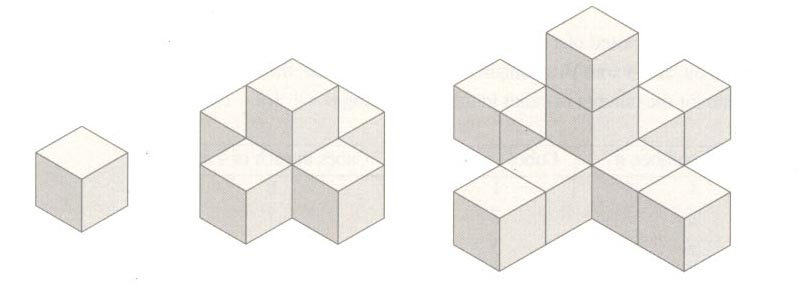
## Counting Cubes Task



Building 3

Building 2

Building 1

* 1. Describe a pattern you see in the cube buildings.
  2. Use your pattern to write an expression for the number of cubes in the nth building.
  3. Use your expression to find the number of cubes in the 5th building. Check your results by constructing the 5th building and counting the cubes.
  4. Look for a different pattern in the buildings. Describe the pattern and use it to write a different expression for the number of cubes in the nth building.

Adapted from “Counting Cubes”, Lappan, Fey, Fitzgerald, Friel, & Phillips (2004*). Connected MathematicsTM, Say it with symbols: Algebraic reasoning* [Teacher’s Edition]. Glenview, IL: Pearson Prentice Hall. © Michigan State University