

Cutting Cookies

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This month's *Puzzle Corner* activity has a Valentine's theme. In it, students are presented with the following scenario. Four friends are given a Valentine cookie with eight candy toppings placed in the geometric pattern shown. They are asked to divide the cookie into four identical pieces without cutting any of the cookie's candy toppings. The challenge in this puzzle is to draw lines on the cookie picture to show where the cuts must be made.

This activity is a dissection puzzle. In these types of puzzles, geometric shapes, regions, or areas are to be cut apart, or dissected. Often, as is the case in this puzzle, these pieces must be identical. Working on these types of puzzles gives students a chance to use spatial visualization skills. While these skills are valuable, they rarely appear in the standard school curriculum.

I have found that these types of puzzles are often quite frustrating for the traditional "good" students, because they require spatial skills that the students have not yet developed. Often, students other than the top students are the ones who solve puzzles like this one first. This is good for both sets of students—it shows the first set that they have skills that need to be developed and gives the second set a chance to shine on a classroom assignment.

I hope that you and your class find this puzzle enjoyable. I'll have a solution and a new puzzle in the next issue. If you have any questions or comments about this activity, please contact me at dyoungs@fresno.edu or at the AIMS address found on the back cover of this magazine.

Last Month's Puzzle

In *Place Logic*, students were challenged to arrange numbers in square grids so that the same number did not appear in the same row, column, or smaller shape within the square. The solutions for each page are shown here.

Place Logic Page 1

3	1	2	1	3	2	1	3	2	2	1	3
2	3	1	3	2	1	2	1	3	1	3	2
1	2	3	2	1	3	3	2	1	3	2	1

Place Logic Page 2

4	3	1	2	4	1	2	3	4	2	3	1
2	1	3	4	2	3	1	4	1	3	4	2
1	2	4	3	1	4	3	2	2	4	1	3
3	4	2	1	3	2	4	1	3	1	2	4

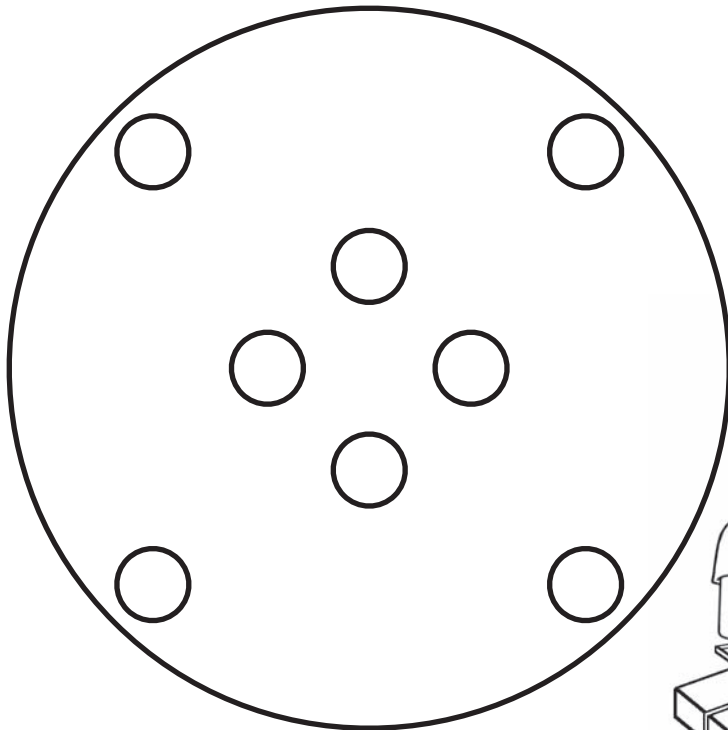
Place Logic Page 3

3	1	2	4	4	3	2	1	2	4	1	3
1	3	4	2	3	2	1	4	1	3	4	2
4	2	3	1	2	1	4	3	4	2	3	1
2	4	1	3	1	4	3	2	3	1	2	4

Cutting Cookies

Four friends at a Valentine's party get a cookie with 8 candies arranged on top in a geometric pattern. They need to divide the cookie into four equal pieces. Each piece must have two candies. The candies may not be cut.

Your task in this puzzle is to show the four friends how to do this.



Draw in lines on the pictures below to show where to cut the cookie. Try to find as many solutions as you can.

