

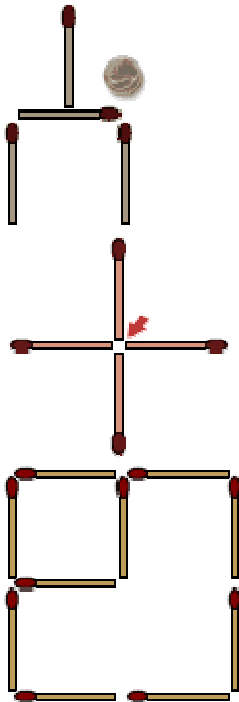
SHAPES ACTIVITY BOOK: ANSWERS

Matchstick Mayhem



Solution #1: The traditional solution is to form a regular tetrahedron, an example of lateral thinking, as it requires using the third dimension. Dr. Matrix's readers provided numerous alternative solutions using only two dimensions, as we did not forbid the overlapping of matches or triangles. This Star of David, with eight triangles (six small and two large ones), would seem to be the best solution.

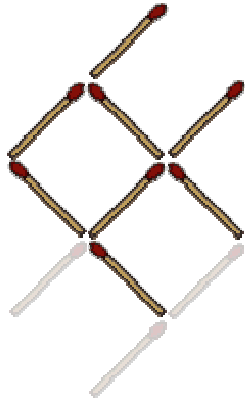
Another restriction (besides disallowing overlapping) which would force the tetrahedron is that all of the triangles must be the same size.



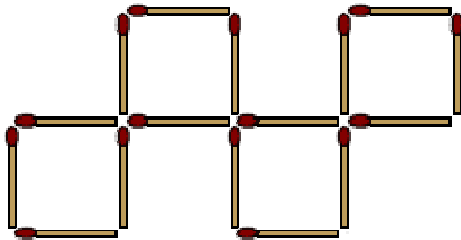
Solution #2: Here is the solution, moving the horizontal matchstick, and the one on the far right. You remove the olive by turning the glass upside down.

Solution #3: Make a small square between the four matchstick ends, as shown.

Solution #4



Solution #5: Move the faint matches in this diagram.



Solution #6: Only two matchsticks were moved.

OTHER ANSWERS:

Patchy Problem – there are 11 different patterns

Coin Puzzle –

Place one coin on top of another at each corner of the square.

Shape Logic –

1 – a 2 – d 3 – b 4 – b 5 – e 6 – d

Word Wheels –

1 – SEARCH 2 – KITTEN 3 – EIGHTY

4 – THREAD 5 – FOUNTAIN 6 – TRIANGLE