12-3

Problem Solving: Use Objects and Solve a Simpler Problem

Use objects to help you solve a simpler problem. Use the solution to help you solve the original problem.

- 1. Six people can be seated at a table. If two tables are put together, 10 people can be seated. How many tables are needed to make a long table that will seat 22 people?
- **2.** A large cube has 5 layers, each with 5 rows of 5 small cubes. How many small cubes will the larger cube contain?
- 3. There are 5 kinds of fish that Jerome feeds: guppies, zebra danios, bettas, platys, and neon tetras. Use the following clues to find the order in which Jerome feeds them.
 - Jerome feeds the guppies third.
 - Jerome does not feed the bettas right before or right after the guppies.
 - Jerome feeds the zebra danios last.
 - Jerome feeds the platys after the bettas.
 - A Guppies, zebra danios, bettas, platys, and neon tetras
 - B Bettas, platys, guppies, neon tetras, zebra danios
 - C Neon tetras, zebra danios, guppies, platys, bettas
 - **D** Bettas, guppies, platys, neon tetras, zebra danios
- **4.** Suppose Ann is placing bowling pins in the following manner: 1 pin in the first row, 2 pins in the second row, 3 pins in the third row, and so on. How many pins will she use if she has 5 rows in her placement? Explain.