

PUZZLEPILE™

Lesson Directions Overview

Equipment List

- 18 PuzzlePile™ Foam Pieces
- 1 PuzzlePile™ Frame

Learning Objectives

1. Students will use their knowledge of geometry and spatial reasoning to strategically add geometric shapes to the pile and form complete horizontal lines.
2. Students use basic counting and operational skills (e.g., counting by 1, skip counting, addition, multiplication etc.) to calculate the total number of pentominoes or cubes used in each round of the game.
3. Students utilize measurement and computational skills to calculate the surface area and volume of the pentomino foam pieces.

Grade Levels: K-2, 3-8

Vocabulary Covered

- Pentomino
- Skip Counting
- Sum
- Product
- Area
- Surface Area
- Volume

CCMS Topics Addressed

- Geometry
- Counting & Cardinality
- Operations & Algebraic Thinking