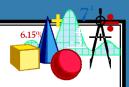
Mathematics, Geometry

Unit V: Lesson 4 Puzzles: <u>Does It Fit?</u>



A polyomino is a figure made by fitting more than two squares together so that they share some sides. Two connected squares are called a domino, three squares are called a triomino, four connected squares are called a tetromino, and five, a pentomino.

Use graph paper to draw all possible ways of connecting two, three, four, and five squares. Make sure none of the drawings are congruent to one another. Rearrange the 12 pentominoes to form the following rectangles: 6 by 10, 5 by 12, 4 by 15, and 3 by 20. Trace the arrangements. Determine which pentominoes can be folded into boxes.

Make your pentominoes out of a durable material. Challenge your classmates to make the rectangles. Make a solution key for use by future classes. Display the pentominoes that make boxes partially folded.