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.