid
- Entertainment Centers:**
  - 5x2 grid
  - 4x3 grid
- Nightstands:**
  - 2x2 grid
  - 2x1 grid