The object is to pull out all the pegs, mix them up, and reassemble. The instruction booklet shown on the following pages says there are 12 ways to do it, shows how to do two of them, and gives blank diagrams to color in the other ten solutions. Here is the solved cube shown above flipped over to show the other three sides:
CHAOTIC™ CUBE

CHAOTIC™ Cube is made up of 21 “Pegs” and 6 sections of a “DICE CUBE.” The 21 pegs are of 4 lengths as shown. The 6 sides of the Dice Cube interlock in a unique manner that holds them together.

The object of the game is to take the Chaotic™ Cube completely apart (all 21 Pegs and 6 cube sides); mix them all up; and then reassemble it again. Simple? — well somewhat . . . except that there are 12 ways it can be put back together again! Thus the real object of the game is to discover all 12 ways.

However, all 12 ways must be assembled as “True Dice Cubes.” A true dice cube totals 7 on all opposite faces (6 opposite 1; 5 opposite 2; etc.). It is only the colors (lengths) of the pegs that will vary in all 12 solutions.
Shown here are two solutions. Use colored pencils to fill in the other ten.