

Math, Magic, Puzzles, and Games

By Dennis K., Emily D., Liam S., Mekiah B., and Sumit D.

Our Partner



The Boys and Girls
Club of Boston:
Hennigan Club



Session 1: 21 Counting Game

- Group kids into pairs
- Partners take turns counting up to three numbers per turn
- When one says 21, they lose
- There is a winning strategy for the second player:
 - Always finish the turn on 4, 8, 12, 16, or 20



Session 2: Card Tricks

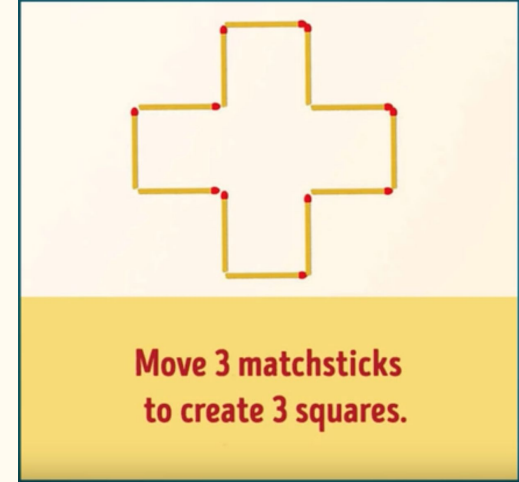
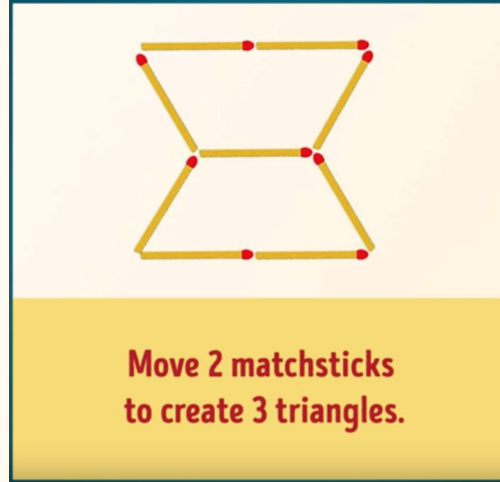
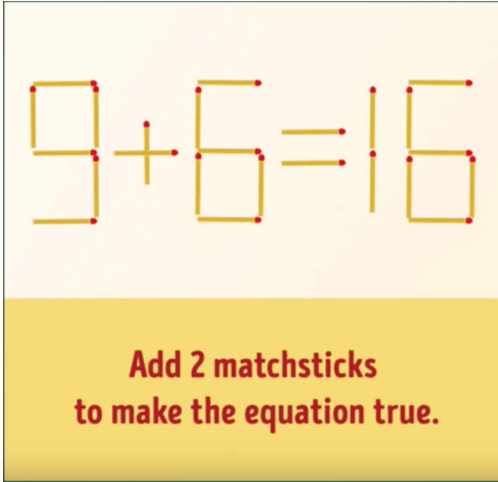
18 Card Trick

1. Deal 3 piles of 6 cards
2. Ask the other person to take a few cards from one of the 3 piles
3. Let them look at the bottom card from their pile
4. Have them put their cards one either of the two full piles
5. Put the other piles on top of the pile they just made
6. Spell out “You chose the” and the next card is their card!

21 Card Trick

1. Get 21 cards.
2. Ask someone to pick one of the 21 cards, and let them put it back in the deck wherever they want.
3. Deal the cards into three piles face up. Then, ask which pile their card is in.
4. Pick up the three piles and put their pile in the middle.
5. Repeat the last step 2 more times.
6. Spell out “Your card is”, and the next card is their card!

Session 3: Matchstick Puzzles



(solutions on next slide)

Session 3: Matchstick Puzzles

