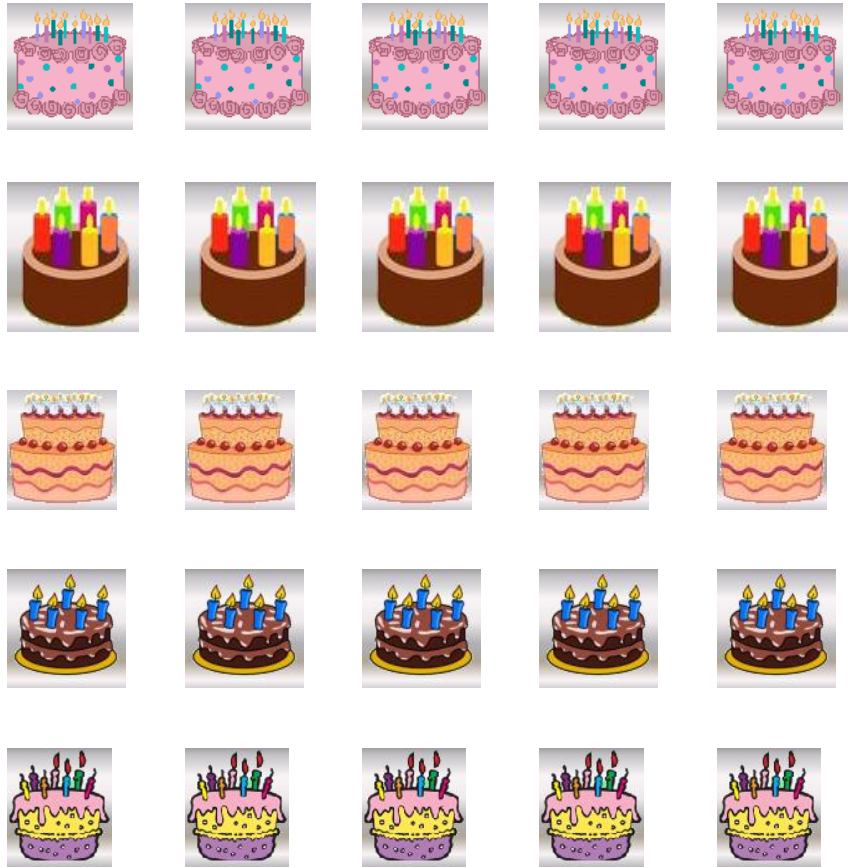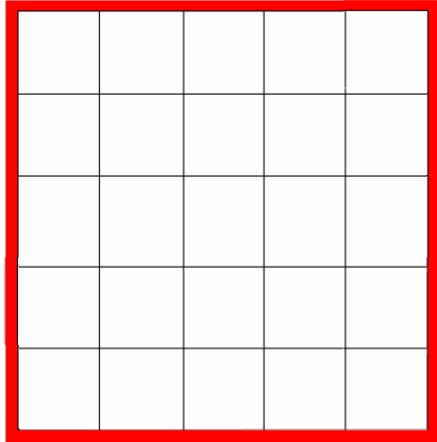# 25 CAKES Challenge
A Pentomino/Sudoku puzzle by Kate Jones
for Kadon's 40th Anniversary/Celebration of Mind – October 2019

Build this square...

1. **Cut out the 5 pentominoes on the next page and fit them together as a 5x5 square. You may rotate but not flip them. In addition, there is to be only one cake in any row in any direction: horizontally, vertically and diagonally.**

2. **Cut out and place the 25 cake images shown above right onto your 5x5 solution, one cake per cell, covering any preprinted cakes if necessary, so that they meet all these goals at the same time:**
   - ◆ Each of 10 rows—5 horizontal, 5 vertical— contains all five different cakes, in any order.
   - ◆ All 5 of the pentomino shapes contain 5 different cakes.

3. **Disregarding the pentomino fields, for extra challenge have no two of the same cake in any of 24 rows, in any direction: horizontally, vertically or diagonally. There are 14 diagonals with at least 2 cells!** Can you find such a solution that also divides into 5-cake pentomino regions with 5 different pentomino shapes? We don't know.

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The 25 CAKES Challenge by Kate Jones
A gift for visitors to the annual Celebration of Mind,
honoring Martin Gardner on his birthday, October 21,
at the Maryland Renaissance Festival, Oct. 19-20, 2019