Form a big hexagon from the 18 half hexagon pieces so that edges match. Puzzles of some type using half hexagons have been around for a long time (e.g., the 1924 patent of A. Chrehore). Here is the solution provided by the manufacturer (http://www.give-me-a-clue.com):

Further Reading

*Crehore Patent*, from: www.uspto.gov - patent no. 1,495,576