

 **Activity 14.10** FIXED PERIMETERS

Explain to students that they are building a pen for a rabbit and that you have 24 feet of wire fence. Ask, "Will it matter what shape rectangle I use to make my pen?" Give students a piece of nonstretching string that is 24 cm long and a sheet of 1-cm grid paper. Ask students to explore how many different-size rectangles can be made with a perimeter of 24 cm, recording the perimeter and area for each new sketch of the pen. As a way to incorporate non-whole rational numbers, change the total number of feet to 30, and encourage students to measure sides to the nearest one-half inch.

From Van de Walle et. al. (2014). *Teaching Student-Centered Mathematics Grades: Developmentally Appropriate Instruction for Grades 6 – 8 (2<sup>nd</sup> Ed.)*. Toronto: Pearson Education, Inc. (p. 310).